UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

(Mark One)

[X] ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2016

OR

[ ] TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from _____ to _____

Commission File No.	Exact Name of Registrants as Specified in their Charters, Address and Telephone Number	State of Incorporation	I.R.S. Employer Identification Nos.
1-14201	SEMPRA ENERGY 488 8th Avenue San Diego, California 92101 (619) 696-2000	California	33-0732627
1-03779	SAN DIEGO GAS & ELECTRIC COMPANY 8326 Century Park Court San Diego, California 92123 (619) 696-2000	California	95-1184800
1-01402	SOUTHERN CALIFORNIA GAS COMPANY 555 West Fifth Street Los Angeles, California 90013 (213) 244-1200	California	95-1240705

SECURITIES REGISTERED PURSUANT TO SECTION 12(b) OF THE ACT:

Title of Each Class	Name of Each Exchange on Which Registered
Sempra Energy Common Stock, without par value	NYSE

SECURITIES REGISTERED PURSUANT TO SECTION 12(g) OF THE ACT:

Southern California Gas Company Preferred Stock, $25 par value
6% Series A, 6% Series

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

Sempra Energy	Yes X	No
San Diego Gas & Electric Company	Yes	No X
Southern California Gas Company	Yes	No X

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act.

Sempra Energy	Yes	No X
San Diego Gas & Electric Company	Yes	No X
Southern California Gas Company	Yes	No X

Indicate by check mark whether the registrants (1) have filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) have been subject to such filing requirements for the past 90 days.

Yes X No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Website, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).

Sempra Energy	Yes	X	No	
San Diego Gas & Electric Company	Yes	X	No	
Southern California Gas Company	Yes	X	No	

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrants' knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Sempra Energy	
San Diego Gas & Electric Company	X
Southern California Gas Company	X

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

	Large accelerated filer	Accelerated filer	Non-accelerated filer	Smaller reporting company
Sempra Energy	[X]	[ ]	[ ]	[ ]
San Diego Gas & Electric Company	[ ]	[ ]	[X]	[ ]
Southern California Gas Company	[ ]	[ ]	[X]	[ ]

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Sempra Energy	Yes		No	X
San Diego Gas & Electric Company	Yes		No	X
Southern California Gas Company	Yes		No	X

Aggregate market value of the voting and non-voting common equity held by non-affiliates of the registrant as of June 30, 2016:

Sempra Energy	$28.4 billion (based on the price at which the common equity was last sold as of the last business day of the most recently completed second fiscal quarter)
San Diego Gas & Electric Company	$0
Southern California Gas Company	$0

Common Stock outstanding, without par value, as of February 21, 2017:

Sempra Energy	250,543,688 shares
San Diego Gas & Electric Company	Wholly owned by Enova Corporation, which is wholly owned by Sempra Energy
Southern California Gas Company	Wholly owned by Pacific Enterprises, which is wholly owned by Sempra Energy

SAN DIEGO GAS & ELECTRIC COMPANY MEETS THE CONDITIONS OF GENERAL INSTRUCTIONS I(1)(a) AND (b) OF FORM 10-K AND IS THEREFORE FILING THIS REPORT WITH A REDUCED DISCLOSURE FORMAT AS PERMITTED BY GENERAL INSTRUCTION I(2).

DOCUMENTS INCORPORATED BY REFERENCE:

Portions of the 2016 Annual Report to Shareholders of Sempra Energy, San Diego Gas & Electric Company and Southern California Gas Company are incorporated by reference into Parts I, II and IV.

Portions of the Sempra Energy Proxy Statement prepared for its May 2017 annual meeting of shareholders are incorporated by reference into Part III.

Portions of the Southern California Gas Company Information Statement prepared for its May 2017 annual meeting of shareholders are incorporated by reference into Part III.

SEMPRA ENERGY FORM 10-K

SAN DIEGO GAS & ELECTRIC COMPANY FORM 10-K

SOUTHERN CALIFORNIA GAS COMPANY FORM 10-K

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This combined Form 10-K is separately filed by Sempra Energy, San Diego Gas & Electric Company and Southern California Gas Company. Information contained herein relating to any individual company is filed by such company on its own behalf. Each company makes representations only as to itself and makes no other representation whatsoever as to any other company.

You should read this report in its entirety as it pertains to each respective reporting company. No one section of the report deals with all aspects of the subject matter. Separate Item 6 and 8 sections are provided for each reporting company, except for the Notes to Consolidated Financial Statements in Item 8. The Notes to Consolidated Financial Statements for all of the reporting companies are combined. All Items other than Items 6 and 8 are combined for the reporting companies.

INFORMATION REGARDING FORWARD-LOOKING STATEMENTS

We make statements in this report that are not historical fact and constitute forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements are based upon assumptions with respect to the future, involve risks and uncertainties, and are not guarantees of performance. These forward-looking statements represent our estimates and assumptions only as of the filing date of this report. We assume no obligation to update or revise any forward-looking statement as a result of new information, future events or other factors.

In this report, when we use words such as “believes,” “expects,” “anticipates,” “plans,” “estimates,” “projects,” “forecasts,” “contemplates,” “assumes,” “depends,” “should,” “could,” “would,” “will,” “confident,” “may,” “potential,” “possible,” “proposed,” “target,” “pursue,” “outlook,” “maintain,” or similar expressions, or when we discuss our guidance, strategy, plans, goals, opportunities, projections, initiatives, objectives or intentions, we are making forward-looking statements.

Factors, among others, that could cause our actual results and future actions to differ materially from those described in forward-looking statements include

- actions and the timing of actions, including decisions, new regulations, and issuances of permits and other authorizations by the California Public Utilities Commission, U.S. Department of Energy, California Division of Oil, Gas, and Geothermal Resources, Federal Energy Regulatory Commission, U.S. Environmental Protection Agency, Pipeline and Hazardous Materials Safety Administration, Los Angeles County Department of Public Health, states, cities and counties, and other regulatory and governmental bodies in the United States and other countries in which we operate;
- the timing and success of business development efforts and construction projects, including risks in obtaining or maintaining permits and other authorizations on a timely basis, risks in completing construction projects on schedule and on budget, and risks in obtaining the consent and participation of partners;
- the resolution of civil and criminal litigation and regulatory investigations;
- deviations from regulatory precedent or practice that result in a reallocation of benefits or burdens among shareholders and ratepayers; modifications of settlements; and delays in, or disallowance or denial of, regulatory agency authorizations to recover costs in rates from customers (including with respect to regulatory assets associated with the San Onofre Nuclear Generating Station facility and 2007 wildfires) or regulatory agency approval for projects required to enhance safety and reliability;
- the availability of electric power, natural gas and liquefied natural gas, and natural gas pipeline and storage capacity, including disruptions caused by failures in the transmission grid, moratoriums on the withdrawal or injection of natural gas from or into storage facilities, and equipment failures;
- changes in energy markets; volatility in commodity prices; moves to reduce or eliminate reliance on natural gas; and the impact on the value of our investment in natural gas storage and related assets from low natural gas prices, low volatility of natural gas prices and the inability to procure favorable long-term contracts for storage services;
- risks posed by actions of third parties who control the operations of our investments, and risks that our partners or counterparties will be unable or unwilling to fulfill their contractual commitments;
- weather conditions, natural disasters, accidents, equipment failures, explosions, terrorist attacks and other events that disrupt our operations, damage our facilities and systems, cause the release of greenhouse gases, radioactive materials and harmful emissions, cause wildfires and subject us to third-party liability for property damage or personal injuries, fines and penalties, some of which may not be covered by insurance (including costs in excess of applicable policy limits) or may be disputed by insurers;
- cybersecurity threats to the energy grid, storage and pipeline infrastructure, the information and systems used to operate our businesses and the confidentiality of our proprietary information and the personal information of our customers and employees;
- the ability to win competitively bid infrastructure projects against a number of strong and aggressive competitors;
- capital markets and economic conditions, including the availability of credit and the liquidity of our investments; fluctuations in inflation, interest and currency exchange rates and our ability to effectively hedge the risk of such fluctuations;
- changes in the tax code as a result of potential federal tax reform, such as the elimination of the deduction for interest and non-deductibility of all, or a portion of, the cost of imported materials, equipment and commodities;
- changes in foreign and domestic trade policies and laws, including border tariffs, revisions to favorable international trade agreements, and changes that make our exports less competitive or otherwise restrict our ability to export;
- expropriation of assets by foreign governments and title and other property disputes;
- the impact on reliability of San Diego Gas & Electric Company’s (SDG&E) electric transmission and distribution system due to increased amount and variability of power supply from renewable energy sources;
- the impact on competitive customer rates due to the growth in distributed and local power generation and the corresponding decrease in demand for power delivered through SDG&E’s electric transmission and distribution system and from possible departing retail load resulting from customers transferring to Direct Access and Community Choice Aggregation; and
- other uncertainties, some of which may be difficult to predict and are beyond our control.

We caution you not to rely unduly on any forward-looking statements. You should review and consider the risks, uncertainties and other factors that affect our business as described in this report and other reports that we file with the Securities and Exchange Commission.

PART I.

ITEM 1. BUSINESS

DESCRIPTION OF BUSINESS

We provide a description of Sempra Energy and its subsidiaries in "Management's Discussion and Analysis of Financial Condition and Results of Operations" and additional information by reporting segment in Note 16 of the Notes to Consolidated Financial Statements, both of which are included in the 2016 Annual Report to Shareholders (Annual Report), which is attached as Exhibit 13.1 to this report and is incorporated herein by reference.

This report includes information for the following separate registrants:

- Sempra Energy and its consolidated entities
- San Diego Gas & Electric Company (SDG&E) and its consolidated variable interest entity (VIE)
- Southern California Gas Company (SoCalGas)

References in this report to "we," "our," "us," "our company" and "Sempra Energy Consolidated" are to Sempra Energy and its consolidated entities, collectively, unless otherwise indicated by the context. SDG&E and SoCalGas are collectively referred to as the California Utilities. They are subsidiaries of Sempra Energy, and Sempra Energy indirectly owns all of the capital stock of SDG&E and all of the common stock and substantially all of the voting stock of SoCalGas.

Sempra Energy's principal operating units are

- Sempra Utilities, which includes our SDG&E, SoCalGas and Sempra South American Utilities reportable segments; and
- Sempra Infrastructure, which includes our Sempra Mexico, Sempra Renewables and Sempra LNG & Midstream reportable segments.

Prior to December 31, 2016, our reportable segments were grouped under the following operating units:

- California Utilities (which included the SDG&E and SoCalGas segments)
- Sempra International (which included the Sempra South American Utilities and Sempra Mexico segments)
- Sempra U.S. Gas & Power (which included the Sempra Renewables and Sempra Natural Gas segments)

The grouping of our segments within our operating units as of December 31, 2016 reflects a realignment of management oversight of our operations. As part of this realignment, we changed the name of our "Sempra Natural Gas" segment to "Sempra LNG & Midstream." This name change and the realignment of our segments within our new operating units had no impact on our historical financial position, results of operations, cash flows or segment results previously reported.

All references to "Sempra Utilities" and "Sempra Infrastructure" and their respective principal segments are not intended to refer to any legal entity with the same or similar name. Sempra Infrastructure also owns or owned (during periods presented in the report) utilities which are not included in our references to the Sempra Utilities. We provide financial information about all of our reportable segments and about the geographic areas in which we do business in "Management's Discussion and Analysis of Financial Condition and Results of Operations" and Note 16 of the Notes to Consolidated Financial Statements in the Annual Report.

COMPANY WEBSITES

Company website addresses are

- Sempra Energy – www.sempra.com
- SDG&E – www.sdge.com
- SoCalGas – www.socalgas.com

We make available free of charge on our website our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and any amendments to those reports as soon as reasonably practicable after such material is electronically filed with or furnished to the Securities and Exchange Commission (SEC). The charters of the audit, compensation and corporate governance committees of Sempra Energy's board of directors (the board), the board's corporate governance guidelines, and Sempra Energy's code of business conduct and ethics for directors and officers (which also applies to directors and officers of SDG&E and SoCalGas) are posted on Sempra Energy's website.

SDG&E and SoCalGas make available free of charge via a hyperlink on their websites their annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and any amendments to those reports as soon as reasonably practicable after such material is electronically filed with or furnished to the SEC.

Printed copies of all of these materials may be obtained by writing to our Corporate Secretary at Sempra Energy, 488 8th Avenue, San Diego, CA 92101-7123.

The SEC also maintains a website that contains reports, proxy and information statements and other information we file with the SEC at www.sec.gov. Copies of these reports, proxy and information statements and other information may also be obtained, after paying a duplicating fee, by electronic request at certified@sec.gov, or by writing the SEC's Public Reference Room, 100 F Street, N.E., Washington, D.C. 20549. Information on the operation of the Public Reference Room may be obtained by calling the SEC at 1-800-SEC-0330.

The information on the websites of Sempra Energy, SDG&E and SoCalGas is not part of this report or any other report that we file with or furnish to the SEC, and is not incorporated herein by reference.

GOVERNMENT REGULATION

California State Utility Regulation

The California Utilities are principally regulated by the California Public Utilities Commission (CPUC), the California Energy Commission (CEC) and the California Air Resources Board (CARB).

The CPUC:

- consists of five commissioners appointed by the Governor of California for staggered, six-year terms.
- regulates SDG&E's and SoCalGas' rates and conditions of service, sales of securities, rates of return, capital structure, rates of depreciation, and long-term resource procurement, except as described below in "United States Utility Regulation."
- has jurisdiction over the proposed construction of major new electric generation, transmission and distribution, and natural gas storage, transmission and distribution facilities in California.
- conducts reviews and audits of utility performance and compliance with regulatory guidelines, and conducts investigations into various matters, such as safety, deregulation, competition and the environment, to determine its future policies.
- regulates the interactions and transactions of the California Utilities with Sempra Energy and its other affiliates.

The CPUC also oversees and regulates new products and services, including solar and wind energy, bioenergy, alternative energy storage and other forms of renewable energy. In addition, the CPUC's safety and enforcement role includes inspections, investigations and penalty and citation processes for safety violations.

We provide further discussion in Notes 13, 14 and 15 of the Notes to Consolidated Financial Statements in the Annual Report.

The CEC publishes electric demand forecasts for the state and for specific service territories. Based on these forecasts, the CEC:

- determines the need for additional energy sources and conservation programs;
- sponsors alternative-energy research and development projects;
- promotes energy conservation programs to reduce demand within the state of California for electricity and natural gas;
- maintains a statewide plan of action in case of energy shortages; and
- certifies power-plant sites and related facilities within California.

The CEC conducts a 20-year forecast of available supplies and prices for every market sector that consumes natural gas in California. This forecast includes resource evaluation, pipeline capacity needs, natural gas demand and wellhead prices, and costs of transportation and distribution. This analysis is one of many resource materials used to support the California Utilities' long-term investment decisions.

The state of California requires certain California electric retail sellers, including SDG&E, to deliver a percentage of their retail energy sales from renewable energy sources. The rules governing this requirement, administered by both the CPUC and the CEC, are generally known as the Renewables Portfolio Standard (RPS) Program. We discuss this requirement as it applies to SDG&E in "Management's Discussion and Analysis of Financial Condition and Results of Operations – Factors Influencing Future Performance" in the Annual Report.

Certification of a generation project by the CEC as an Eligible Renewable Energy Resource (ERR) allows the purchase of output from such generation facility to be counted towards fulfillment of the RPS Program requirements, if such purchase meets the provisions of California Senate Bill X1-2. This may affect the demand for output from renewables projects developed by Sempra Renewables and Sempra Mexico, particularly from California utilities. We have obtained or plan to obtain ERR certification for all of our renewable facilities operating in and/or providing power to California as they become operational.

California Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006, assigns responsibility to CARB for monitoring and establishing policies for reducing greenhouse gas (GHG) emissions. The bill requires CARB to develop and adopt a comprehensive plan for achieving real, quantifiable and cost-effective GHG emission reductions, including a statewide GHG emissions cap, mandatory reporting rules, and regulatory and market mechanisms to achieve reductions of GHG emissions. CARB is a department within the California Environmental Protection Agency, an organization that reports directly to the Governor's Office in the Executive Branch of California State Government. Sempra LNG & Midstream and Sempra Mexico are also subject to the rules and regulations of CARB. We provide further discussion of GHG emissions in Note 1 of the Notes to Consolidated Financial Statements in the Annual Report.

The operation and maintenance of SoCalGas' natural gas storage facilities are regulated by the California Department of Conservation's Division of Oil, Gas, and Geothermal Resources (DOGGR), in accordance with various other state and local agencies described below in "Other State and Local Regulation Within the U.S."

United States Utility Regulation

The California Utilities are also regulated by the Federal Energy Regulatory Commission (FERC), the Nuclear Regulatory Commission (NRC), the U.S. Environmental Protection Agency (EPA), the U.S. Department of Energy (DOE) and the U.S. Department of Transportation (DOT).

In the case of SDG&E, the FERC regulates the interstate sale and transportation of natural gas, the transmission and wholesale sales of electricity in interstate commerce, transmission access, rates of return on transmission investment, the uniform systems of accounts, rates of depreciation and electric rates involving sales for resale. The National Energy Policy Act governs procedures for requests for transmission service. The FERC approved the California investor-owned utilities' (IOUs) transfer of operation and control of their transmission facilities to the Independent System Operator (ISO) in 1998.

In the case of SoCalGas, the FERC regulates the interstate sale and transportation of natural gas and the uniform systems of accounts.

The NRC oversees the licensing, construction, operation and decommissioning of nuclear facilities in the United States, including the San Onofre Nuclear Generating Station (SONGS), in which SDG&E owns a 20-percent interest. NRC and various state regulations require extensive review of the safety, radiological and environmental aspects of these facilities. The majority owner of SONGS, Southern California Edison Company (Edison), made a decision to permanently retire the facility in June 2013. We provide further discussion of current SONGS matters involving the NRC and the closure of the facility in Note 13 of the Notes to Consolidated Financial Statements in the Annual Report.

The DOT, through its Pipeline and Hazardous Materials Safety Administration (PHMSA), has established regulations regarding engineering standards and operating procedures applicable to the California Utilities' natural gas transmission and distribution pipelines. The DOT has certified the CPUC to administer oversight and compliance with these regulations for the entities they regulate in California. The PHMSA also is in the process of promulgating regulations applicable to the California Utilities' natural gas storage facilities. See "Other U.S. Regulation" below.

Other State and Local Regulation Within the U.S.

The South Coast Air Quality Management District (SCAQMD) is the air pollution control agency responsible for regulating stationary sources of air pollution in the South Coast Air Basin in Southern California. The district's territory covers all of Orange County and the urban portions of Los Angeles, San

Bernardino and Riverside counties.

SoCalGas has natural gas franchises with the 12 counties and the 223 cities in its service territory. These franchises allow SoCalGas to locate, operate and maintain facilities for the transmission and distribution of natural gas. Most of the franchises have indefinite lives with no expiration date. Some franchises have fixed expiration dates, ranging from 2017 to 2062. SoCalGas seeks to renew or extend these agreements prior to their expiration. Major franchise agreements include those for Los Angeles County and the City of Los Angeles. The Los Angeles County franchise agreement was entered into in 1955, with the current extension expiring in December 2017. The City of Los Angeles franchise was entered into in 1992, with the current extension expiring in June 2017.

SDG&E has

- electric franchises with the two counties served and the 27 cities in or adjoining its electric service territory; and
- natural gas franchises with the one county and the 18 cities in its natural gas service territory.

These franchises allow SDG&E to locate, operate and maintain facilities for the transmission and distribution of electricity and/or natural gas. Most of the franchises have indefinite lives with no expiration dates. Some natural gas and some electric franchises have fixed expiration dates that range from 2021 to 2035.

Sempra Renewables has operations, investments or development projects in various U.S. markets. Sempra LNG & Midstream develops and invests in liquefied natural gas (LNG)-related infrastructure in North America, develops and operates natural gas storage facilities in Alabama and Mississippi and owns a 50.2-percent interest in a liquefaction project in Louisiana. It is also seeking authorization to develop an LNG natural gas liquefaction and export terminal in Port Arthur, Texas.

Other U.S. Regulation

The FERC regulates certain Sempra Renewables and Sempra LNG & Midstream assets pursuant to the Federal Power Act (FPA) and Natural Gas Act, which provide for FERC jurisdiction over, among other things, sales of wholesale power in interstate commerce, transportation and storage of natural gas in interstate commerce, and siting and permitting of LNG terminals. In addition, certain Sempra Renewables power generation assets are required under the FPA to comply with reliability standards developed by the North American Electric Reliability Corporation. Bay Gas Storage Company, Ltd.'s (Bay Gas) natural gas storage operations are also regulated by the Alabama Public Service Commission.

Sempra LNG & Midstream also has an investment in Cameron LNG Holdings, LLC (Cameron LNG JV), located in Louisiana, that is subject to regulations of the DOE regarding the export of LNG. We discuss Sempra LNG & Midstream's investments further in Note 4 of the Notes to Consolidated Financial Statements in the Annual Report.

The FERC may regulate rates and terms of service based on a cost-of-service approach or, in geographic and product markets determined by the FERC to be sufficiently competitive, rates may be market-based. FERC-regulated rates at the following businesses are

- Sempra Renewables and Sempra LNG & Midstream: market-based for wholesale electricity sales
- Sempra LNG & Midstream: cost-based for the transportation of natural gas
- Sempra LNG & Midstream: market-based for the storage of natural gas, as well as the purchase and sale of LNG and natural gas

The California Utilities, Sempra LNG & Midstream and businesses that Sempra LNG & Midstream invests in are subject to DOT rules and regulations regarding pipeline safety. PHMSA, acting through the Office of Pipeline Safety, is responsible for administering the DOT's national regulatory program to assure the safe transportation of natural gas, petroleum and other hazardous materials by pipeline, including pipelines associated with natural gas storage, and develops regulations and other approaches to risk management to assure safety in design, construction, testing, operation, maintenance, and emergency response of pipeline facilities. The California Utilities, Sempra LNG & Midstream, Sempra Renewables and Sempra Mexico are also subject to regulation by the U.S. Commodity Futures Trading Commission.

Foreign Regulation

Our Sempra Mexico segment owns, develops and operates the following in Mexico:

- natural gas pipelines, ethane systems and a liquid petroleum gas pipeline and associated storage terminal
- electric generation facilities, including wind and solar power generation facilities and a natural gas-fired power plant in Baja California, Mexico; in February 2016, management approved a plan to market and sell the natural gas-fired power plant, as we discuss in Note 3 of the Notes to Consolidated Financial Statements in the Annual Report
- natural gas distribution systems in Mexicali, Chihuahua, and the La Laguna-Durango zone in north-central Mexico
- the Energía Costa Azul LNG regasification terminal located in Baja California, Mexico

These operations and projects are subject to regulation by the Energy Regulatory Commission (Comisión Reguladora de Energía, or CRE), the Safety, Energy and Environment Agency (Agencia de Seguridad, Energía y Ambiente), the Secretary of Energy (Secretaría de Energía) and other labor and environmental agencies of city, state and federal governments in Mexico.

Sempra Mexico's operations in Mexico include the Sempra Energy subsidiary Infraestructura Energética Nova, S.A.B. de C.V. (IEnova), which has common stock held by noncontrolling interests. The issuance of shares was approved and is subject to regulation by the Mexican National Banking and Securities Commission (Comisión Nacional Bancaria y de Valores, or CNBV) for registration of the shares with the Mexican National Securities Registry (Registro Nacional de Valores) maintained by the CNBV. IEnova's shares are traded on the Mexican Stock Exchange (La Bolsa Mexicana de Valores, S.A.B. de C.V., or BMV) under the symbol "IENOVA."

Sempra South American Utilities has two utilities in South America that are subject to laws and regulations in the localities and countries in which they operate. Chilquinta Energía S.A. (including its subsidiaries, Chilquinta Energía) is an electric distribution utility serving customers in the region of Valparaíso in central Chile. Luz del Sur S.A.A. (including its subsidiaries, Luz del Sur) is an electric distribution utility in the southern zone of metropolitan Lima, Peru. These utilities serve primarily regulated customers, and their revenues are based on tariffs that are set by the National Energy Commission (Comisión Nacional de Energía) in Chile and the Energy and Mining Investment Supervisory Body (Organismo Supervisor de la Inversión en Energía y Minería, or OSINERGMIN) in Peru. Luz del Sur has common stock held by noncontrolling interests. The shares are subject to regulation by the Superintendencia del Mercado de Valores (Superintendency of Securities Market, or SMV). Luz del Sur's shares are traded on the Lima Stock Exchange (Bolsa de Valores de Lima) under the symbol LUSURC1.

Licenses and Permits

The California Utilities obtain numerous permits, authorizations and licenses in connection with the transmission and distribution of natural gas and electricity and the operation and construction of related assets, including electric generation and natural gas storage facilities, some of which may require

periodic renewal.

Sempra Mexico and Sempra South American Utilities obtain numerous permits, authorizations and licenses for their electric and natural gas distribution, generation and transmission systems from the local governments where the service is provided. The permits for generation, transportation, storage and distribution operations at Sempra Mexico are generally for 30-year terms, with options for renewal under certain regulatory conditions. The respective energy ministry in Chile or Peru granted the concessions to operate Chilquinta Energía's and Luz del Sur's distribution operations for indefinite terms, not requiring renewal.

Sempra Mexico and Sempra LNG & Midstream obtain licenses and permits for the construction, operation and expansion of LNG facilities, and the import and export of LNG and natural gas.

Sempra Renewables obtains a number of permits, authorizations and licenses in connection with the construction and operation of power generation facilities, and in connection with the wholesale distribution of electricity.

Sempra LNG & Midstream obtains a number of permits, authorizations and licenses in connection with the construction and operation of natural gas storage facilities and pipelines, and with participation in the wholesale electricity market.

Most of the permits and licenses associated with construction and operations within the Sempra Renewables and Sempra LNG & Midstream businesses are for periods generally in alignment with the construction cycle or life of the asset and in many cases greater than 20 years.

We describe other regulatory matters related to our projects in "Management's Discussion and Analysis of Financial Condition and Results of Operations – Our Business" in the Annual Report.

ELECTRIC UTILITY OPERATIONS

SDG&E

Customers

SDG&E's service area covers 4,100 square miles. At December 31, 2016, SDG&E had approximately 1.4 million electric customer meters consisting of approximately:

- 1,275,600 residential
- 151,100 commercial
- 400 industrial
- 5,000 direct access
- 2,000 street and highway lighting

We describe various matters impacting customer growth at SDG&E in "Management's Discussion and Analysis of Financial Condition and Results of Operations – Factors Influencing Future Performance" in the Annual Report.

Resource Planning and Power Procurement

SDG&E's resource planning, power procurement and related regulatory matters are discussed in "Management's Discussion and Analysis of Financial Condition and Results of Operations – Factors Influencing Future Performance" and in Notes 14 and 15 of the Notes to Consolidated Financial Statements in the Annual Report.

Electric Resources

The supply of electric power available to SDG&E for resale is based on CPUC-approved purchased-power contracts currently in place with various suppliers, SDG&E's wholly owned generating facilities, and purchases on a spot basis. This supply as of December 31, 2016 is as follows:

SDG&E ELECTRIC RESOURCES

Resource	Number of contracts	Expiration date	Megawatts
Purchased-power contracts:			
Contracts with Qualifying Facilities (QFs)(1):			
Cogeneration	6	2017 and thereafter	139
Cogeneration tolling contracts(2)	2	2024, 2025	101
Total			240
Other contracts with renewable sources:			
Wind	15	2018 to 2035	1,233
Solar PV	21	2030 to 2041	1,306
Bio-gas/Hydro	16	2017 and thereafter	38
Total			2,577
Tolling(2) and other contracts:			
Natural gas tolling contracts	4	2019 to 2039	800
Hydro/Pump storage	1	2037	40
Market(3)	2	2019, 2022	193
Total			1,033
Total contracted			3,850
Owned generation, natural gas:			

Palomar Energy Center	566
Desert Star Energy Center	485
Miramar Energy Center	96
Cuyamaca Peak Energy Plant	47
Total owned generation	1,194
Total contracted and owned generation	5,044

(1) A QF is a generating facility which meets the requirements for QF status under the Public Utility Regulatory Policies Act of 1978. It includes cogeneration facilities, which produce electricity and another form of useful thermal energy (such as heat or steam) used for industrial, commercial, residential or institutional purposes.

(2) Tolling contracts are purchased-power agreements under which SDG&E provides natural gas for generation to the energy supplier.

(3) Agreements to purchase firm energy during specific periods at fixed prices.

Charges under most of the contracts with QFs are based on what it would incrementally cost SDG&E to produce the power or procure it from other sources. Charges under the remaining contracts are for firm and as-generated energy, and are based on the amount of energy received or are tolls based on available capacity. The prices under these contracts are based on the market value at the time the contracts were negotiated.

Natural Gas Supply

SDG&E buys natural gas under short-term contracts for its owned generation facilities and for certain tolling contracts associated with purchased-power arrangements. Purchases are from various southwestern U.S. suppliers and are primarily priced based on published monthly bid-week indices.

Power Pool

SDG&E is a participant in the Western Systems Power Pool, which includes an electric-power and transmission-rate agreement that allows access to power trading with more than 300 member utilities, power agencies, energy brokers and power marketers located throughout the United States and Canada. Participants are able to make power transactions on standardized terms, including market-based rates, preapproved by the FERC. Participation in the Western Systems Power Pool is intended to assist members in managing power delivery and price risk.

Electric Transmission System

Service to SDG&E's customers is supported by the electric transmission system. SDG&E's 500-kilovolt (kV) Southwest Powerlink transmission line, which is shared with Arizona Public Service Company and Imperial Irrigation District, extends from Palo Verde, Arizona to San Diego, California. SDG&E's share of the line is 1,162 megawatts (MW), although it can be less under certain system conditions. SDG&E's Sunrise Powerlink is a 500-kV transmission line constructed and operated by SDG&E with import capability of 1,000 MW of power.

Mexico's Baja California system is connected to SDG&E's system via two 230-kV interconnections with combined capacity up to 408 MW in the north-to-south direction and 800 MW in the south-to-north direction, although it can be less under certain system conditions.

Edison's transmission is connected to SDG&E's system at SONGS via five 230-kV transmission lines.

Chilquinta Energía

Customers

Chilquinta Energía has approximately 688,000 customer meters in the region of Valparaíso in central Chile, with a service area covering 4,400 square miles. At December 31, 2016, its customer meters consisted of approximately:

- 634,700 residential
- 38,700 commercial
- 1,400 industrial
- 7,700 street and highway lighting
- 5,300 agricultural

In Chile, customers are classified as regulated and non-regulated customers based on installed capacity. Regulated customers are those whose installed capacity is less than 500 kilowatts (kW). Non-regulated customers are those whose installed capacity is greater than 2,000 kW. Customers with installed capacity between 500 kW and 2,000 kW may choose to be classified as regulated or non-regulated. Non-regulated customers can buy power from other sources, such as directly from the generator.

In 2016, Chilquinta Energía added approximately 16,000 new customer meters at a growth rate of 2.3 percent. Chilquinta Energía's electric energy sales increased by approximately 13,000 megawatt hours (MWh) and decreased by approximately 57,000 MWh in 2016 and 2015, respectively, representing an annual growth rate of 0.4 percent in 2016 and a decline of 1.9 percent in 2015. The decrease in electric energy sales in 2015 was primarily due to the transfer of certain non-regulated customers from Chilquinta Energía to the energy-services company, Tecnored S.A., a subsidiary of Sempra South American Utilities in Chile.

Electric Resources

The supply of electric power available to Chilquinta Energía comes from purchased-power contracts currently in place with its various suppliers and its suppliers' generating facilities. This supply as of December 31, 2016 was as follows:

CHILQUINTA ENERGÍA ELECTRIC RESOURCES

Resource	Number of contracts	Expiration date	Megawatts
Purchased-power contracts(1)(2):			
Thermal/Hydro/Wind/Solar/Biomass	29	2020 to 2026	447
Small generation plants:			
Thermal			8

Total	455

(1) Contracts with fuel sources that include natural gas, coal or diesel are collectively referred to as thermal.
(2) In 2016, energy contracts in the Central Interconnected System, where Chilquinta Energía operates, were supplied 53 percent from thermal, 37 percent from hydro, 4 percent from wind, 3 percent from solar and 3 percent from biomass sources.

Power Generation System

Centers for Economic Load Dispatch (Centros de Despacho Económico de Carga, or CDEC), private organizations, were in charge of coordinating the operation of the electricity system until December 31, 2016. Each interconnected system was subject to its own CDEC. Chilquinta Energía operates within CDEC-SIC (Sistema Interconectado Central, or Central Interconnected System).

Effective January 1, 2017, the National Electric System is operated and coordinated by the National Electric Coordinator (Coordinador Eléctrico Nacional), a new independent entity. This institution is managed by a Directive Council (Consejo Directivo) formed by five members designated through a public tender. This new entity functions as a continuation of the CDEC for the central and northern interconnected system.

Transmission System and Access

Transmission lines in Chile are either part of its main transmission system (sistema de transmisión troncal) or its sub-transmission system (sistema de subtransmisión). Sub-transmission systems, including those owned by Chilquinta Energía, are comprised of infrastructure that is interconnected to the electricity system to supply non-regulated and regulated end-users located in the distribution service area.

We discuss transmission line projects that have been completed or are ongoing at Chilquinta Energía's joint ventures in "Management's Discussion and Analysis of Financial Condition and Results of Operations – Our Business" in the Annual Report.

Luz del Sur

Customers

Luz del Sur has approximately 1,078,000 customer meters in the southern zone of metropolitan Lima, Peru, with a service area covering approximately 1,394 square miles. At December 31, 2016, its customer meters consisted of approximately:

- 1,011,500 residential
- 56,600 commercial
- 4,100 industrial
- 5,100 street and highway lighting
- 500 agricultural

In Peru, customers are classified as regulated and non-regulated customers based on capacity demand. Regulated customers are those whose capacity demand is less than 200 kW and their energy supply is considered public service. Non-regulated customers are those whose capacity demand is greater than 2,500 kW. Customers with capacity demand between 200 kW and 2,500 kW may choose to be classified as regulated or non-regulated.

In 2016, Luz del Sur added approximately 25,000 new customer meters at a growth rate of 2.4 percent. However, Luz del Sur's electric energy sales decreased by approximately 162,000 MWh in 2016, compared to an increase of approximately 262,000 MWh in 2015, representing a decrease in annual growth rate of 2.1 percent in 2016 and an increase of 3.6 percent in 2015. The decrease in electric energy sales in 2016 is primarily due to the migration of regulated and non-regulated customers to tolling customers, who only pay a tolling fee and do not contribute to customer load.

Electric Resources

The supply of electric power available to Luz del Sur comes from purchased-power contracts currently in place with various suppliers, as well as purchases made on an as-needed basis. Luz del Sur also uses the supply of power generated by Santa Teresa, its wholly owned 100-MW hydroelectric power plant in Peru's Cusco region.

Luz del Sur's electric power supply as of December 31, 2016 was as follows:

LUZ DEL SUR ELECTRIC RESOURCES

Resource	Number of contracts	Expiration date	Megawatts
Purchased-power contracts(1):			
Bilateral contract:			
Hydro/Thermal	1	2019	25
Auction contracts:			
Hydro	14	2021 to 2025	233
Thermal	21	2021 to 2025	687
Hydro/Thermal	26	2021 to 2025	537
Total contracted			1,482
Owned generation, Hydro:			
Santa Teresa(2)			61
Total contracted and owned generation			1,543

(1) Contracts with fuel sources that include natural gas, coal or diesel are collectively referred to as thermal.
(2) Firm capacity is estimated at 61 MW based on guidelines established by the system operator in Peru and historical water flows. Available excess capacity is sold on the spot market.

Power Generation System

The Sistema Eléctrico Interconectado Nacional (SEIN) is the Peruvian national interconnected system. The OSINERGMIN, in addition to setting tariffs as discussed above, supervises the bidding processes for energy purchases between distribution companies and generators.

The Committee of Economic Operation of the National Interconnected System (Comité de Operación Económica del Sistema Interconectado Nacional) coordinates the operation and dispatch of electricity of the SEIN.

Transmission System and Access

Transmission lines in Peru are divided into principal and secondary systems. The principal system lines are accessible by all generators and allow the flow of energy through the national grid. The secondary system lines connect principal transmission with the network of distribution companies or connect directly to certain final customers. The transmission company receives tariff revenues and collects tolls based on a charge per unit of electricity.

We discuss ongoing transmission line and substation projects at Luz del Sur in "Management's Discussion and Analysis of Financial Condition and Results of Operations – Our Business" in the Annual Report.

CALIFORNIA NATURAL GAS UTILITY OPERATIONS

SoCalGas and SDG&E sell, distribute and transport natural gas. SoCalGas purchases and stores natural gas for its core customers and SDG&E's core customers on a combined portfolio basis and provides natural gas storage services for others. We discuss the California Utilities' resource planning, natural gas procurement, contractual commitments, and related regulatory matters below. We also provide further discussion in "Management's Discussion and Analysis of Financial Condition and Results of Operations," and in Notes 14 and 15 of the Notes to Consolidated Financial Statements in the Annual Report.

Customers

At December 31, 2016, SoCalGas had approximately 5.9 million customer meters consisting of approximately:

- 5,656,500 residential
- 247,300 commercial
- 26,000 industrial
- 50 electric generation and wholesale

At December 31, 2016, SDG&E had approximately 878,000 natural gas customer meters consisting of approximately:

- 845,600 residential
- 28,600 commercial
- 3,900 electric generation and transportation

For regulatory purposes, end-use customers are classified as either core or noncore customers. Core customers are primarily residential and small commercial and industrial customers. Noncore customers at SoCalGas consist primarily of electric generation, wholesale, large commercial and industrial, and enhanced oil recovery customers. SoCalGas' wholesale customers are primarily other IOUs, including SDG&E, or municipally owned natural gas distribution systems. Noncore customers at SDG&E consist primarily of electric generation and large commercial customers.

Most core customers purchase natural gas directly from SoCalGas or SDG&E. While core customers are permitted to purchase directly from producers, marketers or brokers, the California Utilities are obligated to provide reliable supplies of natural gas to serve the requirements of their core customers. Noncore customers are responsible for the procurement of their natural gas requirements.

Natural Gas Procurement and Transportation

SoCalGas purchases natural gas under short-term and long-term contracts for the California Utilities' residential and smaller business customers. SoCalGas purchases natural gas from various sources, including from Canada, the U.S. Rockies and the southwestern regions of the U.S. Purchases of natural gas are primarily priced based on published monthly bid-week indices.

To help ensure the delivery of the natural gas supplies to its distribution system and to meet the seasonal and annual needs of customers, SoCalGas has firm interstate pipeline capacity contracts that require the payment of fixed reservation charges to reserve firm transportation rights. Pipeline companies, primarily El Paso Natural Gas Company, Transwestern Pipeline Company, Pacific Gas and Electric Company (PG&E) and Kern River Gas Transmission Company, provide transportation services into SoCalGas' intrastate transmission system for supplies purchased by SoCalGas or its transportation customers from outside of California.

Natural Gas Storage

SoCalGas owns four natural gas storage facilities. The facilities have a combined working gas capacity of 137 billion cubic feet (Bcf) and have over 200 injection, withdrawal and observation wells. Natural gas withdrawn from storage is important for ensuring service reliability during peak demand periods, including heating needs in the winter, as well as peak electric generation needs in the summer. The Aliso Canyon natural gas storage facility represents 63 percent of SoCalGas' natural gas storage capacity. SoCalGas discovered a natural gas leak at one of its wells at the Aliso Canyon facility in October 2015, and permanently sealed the well in February 2016. SoCalGas has not injected natural gas into Aliso Canyon since October 25, 2015, pursuant to orders from DOGGR and the Governor, and Senate Bill (SB) 380, all discussed in Note 15 of the Notes to Consolidated Financial Statements in the Annual Report. Limited withdrawals of natural gas from Aliso Canyon have been made in 2017 to augment natural gas supplies during critical demand periods. SoCalGas completed its measurement of the natural gas lost from the leak and calculated that approximately 4.62 Bcf of natural gas was released from the Aliso Canyon natural gas storage facility as a result of the leak. In November 2016, SoCalGas submitted a request to DOGGR seeking authorization to resume injection operations at the Aliso Canyon storage facility. In accordance with SB 380, DOGGR held public meetings on February 1 and 2, 2017 to receive public comment on DOGGR's findings from its gas storage and well safety review and proposed pressure limits for the Aliso Canyon natural gas storage facility. The public comment period has expired. It remains for DOGGR to issue its safety determination, after which the CPUC must concur with DOGGR's determination, before injections at the facility can resume. We discuss the Aliso Canyon natural gas storage facility gas leak in "Risk Factors" below and in Note 15 of the Notes to Consolidated Financial Statements in the Annual Report.

SoCalGas also provides natural gas storage services directly to its customers. It uses the majority of its natural gas storage capacity to provide service to its residential and smaller business customers and offers the remaining storage capacity for sale to others.

Demand for Natural Gas

Demand for natural gas largely depends on the health and expansion of the Southern California economy, prices of alternative energy products, consumer preference, environmental regulations, legislation, California's energy policy supporting increased electrification and renewable power generation, and the effectiveness of energy efficiency programs. Other external factors such as weather, the price of electricity, the use of hydroelectric power, development of

renewable energy resources, development of new natural gas supply sources, demand for natural gas outside the state of California, and general economic conditions can also result in significant shifts in market price, which may in turn impact demand.

One of the larger sources for natural gas demand is electric generation. Natural gas-fired electric generation within Southern California (and demand for natural gas supplied to such plants) competes with electric power generated throughout the western United States. Natural gas transported for electric generating plant customers may be affected by the overall demand for electricity, growth in renewable generation (including rooftop solar), the addition of more efficient gas technologies, new energy efficiency initiatives, and the extent that regulatory changes in electric transmission infrastructure investment divert electric generation from the California Utilities' respective service areas. The demand may also fluctuate due to volatility in the demand for electricity due to climate change, weather conditions and other impacts, and the availability of competing supplies of electricity such as hydroelectric generation and other renewable energy sources. We provide additional information regarding the electric industry and related infrastructure projects and regulatory impacts at the California Utilities in "Our Business" and "Factors Influencing Future Performance" in "Management's Discussion and Analysis of Financial Condition and Results of Operations" and in Note 14 of the Notes to Consolidated Financial Statements in the Annual Report.

The natural gas distribution business is seasonal, and cash provided from operating activities generally is greater during and immediately following the winter heating months. As is prevalent in the industry, but subject to current regulatory limitations, SoCalGas usually injects natural gas into storage during the summer months (April through October), which reduces cash provided from operating activities during this period, for withdrawal from storage usually during the winter months (November through March), which increases cash provided from operating activities, when customer demand is higher.

RATES AND REGULATION

We provide information concerning rates and regulation applicable to our utilities in "Management's Discussion and Analysis of Financial Condition and Results of Operations" and in Notes 1, 13 and 14 of the Notes to Consolidated Financial Statements in the Annual Report.

SEMPRA INFRASTRUCTURE

We provide descriptions of Sempra Infrastructure's segments and information concerning their operations in "Management's Discussion and Analysis of Financial Condition and Results of Operations" and in Notes 1, 3, 4, 15 and 16 of the Notes to Consolidated Financial Statements in the Annual Report.

Competition

Sempra Energy's non-utility businesses are among many others in the energy industry providing similar services. They are engaged in competitive activities that require significant capital investments and skilled and experienced personnel. Among these competitors there may be significant variation in financial, personnel and other resources compared to Sempra Infrastructure.

Generation – Renewables

Sempra Renewables primarily competes for wholesale contracts for the generation and sale of electricity through its development of and investments in wind and solar power generation facilities. Sempra Renewables also competes with other non-utility generators, regulated utilities, unregulated subsidiaries of regulated utilities, and other energy service companies for sales of non-contracted renewable energy. The number and type of competitors may vary based on location, generation type and project size. Also, regulatory initiatives designed to enhance energy consumption from renewable resources for regulated utility companies may increase competition from these types of institutions. These utilities may have a cost of capital that differs from most independent renewable power producers and often are able to recover fixed costs through rate base mechanisms. This allows them to build, buy and upgrade renewable generation projects without relying exclusively on market clearing prices to recover their investments. Additionally, generation from Sempra Renewables' renewable energy assets is exposed to fluctuations in naturally occurring conditions such as wind, inclement weather and hours of sunlight.

Our renewable energy competitors include, among others:

- § Avangrid
- § First Solar
- § Invenergy
- § MidAmerican Energy
- § NextEra Energy Resources
- § NRG Energy

Because Sempra Mexico sells the power that it generates at its Energía Sierra Juárez wind power generation facility into California, it is also impacted by these competitive factors.

LNG

Technological advances associated with shale gas and tight oil production have significantly reduced the need for North American LNG import facilities and increased interest in liquefaction and export opportunities.

At current forward gas prices, U.S. Gulf Coast liquefaction is among the most price competitive potential LNG supply in the world. Brownfield liquefaction is particularly price competitive, resulting from many factors, including:

- high levels of developed and undeveloped North American unconventional natural gas and tight oil resources relative to domestic consumption levels;
- increasing gas and oil drilling productivity and decreasing unit costs of gas production;
- low breakeven prices of marginal North American unconventional gas production;
- proximity to ample existing gas transmission pipeline and underground gas storage capacity; and
- existing LNG tankage and berths.

Global LNG competition may limit U.S. LNG exports, as international liquefaction projects attempt to match U.S. Gulf Coast LNG production costs and customer contractual rights such as volume and destination flexibility. Host governments for international liquefaction projects are altering fiscal and tax regimes in an effort to make projects in their jurisdictions competitive relative to U.S. projects; however, sustained low oil prices may cause some of the international projects to become unfeasible due to their LNG price formulas' link to oil prices. It is expected that U.S. LNG exports will increase competition for current and future global natural gas demand, and thereby facilitate development of a global commodity market for natural gas and LNG.

Sempra LNG & Midstream has a 50.2-percent equity interest in Cameron LNG JV, which owns a regasification facility in Hackberry, Louisiana. The joint venture began construction in the second half of 2014 on a natural gas liquefaction export facility using some of the existing regasification infrastructure. The joint venture has authorization to export LNG to both Free Trade Agreement (FTA) countries and to countries that do not have an FTA with the United States.

Cameron LNG JV has 20-year liquefaction and regasification tolling capacity agreements in place with ENGIE S.A. and affiliates of Mitsubishi Corporation and Mitsui & Co., Ltd., which subscribe the full nameplate capacity of three trains at the facility. In addition, Cameron LNG JV is working on the development of up to two additional trains. We discuss Cameron LNG JV in Notes 3 and 4 of the Notes to Consolidated Financial Statements and the construction of the first three trains in "Our Business" and "Factors Influencing Future Performance" in "Management's Discussion and Analysis of Financial Condition and Results of Operations" in the Annual Report. Our joint venture partners, affiliates of ENGIE S.A., Mitsubishi Corporation (through a related company jointly established with Nippon Yusen Kabushiki Kaisha), and Mitsui & Co., Ltd., compete globally to market and sell LNG to end users, including gas and electric utilities located in LNG importing countries around the world. By providing liquefaction services, Cameron LNG JV will compete indirectly with liquefaction projects currently operating and those under development in the global LNG market. In addition to the U.S., these competitors are located in the Middle East, Southeast Asia, Africa, South America, Australia and Europe.

Sempra Energy is also taking steps to explore the development of additional LNG export facilities at Sempra LNG & Midstream's Port Arthur, Texas property and Sempra Mexico's Energía Costa Azul regasification facility.

Our LNG liquefaction business' major domestic and international competitors will include, among others, the following companies and their related LNG affiliates:

- BP
- Cheniere Energy
- Chevron
- ConocoPhillips
- ExxonMobil
- Kinder Morgan
- Petronas
- Qatar Petroleum
- Royal Dutch Shell
- Total
- Woodside

Natural Gas Pipelines and Storage Facilities

Within their respective market areas, Sempra LNG & Midstream's and Sempra Mexico's pipeline businesses and Sempra LNG & Midstream's storage facilities businesses compete with other regulated and unregulated storage facilities and pipelines. They compete primarily on the basis of price (in terms of storage and transportation fees), available capacity and interconnections to downstream markets.

Sempra LNG & Midstream's competitors include, among others:

- Boardwalk Pipeline Partners
- Cardinal Gas Storage Partners
- Columbia Energy
- Enbridge
- Energy Transfer Partners
- Enterprise Products Partners
- Kinder Morgan
- Macquarie Infrastructure Partners
- Plains All American Pipeline
- Southern Company Gas
- TransCanada
- The Williams Companies

Sempra Mexico's competitors include, among others:

- Carso Energy
- Enagas
- ENGIE S.A.
- Fermaca
- Kinder Morgan
- TransCanada

ENVIRONMENTAL MATTERS

We discuss environmental issues affecting us in Note 15 of the Notes to Consolidated Financial Statements in the Annual Report. You should read the following additional information in conjunction with those discussions.

Hazardous Substances

The CPUC's Hazardous Waste Collaborative mechanism allows California's IOUs to recover hazardous waste cleanup costs for certain sites, including those related to certain Superfund sites. This mechanism permits the California Utilities to recover in rates 90 percent of hazardous waste cleanup costs and related third-party litigation costs, and 70 percent of the related insurance-litigation expenses. In addition, the California Utilities have the opportunity to retain a percentage of any recoveries from insurance carriers and other third parties to offset the cleanup and associated litigation costs not recovered in rates.

We record estimated liabilities for environmental remediation when amounts are probable and estimable. In addition, we record amounts authorized to be recovered in rates under the Hazardous Waste Collaborative mechanism as regulatory assets.

Air and Water Quality

The electric and natural gas industries are subject to increasingly stringent air-quality and greenhouse gas standards, such as those established by the EPA, the CARB and SCAQMD. The California Utilities generally recover in rates the costs to comply with these standards. We discuss greenhouse gas standards and credits further in Note 1 of the Notes to Consolidated Financial Statements in the Annual Report.

We discuss environmental matters concerning SoCalGas' Aliso Canyon natural gas storage facility in "Risk Factors" below, and in "Management's Discussion and Analysis of Financial Condition and Results of Operations – Factors Influencing Future Performance" and Note 15 of the Notes to Consolidated Financial Statements in the Annual Report.

EXECUTIVE OFFICERS OF THE REGISTRANTS

EXECUTIVE OFFICERS OF SEMPRA ENERGY

Name	Age(1)	Positions Held Over Last Five Years	Time in Position
Debra L. Reed(2)	60	Chairman	December 2012 to present
		Chief Executive Officer	June 2011 to present
Mark A. Snell(3)	60	President	October 2011 to present
Joseph A. Householder	61	Corporate Group President - Infrastructure Businesses	January 2017 to present
		Executive Vice President and Chief Financial Officer	October 2011 to December 2016
Steven D. Davis	61	Corporate Group President - Utilities	January 2017 to present
		Executive Vice President - External Affairs and Corporate Strategy	September 2015 to December 2016
		President and Chief Operating Officer, SDG&E	January 2014 to September 2015
		Senior Vice President - External Affairs	March 2012 to December 2013
		Vice President - Investor Relations	May 2010 to March 2012
J. Walker Martin	55	Executive Vice President and Chief Financial Officer	January 2017 to present
		Chairman, SDG&E	November 2015 to December 2016
		President, SDG&E	October 2015 to December 2016
		Chief Executive Officer, SDG&E	January 2014 to December 2016
		President and Chief Executive Officer, Sempra U.S. Gas & Power	October 2011 to December 2013
Martha B. Wyrsch	59	Executive Vice President and General Counsel	September 2013 to present
		President, Vestas American Wind Systems	June 2009 to December 2012
Dennis V. Arriola	56	Executive Vice President - Corporate Strategy and External Affairs	January 2017 to present
		Chairman, SoCalGas	November 2015 to December 2016
		Chief Executive Officer, SoCalGas	March 2014 to December 2016
		President, SoCalGas	August 2012 to September 2016
		Chief Operating Officer, SoCalGas	August 2012 to January 2014
		Executive Vice President and Chief Financial Officer, SunPower Corporation	January 2008 to January 2012
Trevor I. Mihalik	50	Senior Vice President	December 2013 to present
		Controller and Chief Accounting Officer	July 2012 to present
		Senior Vice President of Finance, Iberdrola Renewables Holdings, Inc.	July 2010 to July 2012
G. Joyce Rowland	62	Senior Vice President, Chief Human Resources Officer and Chief Administrative Officer	September 2014 to present
		Senior Vice President - Human Resources, Diversity and Inclusion	May 2010 to September 2014

(1) Ages are as of February 28, 2017.
(2) Ms. Reed also becomes President effective on March 1, 2017.
(3) Mr. Snell will be retired as of March 1, 2017.

EXECUTIVE OFFICERS OF SDG&E

Name	Age(1)	Positions Held Over Last Five Years	Time in Position
Scott D. Drury	51	President	January 2017 to present
		Chief Energy Supply Officer	June 2015 to December 2016
		Vice President - Human Resources, Diversity and Inclusion	March 2011 to June 2015
James P. Avery(2)	60	Chief Development Officer	June 2015 to present
		Senior Vice President - Power Supply	April 2009 to June 2015
J. Chris Baker	57	Chief Information Officer	June 2015 to present
		Senior Vice President and Chief Information Technology Officer	January 2014 to June 2015
		Senior Vice President - Strategic Planning and Technology	September 2012 to January 2014
		Senior Vice President - Support Services	April 2010 to August 2012
Lee Schavrien	62	Chief Administrative Officer	June 2015 to present

		Senior Vice President of Regulatory Affairs and Operations Support	February 2015 to June 2015
		Senior Vice President - Finance, Regulatory and Legislative Affairs	April 2010 to February 2015
Erbin B. Keith	56	Chief Regulatory and Risk Officer and General Counsel	September 2016 to present
		Senior Vice President and General Counsel	October 2014 to September 2016
		Vice President and Special Projects Counsel, Sempra Energy	May 2014 to October 2014
		Senior Vice President and General Counsel, SoCalGas	August 2012 to August 2014
		General Counsel, SoCalGas	April 2010 to August 2014
		Senior Vice President - External Affairs	April 2010 to August 2012
Caroline A. Winn	53	Chief Operating Officer	January 2017 to present
		Chief Energy Delivery Officer	June 2015 to December 2016
		Vice President - Customer Services	April 2010 to June 2015
Bruce A. Folkmann	49	Vice President, Controller, Chief Financial Officer, Chief Accounting Officer and Treasurer	March 2015 to present
		Vice President and Chief Financial Officer, Sempra U.S. Gas & Power	July 2013 to March 2015
		Vice President and Controller, Sempra U.S. Gas & Power	August 2012 to September 2013
		Assistant Controller, Sempra Energy	July 2012 to August 2012
		Acting Controller, Sempra Energy	October 2011 to July 2012

(1) Ages are as of February 28, 2017.
(2) Mr. Avery will be retired as of April 1, 2017.

EXECUTIVE OFFICERS OF SOCALGAS

Name	Age(1)	Positions Held Over Last Five Years	Time in Position
Patricia K. Wagner	54	Chief Executive Officer	January 2017 to present
		Executive Vice President, Sempra Energy	September 2016 to December 2016
		President and Chief Executive Officer, Sempra U.S. Gas & Power	January 2014 to September 2016
		Vice President of Audit Services, Sempra Energy	February 2012 to December 2013
		Vice President of Accounting and Finance, SoCalGas	November 2010 to February 2012
J. Bret Lane	57	President	September 2016 to present
		Chief Operating Officer	January 2014 to present
		Senior Vice President - Gas Operations and System Integrity, SDG&E and SoCalGas	August 2012 to January 2014
		Vice President - Field Services, SDG&E and SoCalGas	April 2010 to August 2012
J. Chris Baker	57	Chief Information Officer	June 2015 to present
		Senior Vice President and Chief Information Technology Officer	January 2014 to June 2015
		Senior Vice President - Strategic Planning and Technology	September 2012 to January 2014
		Senior Vice President - Support Services	April 2010 to August 2012
Lee Schavrien	62	Chief Administrative Officer	June 2015 to present
		Senior Vice President of Regulatory Affairs and Operations Support	February 2015 to June 2015
		Senior Vice President - Finance, Regulatory and Legislative Affairs	April 2010 to February 2015
Sharon L. Tomkins	51	Vice President and General Counsel	August 2014 to present
		Assistant General Counsel	April 2010 to August 2014
Bruce A. Folkmann	49	Vice President, Controller, Chief Financial Officer, Chief Accounting Officer and Treasurer	March 2015 to present
		Vice President and Chief Financial Officer, Sempra U.S. Gas & Power	July 2013 to March 2015
		Vice President and Controller, Sempra U.S. Gas & Power	August 2012 to September 2013
		Assistant Controller, Sempra Energy	July 2012 to August 2012
		Acting Controller, Sempra Energy	October 2011 to July 2012

(1) Ages are as of February 28, 2017.

OTHER MATTERS

Employees of the Registrants

At December 31, each company has the following number of employees:

NUMBER OF EMPLOYEES

	December 31,	
	2016	2015
Sempra Energy Consolidated(1)	16,575	17,387
SDG&E(1)	4,134	4,315
SoCalGas	8,042	8,438

(1) Excludes employees of variable interest entities as defined by accounting principles generally accepted in the United States of America.

Labor Relations

SDG&E

Field employees and some clerical and technical employees at SDG&E are represented by the International Brotherhood of Electrical Workers. Provisions of the collective bargaining agreement covering wages and working conditions for these employees are in effect through August 31, 2020 (subject to wage renegotiation on September 1, 2019). For these same employees, the agreement covering pension and savings plan benefits is in effect through October 1, 2017 and the agreement covering health and welfare benefits is in effect through December 31, 2017. At December 31, 2016, 29 percent of SDG&E employees are covered by these agreements.

SoCalGas

Field, technical and most clerical employees at SoCalGas are represented by the Utility Workers Union of America or the International Chemical Workers Union Council (collectively "Union") under a single collective bargaining agreement. The provisions of the collective bargaining agreement for these employees covering wages, hours, working conditions, medical and all other benefit plans are in effect through September 30, 2018. At December 31, 2016, 60 percent of SoCalGas employees are represented by the Union.

Sempra South American Utilities

Field, technical and administrative employees at Luz del Sur are represented by various labor unions. In January 2017, two collective bargaining agreements were signed covering these employees, which will also be extended to 141 nonrepresented employees. It will cover wages, working conditions and other benefit plans, and will be in effect from January 1, 2017 through December 31, 2017.

Field, technical and administrative employees at Chilquinta Energía are represented under various collective bargaining agreements with different labor unions. The collective bargaining agreements for employees represented by these unions and negotiating groups cover wages, hours, working conditions and medical and other benefit plans and expire between 2017 and 2020.

Professional employees at Chilquinta Energía are represented by the Professional Union. The collective bargaining agreement for these employees covers wages, hours, working conditions and medical and other benefit plans and is in effect through July 2017.

At December 31, 2016, Sempra South American Utilities has a total of 1,140 employees in Peru, of whom 23 percent are covered under a labor agreement, and 1,464 employees in Chile, of whom 45 percent are covered under labor agreements.

Sempra Mexico

At December 31, 2016, Sempra Mexico has 883 employees, 4 percent of whom are covered by various collective bargaining agreements with different labor unions. The collective bargaining agreements are subject to renegotiation on an annual basis with respect to wages, and otherwise on a bi-annual basis.

ITEM 1A. RISK FACTORS

When evaluating our company and its subsidiaries, you should consider carefully the following risk factors and all other information contained in this report. These risk factors could materially adversely affect our actual results and cause such results to differ materially from those expressed in any forward-looking statements made by us or on our behalf. We may also be materially harmed by risks and uncertainties not currently known to us or that we currently deem to be immaterial. If any of the following occurs, our businesses, cash flows, results of operations, financial condition and/or prospects could be materially negatively impacted. In addition, the trading prices of our securities and those of our subsidiaries could substantially decline due to the occurrence of any of these risks. These risk factors should be read in conjunction with the other detailed information concerning our company set forth in the Annual Report, including, without limitation, the information set forth in the Notes to Consolidated Financial Statements and in "Management's Discussion and Analysis of Financial Condition and Results of Operations." In this section, when we state that a risk or uncertainty may, could or will have a "material adverse effect" on us or may, could or will "materially adversely affect" us, we mean that the risk or uncertainty may, could or will, as the case may be, have a material adverse effect on our businesses, cash flows, results of operations, financial condition, prospects and/or the trading prices of our securities or those of our subsidiaries.

Sempra Energy's cash flows, ability to pay dividends and ability to meet its debt obligations largely depend on the performance of its subsidiaries and the ability to utilize the cash flows from those subsidiaries.

Sempra Energy's ability to pay dividends and meet its debt obligations depends almost entirely on cash flows from its subsidiaries and, in the short term, its ability to raise capital from external sources. In the long term, cash flows from the subsidiaries depend on their ability to generate operating cash flows in excess of their own expenditures, common and preferred stock dividends (if any), and long-term debt obligations. In addition, the subsidiaries are separate and distinct legal entities that are not obligated to pay dividends and could be precluded from making such distributions under certain circumstances, including, without limitation, as a result of legislation, regulation, court order, contractual restrictions or in times of financial distress.

A significant portion of our worldwide cash reserves are generated by, and therefore held in, foreign jurisdictions. Some jurisdictions impose taxes on cash transferred to the United States, which could reduce the cash available to us. To the extent we have excess cash in foreign locations that could be used in, or is needed by, our United States operations, we may incur significant U.S. and foreign taxes to repatriate these funds.

Conditions in the financial markets and economic conditions generally may materially adversely affect us.

Our businesses are capital intensive and we rely significantly on long-term debt to fund a portion of our capital expenditures and repay outstanding debt, and on short-term borrowings to fund a portion of day-to-day business operations.

Limitations on the availability of credit and increases in interest rates or credit spreads may materially adversely affect our businesses, cash flows, results of operations, financial condition and/or prospects, as well as our ability to meet contractual and other commitments. In difficult credit market environments, we may find it necessary to fund our operations and capital expenditures at a higher cost or we may be unable to raise as much funding as we need to support new business activities. This could cause us to reduce capital expenditures and could increase our cost of servicing debt, both of which could significantly reduce our short-term and long-term profitability.

The availability and cost of credit for our businesses may be greatly affected by credit ratings. If SoCalGas or SDG&E were to have their credit ratings downgraded, their cash flows and results of operations could be materially adversely affected, and any downgrades of Sempra Energy's credit ratings could materially adversely affect the cash flows and results of operations of Sempra Energy. If the credit ratings of Sempra Energy or any of its subsidiaries were downgraded, especially below investment grade, financing costs and the principal amount of borrowings would likely increase due to the additional risk of our debt and because certain counterparties may require collateral in the form of cash, a letter of credit or other forms of security for new and existing transactions. Such amounts may be material and could adversely affect our cash flows, results of operations and financial condition.

Sempra Energy has substantial investments in Mexico and South America which expose us to foreign currency, inflation, legal, tax, economic, geo-political and management oversight risk.

We have significant foreign operations in Mexico and South America. Our foreign operations pose complex management, foreign currency, inflation, legal, tax and economic risks, which we may not be able to fully mitigate with our actions. These risks differ from and potentially may be greater than those associated with our domestic businesses. All of our international businesses are sensitive to geo-political uncertainties, and our non-utility international businesses are sensitive to changes in the priorities and budgets of international customers, all of which may be driven by changes in their environments and potentially volatile worldwide economic conditions, and various regional and local economic and political factors, risks and uncertainties, as well as U.S. foreign policy. Foreign currency exchange and inflation rates and fluctuations in those rates may have an impact on our revenue, costs or cash flows from our international operations, which could materially adversely affect our financial performance. Our currency exposures are to the Mexican, Peruvian and Chilean currencies. Our Mexican subsidiaries have U.S. dollar denominated monetary assets and liabilities that give rise to Mexican currency exchange rate movements for Mexican income tax purposes. They also have deferred income tax assets and liabilities, which are significant, denominated in the Mexican peso that must be translated to U.S. dollars for financial reporting purposes. In addition, monetary assets and liabilities and certain nonmonetary assets and liabilities are adjusted for Mexican inflation for Mexican income tax purposes. Our primary objective in reducing foreign currency risk is to preserve the economic value of our foreign investments and to reduce earnings volatility that would otherwise occur due to exchange rate fluctuations. We may attempt to offset material cross-currency transactions and earnings exposure through various means, including financial instruments and short-term investments. Because we generally do not hedge our net investments in foreign countries, we are susceptible to volatility in other comprehensive income caused by exchange rate fluctuations, primarily related to our South American subsidiaries, whose functional currency is not the U.S. dollar. We generally do not hedge our deferred income tax assets and liabilities, which makes us susceptible to volatility in income tax expense. We discuss our foreign currency exposure at our Mexican subsidiaries in "Results of Operations – Impact of Foreign Currency and Inflation Rates on Results of Operations" and "Market Risk – Foreign Currency and Inflation Rate Risk" in "Management's Discussion and Analysis of Financial Condition and Results of Operations" in the Annual Report.

Mexico has developed a new legal framework for the regulation of the hydrocarbons and electric power sectors based on a package of constitutional amendments approved by the Mexican Congress in December 2013 and implementing legislation enacted in 2014 and the issuance of new regulations thereunder. However, given the relatively recent creation of this legal framework, it is uncertain how it will be interpreted in practice. We also cannot predict the manner in which the new legal framework will affect any new business opportunities that IEnova may wish to pursue. The changes introduced by the new legal framework may require IEnova to obtain amendments to its existing permits or secure additional permits to operate its energy facilities or to provide its services, to take additional actions to secure rights-of-way for its projects, to perform social impact assessments, and to obtain the consent of indigenous communities for the development of certain projects, any or all of which may cause IEnova to incur additional material costs in connection with the development of its projects.

The current U.S. administration has previously indicated its intention to renegotiate trade agreements, such as the North American Free Trade Agreement, or NAFTA, and implement U.S. immigration policy changes. The current U.S. administration has stated that it is reviewing various options, including tariffs, for funding new Mexico–U.S. border security infrastructure. Such actions could result in changes in the Mexican, U.S. and other markets. In addition, if this occurs, the Mexican government could implement retaliatory actions, such as the imposition of restrictions or import fees on Mexican imports of natural gas from the U.S. or imports and exports of electricity to and from the U.S. Any of these actions by either or both governments could adversely affect imports and exports between Mexico and the U.S. and negatively impact the Mexican economy and the companies with whom we conduct business in Mexico, which could materially adversely affect our business, financial condition, results of operations, cash flows, or prospects.

Risks Related to All Sempra Energy Subsidiaries

Severe weather conditions, natural disasters, accidents, equipment failures, explosions or acts of terrorism could materially adversely affect our businesses, financial condition, results of operations, cash flows and/or prospects.

Like other major industrial facilities, ours may be damaged by severe weather conditions, natural disasters such as earthquakes, hurricanes, tsunamis and fires, accidents, equipment failures, explosions or acts of terrorism. Because we are in the business of using, storing, transporting and disposing of highly flammable and explosive materials, as well as radioactive materials, and operating highly energized equipment, the risks such incidents may pose to our facilities and infrastructure, as well as the risks to the surrounding communities, are substantially greater than the risks such incidents may pose to a typical business. The facilities and infrastructure that we own and in which we have interests that may be subject to such incidents include, but are not limited to:

- natural gas, propane and ethane pipelines, storage and compression facilities
- LNG terminals and storage

- electric transmission and distribution
- power generation plants, including natural gas-fired and renewable energy generation
- nuclear fuel and nuclear waste storage facilities
- nuclear power facilities (currently being decommissioned)

Such incidents could result in severe business disruptions, prolonged power outages, property damage, injuries or loss of life, significant decreases in revenues and earnings, and/or significant additional costs to us. Any such incident could have a material adverse effect on our businesses, financial condition, results of operations, cash flows and/or prospects.

Depending on the nature and location of the facilities and infrastructure affected, any such incident also could cause catastrophic fires; natural gas, natural gas odorant, propane or ethane leaks; releases of other greenhouse gases; radioactive releases; explosions, spills or other significant damage to natural resources or property belonging to third parties; personal injuries, health impacts or fatalities; or present a nuisance to impacted communities. Any of these consequences could lead to significant claims against us. In some cases, we may be liable for damages even though we are not at fault, such as in cases where the concept of inverse condemnation applies. Insurance coverage may significantly increase in cost, may be disputed by the insurers, or may become unavailable for certain of these risks, and any insurance proceeds we receive may be insufficient to cover our losses or liabilities due to the existence of limitations, exclusions, high deductibles, failure to comply with procedural requirements, and other factors, which could materially adversely affect our businesses, financial condition, results of operations, cash flows and/or prospects.

Severe weather conditions may also impact our businesses, including our international operations. Drought conditions in California and the western United States increase the risk of catastrophic wildfires in SDG&E's and SoCalGas' service territories, which could place third party property and our electric and natural gas infrastructure in jeopardy. Drought conditions also reduce the amount of power available from hydro-electric generation facilities in the Northwest United States, which could adversely impact the availability of a reliable energy supply into the California electric grid managed by the California ISO. If alternate supplies of electric generation are not available to replace the lower level of power available from hydro-electric generation facilities, this could result in temporary power shortages in SDG&E's service territory. In addition, severe weather conditions could result in delays and/or cost increases to our capital projects.

Another example of weather impacting operations is a strong El Niño weather pattern in the Pacific Ocean, which can cause severe rainstorms in coastal areas. Significant rainstorms and associated high winds, such as those caused by a strong El Niño weather pattern, could damage our electric and natural gas infrastructure, resulting in increased expenses, including higher maintenance and repair costs, and interruptions in electricity and natural gas delivery services. As a result, these events can have significant financial consequences, including regulatory penalties and disallowances if the California Utilities or our utilities in Mexico or South America encounter difficulties in restoring service to their customers on a timely basis. Further, the cost of storm restoration efforts may not be fully recoverable through the regulatory process. Any such events could have a material adverse effect on our businesses, financial condition, results of operations and cash flows.

Our businesses are subject to complex government regulations and tax requirements and may be materially adversely affected by changes in these regulations or requirements or in their interpretation or implementation.

In recent years, the regulatory environment that applies to the electric power and natural gas industries has undergone significant changes, on the federal, state and local levels. These changes have affected the nature of these industries and the manner in which their participants conduct their businesses. These changes are ongoing, and we cannot predict the future course of changes in this regulatory environment or the ultimate effect that this changing regulatory environment will have on our businesses. Moreover, existing regulations, laws and tariffs may be revised or reinterpreted, and new regulations, laws and tariffs may be adopted or become applicable to us and our facilities. Special tariffs may also be imposed on components used in our businesses that could increase costs.

Our businesses are subject to increasingly complex accounting and tax requirements, and the regulations, laws and tariffs that affect us may change in response to economic or political conditions. Compliance with these requirements could increase our operating costs, and new tax legislation, regulations or other interpretations in the U.S. and other countries in which we operate could materially adversely affect our tax expense and/or tax balances. Changes in tax policies, including potential tax reform provisions, such as the elimination of the deduction for interest and non-deductibility of all or a portion of the cost of imported materials, equipment and commodities, could materially adversely impact our business. Changes in regulations, laws and tariffs and how they are implemented and interpreted may have a material adverse effect on our businesses, cash flows, financial condition, results of operations and/or prospects. We discuss potential U.S. federal tax reform further in "Management's Discussion and Analysis of Financial Condition and Results of Operations – Factors Influencing Performance" in the Annual Report.

Our operations are subject to rules relating to transactions among the California Utilities and other Sempra Energy businesses. These rules are commonly referred to as "affiliate rules," which primarily impact commodity and commodity-related transactions. These businesses could be materially adversely affected by changes in these rules or to their interpretations, or by additional CPUC or FERC rules that further restrict our ability to sell electricity or natural gas to, or to trade with, the California Utilities and with each other. Affiliate rules also could require us to obtain prior approval from the CPUC before entering into any such transactions with the California Utilities. Any such restrictions on or approval requirements for transactions among affiliates could materially adversely affect the LNG terminals, natural gas pipelines, electric generation facilities, or other operations of our subsidiaries, which could have a material adverse effect on our businesses, results of operations and/or prospects.

Our businesses require numerous permits, licenses, franchise agreements, and other governmental approvals from various federal, state, local and foreign governmental agencies; any failure to obtain or maintain required permits, licenses or approvals could cause our sales to materially decline and/or our costs to materially increase, and otherwise materially adversely affect our businesses, cash flows, financial condition, results of operations and/or prospects.

All of our existing and planned development projects require multiple approvals. The acquisition, construction, ownership and operation of LNG terminals; natural gas pipelines and distribution and storage facilities; electric generation, transmission and distribution facilities; and propane and ethane systems require numerous permits, licenses, franchise agreements, certificates and other approvals from federal, state, local and foreign governmental agencies. Once received, approvals may be subject to litigation, and projects may be delayed or approvals reversed or modified in litigation. In addition, permits, licenses, franchise agreements, certificates, and other approvals may be modified, rescinded or fail to be extended by one or more of the governmental agencies and authorities that oversee our businesses. SoCalGas' franchise agreements with the City of Los Angeles and Los Angeles County, where the Aliso Canyon facility is located, are due to expire in 2017. If there is a delay in obtaining required regulatory approvals or failure to obtain or maintain required approvals or to comply with applicable laws or regulations, we may be precluded from constructing or operating facilities, or we may be forced to incur additional costs. Further, accidents beyond our control may cause us to violate the terms of conditional use permits, causing delays in projects. Any such delay or failure to obtain or maintain necessary permits, licenses, certificates and other approvals could cause our sales to materially decline, and/or our costs to materially increase, and otherwise materially adversely affect our businesses, cash flows, financial condition, results of operations and/or prospects.

Our businesses have significant environmental compliance costs, and future environmental compliance costs could have a material adverse effect on our cash flows and results of operations.

Our businesses are subject to extensive federal, state, local and foreign statutes, rules and regulations and mandates relating to environmental protection, including, air quality, water quality and usage, wastewater discharge, solid waste management, hazardous waste disposal and remediation, conservation of

natural resources, wetlands and wildlife, renewable energy resources, climate change and greenhouse gas, or GHG, emissions. We are required to obtain numerous governmental permits, licenses, certificates and other approvals to construct and operate our businesses. Additionally, to comply with these legal requirements, we must spend significant amounts on environmental monitoring, pollution control equipment, mitigation costs and emissions fees. The California Utilities may be materially adversely affected if these additional costs for projects are not recoverable in rates. In addition, we may be ultimately responsible for all on-site liabilities associated with the environmental condition of our LNG terminals; natural gas transmission, distribution and storage facilities; electric generation, transmission and distribution facilities; and other energy projects and properties; regardless of when the liabilities arose and whether they are known or unknown, which exposes us to risks arising from contamination at our former or existing facilities or with respect to offsite waste disposal sites that have been used in our operations. In the case of our California and other regulated utilities, some of these costs may not be recoverable in rates. Our facilities, including those in our joint ventures, are subject to laws and regulations protecting migratory birds, which have recently been the subject of increased enforcement activity with respect to wind farms. Failure to comply with applicable environmental laws, regulations and permits may subject our businesses to substantial penalties and fines and/or significant curtailments of our operations, which could materially adversely affect our cash flows and/or results of operations.

Increasing international, national, regional and state-level concerns as well as new or proposed legislation and regulation may have substantial negative effects on our operations, operating costs, and the scope and economics of proposed expansion, which could have a material adverse effect on our results of operations, cash flows and/or prospects. In particular, state-level laws and regulations, as well as proposed state, national and international legislation and regulation relating to the control and reduction of GHG emissions, may materially limit or otherwise materially adversely affect our operations. The implementation of recent and proposed California and federal legislation and regulation may materially adversely affect our non-utility businesses by imposing, among other things, additional costs associated with emission limits, controls and the possible requirement of carbon taxes or the purchase of emissions credits. Similarly, California Senate Bill 350 requires all load-serving entities, including SDG&E, to file integrated resource plans that will ultimately enable the electric sector to achieve reductions in greenhouse gas emissions of 40 percent compared to 1990 levels by 2030. Our California Utilities may be materially adversely affected if these additional costs are not recoverable in rates. Even if recoverable, the effects of existing and proposed greenhouse gas emission reduction standards may cause rates to increase to levels that substantially reduce customer demand and growth and may have a material adverse effect on the California Utilities' cash flows. SDG&E may also be subject to significant penalties and fines if certain mandated renewable energy goals are not met.

In addition, existing and future laws, orders and regulations regarding mercury, nitrogen and sulfur oxides, particulates, methane or other emissions could result in requirements for additional monitoring, pollution monitoring and control equipment, safety practices or emission fees, taxes or penalties that could materially adversely affect our results of operations and/or cash flows. Moreover, existing rules and regulations may be interpreted or revised in ways that may materially adversely affect our results of operations and/or cash flows.

We provide further discussion of these matters in "Management's Discussion and Analysis of Financial Condition and Results of Operations" and in Note 15 of the Notes to Consolidated Financial Statements in the Annual Report.

Our businesses, results of operations, financial condition and/or cash flows may be materially adversely affected by the outcome of litigation against us.

Sempra Energy and its subsidiaries are defendants in numerous lawsuits and arbitration proceedings. We have spent, and continue to spend, substantial amounts of money and time defending these lawsuits and proceedings, and in related investigations and regulatory proceedings. We discuss pending proceedings in Note 15 of the Notes to Consolidated Financial Statements and in "Management's Discussion and Analysis of Financial Condition and Results of Operations" in the Annual Report. The uncertainties inherent in lawsuits, arbitrations and other legal proceedings make it difficult to estimate with any degree of certainty the costs and effects of resolving these matters. In addition, juries have demonstrated a willingness to grant large awards, including punitive damages, in personal injury, product liability, property damage and other claims. Accordingly, actual costs incurred may differ materially from insured or reserved amounts and may not be recoverable in whole or in part in rates from our customers, which in each case could materially adversely affect our businesses, cash flows, results of operations and/or financial condition.

We cannot and do not attempt to fully hedge our assets or contract positions against changes in commodity prices. In addition, for those contract positions that are hedged, our hedging procedures may not mitigate our risk as planned.

To reduce financial exposure related to commodity price fluctuations, we may enter into contracts to hedge our known or anticipated purchase and sale commitments, inventories of natural gas and LNG, natural gas storage and pipeline capacity and electric generation capacity. As part of this strategy, we may use forward contracts, physical purchase and sales contracts, futures, financial swaps, and options. We do not hedge the entire exposure to market price volatility of our assets or our contract positions, and the coverage will vary over time. To the extent we have unhedged positions, or if our hedging strategies do not work as planned, fluctuating commodity prices could have a material adverse effect on our results of operations, cash flows and/or financial condition. Certain of the contracts we use for hedging purposes are subject to fair value accounting. Such accounting may result in gains or losses in earnings for those contracts. In certain cases, these gains or losses may not reflect the associated losses or gains of the underlying position being hedged.

In addition, possible changes in federal regulation of over-the-counter derivatives regulated by the U.S. Commodity Futures Trading Commission could impact the cost and effectiveness of our hedging programs, as we discuss in "Management's Discussion and Analysis of Financial Condition and Results of Operations – Factors Influencing Future Performance" in the Annual Report.

Risk management procedures may not prevent losses.

Although we have in place risk management and control systems that use advanced methodologies to quantify and manage risk, these systems may not always prevent material losses. Risk management procedures may not always be followed as required by our businesses or may not always work as planned. In addition, daily value-at-risk and loss limits are based on historic price movements. If prices significantly or persistently deviate from historic prices, the limits may not protect us from significant losses. As a result of these and other factors, there is no assurance that our risk management procedures will prevent losses that would materially adversely affect our results of operations, cash flows and/or financial condition.

The operation of our facilities depends on good labor relations with our employees.

Several of our businesses have entered into and have in place collective bargaining agreements with different labor unions. Our collective bargaining agreements are generally negotiated on a company-by-company basis. Any failure to reach an agreement on new labor contracts or to negotiate these labor contracts might result in strikes, boycotts or other labor disruptions. Labor disruptions, strikes or significant negotiated wage and benefit increases, whether due to union activities, employee turnover or otherwise, could have a material adverse effect on our businesses, results of operations and/or cash flows.

New business technologies implemented by us or developed by others present a risk for increased attacks on our information systems and the integrity of our energy grid and our natural gas pipeline and storage infrastructure.

In addition to general information and cyber risks that all Fortune 500 corporations face (e.g. malware, malicious intent by insiders and inadvertent disclosure of sensitive information), the utility industry faces evolving cybersecurity risks associated with protecting sensitive and confidential customer information, Smart Grid infrastructure, and natural gas pipeline and storage infrastructure. Deployment of new business technologies represents a new and large-scale opportunity for attacks on our information systems and confidential customer information, as well as on the integrity of the energy grid and the natural gas infrastructure. While our computer systems have been, and will likely continue to be, subjected to computer viruses or other malware, unauthorized access

attempts, and cyber- or phishing-attacks, to date we have not detected a material breach of cybersecurity. Addressing these risks is the subject of significant ongoing activities across Sempra Energy's businesses, but we cannot ensure that a successful attack has not and will not occur. An attack on our information systems, the integrity of the energy grid, our natural gas, ethane, or propane pipeline and storage infrastructure or one of our facilities, or unauthorized access to confidential customer information, could result in energy delivery service failures, financial loss, violations of privacy laws, customer dissatisfaction and litigation, any of which, in turn, could have a material adverse effect on our businesses, cash flows, financial condition, results of operations and/or prospects.

In the ordinary course of business, Sempra Energy and its subsidiaries collect and retain sensitive information, including personal identification information about customers and employees, customer energy usage and other information. The theft, damage or improper disclosure of sensitive electronic data can subject us to penalties for violation of applicable privacy laws, subject us to claims from third parties, require compliance with notification and monitoring regulations, and harm our reputation.

Finally, as seen with recent cyber-attacks around the world, the goal of a cyber-attack may be primarily to inflict large-scale harm on a company and the places where it operates. Any such cyber-attack could cause widespread disruptions to our operating and administrative systems, including the destruction of critical information and programming, that could materially adversely affect our business operations and the integrity of the power grid, and/or release confidential information about our company and our customers, employees and other constituents.

Our businesses will need to continue to adapt to technological change which may cause us to incur significant expenditures to adapt to these changes and which efforts may not be successful.

Emerging technologies may be superior to, or may not be compatible with, some of our existing technologies, investments and infrastructure, and may require us to make significant expenditures to remain competitive, or may result in the obsolescence of certain of our operating assets or the operating assets of our equity method investments. Our future success will depend, in part, on our ability and our investment partners' abilities to anticipate and successfully adapt to technological changes, to offer services that meet customer demands and evolving industry standards and to recover all, or a significant portion of, any unrecovered investment in obsolete assets. If we incur significant expenditures in adapting to technological changes, fail to adapt to significant technological changes, fail to obtain access to important new technologies, fail to recover a significant portion of any remaining investment in obsolete assets, or if implemented technology fails to operate as intended, our businesses, operating results and financial condition could be materially and adversely affected. Examples of technological changes that could negatively impact our businesses include

- Sempra Utilities – Technologies that could change the utilization of natural gas distribution and electric generation, transmission and distribution assets including
  - energy storage technology, and
  - the expanded cost-effective utilization of distributed generation (e.g., rooftop solar and community solar projects).
- Sempra Infrastructure
  - At Sempra Renewables, technological advances in distributed and local power generation and energy storage could reduce the demand for large-scale renewable electricity generation. Sempra Renewables' power sales customers' ability to perform under long-term agreements could be impacted by changes in utility rate structures and advances in distributed and local power generation.
  - At Sempra LNG & Midstream, technological advances could reduce the demand for natural gas. These technologies include cost-effective batteries for renewable electricity generation, economic improvements to gas-to-liquids conversion processes, and advances in alternative fuels and other alternative energy sources.

Risks Related to the California Utilities

The California Utilities are subject to extensive regulation by state, federal and local legislative and regulatory authorities, which may materially adversely affect us.

The CPUC regulates the California Utilities' rates, except SDG&E's electric transmission rates which are regulated by the FERC. The CPUC also regulates the California Utilities':

- conditions of service
- capital structure
- rates of return
- rates of depreciation
- long-term resource procurement
- sales of securities

The CPUC conducts various reviews and audits of utility performance, safety standards and practices, compliance with CPUC regulations and standards, affiliate relationships and other matters. These reviews and audits may result in disallowances, fines and penalties that could materially adversely affect our financial condition, results of operations and/or cash flows. SoCalGas and SDG&E may be subject to penalties or fines related to their operation of natural gas pipelines and storage and, for SDG&E, electric operations, under regulations concerning natural gas pipeline safety and citation programs concerning both gas and electric safety, which could have a material adverse effect on their results of operations, financial condition and/or cash flows. We discuss various CPUC proceedings relating to the California Utilities' rates, costs, incentive mechanisms, and performance-based regulation in Notes 13, 14 and 15 of the Notes to Consolidated Financial Statements and in "Management's Discussion and Analysis of Financial Condition and Results of Operations" in the Annual Report.

The CPUC periodically approves the California Utilities' rates based on authorized capital expenditures, operating costs, including income taxes, and an authorized rate of return on investment. Delays by the CPUC on decisions authorizing recovery or authorizations for less than full recovery may adversely affect the working capital and financial condition of each of the California Utilities. If the California Utilities receive an adverse CPUC decision and/or actual capital expenditures and/or operating costs were to exceed the amounts approved by the CPUC, our results of operations, financial condition, cash flows and/or prospects could be materially adversely affected. Reductions in key benchmark interest rates may trigger automatic adjustment mechanisms which would reduce the California Utilities' authorized rates of return, changes in which could materially adversely affect their results of operations, financial condition, cash flows and/or prospects.

In December 2014, the CPUC issued a decision incorporating a risk-based decision-making framework into all future general rate case (GRC) application filings for major natural gas and electric utilities in California. As the framework is still in the developing stages, we cannot estimate whether its application in future GRC applications will result in full recovery of costs. We discuss this further in "Management's Discussion and Analysis of Financial Condition and Results of Operations – Factors Influencing Future Performance" in the Annual Report.

The CPUC applies performance-based measures and mechanisms to all California utilities. Under these, earnings potential over authorized base margins is tied to achieving or exceeding specific performance and operating goals, and reductions in authorized base margins are tied to not achieving specific performance and operating goals. At both of the California Utilities, the areas that are currently eligible for performance mechanisms are operational activities designated by the CPUC and energy efficiency programs; at SDG&E, electric reliability performance; and, at SoCalGas, natural gas procurement and unbundled natural gas storage and system operator hub services. Although the California Utilities have received incentive awards in the past, there can be no

assurance that they will receive awards in the future, or that any future awards earned would be in amounts comparable to prior periods. Additionally, if the California Utilities fail to achieve certain minimum performance levels established under such mechanisms, they may be assessed financial disallowances, penalties and fines which could have a material adverse effect on their results of operations, financial condition and/or cash flows.

In September 2016, California adopted new laws concerning the CPUC that establish rules governing, among other subjects, communications between CPUC officials, CPUC staff and regulated utilities. Changes to the rules and processes around *ex parte* communications could result in delayed decisions, increased investigations, enforcement actions and penalties. In addition, the CPUC or other parties may initiate investigations of past communications between public utilities and CPUC officials and staff that could result in reopening completed proceedings for reconsideration.

The FERC regulates electric transmission rates, the transmission and wholesale sales of electricity in interstate commerce, transmission access, the rates of return on investments in electric transmission assets, and other similar matters involving SDG&E.

The California Utilities may be materially adversely affected by new legislation, regulations, decisions, orders or interpretations of the CPUC, the FERC or other regulatory bodies. In addition, existing legislation or regulations may be revised or reinterpreted. New, revised or reinterpreted legislation, regulations, decisions, orders or interpretations could change how the California Utilities operate, could affect their ability to recover various costs through rates or adjustment mechanisms, or could require them to incur substantial additional expenses.

The construction and expansion of the California Utilities' natural gas pipelines, SoCalGas' storage facilities, and SDG&E's electric transmission and distribution facilities require numerous permits, licenses, rights of way and other approvals from federal, state and local governmental agencies, including approvals and renewals of rights-of-way over Native American tribal land held in trust by the federal governments. If there are delays in obtaining these approvals, failure to obtain or maintain these approvals, difficulties in renewing rights-of-way and other property rights, or failure to comply with applicable laws or regulations, the California Utilities' businesses, cash flows, results of operations, financial condition and/or prospects could be materially adversely affected. Coordinating these projects for successful completion requires good execution from our employees and contractors, cooperation of third parties and the absence of litigation and regulatory delay. In the event that one or more of these projects is delayed or experiences significant cost overruns, this could have a material adverse effect on the California Utilities. The California Utilities could experience difficulties in renewing rights-of-way or other forms of property rights for existing assets, which could have a material adverse effect on the California Utilities. The California Utilities may invest a significant amount of money in a major capital project prior to receiving regulatory approval. If the project does not receive regulatory approval, if the regulatory approval is conditioned on major changes, or if management decides not to proceed with the project, they may be unable to recover any or all amounts invested in that project, which could materially adversely affect their financial condition, results of operations, cash flows and/or prospects.

Our California Utilities are also affected by the activities of organizations such as The Utility Reform Network (TURN), Utility Consumers' Action Network, Sierra Club and other stakeholder, advocacy and activist groups. Operations that may be influenced by these groups include

- the rates charged to our customers;
- our ability to site and construct new facilities;
- our ability to purchase or construct generating facilities;
- safety;
- the issuance of securities;
- accounting and income tax matters;
- transactions between affiliates;
- the installation of environmental emission controls equipment;
- our ability to decommission generating and other facilities and recover the remaining carrying value of such facilities and related costs;
- our ability to recover costs incurred in connection with nuclear decommissioning activities from trust funds established to pay for such costs;
- the amount of certain sources of energy we must use, such as renewable sources; limits on the amount of certain energy sources we can use, such as natural gas; and programs to encourage reductions in energy usage by customers; and
- the amount of costs associated with these and other operations that may be recovered from customers.

SoCalGas will incur significant costs and expenses related to remediating the natural gas leak at its Aliso Canyon natural gas storage facility and to mitigate local community and environmental impacts from the leak, some or a substantial portion of which may not be recoverable through insurance, and SoCalGas also may incur significant liabilities for fines, penalties, damages and greenhouse gas mitigation activities as a result of this incident, some or a significant portion of which may not be recoverable through insurance.

In October 2015, SoCalGas discovered a leak at one of its injection-and-withdrawal wells, SS25, at its Aliso Canyon natural gas storage facility, located in the northern part of the San Fernando Valley in Los Angeles County. The Aliso Canyon facility has been operated by SoCalGas since 1972. SS25 is more than one mile away from and 1,200 feet above the closest homes. It is one of more than 100 injection-and-withdrawal wells at the storage facility. SoCalGas worked closely with several of the world's leading experts to stop the leak, and in February 2016, DOGGR confirmed that the well was permanently sealed.

Local Community Mitigation Efforts

Pursuant to a stipulation and order by the Los Angeles County Superior Court (Superior Court), SoCalGas provided temporary relocation support to residents in the nearby community who requested it before the well was permanently sealed, at significant expense to SoCalGas. Following the permanent sealing of the well and the completion of the Los Angeles County Department of Public Health's (DPH) indoor testing of certain homes in the Porter Ranch community, which concluded that indoor conditions did not present a long-term health risk and that it was safe for residents to return home, the Superior Court issued an order in May 2016 ruling that currently relocated residents be given the choice to request residence cleaning prior to returning home, with such cleaning to be performed according to the DPH's proposed protocol and at SoCalGas' expense. SoCalGas completed the cleaning program, and the relocation program ended in July 2016.

Apart from the Superior Court order, in May 2016 the DPH also issued a directive that SoCalGas professionally clean (in accordance with the proposed protocol prepared by the DPH) the homes of all residents located within the Porter Ranch Neighborhood Council boundary, or who participated in the relocation program, or who are located within a five mile radius of the Aliso Canyon natural gas storage facility and have experienced symptoms from the natural gas leak (the Directive). SoCalGas disputes the Directive, contending that it is invalid and unenforceable, and has filed a petition for writ of mandate to set aside the Directive.

The total costs incurred to mitigate local community impacts of the leak are significant and may increase, and to the extent not covered by insurance (including any costs in excess of applicable policy limits), or if there were to be significant delays in receiving insurance recoveries, such costs could have a material adverse effect on SoCalGas' and Sempra Energy's cash flows, financial condition and results of operations.

Governmental Investigations and Civil and Criminal Litigation

Various governmental agencies, including DOGGR, DPH, SCAQMD, CARB, Los Angeles Regional Water Quality Control Board, California Division of Occupational Safety and Health, CPUC, PHMSA, EPA, Los Angeles County District Attorney's Office and California Attorney General's Office, have investigated or are investigating this incident. Other federal agencies (e.g., the DOE and U.S. Department of the Interior) investigated the incident in conjunction with the preparation of an Interagency Task Force report, *Ensuring Safe and Reliable Underground Natural Gas Storage*, published in October 2016. In January 2016, DOGGR and the CPUC selected Blade Energy Partners to conduct an independent analysis under their supervision and to be funded by SoCalGas to investigate the technical root cause of the Aliso Canyon gas leak. This investigation is currently ongoing.

As of February 27, 2017, 250 lawsuits, including over 14,000 plaintiffs, have been filed against SoCalGas, some of which have also named Sempra Energy. These various lawsuits assert causes of action for negligence, negligence per se, strict liability, property damage, fraud, public and private nuisance (continuing and permanent), trespass, inverse condemnation, fraudulent concealment, unfair business practices and loss of consortium, among other things. A complaint alleging violations of Proposition 65 was also filed. Many of these complaints seek class action status, compensatory and punitive damages, civil penalties, injunctive relief, costs of future medical monitoring and attorneys' fees.

In addition to the lawsuits described above, a federal securities class action alleging violation of the federal securities laws has been filed against Sempra Energy and certain of its officers and directors, and four shareholder derivative actions alleging breach of fiduciary duties have been filed against certain officers and directors of Sempra Energy and/or SoCalGas. Three complaints have also been filed by public entities, including the California Attorney General, the SCAQMD and the County of Los Angeles. These complaints seek various remedies, including injunctive relief, abatement of the public nuisance, civil penalties, payment of the cost of a longitudinal health study, and money damages, as well as punitive damages and attorneys' fees. In February 2017, SoCalGas entered into a settlement agreement with the SCAQMD under which SoCalGas will pay $8.5 million and SCAQMD will dismiss its complaint and petition for dismissal of a stipulated abatement order issued by its Hearing Board. Separately, in February 2016, the Los Angeles County District Attorney's Office filed a misdemeanor criminal complaint against SoCalGas seeking penalties and other remedies for alleged failure to provide timely notice of the leak and for allegedly violating certain California Health and Safety Code provisions. On November 29, 2016, the court approved a settlement between SoCalGas and the District Attorney's Office whereby SoCalGas agreed to plead no contest to a misdemeanor for the alleged failure to provide timely notice of the leak and to spend approximately $4.3 million on reimbursement of government agency expenses, operational commitments, and fines and penalties, in exchange for the dismissal of the remaining counts. Certain individuals residing near Aliso Canyon who objected to the settlement have filed a notice of appeal of the judgment, as well as a petition asking the Superior Court to set aside the November 29, 2016 order and grant them restitution.

Additional litigation may be filed against us in the future related to the Aliso Canyon incident or our responses thereto. For a more detailed description of the governmental investigations and civil and criminal lawsuits brought against us, see Note 15 of the Notes to Consolidated Financial Statements in the Annual Report.

The costs of defending against the civil and criminal lawsuits, cooperating with the various investigations, and any damages, restitution, and civil and criminal fines, costs and other penalties, if awarded or imposed, could be significant and to the extent not covered by insurance (including any costs in excess of applicable policy limits), or if there were to be significant delays in receiving insurance recoveries, such costs could have a material adverse effect on SoCalGas' and Sempra Energy's cash flows, financial condition and results of operations.

Governmental Orders and Additional Regulation

In January 2016, the Governor of the State of California issued an Order proclaiming a state of emergency to exist in Los Angeles County due to the natural gas leak at the Aliso Canyon facility. The Governor's Order imposed various orders with respect to: stopping the leak; protecting public health and safety; ensuring accountability; and strengthening oversight. Also in January 2016, the Hearing Board of the SCAQMD ordered SoCalGas to take various actions in connection with injections and withdrawals of natural gas at Aliso Canyon, sealing the well, monitoring, reporting, safety and funding a health study, among other things. As discussed above, SoCalGas has entered into a settlement agreement with the SCAQMD that calls for the SCAQMD to petition its Hearing Board for dismissal of the order. We provide further detail regarding the Governor's Order and SCAQMD's order in Note 15 of the Notes to Consolidated Financial Statements in the Annual Report.

In December 2015, SoCalGas made a commitment to mitigate the actual natural gas released from the leak and has been working on a plan to accomplish the mitigation. In March 2016, pursuant to the Governor's Order, the CARB issued its recommended approach to achieve full mitigation of the climate impacts from the Aliso Canyon natural gas leak, which includes recommendations that:

- reductions in short-lived climate pollutants and other greenhouse gases be at least equivalent to the amount of the emissions from the leak,
- a 20-year global warming potential be used in deriving the amount of reductions required (rather than the 100-year term the CARB and other state and federal agencies use in regulating emissions), and
- all of the mitigation occur in California over the next five to ten years without the use of allowances or offsets.

In October 2016, CARB issued a final report concluding that the incident resulted in total emissions from 90,350 to 108,950 metric tons of methane, and asserting that SoCalGas should mitigate 109,000 metric tons of methane to fully mitigate the greenhouse gas impacts of the leak. Although we have not agreed with CARB's estimate of methane released, we continue to work with CARB on developing a mitigation plan. The costs of mitigating the actual natural gas released could be significant and to the extent not covered by insurance (including any costs in excess of applicable policy limits), or if there were to be significant delays in receiving insurance recoveries, such costs could have a material adverse effect on SoCalGas' and Sempra Energy's cash flows, financial condition and results of operations.

In June 2016, the "Protecting our Infrastructure of Pipelines and Enhancing Safety Act of 2016" or the "PIPES Act of 2016" was enacted. Among other things, the PIPES Act requires PHMSA to issue, within two years of passage, "minimum safety standards for underground natural gas storage facilities," and imposes a "user fee" on underground storage facilities as needed to implement the safety standards. In October 2016, the Interagency Task Force formed by the DOE and PHMSA in response to the leak at Aliso Canyon issued its report, recommending that PHMSA adopt new safety regulations and providing 44 specific recommendations to industry and to federal, state, and local regulators and governments, which may result in additional regulations.

PHMSA, DOGGR, SCAQMD, EPA and CARB have each commenced separate rulemaking proceedings to adopt further regulations covering natural gas storage facilities and injection wells. DOGGR has issued new draft regulations for all storage fields in California, and in 2016, the California Legislature enacted four separate bills providing for additional regulation of natural gas storage facilities. Also, the Los Angeles County Board of Supervisors formed a task force to review and potentially implement new, more stringent land use (zoning) requirements and associated regulations and enforcement protocols for oil and gas activities, including natural gas storage field operations. We provide further detail regarding new regulations and legislation in "Management's Discussion and Analysis of Financial Condition and Results of Operations – Factors Influencing Future Performance" and Note 15 of the Notes to Consolidated Financial Statements in the Annual Report.

Additional hearings in the California Legislature, as well as with various other federal and state regulatory agencies, have been or may be scheduled, additional legislation has been proposed in the California Legislature, and additional laws, orders, rules and regulations may be adopted. Higher operating costs and additional capital expenditures incurred by SoCalGas as a result of new laws, orders, rules and regulations arising out of the Aliso Canyon incident or our responses thereto could be significant and may not be recoverable through insurance or in customer rates, and SoCalGas' and Sempra Energy's cash flows, financial condition and results of operations may be materially adversely affected by any such new laws, orders, rules and regulations.

Natural Gas Storage Operations and Reliability

Natural gas withdrawn from storage is important for service reliability during peak demand periods, including peak electric generation needs in the summer and heating needs in the winter. Aliso Canyon, with a storage capacity of 86 Bcf (which represents 63 percent of SoCalGas' natural gas storage inventory capacity), is the largest SoCalGas storage facility and an important element of SoCalGas' delivery system. SoCalGas has not injected natural gas into Aliso Canyon since October 25, 2015, pursuant to orders by DOGGR and the Governor, and SB 380. Limited withdrawals of natural gas from Aliso Canyon have been made in 2017 to augment natural gas supplies during critical demand periods. In November 2016, SoCalGas submitted a request to DOGGR seeking authorization to resume injection operations at the Aliso Canyon storage facility. In accordance with SB 380, DOGGR held public meetings on February 1 and 2, 2017 to receive public comment on DOGGR's findings from its gas storage and well safety review and proposed pressure limits for the Aliso Canyon natural gas storage facility. The public comment period has expired. It remains for DOGGR to issue its safety determination, after which the CPUC must concur with DOGGR's determination, before injections at the facility can resume.

If the Aliso Canyon facility were to be taken out of service for any meaningful period of time, it could result in an impairment of the facility, significantly higher than expected operating costs and/or additional capital expenditures, and natural gas reliability and electric generation could be jeopardized. At December 31, 2016, the Aliso Canyon facility has a net book value of $531 million, including $217 million of construction work in progress for the project to construct a new compression station. Any significant impairment of this asset could have a material adverse effect on SoCalGas' and Sempra Energy's results of operations for the period in which it is recorded. Higher operating costs and additional capital expenditures incurred by SoCalGas may not be recoverable in customer rates, and SoCalGas' and Sempra Energy's results of operations, cash flows and financial condition may be materially adversely affected.

Insurance and Estimated Costs

Excluding directors and officers liability insurance, we have four kinds of insurance policies that together provide between $1.2 billion to $1.4 billion in insurance coverage, depending on the nature of the claims. These policies are subject to various policy limits, exclusions and conditions. We have been communicating with our insurance carriers, and we have received $169 million of insurance proceeds for control of well expenses and temporary relocation costs. We intend to pursue the full extent of our insurance coverage for the costs we have incurred or may incur. Our recorded estimate as of December 31, 2016 of $780 million of certain costs in connection with the Aliso Canyon storage facility leak may rise significantly as more information becomes available. In addition, any costs not included in the $780 million estimate could be material. The $780 million estimate does not include unsettled damage claims, restitution, or civil, administrative or criminal fines, costs and other penalties. In addition, such estimate excludes the costs to clean additional homes pursuant to the DPH Directive, future legal costs to defend litigation and other potential costs that we currently do not anticipate incurring or that we cannot reasonably estimate. There can be no assurance that we will be successful in obtaining insurance coverage for these costs under the applicable policies, and to the extent we are not successful in obtaining coverage, or if such costs are not covered by insurance (including any costs in excess of applicable policy limits), or if there were to be significant delays in receiving insurance recoveries, such costs could have a material adverse effect on SoCalGas' and Sempra Energy's cash flows, financial condition and results of operations.

Additional Information

We discuss Aliso Canyon matters further in Note 15 of the Notes to Consolidated Financial Statements and in "Management's Discussion and Analysis of Financial Condition and Results of Operations – Factors Influencing Future Performance" in the Annual Report.

Natural gas pipeline safety assessments may not be fully or adequately recovered in rates.

Pending the outcome of various regulatory agency evaluations of natural gas pipeline safety regulations, practices and procedures, Sempra Energy, including the California Utilities, may incur incremental expense and capital investment associated with their natural gas pipeline operations and investments. The California Utilities filed implementation plans with the CPUC to test or replace natural gas transmission pipelines located in populated areas that either have not been pressure tested or lack sufficient documentation of a pressure test, to enhance existing valve infrastructure and to retrofit pipelines to allow for the use of in-line inspection technology, referred to as SoCalGas' and SDG&E's Pipeline Safety Enhancement Plan (PSEP).

In June 2014, the CPUC issued a final decision approving the utilities' plan for implementing PSEP, and established criteria to determine the amounts related to PSEP that may be recovered from ratepayers and the processes for recovery of such amounts, including providing that such costs are subject to a reasonableness review. In the future, certain PSEP costs may be subject to recovery as determined by separate regulatory filings with the CPUC, including GRC filings.

Various PSEP-related proceedings are regularly pending before the CPUC regarding the California Utilities' reasonableness review and cost recovery requests, which are often challenged by intervening parties. These proceedings are described in more detail in "Management's Discussion and Analysis of Financial Condition and Results of Operations – Factors Influencing Future Performance" in the Annual Report. In the future, consumer advocacy groups may similarly challenge the California Utilities' petitions for recovery and recommend disallowances in whole or in part with respect to applications to recover PSEP costs.

From 2011 through 2016, SoCalGas and SDG&E have invested $1.1 billion and $302 million, respectively, in PSEP. As of December 31, 2016, SoCalGas has received approval for recovery of $33 million. If the CPUC were to deny rate recovery for PSEP and other gas pipeline safety costs incurred by SoCalGas and SDG&E, it could materially adversely affect the respective company's cash flows, financial condition, results of operations and prospects.

The California Utilities are subject to increasingly stringent safety standards and the potential for significant penalties if regulators deem either SDG&E or SoCalGas to be out of compliance.

California Senate Bill (SB) 291 requires the CPUC to develop and maintain a safety enforcement program that includes procedures for monitoring, data tracking and analysis, and investigations, and delegates citation authority to CPUC staff personnel under the direction of the CPUC Executive Director. In exercising this citation authority, the CPUC staff is to take into account voluntary reporting of potential violations, voluntary resolution efforts undertaken, prior history of violations, the gravity of the violation, and the degree of culpability. The CPUC previously implemented both electric and gas safety enforcement programs whereby electric and gas utilities may be cited by CPUC staff for violations of the CPUC's safety requirements or applicable federal standards.

Under each enforcement program, each day of an ongoing violation may be counted as an additional offense. The maximum penalty is $50,000 per offense. Citations under either program may be appealed to the CPUC. Penalties imposed under these programs can be significant, exceeding $1.5 billion in one instance. In September 2016, the CPUC issued a decision making further refinements to the electric and gas safety enforcement programs. The decision harmonizes the rules for the two programs, further defines the criteria for issuing a citation and penalty, sets an administrative limit of $8 million per citation issued by staff under its delegated authority and makes certain other changes to rules related to self-reporting and notifying local officials.

If the CPUC or its staff determine that either of SDG&E's or SoCalGas' operations and practices are not in compliance with applicable safety standards and operating procedures, the corrective or mitigation actions required to be in conformance, if not sufficiently funded in customer rates, and any penalties imposed could materially adversely affect that company's cash flows, financial condition, results of operations and prospects.

The failure by the CPUC to continue reforms of SDG&E's rate structure, including the implementation of a more significant fixed charge, could have a material adverse effect on its business, cash flows, financial condition, results of operations and/or prospects.

The current electric rate structure in California is primarily based on consumption volume, which places an undue burden on residential customers with higher electric use while subsidizing lower use customers. As higher electric use residential customers switch to self-generation or obtain local off-the-grid sources of power, such as wind, the burden on the remaining higher electric use customers increases, which in turn encourages more self-generation, further increasing rate pressure on existing customers. In July 2015, the CPUC adopted a decision that establishes comprehensive reform and a framework for rates that are more transparent, fair and sustainable. The decision provides for a minimum monthly bill, fewer rate tiers and a gradual reduction in the differences between the tiered rates, directs the utilities to pursue expanded time of use rates, and implements a super-user electric surcharge in 2017 for usage that exceeds average customer usage by approximately 400 percent within each climate zone. The surcharge will increase over time, ultimately reaching a rate of more than double the first tier rate. The decision will be implemented over a five year period from 2015 to 2020, and should result in significant relief for higher-use customers that do not exceed the super-user threshold and a rate structure that better aligns rates with actual costs to serve customers. The decision also establishes a process for utilities to seek implementation of a fixed charge for residential customers in 2020 (but it also sets certain conditions for the implementation of a fixed charge), after the initial reforms are implemented. The establishment of a fixed charge for residential customers may become more critical to help ensure rates are fair for all customers as distributed energy resources could generally reduce delivered volumes and increase fixed costs.

If the CPUC fails to continue to reform SDG&E's rate structure by implementing a rate structure that maintains reasonable, cost-based electric rates that are competitive with alternative sources of power and adequate to maintain the reliability of the electric transmission and distribution system, such failure could have a material adverse effect on SDG&E's business, cash flows, financial condition, results of operations and/or prospects.

Meaningful net energy metering, or NEM, reform must continue to progress to ensure that SDG&E is authorized to recover its costs in providing services to NEM customers while minimizing the cost shift (or subsidy) being borne by non-solar customers.

Due to current rate structures and state policies, customers who self-generate their own power using eligible renewable resources (primarily solar installations) currently do not pay their proportionate cost of maintaining and operating the electric transmission and distribution system, subject to certain limitations, while they still receive power from the system when their self-generation is inadequate to meet their electricity needs. The proportionate costs not paid by NEM customers are paid (i.e., subsidized) by consumers not participating in NEM. In addition, the continuing increase of self-generated solar, other forms of self-generation and other local off-the-grid sources of power adversely impacts the reliability of the electric transmission and distribution system.

Appropriate NEM reforms are necessary to ensure that SDG&E is authorized to recover, from NEM customers, the costs incurred in providing grid and energy services, as well as mandated legislative and regulatory public policy programs. SDG&E believes this design would be preferable to recovering these costs from customers not participating in NEM. If NEM self-generating installations were to increase substantially between 2016 and when more significant reforms take effect in 2019 or later, as described below, the rate structure adopted by the CPUC could have a material adverse effect on SDG&E's business, cash flows, financial condition, results of operations and/or prospects.

In July 2014, the CPUC initiated a rulemaking proceeding to develop a successor tariff to the state's existing NEM program pursuant to the provisions of AB 327. The NEM program was originally established in 1995 and is an electric billing tariff mechanism designed to promote the installation of on-site renewable generation. Under NEM, qualifying customer-generators receive a full retail rate for the energy they generate that is fed back to the utility's power grid. This occurs during times when the customer's generation exceeds their own energy usage. In addition, if a NEM customer generates any electricity over the annual measurement period that exceeds its annual consumption, they receive compensation at a rate equal to a wholesale energy price.

In January 2016, the CPUC adopted a decision making modest changes to the NEM program, which require NEM customers to pay some costs that would otherwise be borne by non-NEM customers and moves new NEM customers to time-of-use rates. Together with a reduction in tiered rate differentials and the potential implementation of a fixed charge component in 2020, these changes to the NEM program begin a process of reducing the cost burden on non-NEM customers, but SDG&E believes that further reforms are necessary and appropriate. In March 2016, SDG&E, Edison, PG&E, TURN and the California Coalition of Utility Employees filed applications with the CPUC requesting rehearing of its January 2016 decision. In September 2016, the CPUC issued an order denying the rehearing requests in all respects. SDG&E implemented the adopted successor NEM tariff in July 2016, after reaching the 617-MW cap established for the prior NEM program.

The electricity industry is undergoing significant change, including increased deployment of distributed energy resources, technological advancements, and political and regulatory developments.

Electric utilities in California are experiencing increasing deployment of distributed energy resources, such as solar, energy storage, energy efficiency and demand response technologies. This growth will eventually require modernization of the electric distribution grid to, among other things, accommodate two-way flows of electricity and increase the grid's capacity to interconnect distributed energy resources. The CPUC is conducting proceedings: to evaluate changes to the planning and operation of the electric distribution grid in order to prepare for higher penetration of distributed energy resources; to consider future grid modernization and grid reinforcement investments; to evaluate if traditional grid investments can be deferred by distributed energy resources, and if feasible, what, if any, compensation would be appropriate; and to clarify the role of the electric distribution grid operator. These proceedings may result in new regulations, policies and/or operational changes that could materially adversely affect SDG&E's business, cash flows, financial condition, results of operations and/or prospects.

SDG&E provides bundled electric procurement service through various resources that are typically procured on a long-term basis. While SDG&E provides such procurement service for the majority of its customer load, customers do have the ability to receive procurement service from a load serving entity other than SDG&E, through programs such as Direct Access and Community Choice Aggregation (CCA). Direct Access is currently closed, but utility customers have the ability to receive procurement through CCA, if the customer's local jurisdiction (city) offers such a program. A number of cities in our service territory have expressed interest in CCA, which, if widely adopted, could result in substantial reductions in the load we are required to serve. When customers are served by another load serving entity, SDG&E no longer serves this departing load and the associated costs of the utility's procured resources are borne by its remaining bundled procurement customers. This issue is addressed by rate mechanisms that attempt to ensure bundled ratepayer indifference in the event of departing load, but these existing mechanisms may not be sufficient to address the full extent of the potential cost shift in the event of significant departing load, and SDG&E bears some risk that its procured resources become stranded and the associated costs are not recoverable.

In addition, the FERC has adopted changes that have opened transmission development to competition from independent developers, allowing such developers to compete with incumbent utilities for the construction and operation of transmission facilities. These changes could materially adversely affect SDG&E's business and prospects.

Recovery of 2007 wildfire litigation costs requires future regulatory approval, and insurance coverage for future wildfires may not be sufficient to cover losses we may incur.

SDG&E is seeking to recover in rates its reasonably incurred costs of resolving 2007 wildfire claims in excess of its liability insurance coverage and amounts recovered from third parties. Through December 31, 2016, SDG&E's payments for claim settlements plus funds estimated to be required for settlement of outstanding claims and legal fees have exceeded its liability insurance coverage and amounts recovered from third parties. However, SDG&E has concluded that it is probable that it will be permitted to recover in rates a substantial portion of the reasonably incurred costs of resolving wildfire claims in excess of its liability insurance coverage and amounts recovered from third parties. At December 31, 2016, Sempra Energy's and SDG&E's Consolidated Balance Sheets

included $352 million in Other Regulatory Assets (long-term) related to CPUC-regulated operations for these costs incurred and the estimated resolution of pending claims.

In December 2012, the CPUC issued a final decision allowing SDG&E to maintain an authorized memorandum account, enabling SDG&E to file applications with the CPUC requesting recovery of amounts properly recorded in the memorandum account, subject to reasonableness review, at a later date. In September 2015, SDG&E filed an application with the CPUC requesting rate recovery of such costs, and is proposing to recover the costs in rates over a six- to ten-year period. The CPUC has scheduled a two-phased proceeding to address SDG&E's request. SDG&E has responded to testimony submitted by intervening parties raising various concerns with SDG&E's operations and management prior to and during the 2007 wildfires, and have asked the CPUC to reject SDG&E's request for cost recovery. We discuss these cost recovery proceedings in "Management's Discussion and Analysis of Financial Condition and Results of Operations – Factors Influencing Future Performance" and in Note 15 of the Notes to Consolidated Financial Statements in the Annual Report.

Recovery of these costs in rates will require future regulatory approval. SDG&E will continue to assess the likelihood, amount and timing of such recoveries in rates. Should SDG&E conclude that recovery of excess wildfire costs in rates is no longer probable, at that time SDG&E would record a charge against earnings. If SDG&E had concluded that the recovery of regulatory assets related to CPUC-regulated operations was no longer probable or was less than currently estimated at December 31, 2016, the resulting after-tax charge against earnings would have been up to approximately $208 million. A failure to obtain substantial or full recovery of these costs from customers, or any negative assessment of the likelihood of recovery, would likely have a material adverse effect on Sempra Energy's and SDG&E's financial condition, cash flows and results of operations. We discuss how we assess the probability of recovery of our regulatory assets in Note 1 of the Notes to Consolidated Financial Statements in the Annual Report.

We have experienced increased costs and difficulties in obtaining insurance coverage for wildfires that could arise from the California Utilities' operations. In addition, the insurance that has been obtained for wildfire liabilities may not be sufficient to cover all losses that we may incur. Uninsured losses and increases in the cost of insurance may not be recoverable in customer rates. A loss which is not fully insured or cannot be recovered in customer rates could materially adversely affect Sempra Energy's and the affected California Utility's financial condition, cash flows and results of operations. Furthermore, insurance for wildfire liabilities may not continue to be available at all or at rates or with terms similar to those presently available.

SDG&E may incur substantial costs and liabilities as a result of its partial ownership of a nuclear facility that is being decommissioned.

SDG&E has a 20-percent ownership interest in SONGS, a 2,150-MW nuclear generating facility near San Clemente, California, that is in the process of being decommissioned by Edison, the majority owner of SONGS. SONGS is subject to the jurisdiction of the NRC and the CPUC. On June 6, 2013, Edison notified SDG&E that it had reached a decision to permanently retire SONGS and seek approval from the NRC to start the decommissioning activities for the entire facility. SDG&E, and each of the other owners, holds its undivided interest as a tenant in common in the property, and each owner is responsible for financing its share of expenses and capital expenditures, including decommissioning activities. Although the facility is being decommissioned, SDG&E's ownership interest in SONGS continues to subject it to the risks of owning a partial interest in a nuclear generation facility, which include

- the potential that a natural disaster such as an earthquake or tsunami could cause a catastrophic failure of the safety systems in place that are designed to prevent the release of radioactive material. If such a failure were to occur, a substantial amount of radiation could be released and cause catastrophic harm to human health and the environment;
- the potential harmful effects on the environment and human health resulting from the prior operation of nuclear facilities and the storage, handling and disposal of radioactive materials;
- limitations on the amounts and types of insurance commercially available to cover losses that might arise in connection with operations and the decommissioning of the facility; and
- uncertainties with respect to the technological and financial aspects of decommissioning the facility.

In addition, SDG&E maintains nuclear decommissioning trusts for the purpose of providing funds to decommission SONGS. Trust assets have been generally invested in equity and debt securities, which are subject to significant market fluctuations. A decline in the market value of trust assets or an adverse change in the law regarding funding requirements for decommissioning trusts could increase the funding requirements for these trusts, which in each case may not be fully recoverable in rates. Furthermore, CPUC approval is required in order to make withdrawals from these trusts. CPUC approval for certain expenditures may be denied by the CPUC altogether if the CPUC determines that the expenditures are unreasonable. Finally, decommissioning may be materially more expensive than we currently anticipate and therefore decommissioning costs may exceed the amounts in the trust funds. Rate recovery for overruns would require CPUC approval, which may not occur.

Interpretations of tax regulations could impact access to nuclear decommissioning trust funds for reimbursement of spent nuclear fuel management costs. Depending on how the Internal Revenue Service (IRS) or the U.S. Department of Treasury ultimately interprets or alters regulations addressing the taxation of a qualified nuclear decommissioning trust, SDG&E may be restricted from withdrawing amounts from its qualified decommissioning trusts to pay for spent fuel management where Edison and SDG&E are seeking, or plan to seek, recovery of spent fuel management costs in litigation against, or in settlements with, the DOE. In December 2016, the IRS and the U.S. Department of Treasury issued proposed regulations that clarify the definition of "nuclear decommissioning costs" that may be paid for or reimbursed from a qualified fund. These proposed regulations are not yet finalized, but SDG&E is working with outside counsel to clarify with the IRS some of the provisions in the proposed regulations to confirm that the proposed regulations will allow SDG&E to access the trust funds for reimbursement or payment of the spent fuel management costs incurred in 2016 and subsequent years. Until the DOE litigation is resolved, and/or IRS regulations regarding spent fuel management costs are confirmed to apply, SDG&E expects to continue to pay for such spent fuel management costs. If SDG&E is unable to obtain timely access to the trusts for these costs, SDG&E's cash flows could be negatively impacted.

In November 2014, the CPUC approved the Amended Settlement Agreement that resolved the investigation into the steam generator replacement project that ultimately led to the shut-down of SONGS. Various petitions have since been filed to reopen the settlement. In December 2016, the Commissioner and Administrative Law Judge assigned to the proceeding issued a ruling directing SDG&E and Edison to "meet and confer" with other parties to the proceeding to determine whether an agreement could be reached to modify the Amended Settlement Agreement previously approved by the CPUC to resolve allegations that unreported *ex parte* communications between Edison and the CPUC resulted in an unfair advantage at the time the settlement agreement was negotiated. If no agreement to modify the Amended Settlement Agreement is reached by April 28, 2017, the CPUC will consider other options, including entertaining additional testimony, hearings and briefs. We cannot assure you that the Amended Settlement Agreement will not be renegotiated, modified or set aside as a result of this proceeding. We provide additional detail in Note 13 of the Notes to the Consolidated Financial Statements in the Annual Report.

The occurrence of any of these events could result in a substantial reduction in our expected recovery and have a material adverse effect on SDG&E's and Sempra Energy's businesses, cash flows, financial condition, results of operations and/or prospects.

Risks Related to our Sempra South American Utilities and Sempra Infrastructure Businesses

Our businesses are exposed to market risks, including fluctuations in commodity prices, and our businesses, financial condition, results of operations, cash flows and/or prospects may be materially adversely affected by these risks. Energy-related commodity prices impact LNG liquefaction and regasification, the transport and storage of natural gas, and power generation from renewable and conventional sources, among other businesses that we operate and invest in.

We buy energy-related commodities from time to time, for LNG terminals or power plants to satisfy contractual obligations with customers, in regional markets and other competitive markets in which we compete. Our revenues and results of operations could be materially adversely affected if the prevailing market prices for natural gas, LNG, electricity or other commodities that we buy change in a direction or manner not anticipated and for which we had not provided adequately through purchase or sale commitments or other hedging transactions. In particular, North American natural gas prices, when in decline, negatively impact profitability at Sempra LNG & Midstream.

Unanticipated changes in market prices for energy-related commodities result from multiple factors, including:

- weather conditions
- seasonality
- changes in supply and demand
- transmission or transportation constraints or inefficiencies
- availability of competitively priced alternative energy sources
- commodity production levels
- actions by oil and natural gas producing nations or organizations affecting the global supply of crude oil and natural gas
- federal, state and foreign energy and environmental regulation and legislation
- natural disasters, wars, embargoes and other catastrophic events
- expropriation of assets by foreign countries

The FERC has jurisdiction over wholesale power and transmission rates, independent system operators, and other entities that control transmission facilities or that administer wholesale power sales in some of the markets in which we operate. The FERC may impose additional price limitations, bidding rules and other mechanisms, or terminate existing price limitations from time to time. Any such action by the FERC may result in prices for electricity changing in an unanticipated direction or manner and, as a result, may have a material adverse effect on our businesses, cash flows, results of operations and/or prospects.

When our businesses enter into fixed-price long-term contracts to provide services or commodities, they are exposed to inflationary pressures such as rising commodity prices, and interest rate risks.

Sempra Mexico, Sempra Renewables and Sempra LNG & Midstream generally endeavor to secure long-term contracts with customers for services and commodities to optimize the use of their facilities, reduce volatility in earnings, and support the construction of new infrastructure. However, if these contracts are at fixed prices, the profitability of the contract may be materially adversely affected by inflationary pressures, including rising operational costs, costs of labor, materials, equipment and commodities, and rising interest rates that affect financing costs. We may try to mitigate these risks by using variable pricing tied to market indices, anticipating an escalation in costs when bidding on projects, providing for cost escalation, providing for direct pass-through of operating costs or entering into hedges. However, these measures, if implemented, may not ensure that the increase in revenues they provide will fully offset increases in operating expenses and/or financing costs. The failure to fully or substantially offset these increases could have a material adverse effect on our financial condition, cash flows and/or results of operations.

Business development activities may not be successful and projects under construction may not commence operation as scheduled or be completed within budget, which could have a material adverse effect on our businesses, financial condition, cash flows, results of operations and/or prospects.

The acquisition, development, construction and expansion of LNG terminals; natural gas, propane and ethane pipelines and storage facilities; electric generation, transmission and distribution facilities; and other energy infrastructure projects involve numerous risks. We may be required to spend significant sums for preliminary engineering, permitting, fuel supply, resource exploration, legal, and other expenses before we can determine whether a project is feasible, economically attractive, or capable of being built.

Success in developing a particular project is contingent upon, among other things:

- negotiation of satisfactory engineering, procurement and construction (EPC) agreements
- negotiation of supply and natural gas sales agreements or firm capacity service agreements
- timely receipt of required governmental permits, licenses, authorizations, and rights of way and maintenance or extension of these authorizations
- timely implementation and satisfactory completion of construction
- obtaining adequate and reasonably priced financing for the project

Successful completion of a particular project may be materially adversely affected by, among other factors:

- unforeseen engineering problems
- construction delays and contractor performance shortfalls
- work stoppages
- failure to obtain, maintain or extend required governmental permits, licenses, authorizations, and rights of way
- equipment unavailability or delay and cost increases
- adverse weather conditions
- environmental and geological conditions
- litigation
- unsettled property rights

If we are unable to complete a development project or if we have substantial delays or cost overruns, this could have a material adverse effect on our businesses, financial condition, cash flows, results of operations and/or prospects.

The operation of existing and future facilities also involves many risks, including the breakdown or failure of electric generation, transmission and distribution facilities, or natural gas regasification, liquefaction and storage facilities or other equipment or processes, labor disputes, fuel interruption, environmental contamination and operating performance below expected levels. In addition, weather-related incidents and other natural disasters can disrupt generation, regasification, liquefaction, storage, transmission and distribution systems. The occurrence of any of these events could lead to our facilities being idled for an extended period of time or our facilities operating well below expected capacity levels, which may result in lost revenues or increased expenses, including higher maintenance costs and penalties. Such occurrences could materially adversely affect our businesses, financial condition, cash flows, results of operations and/or prospects.

The design, development and construction of the Cameron LNG liquefaction facility involves numerous risks and uncertainties.

With respect to our project to add LNG export capability at the Cameron LNG facility, the Cameron LNG Holdings, LLC joint venture (Cameron LNG JV) is building an LNG export facility consisting of three liquefaction trains designed to a total nameplate capacity of 13.9 million tonnes per annum (Mtpa) of LNG with an expected export capability of 12 Mtpa of LNG, or approximately 1.7 Bcf per day. The anticipated incremental investment in the three-train

liquefaction project is estimated to be approximately $7 billion, including the cost of the lump-sum, turnkey construction contract, development engineering costs and permitting costs, but excluding capitalized interest and other financing costs. The total cost of the facility, including the cost of our original regasification facility contributed to the joint venture plus interest during construction, financing costs and required reserves, is estimated to be approximately $10 billion. If construction, financing or other project costs are higher than we currently expect, we may have to contribute additional cash exceeding our current estimates. The majority of the incremental investment in the joint venture will be project-financed and the balance provided by the project partners. Any failure by the project partners to make their required investments on a timely basis could result in project delays and could materially adversely affect the development of the project. In addition, Sempra Energy has guaranteed a maximum of $3.9 billion related to the project financing and financing-related agreements. These guarantees terminate upon Cameron LNG JV's achieving "financial completion" of the initial three-train liquefaction project, including all three trains achieving commercial operation and meeting certain operational performance tests. If, due to the joint venture's failure to satisfy the financial completion criteria, we are required to repay some or all of the $3.9 billion under our guarantees, any such repayments could have a material adverse effect on our business, results of operations, cash flows, financial condition, and/or prospects.

Large-scale construction projects like the design, development and construction of the Cameron LNG liquefaction facility involve numerous risks and uncertainties, including among others, the potential for unforeseen engineering problems, substantial construction delays and increased costs. Cameron LNG JV has a turnkey EPC contract with a joint venture contractor comprised of subsidiaries of Chicago Bridge & Iron Company N.V. and Chiyoda Corporation, who are jointly and severally liable for performance under the contract. If the contractor becomes unwilling or unable to perform according to the terms and timetable of the EPC contract, Cameron LNG JV may be required to engage a substitute contractor, which would result in project delays and increased costs, which could be significant. The construction of this facility requires a large and specialized work force, necessary equipment and materials, and sophisticated engineering. There can be no assurance that Cameron LNG JV's contractor will not encounter delays due to disruptions in obtaining the necessary equipment and materials, inability to field the necessary workforce, weather conditions, or engineering issues that were not contemplated. In October 2016, Cameron LNG JV received an indication from the EPC contractor that the respective in-service dates for each train may be delayed. Any such construction delays will defer a portion of the 2018 and 2019 earnings anticipated from the Cameron LNG project. As construction progresses, Cameron LNG JV may decide or be forced to submit change orders to the contractor that could result in longer construction periods and higher construction costs or both. In addition, new regulations, labor disputes, breakdown or failure of equipment and litigation could substantially delay the project. As we do not control Cameron LNG JV, we are dependent on reaching a consensus with one or more of our joint venture partners to resolve a variety of issues that could transpire. The inability to timely resolve issues, including construction issues, could cause substantial delays to the completion of this project. A substantial delay could result in cost overruns, substantially postpone the earnings we anticipate deriving from this facility, and require additional cash investments by us and our joint venture partners. The anticipated cost of this project is based on a number of assumptions that may prove incorrect, and the ultimate cost could significantly exceed the current estimate of approximately $7 billion of incremental investment, excluding capitalized interest and other financing costs. These risks could have a material adverse effect on our business, results of operations, cash flows, financial condition, and/or prospects.

We face many challenges to develop and complete our contemplated LNG export facilities.

In addition to the three-train Cameron LNG liquefaction facility described above, we are looking at several other LNG export terminal development opportunities, including a greenfield project in Port Arthur, Texas, a brownfield project at our existing Energía Costa Azul regasification facility in Baja California, Mexico and an expansion of up to two additional liquefaction trains to the Cameron liquefaction facility. Each of these contemplated projects faces numerous risks and must overcome significant hurdles before we can proceed with construction. Common to all of these projects is the risk that an extended decline in current and forward projections of crude oil prices could reduce the demand for natural gas in some sectors and cause a corresponding reduction in projected global demand for LNG. This could result in increased competition among those working on projects in an environment of declining LNG demand, such as the Sempra Energy-sponsored export initiatives. Such reduction in natural gas demand could also occur from higher penetration of coal in new power generation, which could also lead to increased competition among the LNG suppliers for the declining LNG demand. Oil prices at certain moderate levels could also make LNG projects in other parts of the world still feasible and competitive with LNG projects from North America, thus increasing supply and the competition for the available LNG demand. A decline in natural gas prices outside the United States (which in many foreign countries are based on the price of crude oil) may also materially adversely affect the relative pricing advantage that has existed in recent years in favor of domestic natural gas prices (based on Henry Hub pricing).

Sempra LNG & Midstream has entered into a project development agreement for the joint development of the proposed Port Arthur liquefaction project with an affiliate of Woodside Petroleum Ltd. The agreement specifies how the parties will share costs, and establishes a framework for the parties to work jointly on permitting, design, engineering, and commercial and marketing activities associated with developing the Port Arthur liquefaction project. Also, Sempra LNG & Midstream, IEnova and a subsidiary of Petróleos Mexicanos (or PEMEX, the Mexican state-owned oil company) entered into a project development agreement for the joint development of the proposed liquefaction project at IEnova's existing Energía Costa Azul regasification facility in Mexico. The agreement specifies how the parties will share costs, and establishes a framework for the parties to work jointly on permitting, design, engineering, and commercial activities associated with developing the potential liquefaction project. We are sharing costs with PEMEX on the development efforts. Any decisions by the parties to proceed with binding agreements with respect to the formation of these potential joint ventures and the potential development of these projects will require, among other things, completion of project assessments and achieving other necessary internal and external approvals of each such party. In addition, all of our proposed projects are subject to a number of risks and uncertainties, including the receipt of a number of permits and approvals; finding suitable partners and customers; obtaining financing and incentives; negotiating and completing suitable commercial agreements, including joint venture agreements, tolling capacity agreements or natural gas supply and LNG sales agreements and construction contracts; and reaching a final investment decision.

Expansion of the Cameron LNG liquefaction facility beyond the first three trains is subject to certain restrictions and conditions under the joint venture project financing agreements, including among others, timing restrictions on expansion of the project unless appropriate prior consent is obtained from the project lenders. Under the Cameron LNG JV equity agreements, the expansion of the project requires the unanimous consent of all of the partners, including with respect to the equity investment obligation of each partner. One of the partners indicated to Sempra Energy and the other partners that it does not intend to invest additional capital in Cameron LNG JV with respect to the expansion. As a result, discussions among the partners have occurred, and we are considering a variety of options to attempt to move the expansion project forward. These activities have contributed to delays in developing firm pricing information and securing customer commitments. In light of these developments, we cannot assure you that the various consents required for expansion of the Cameron LNG project will be obtained.

Furthermore, there are a number of potential new projects under construction or in the process of development by various project developers in North America, in addition to ours, and given the projected global demand for LNG, the vast majority of these projects likely will not be completed. With respect to our Port Arthur, Texas project, this is a greenfield site, and therefore it may not have the advantages often associated with brownfield sites. The Energía Costa Azul facility in Mexico is subject to on-going land disputes that could make project financing difficult as well as finding suitable partners and customers. In addition, while we have completed the regulatory process for an LNG export facility in the U.S., the regulatory process in Mexico and the overlay of U.S. regulations for natural gas exports to an LNG export facility in Mexico are not well developed. There can be no assurance that such a facility could be permitted and constructed without facing significant legal challenges and uncertainties, which in turn could make project financing, as well as finding suitable partners and customers, difficult. Finally, Energía Costa Azul has profitable long-term regasification contracts for 100 percent of the facility, making the decision to pursue a new liquefaction facility dependent in part on whether the investment in a new liquefaction facility would, over the long term, be more beneficial than continuing to supply regasification services under our existing contracts.

There can be no assurance that our contemplated LNG export facilities will be completed, and our inability to complete one or more of our contemplated LNG export facilities could have a material adverse effect on our future cash flows, results of operations and prospects.

We discuss these projects further in “Our Business” and “Factors Influencing Future Performance” in “Management’s Discussion and Analysis of Financial Condition and Results of Operations” in the Annual Report.

Federal and state legislative and regulatory initiatives relating to hydraulic fracturing could reduce or eliminate LNG export opportunities and demand.

Several states have adopted or are considering adopting regulations to impose more stringent permitting, public disclosure or well construction requirements on hydraulic fracturing operations. In addition to state laws, some local municipalities have adopted or are considering adopting land use restrictions, such as city ordinances, that may restrict the performance of or prohibit the well drilling in general and/or hydraulic fracturing in particular. Hydraulic fracturing is typically regulated by state oil and natural gas commissions, but federal agencies have asserted regulatory authority over certain hydraulic fracturing activities. For example, the EPA issued permitting guidance in February 2014 under the federal Safe Drinking Water Act (SDWA) for hydraulic fracturing activities involving the use of diesel fuels. In April 2015, the EPA issued a proposed rule that would prevent the discharge of hydraulic fracturing wastewater into publicly owned treatment works, and in March 2015, the Bureau of Land Management of the U.S. Department of the Interior adopted rules imposing new requirements for hydraulic fracturing activities on federal lands, including new requirements relating to public disclosure of hydraulic fracturing chemicals, as well as wellbore integrity and handling of flowback water. In addition, the U.S. Congress has from time to time considered legislation to provide for federal regulation of hydraulic fracturing under the SDWA and to require disclosure of the chemicals used in the hydraulic fracturing process. There are also certain governmental reviews that have been conducted or are underway on deep shale and other formation completion and production practices, including hydraulic fracturing. Depending on the outcome of these studies, federal and state legislatures and agencies may seek to further regulate or even ban such activities. Certain environmental and other groups have also suggested that additional federal, state and local laws and regulations may be needed to more closely regulate the hydraulic fracturing process.

We cannot predict whether additional federal, state or local laws or regulations applicable to hydraulic fracturing will be enacted in the future and, if so, what actions any such laws or regulations would require or prohibit. If additional levels of regulation or permitting requirements were imposed on hydraulic fracturing operations, natural gas prices in North America could rise, which in turn could materially adversely affect the relative pricing advantage that has existed in recent years in favor of domestic natural gas prices (based on Henry Hub pricing). Increased regulation or difficulty in permitting of hydraulic fracturing, and any corresponding increase in domestic natural gas prices, could materially adversely affect demand for LNG exports and our ability to develop commercially viable LNG export facilities beyond the three train Cameron LNG facility currently under construction.

Increased competition and changes in trade policies could materially adversely affect us.

The markets in which we operate are characterized by numerous strong and capable competitors, many of whom have extensive and diversified developmental and/or operating experience (including both domestic and international) and financial resources similar to or greater than ours. Further, in recent years, the natural gas pipeline, storage and LNG market segments have been characterized by strong and increasing competition both with respect to winning new development projects and acquiring existing assets. In Mexico, despite the commissioning of many new energy infrastructure projects by the Federal Electricity Commission (Comisión Federal de Electricidad, or CFE) and other governmental agencies in connection with energy reforms, competition for recent pipeline projects has been intense with numerous bidders competing aggressively for these projects. There can be no assurance that we will be successful in bidding for new development opportunities in the U.S., Mexico or South America. In addition, as noted above, there are a number of potential new LNG liquefaction projects under construction or in the process of being developed by various project developers in North America, including our contemplated new projects, and given the projected global demand for LNG, it is likely that most of these projects will not be completed. Finally, as existing contracts expire at our natural gas storage assets in the Gulf Coast region, we compete with other facilities for storage customers that could continue to support the existing book value of these assets, and for anchor customers that could support development of new capacity. These competitive factors could have a material adverse effect on our business, results of operations, cash flows and/or prospects.

In addition, the current U.S. Administration has previously indicated its intention to renegotiate trade agreements, such as the North American Free Trade Agreement, or NAFTA. A shift in U.S. trade policies could materially adversely affect our LNG development opportunities, as well as opportunities for trade between Mexico and the United States.

We may elect not to, or may not be able to, enter into, extend or replace expiring long-term supply and sales agreements or long-term firm capacity agreements for our projects, which would subject our revenues to increased volatility and our businesses to increased competition. Such long-term contracts, once entered into, increase our credit risk if our counterparties fail to perform or become unable to meet their contractual obligations on a timely basis due to bankruptcy, insolvency, or otherwise.

The Energía Costa Azul LNG facility and the Cameron LNG facility (within the Cameron LNG JV) have entered into long-term capacity agreements with a limited number of counterparties at each facility. Under these agreements, customers pay capacity reservation and usage fees to receive, store and regasify the customers’ LNG. We also may enter into short-term and/or long-term supply agreements to purchase LNG to be received, stored and regasified for sale to other parties. The long-term supply agreement contracts are expected to reduce our exposure to changes in natural gas prices through corresponding natural gas sales agreements or by tying LNG supply prices to prevailing natural gas market price indices. If the counterparties, customers or suppliers to one or more of the key agreements for the LNG facilities were to fail to perform or become unable to meet their contractual obligations on a timely basis, it could have a material adverse effect on our results of operations, cash flows and/or prospects.

At Cameron LNG JV, although the Cameron LNG terminal is partially contracted for regasification, there is a termination agreement in place that will result in the termination of the regasification contract at the point during the construction of the new liquefaction facilities where piping tie-ins to the existing regasification terminal become necessary.

For the three-train liquefaction facility currently under construction, Cameron LNG JV has 20-year liquefaction and regasification tolling capacity agreements in place with ENGIE S.A. (formerly GDF SUEZ S.A.) and affiliates of Mitsubishi Corporation and Mitsui & Co. Ltd., that subscribe for the full nameplate capacity of the facility. If the counterparties to these tolling agreements were to fail to perform or become unable to meet their contractual obligations to Cameron LNG JV on a timely basis, it could have a material adverse effect on our results of operations, cash flows and/or prospects.

Sempra Mexico’s and Sempra LNG & Midstream’s ability to enter into or replace existing long-term firm capacity agreements for their natural gas pipeline operations are dependent on demand for and supply of LNG and/or natural gas from their transportation customers, which may include our LNG facilities. A significant sustained decrease in demand for and supply of LNG and/or natural gas from such customers could have a material adverse effect on our businesses, results of operations, cash flows and/or prospects.

Our natural gas storage assets include operational and development assets at Bay Gas Storage Company, Ltd. (Bay Gas) in Alabama and Mississippi Hub, LLC (Mississippi Hub) in Mississippi, as well as our development project, LA Storage, LLC (LA Storage) in Louisiana. LA Storage could be positioned to support LNG export from the Cameron LNG JV terminal and other liquefaction projects, if anticipated cash flows support further investment. However, changes in the U.S. natural gas market could also lead to diminished natural gas storage values. Historically, the value of natural gas storage services has positively correlated with the difference between the seasonal prices of natural gas, among other factors. In general, over the past several years, seasonal differences in natural gas prices have declined, which have contributed to lower prices for storage services. As our legacy (higher rate) sales contracts mature at our Bay Gas and Mississippi Hub facilities, replacement sales contract rates have been and could continue to be lower than has historically been the case.

Lower sales revenues may not be offset by cost reductions, which could lead to depressed asset values. In addition, our LA Storage development project may be unable to either attract cash flow commitments sufficient to support further investment or extend its FERC construction permit beyond its current expiration date of June 2017. The LA Storage project also includes an existing 23.3-mile pipeline header system, the LA Storage Pipeline, that is not contracted. Market conditions could result in the need to perform recovery testing of our recorded asset values. In the event such values are not recoverable, we would consider the fair value of these assets relative to their recorded value. To the extent the recorded (carrying) value is in excess of the fair value, we would record a noncash impairment charge. The recorded value of our long-lived natural gas storage assets at December 31, 2016 was $1.5 billion. A significant impairment charge related to our natural gas storage assets would have a material adverse effect on our results of operations in the period in which it is recorded.

The electric generation and wholesale power sales industries are highly competitive. As more plants are built and competitive pressures increase, wholesale electricity prices may become more volatile. Without the benefit of long-term power sales agreements, our revenues may be subject to increased price volatility, and we may be unable to sell the power that Sempra Renewables' and Sempra Mexico's facilities are capable of producing or to sell it at favorable prices, which could materially adversely affect our results of operations, cash flows and/or prospects.

We provide information about these matters in "Management's Discussion and Analysis of Financial Condition and Results of Operations" in the Annual Report.

Our businesses depend on counterparties, business partners, customers, and suppliers performing in accordance with their agreements. If they fail to perform, we could incur substantial expenses and business disruptions and be exposed to commodity price risk and volatility, which could materially adversely affect our businesses, financial condition, cash flows, results of operations and/or prospects.

Our businesses, and the businesses that we invest in, are exposed to the risk that counterparties, business partners, customers, and suppliers that owe money or commodities as a result of market transactions or other long-term agreements or arrangements will not perform their obligations in accordance with such agreements or arrangements. Should they fail to perform, we may be required to enter into alternative arrangements or to honor the underlying commitment at then-current market prices. In such an event, we may incur additional losses to the extent of amounts already paid to such counterparties or suppliers. In addition, many such agreements are important for the conduct and growth of our businesses. The failure of any of the parties to perform in accordance with these agreements could materially adversely affect our businesses, results of operations, cash flows, financial condition and/or prospects. Finally, we often extend credit to counterparties and customers. While we perform significant credit analyses prior to extending credit, we are exposed to the risk that we may not be able to collect amounts owed to us.

In November 2015, a major U.S. credit rating agency revised PEMEX's global foreign currency and local currency credit ratings from A3 to Baa1 and changed the outlook for its credit ratings to negative. In March 2016, the same major credit rating agency further downgraded PEMEX's global foreign currency and local currency credit ratings from Baa1 to Baa3. In May, October and December 2016, in connection with debt offerings by PEMEX, the same major credit agency reaffirmed that the outlook on PEMEX's credit ratings remains negative. PEMEX is also subject to the control of the Mexican government, which could limit its ability to satisfy its external debt obligations. Although PEMEX is a State Productive Enterprise of Mexico, its financing obligations are not guaranteed by the Mexican government. As both a partner in a Sempra Mexico joint venture that holds a 50-percent interest in the Los Ramones Norte pipeline project and a customer with capacity contracts for transportation services on Sempra Mexico's ethane pipelines, if PEMEX were unable to meet any or all of its obligations to Sempra Mexico, it could have a material adverse effect on our financial condition, results of operations, cash flows and prospects.

Sempra Mexico's and Sempra LNG & Midstream's obligations and those of their suppliers for LNG supplies are contractually subject to (1) suspension or termination for "force majeure" events beyond the control of the parties; and (2) substantial limitations of remedies for other failures to perform, including limitations on damages to amounts that could be substantially less than those necessary to provide full recovery of costs for breach of the agreements, which in either event could have a material adverse effect on our results of operations, cash flows, financial condition and/or prospects.

Our businesses are subject to various legal actions challenging our property rights and permits.

We are engaged in disputes regarding our title to the properties adjacent to and properties where our LNG terminal in Mexico is located, as we discuss in Note 15 of the Notes to Consolidated Financial Statements in the Annual Report. In the event that we are unable to defend and retain title to the properties on which our LNG terminal is located, we could lose our rights to occupy and use such properties and the related terminal, which could result in breaches of one or more permits or contracts that we have entered into with respect to such terminal. In addition, our ability to convert the LNG terminal into an export facility may be hindered by these disputes, and they could make project financing such a facility and finding suitable partners and customers very difficult. If we are unable to occupy and use such properties and the related terminal, it could have a material adverse effect on our businesses, financial condition, results of operations, cash flows and/or prospects.

We are also engaged in disputes regarding permits at our Energía Sierra Juárez wind project in Mexico, as we discuss in Note 15 of the Notes to Consolidated Financial Statements in the Annual Report.

We rely on transportation assets and services, much of which we do not own or control, to deliver electricity and natural gas.

We depend on electric transmission lines, natural gas pipelines, and other transportation facilities owned and operated by third parties to:

- deliver the electricity and natural gas we sell to wholesale markets,
- supply natural gas to our gas storage and electric generation facilities, and
- provide retail energy services to customers.

Sempra Mexico and Sempra LNG & Midstream also depend on natural gas pipelines to interconnect with their ultimate source or customers of the commodities they are transporting. Sempra Mexico and Sempra LNG & Midstream also rely on specialized ships to transport LNG to their facilities and on natural gas pipelines to transport natural gas for customers of the facilities. Sempra Renewables, Sempra South American Utilities and Sempra Mexico rely on transmission lines to sell electricity to their customers. If transportation is disrupted, or if capacity is inadequate, we may be unable to sell and deliver our commodities, electricity and other services to some or all of our customers. As a result, we may be responsible for damages incurred by our customers, such as the additional cost of acquiring alternative electricity, natural gas supplies and LNG at then-current spot market rates, which could have a material adverse effect on our businesses, financial condition, cash flows, results of operations and/or prospects.

Our international businesses are exposed to different local, regulatory and business risks and challenges.

In Mexico, we own or have interests in natural gas distribution and transportation, liquid petroleum gas storage and transportation facilities, ethane transportation, electricity generation, distribution and transmission facilities, and an LNG terminal. In Peru and Chile, we own or have interests in electricity generation, transmission and distribution facilities and operations. Developing infrastructure projects, owning energy assets, and operating businesses in foreign jurisdictions subject us to significant political, legal, regulatory and financial risks that vary by country, including:

- changes in foreign laws and regulations, including tax and environmental laws and regulations, and U.S. laws and regulations, in each case, that are related to foreign operations
- governance by and decisions of local regulatory bodies, including setting of rates and tariffs that may be earned by our businesses

- high rates of inflation
- volatility in exchange rates between the U.S. dollar and currencies of the countries in which we operate, as we discuss below
- foreign cash balances that may be unavailable to fund U.S. operations, or available only at unfavorable U.S. and/or foreign tax rates upon repatriation of such amounts or changes in tax law
- changes in government policies or personnel
- trade restrictions
- limitations on U.S. company ownership in foreign countries
- permitting and regulatory compliance
- changes in labor supply and labor relations
- adverse rulings by foreign courts or tribunals, challenges to permits and approvals, difficulty in enforcing contractual and property rights, and unsettled property rights and titles in Mexico and other foreign jurisdictions
- expropriation of assets
- adverse changes in the stability of the governments in the countries in which we operate
- general political, social, economic and business conditions
- compliance with the Foreign Corrupt Practices Act and similar laws
- valuation of goodwill

Our international businesses also are subject to foreign currency risks. These risks arise from both volatility in foreign currency exchange and inflation rates and devaluations of foreign currencies. In such cases, an appreciation of the U.S. dollar against a local currency could materially reduce the amount of cash and income received from those foreign subsidiaries. We may or may not choose to hedge these risks, and any hedges entered into may or may not be effective. Fluctuations in foreign currency exchange and inflation rates may result in significantly increased taxes in foreign countries and materially adversely affect our cash flows, financial condition, results of operations and/or prospects.

We discuss litigation related to Sempra Mexico's Energía Costa Azul LNG terminal and other international energy projects in Note 15 of the Notes to Consolidated Financial Statements and in "Management's Discussion and Analysis of Financial Condition and Results of Operations" in the Annual Report.

IEnova's completed acquisitions of the remaining 50-percent interest in the Gasoductos de Chihuahua joint venture and of the Ventika wind power generation facilities will subject IEnova to integration challenges and risks.

IEnova's completed acquisitions of the remaining 50-percent interest in the Gasoductos de Chihuahua joint venture from Pemex TRI and of the Ventika I and Ventika II wind power facilities from Fisterra Energy and certain minority shareholders will subject IEnova to substantial integration challenges and risks. IEnova's expectations for the operating performance of the existing projects and the projects under construction by Gasoductos de Chihuahua are based on assumptions and estimates derived from its prior experience in the development of joint venture projects with Pemex TRI, and IEnova's expectations regarding the results of operations of the Ventika wind power generation facilities are based on its due diligence and assumptions and estimates regarding the future productivity of those assets. The ability of these entities to achieve their expected results is subject to the risks inherent in the development, construction and management of energy projects generally. Following these acquisitions, Gasoductos de Chihuahua and/or the Ventika wind power generation facilities may not perform as expected, and the revenues generated by such acquisitions may prove insufficient to support the financing utilized to acquire such entities or to maintain such acquisitions. Furthermore, the successful integration and consolidation of any acquisition requires significant human, financial and other resources, which may distract the attention of IEnova's management from IEnova's existing projects, give rise to disruptions in such projects or result in an acquisition not being adequately integrated. IEnova may be unsuccessful at integrating either of these businesses with its own, or may experience difficulties in connection with the integration of their operations and systems (including IT, accounting, financial, control, risk management and safety systems). Any failure by IEnova to achieve the expected results, synergies and/or economies of scale from the integration of these businesses could have a material adverse effect on IEnova's business, financial condition, results of operations, cash flows, and/or prospects.

Other Risks

Sempra Energy has substantial investments in and obligations arising from businesses that it does not control or manage or in which it shares control.

Sempra Energy makes investments in entities that we do not control or manage or in which we share control. As described above, SDG&E holds a 20-percent ownership interest in SONGS, which is in the process of being decommissioned by Edison, its majority owner. Sempra LNG & Midstream accounts for its investment in the Cameron LNG JV under the equity method, which investment is approximately $1 billion at December 31, 2016. At December 31, 2016, Sempra Renewables had investments totaling $844 million in several joint ventures to operate renewable generation facilities. Sempra Mexico has a 40-percent interest in a joint venture with a subsidiary of TransCanada Corporation to build, own and operate the Sur de Texas-Tuxpan natural gas marine pipeline in Mexico, a 50-percent interest in a renewables wind project in Baja California, and a 50-percent interest in a joint venture with PEMEX which, in turn, owns a 50-percent interest in the Los Ramones Norte pipeline in Mexico. At December 31, 2016, these various joint venture investments by Sempra Mexico totaled $180 million. Sempra Energy has an investment balance of $67 million at December 31, 2016 that reflects remaining distributions expected to be received from the RBS Sempra Commodities LLP (RBS Sempra Commodities) partnership as it is dissolved. The timing and amount of distributions may be impacted by the matters we discuss related to RBS Sempra Commodities in Notes 6 and 15 of the Notes to Consolidated Financial Statements in the Annual Report. The failure to collect all or a substantial portion of our remaining investment in the RBS Sempra Commodities partnership could have a corresponding impact on our cash flows, financial condition and results of operations.

Sempra Renewables and Sempra LNG & Midstream have provided guarantees related to joint venture financing agreements, and Sempra South American Utilities and Sempra Mexico have provided loans to joint ventures in which they have investments and to other affiliates. We discuss the guarantees in Note 4, and affiliate loans in Note 1 of the Notes to Consolidated Financial Statements in the Annual Report.

We have limited influence over these ventures and other businesses in which we do not have a controlling interest. In addition to the other risks inherent in these businesses, if their management were to fail to perform adequately or the other investors in the businesses were unable or otherwise failed to perform their obligations to provide capital and credit support for these businesses, it could have a material adverse effect on our results of operations, financial condition, cash flows and/or prospects. We discuss our investments further in Notes 3, 4 and 10 of the Notes to Consolidated Financial Statements in the Annual Report.

Market performance or changes in other assumptions could require Sempra Energy, SDG&E and/or SoCalGas to make significant unplanned contributions to their pension and other postretirement benefit plans.

Sempra Energy, SDG&E and SoCalGas provide defined benefit pension plans and other postretirement benefits to eligible employees and retirees. A decline in the market value of plan assets may increase the funding requirements for these plans. In addition, the cost of providing pension and other postretirement benefits is also affected by other factors, including the assumed rate of return on plan assets, employee demographics, discount rates used in determining

future benefit obligations, rates of increase in health care costs, levels of assumed interest rates and future governmental regulation. An adverse change in any of these factors could cause a material increase in our funding obligations which could have a material adverse effect on our results of operations, financial condition, cash flows and/or prospects.

Impairment of goodwill would negatively impact our consolidated results of operations and net worth.

As of December 31, 2016, Sempra Energy had approximately $2.4 billion of goodwill, which represented approximately 4.9 percent of the total assets on its Consolidated Balance Sheet, primarily related to investments in Gasoductos de Chihuahua in Mexico, Chilquinta Energía in Chile and Luz Del Sur in Peru. Goodwill is not amortized, but we test it for impairment annually on October 1 or whenever events or changes in circumstances necessitate an evaluation, which could result in our recording a goodwill impairment loss. We discuss our annual goodwill impairment testing process and the factors considered in such testing in “Management’s Discussion and Analysis of Financial Condition and Results of Operations – Critical Accounting Policies and Estimates” and in Note 1 of the Notes to Consolidated Financial Statements in the Annual Report. A goodwill impairment loss could materially adversely affect our results of operations for the period in which such charge is recorded.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

SEMPRA UTILITIES

Electric Properties

SDG&E

At December 31, 2016, SDG&E owns and operates four natural gas-fired power plants:

- a 566-MW electric generation facility (the Palomar generation facility) in Escondido, California
- a 485-MW electric generation facility (the Desert Star generation facility) in Boulder City, Nevada
- a 96-MW electric generation peaking facility (the Miramar Energy Center) in San Diego, California
- a 47-MW electric generation facility (the Cuyamaca Peak Energy Plant) in El Cajon, California

SDG&E's interest in SONGS, as well as matters related to SONGS' retirement and related issues, are discussed in Note 13 of the Notes to Consolidated Financial Statements in the Annual Report.

At December 31, 2016, SDG&E's electric transmission and distribution facilities included substations and overhead and underground lines. These electric facilities are located in San Diego, Imperial and Orange counties of California, and in Arizona and Nevada. The facilities consist of 2,083 miles of transmission lines, 23,371 miles of distribution lines and 161 substations. Periodically, various areas of the service territory require expansion to accommodate customer growth, reliability and safety.

Sempra South American Utilities

Sempra South American Utilities operates Chilquinta Energía, which serves customers in the region of Valparaíso in central Chile. Its property consists of 10,118 miles of distribution lines, 352 miles of transmission lines and 48 substations. Chilquinta Energía and Sociedad Austral de Electricidad Sociedad Anónima are 50-percent partners in Eletrans S.A., an electric transmission company that operates a 100-mile double circuit 220-kV transmission line, which extends from Cardones to Diego de Almagro in Chile.

Sempra South American Utilities operates Luz del Sur, which serves customers in the southern zone of metropolitan Lima, Peru. Its property consists of 13,763 miles of distribution lines, 194 miles of transmission lines and 39 substations. Luz del Sur operates Santa Teresa, a 100-MW hydroelectric power plant located in the Cusco region of Peru.

Natural Gas Properties

SDG&E

At December 31, 2016, SDG&E's natural gas facilities consisted of one compressor station, 168 miles of transmission pipelines, 8,647 miles of distribution pipelines and 6,457 miles of service pipelines.

SoCalGas

At December 31, 2016, SoCalGas' natural gas facilities included 2,964 miles of transmission and storage pipelines, 50,296 miles of distribution pipelines and 47,676 miles of service pipelines. They also included 10 transmission compressor stations and four underground natural gas storage reservoirs with a combined working capacity of 137 Bcf. We discuss recent events concerning SoCalGas' Aliso Canyon natural gas storage facility in "Risk Factors" above and in "Management's Discussion and Analysis of Financial Condition and Results of Operations – Factors Influencing Future Performance" and Note 15 of the Notes to Consolidated Financial Statements in the Annual Report.

SEMPRA INFRASTRUCTURE

Energy Properties

At December 31, 2016, Sempra Mexico and Sempra Renewables operate or own interests in a power plant and/or renewable generation facilities in North America with a total capacity of 3,329 MW. Our share of this capacity is 2,345 MW. We provide additional information in "Management's Discussion and Analysis of Financial Condition and Results of Operations" and in Notes 3 and 4 of the Notes to Consolidated Financial Statements in the Annual Report.

At December 31, 2016, Sempra Mexico's operations included 2,336 miles of natural gas distribution pipelines, 710 miles of natural gas transmission pipelines and eight compressor stations, 140 miles of ethane pipelines and 118 miles of liquid petroleum gas pipelines. Sempra Mexico operates its Energía Costa Azul LNG regasification terminal on land it owns in Baja California, Mexico and operates a liquid petroleum gas storage terminal in Jalisco, Mexico.

Sempra Renewables leases properties in Nevada and Michigan and owns property in California, Arizona and Michigan for potential development and/or for currently operating solar and wind electric generation facilities and intermittency solutions. Sempra Mexico leases properties in Mexico for current and potential development of solar and wind electric generation facilities.

Sempra LNG & Midstream and its partner, ProLiance Transportation and Storage, LLC, own land in Cameron Parish, Louisiana, with potential to develop 19 Bcf of salt cavern natural gas storage capacity at the LA Storage development project.

In Washington County, Alabama, Sempra LNG & Midstream operates a 20 Bcf natural gas storage facility, Bay Gas, under a land lease. Sempra LNG & Midstream also owns land in Simpson County, Mississippi, on which it operates a 22 Bcf natural gas storage facility, Mississippi Hub. We will evaluate additional cavern and associated pipeline expansion opportunities at Bay Gas and Mississippi Hub based on regional market demand for natural gas storage services.

Sempra LNG & Midstream owns land in Port Arthur, Texas, for potential LNG liquefaction development. Sempra LNG & Midstream also has an equity interest in Cameron LNG JV, which owns land and an LNG regasification terminal and has a land lease in Hackberry, Louisiana. The joint venture is constructing an LNG liquefaction terminal at the facility.

OTHER PROPERTIES

Sempra Energy occupies its 16-story corporate headquarters building in San Diego, California, pursuant to a 25-year, build-to-suit lease that expires in 2040. The lease has five five-year renewal options. We discuss the details of this lease further in Note 15 of the Notes to Consolidated Financial Statements in the Annual Report.

SoCalGas leases approximately one-fourth of a 52-story office building in downtown Los Angeles, California, pursuant to an operating lease expiring in 2026. The lease has four five-year renewal options.

SDG&E occupies a six-building office complex in San Diego, California, pursuant to two separate operating leases, both ending in December 2024. One lease has four five-year renewal options and the other lease has three five-year renewal options.

Sempra South American Utilities owns or leases office facilities at various locations in Chile and Peru, with the leases ending from 2017 to 2021. Sempra Infrastructure owns or leases office facilities at various locations in the United States and Mexico, with the leases ending from 2017 to 2021.

We own or lease other land, easements, rights of way, warehouses, offices, operating and maintenance centers, shops, service facilities and equipment necessary to conduct our businesses.

ITEM 3. LEGAL PROCEEDINGS

We are not party to, and our property is not the subject of, any material pending legal proceedings (other than ordinary routine litigation incidental to our businesses) except for the matters (1) described in Notes 13, 14 and 15 of the Notes to Consolidated Financial Statements in the Annual Report, or (2) referred to in “Management’s Discussion and Analysis of Financial Condition and Results of Operations” in the Annual Report.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II.

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

COMMON STOCK AND RELATED SHAREHOLDER MATTERS

The common stock, related shareholder, and dividend restriction information required by Item 5 is included in "Common Stock Data" in the Annual Report.

SEMPRA ENERGY EQUITY COMPENSATION PLANS

Sempra Energy has a long-term incentive plan that permits the grant of a wide variety of equity and equity-based incentive awards to directors, officers and key employees. At December 31, 2016, outstanding awards consisted of stock options and restricted stock units held by 434 employees.

The following table sets forth information regarding our equity compensation plan at December 31, 2016.

EQUITY COMPENSATION PLAN	Number of shares to be issued upon exercise of outstanding options, warrants and rights(1)	Weighted-average exercise price of outstanding options, warrants and rights(2)	Number of additional shares remaining available for future issuance(3)
Equity compensation plan approved by shareholders:			
2013 Long-Term Incentive Plan	2,620,313	$ 52.46	5,627,118

(1) Consists of 360,255 options to purchase shares of our common stock, all of which were granted at an exercise price of 100% of the grant date fair market value of the shares subject to the option, 1,954,322 performance-based restricted stock units and 305,736 restricted stock units that are service-based or issued in connection with certain other criteria. Each performance-based restricted stock unit represents the right to receive from zero to 1.5 shares (2.0 shares for awards granted during or after 2014) of our common stock if applicable performance conditions are satisfied. The 2,620,313 shares also includes awards granted under two previously shareholder-approved long-term incentive plans (Predecessor Plans). No new awards may be granted under these Predecessor Plans.

(2) Represents only the weighted-average exercise price of the 360,255 outstanding options to purchase shares of common stock.

(3) The number of shares available for future issuance is increased by the number of shares or units withheld or surrendered to satisfy the exercise price or to satisfy tax withholding obligations relating to any plan awards, and is also increased by the number of shares subject to awards that expire or are forfeited, canceled or otherwise terminated without the issuance of shares.

We provide additional discussion of share-based compensation in Note 8 of the Notes to Consolidated Financial Statements in the Annual Report.

PURCHASES OF EQUITY SECURITIES BY THE ISSUER AND AFFILIATED PURCHASERS

On September 11, 2007, the Sempra Energy board of directors authorized the repurchase of Sempra Energy common stock provided that the amounts spent for such purpose do not exceed the greater of $2 billion or amounts spent to purchase no more than 40 million shares. No shares have been repurchased under this authorization since 2011. Approximately $500 million remains authorized by the board for the purchase of additional shares, not to exceed approximately 12 million shares.

We also may, from time to time, purchase shares of our common stock from long-term incentive plan participants who elect to sell a sufficient number of vesting restricted shares to meet minimum statutory tax withholding requirements.

ITEM 6. SELECTED FINANCIAL DATA

The information required by Item 6 is included in "Five-Year Summaries" in the Annual Report.

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The information required by Item 7 is set forth in "Management's Discussion and Analysis of Financial Condition and Results of Operations" in the Annual Report, on pages 2 through 78.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

The information required by Item 7A is set forth in "Management's Discussion and Analysis of Financial Condition and Results of Operations – Market Risk" in the Annual Report.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

The information required by Item 8 is set forth on pages 90 through 226 of the Annual Report. Item 15(a)1 of Part IV of this report includes a listing of financial statements included.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A. CONTROLS AND PROCEDURES

The information required by Item 9A is provided in “Controls and Procedures” in the Annual Report.

ITEM 9B. OTHER INFORMATION

None.

PART III.

Because SDG&E meets the conditions of General Instructions I(1)(a) and (b) of Form 10-K and is therefore filing this report with a reduced disclosure format as permitted by General Instruction I(2), the information required by Items 10, 11, 12 and 13 below is not required for SDG&E. We have, however, provided the information required by Item 10 with respect to SDG&E’s executive officers in Part I, Item 1. Business in “Executive Officers of the Registrants – Executive Officers of SDG&E.”

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

SEMPRA ENERGY

We provide the information required by Item 10 with respect to executive officers for Sempra Energy in Part I, Item 1. Business in “Executive Officers of the Registrants – Executive Officers of Sempra Energy.” All other information required by Item 10 is incorporated by reference from “Corporate Governance” and “Share Ownership” in the Proxy Statement prepared for the May 2017 annual meeting of shareholders.

SOCALGAS

We provide the information required by Item 10 with respect to executive officers for SoCalGas in Part I, Item 1. Business in “Executive Officers of the Registrants – Executive Officers of SoCalGas.” All other information required by Item 10 is incorporated by reference from the company’s Information Statement prepared for its May 2017 annual meeting of shareholders.

ITEM 11. EXECUTIVE COMPENSATION

The information required by Item 11 is incorporated by reference from “Corporate Governance” and “Executive Compensation,” including “Compensation Discussion and Analysis” and “Compensation Committee Report” in the Proxy Statement prepared for the May 2017 annual meeting of shareholders for Sempra Energy and from the Information Statement prepared for the May 2017 annual meeting of shareholders for SoCalGas.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

SECURITIES AUTHORIZED FOR ISSUANCE UNDER EQUITY COMPENSATION PLANS

Information regarding securities authorized for issuance under equity compensation plans as required by Item 12 is included in Item 5.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS

The security ownership information required by Item 12 is incorporated by reference from “Share Ownership” in the Proxy Statement prepared for the May 2017 annual meeting of shareholders for Sempra Energy and in the Information Statement prepared for the May 2017 annual meeting of shareholders for

SoCalGas.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information required by Item 13 is incorporated by reference from "Corporate Governance" in the Proxy Statement prepared for the May 2017 annual meeting of shareholders for Sempra Energy and from the Information Statement prepared for the May 2017 annual meeting of shareholders for SoCalGas.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

Information regarding principal accountant fees and services, as required by Item 14, is presented below for Sempra Energy, SDG&E and SoCalGas. The following table shows the fees paid to Deloitte & Touche LLP, the independent registered public accounting firm for Sempra Energy, SDG&E and SoCalGas, for services provided for 2016 and 2015.

PRINCIPAL ACCOUNTANT FEES
(Dollars in thousands)

	Sempra Energy Consolidated		SDG&E		SoCalGas	
	Fees	Percent of total	Fees	Percent of total	Fees	Percent of total
2016:						
Audit fees:						
Consolidated financial statements and internal controls audits, subsidiary and statutory audits	$ 9,525		$ 2,513		$ 2,627	
Regulatory filings and related services	117		31		31	
Total audit fees	9,642	88%	2,544	90%	2,658	83%
Audit-related fees:						
Employee benefit plan audits	460		138		240	
Other audit-related services, accounting consultation	706		12		304	
Total audit-related fees	1,166	11	150	5	544	17
Tax planning and compliance fees	175	1	143	5	—	—
All other fees	15	—	3	—	—	—
Total fees	$ 10,998	100%	$ 2,840	100%	$ 3,202	100%
2015:						
Audit fees:						
Consolidated financial statements and internal controls audits, subsidiary and statutory audits(1)	$ 11,269		$ 2,430		$ 2,516	
Regulatory filings and related services	200		58		59	
Total audit fees	11,469	91%	2,488	89%	2,575	87%
Audit-related fees:						
Employee benefit plan audits	430		134		218	
Other audit-related services, accounting consultation	229		32		95	
Total audit-related fees	659	5	166	6	313	11
Tax planning and compliance fees	440	4	140	5	54	2
All other fees	46	—	8	—	9	—
Total fees	$ 12,614	100%	$ 2,802	100%	$ 2,951	100%

(1) Sempra Energy Consolidated includes $1.8 million of audit services relating to a confidential submission of a subsidiary's Form S-1 to the Securities and Exchange Commission for the formation of a master limited partnership and initial public offering, which have been indefinitely suspended.

The Audit Committee of Sempra Energy's board of directors is directly responsible for the appointment, compensation, retention and oversight of the independent registered public accounting firm for Sempra Energy and its subsidiaries, including SDG&E and SoCalGas. As a matter of good corporate governance, the SDG&E and SoCalGas boards of directors also reviewed the performance of Deloitte & Touche LLP and concurred with the determination by the Sempra Energy Audit Committee to retain them as the independent registered public accounting firm for each of Sempra Energy, SDG&E and SoCalGas. Sempra Energy's board has determined that each member of its Audit Committee is an independent director and is financially literate, and that Mr. Taylor, the chair of the committee, is an audit committee financial expert as defined by the rules of the SEC.

Except where pre-approval is not required by SEC rules, Sempra Energy's Audit Committee pre-approves all audit and permissible non-audit services provided by Deloitte & Touche LLP for Sempra Energy and its subsidiaries. The committee's pre-approval policies and procedures provide for the general pre-approval of specific types of services and give detailed guidance to management as to the services that are eligible for general pre-approval. They require specific pre-approval of all other permitted services. For both types of pre-approval, the committee considers whether the services to be provided are

consistent with maintaining the firm's independence. The policies and procedures also delegate authority to the chair of the committee to address any requests for pre-approval of services between committee meetings, with any pre-approval decisions to be reported to the committee at its next scheduled meeting.

PART IV.

ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES

(a) The following documents are filed as part of this report:

1. FINANCIAL STATEMENTS

	Page in Annual Report(1)		
	Sempra Energy	**San Diego Gas & Electric Company**	**Southern California Gas Company**
Consolidated Statements of Operations for the years ended December 31, 2016, 2015 and 2014	90	97	104
Consolidated Statements of Comprehensive Income (Loss) for the years ended December 31, 2016, 2015 and 2014	91	98	105
Consolidated Balance Sheets at December 31, 2016 and 2015	92	99	106
Consolidated Statements of Cash Flows for the years ended December 31, 2016, 2015 and 2014	94	101	108
Consolidated Statements of Changes in Equity for the years ended December 31, 2016, 2015 and 2014	96	103	N/A
Consolidated Statements of Changes in Shareholders' Equity for the years ended December 31, 2016, 2015 and 2014	N/A	N/A	109
Notes to Consolidated Financial Statements	110	110	110

(1) Incorporated by reference from the indicated pages of the 2016 Annual Report to Shareholders, filed as Exhibit 13.1

2. FINANCIAL STATEMENT SCHEDULES

Sempra Energy

Schedule I--Sempra Energy Condensed Financial Information of Parent may be found on page 58 of this report.

Any other schedule for which provision is made in Regulation S-X is not required under the instructions contained therein, is inapplicable or the information is included in the Consolidated Financial Statements and Notes thereto in the Annual Report.

3. EXHIBITS

See Exhibit Index on page 68 of this report.

CONSENTS OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM AND REPORT ON SCHEDULE

SEMPRA ENERGY

To the Board of Directors and Shareholders of Sempra Energy:

We consent to the incorporation by reference in Registration Statement No. 333-198572 on Form S-3 and Nos. 333-200828, 333-188526, 333-182225, 333-56161, 333-50806, 333-49732, 333-121073, 333-151184, 333-155191 and 333-129774 on Form S-8 of our reports dated February 28, 2017, relating to the consolidated financial statements of Sempra Energy and subsidiaries (the "Company"), and the effectiveness of the Company's internal control over financial reporting, incorporated by reference in this Annual Report on Form 10-K of Sempra Energy for the year ended December 31, 2016.

Our audits of the financial statements referred to in our aforementioned report relating to the consolidated financial statements also included the financial statement schedule of the Company, listed in Item 15. This financial statement schedule is the responsibility of the Company's management. Our responsibility is to express an opinion based on our audits. In our opinion, such financial statement schedule, when considered in relation to the basic consolidated financial statements taken as a whole, presents fairly, in all material respects, the information set forth therein.

/s/ DELOITTE & TOUCHE LLP

San Diego, California
February 28, 2017

SAN DIEGO GAS & ELECTRIC COMPANY

To the Board of Directors and Shareholder of San Diego Gas & Electric Company:

We consent to the incorporation by reference in Registration Statement No. 333-205410 on Form S-3 of our reports dated February 28, 2017, relating to the consolidated financial statements of San Diego Gas & Electric Company (the "Company"), and the effectiveness of the Company's internal control over financial reporting, incorporated by reference in this Annual Report on Form 10-K of San Diego Gas & Electric Company for the year ended December 31, 2016.

/s/ DELOITTE & TOUCHE LLP

San Diego, California
February 28, 2017

SOUTHERN CALIFORNIA GAS COMPANY

To the Board of Directors and Shareholders of Southern California Gas Company:

We consent to the incorporation by reference in Registration Statement No. 333-205950 on Form S-3 of our reports dated February 28, 2017, relating to the financial statements of Southern California Gas Company (the "Company"), and the effectiveness of the Company's internal control over financial reporting, incorporated by reference in this Annual Report on Form 10-K of Southern California Gas Company for the year ended December 31, 2016.

/s/ DELOITTE & TOUCHE LLP

San Diego, California
February 28, 2017

SCHEDULE I – SEMPRA ENERGY CONDENSED FINANCIAL INFORMATION OF PARENT

SEMPRA ENERGY
CONDENSED STATEMENTS OF OPERATIONS
(Dollars in millions, except per share amounts)

	Years ended December 31,		
	2016	2015	2014
Interest expense	$ (277)	$ (261)	$ (235)
Operation and maintenance	(81)	(66)	(78)
Other (expense) income, net	(2)	7	50
Income tax benefit	181	150	133
Loss before equity in earnings of subsidiaries	(179)	(170)	(130)
Equity in earnings of subsidiaries, net of income taxes	1,549	1,519	1,291
Net income/earnings	$ 1,370	$ 1,349	$ 1,161
Basic earnings per common share	$ 5.48	$ 5.43	$ 4.72
Weighted-average number of shares outstanding (thousands)	250,217	248,249	245,891
Diluted earnings per common share	$ 5.46	$ 5.37	$ 4.63
Weighted-average number of shares outstanding (thousands)	251,155	250,923	250,655

See Notes to Condensed Financial Information of Parent.

SEMPRA ENERGY
CONDENSED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)
(Dollars in millions)

	Years ended December 31,		
	Pretax amount	Income tax benefit	Net-of-tax amount
2016:			
Net income	$ 1,189	$ 181	$ 1,370
Other comprehensive income (loss):			
Foreign currency translation adjustments	42	—	42
Financial instruments	(6)	11	5
Pension and other postretirement benefits	(13)	4	(9)
Total other comprehensive income	23	15	38
Comprehensive income	$ 1,212	$ 196	$ 1,408
2015:			
Net income	$ 1,199	$ 150	$ 1,349
Other comprehensive income (loss):			
Foreign currency translation adjustments	(260)	—	(260)
Financial instruments	(80)	33	(47)
Pension and other postretirement benefits	(3)	1	(2)
Total other comprehensive loss	(343)	34	(309)
Comprehensive income	$ 856	$ 184	$ 1,040
2014:			
Net income	$ 1,028	$ 133	$ 1,161
Other comprehensive income (loss):			
Foreign currency translation adjustments	(193)	—	(193)
Financial instruments	(106)	42	(64)
Pension and other postretirement benefits	(20)	8	(12)
Total other comprehensive loss	(319)	50	(269)
Comprehensive income	$ 709	$ 183	$ 892

See Notes to Condensed Financial Information of Parent.

SEMPRA ENERGY

CONDENSED BALANCE SHEETS
(Dollars in millions)

	December 31, 2016	December 31, 2015
Assets:		
Cash and cash equivalents	$ 12	$ 4
Due from affiliates	73	62
Other current assets	2	4
Total current assets	87	70
Investments in subsidiaries	17,329	15,586
Due from affiliates	—	457
Deferred income taxes	2,570	2,188
Other assets	592	641
Total assets	$ 20,578	$ 18,942
Liabilities and shareholders' equity:		
Current portion of long-term debt	$ 600	$ 752
Due to affiliates	359	332
Income taxes payable	153	42
Other current liabilities	374	310
Total current liabilities	1,486	1,436
Long-term debt	5,100	5,195
Due to affiliates	517	—
Other long-term liabilities	524	502
Shareholders' equity	12,951	11,809
Total liabilities and shareholders' equity	$ 20,578	$ 18,942

See Notes to Condensed Financial Information of Parent.

SEMPRA ENERGY
CONDENSED STATEMENTS OF CASH FLOWS
(Dollars in millions)

	Years ended December 31,		
	2016	2015	2014
Net cash used in operating activities	$ (178)	$ (255)	$ (260)
Dividends received from subsidiaries	175	350	300
Expenditures for property, plant and equipment	(5)	(43)	(15)
Purchase of trust assets	—	(5)	(4)
Decrease (increase) in loans to affiliates, net	457	(457)	627
Cash provided by (used in) investing activities	627	(155)	908
Common stock dividends paid	(686)	(628)	(598)
Issuances of common stock	51	52	56
Repurchases of common stock	(56)	(74)	(38)
Issuances of long-term debt	499	1,248	499
Payments on long-term debt	(750)	—	(800)
Increase (decrease) in loans from affiliates, net	504	(230)	234
Tax benefit related to share-based compensation	—	52	—
Other	(3)	(9)	(4)
Cash (used in) provided by financing activities	(441)	411	(651)
Increase (decrease) in cash and cash equivalents	8	1	(3)
Cash and cash equivalents, January 1	4	3	6
Cash and cash equivalents, December 31	$ 12	$ 4	$ 3
SUPPLEMENTAL DISCLOSURE OF NONCASH FINANCING ACTIVITIES			
Financing of build-to-suit property	$ —	$ 61	$ 61

Common dividends issued in stock	53	55	42
Dividends declared but not paid	189	174	163

See Notes to Condensed Financial Information of Parent.

SEMPRA ENERGY

NOTES TO CONDENSED FINANCIAL INFORMATION OF PARENT

Note 1. Basis of Presentation

Sempra Energy accounts for the earnings of its subsidiaries under the equity method in this unconsolidated financial information.

Other Income, Net, on the Condensed Statements of Operations includes $23 million, $3 million and $27 million of gains on dedicated assets in support of our executive retirement and deferred compensation plans in 2016, 2015 and 2014, respectively.

Because of its nature as a holding company, Sempra Energy Parent classifies dividends received from subsidiaries as an investing cash flow.

Note 2. New Accounting Standards

We describe below recent pronouncements that have had or may have a significant effect on Sempra Energy Parent's financial condition, results of operations, cash flows or disclosures.

Accounting Standards Update (ASU) 2016-01, "Recognition and Measurement of Financial Assets and Financial Liabilities": In addition to the presentation and disclosure requirements for financial instruments, ASU 2016-01 requires entities to measure equity investments, other than those accounted for under the equity method, at fair value and recognize changes in fair value in net income. Entities will no longer be able to use the cost method of accounting for equity securities. However, for equity investments without readily determinable fair values, entities may elect a measurement alternative that will allow those investments to be recorded at cost, less impairment, and adjusted for subsequent observable price changes. Upon adoption, entities must record a cumulative-effect adjustment to the balance sheet as of the beginning of the first reporting period in which the standard is adopted. The guidance on equity securities without readily determinable fair values will be applied prospectively to all equity investments that exist as of the date of adoption of the standard.

For public entities, ASU 2016-01 is effective for fiscal years beginning after December 15, 2017. We will adopt ASU 2016-01 on January 1, 2018 as required and do not expect it to materially affect our financial condition, results of operations or cash flows. We will make the required changes to our disclosures upon adoption.

ASU 2016-02, "Leases": ASU 2016-02 requires entities to include substantially all leases on the balance sheet by requiring the recognition of right-of-use assets and lease liabilities for all leases. Entities may elect to exclude from the balance sheet those leases with a maximum possible term of less than 12 months. For lessees, a lease is classified as finance or operating and the asset and liability are initially measured at the present value of the lease payments. For lessors, accounting for leases is largely unchanged from previous provisions of accounting principles generally accepted in the United States of America (U.S. GAAP), other than certain changes to align lessor accounting to specific changes made to lessee accounting and ASU 2014-09, "Revenue from Contracts with Customers." ASU 2016-02 also requires new qualitative and quantitative disclosures for both lessees and lessors.

For public entities, ASU 2016-02 is effective for fiscal years beginning after December 15, 2018, with early adoption permitted, and is effective for interim periods in the year of adoption. The standard requires lessees and lessors to recognize and measure leases at the beginning of the earliest period presented using a modified retrospective approach. The modified retrospective approach includes optional practical expedients that may be elected, which would allow entities to continue to account for leases that commence before the effective date of the standard in accordance with previous U.S. GAAP unless the lease is modified, except for the lessee requirement to begin recognizing right-of-use assets and lease liabilities for all operating leases on the balance sheet at the reporting date. We are currently evaluating the effect of the standard on our ongoing financial reporting and have not yet selected the year in which we will adopt the standard. As part of our evaluation, we formed a steering committee comprised of members from relevant Sempra Energy business units. Based on our assessment to date, we have determined that we will adopt ASU 2016-02 using the modified retrospective approach and will elect the practical expedients available under the transition guidance.

ASU 2016-09, "Improvements to Employee Share-Based Payment Accounting": ASU 2016-09 is intended to simplify several aspects of the accounting for employee share-based payment transactions. Under ASU 2016-09, excess tax benefits and tax deficiencies are required to be recorded in earnings, and the requirement to reclassify excess tax benefits from operating to financing activities on the statement of cash flows has been eliminated. ASU 2016-09 also allows entities to withhold taxes up to the maximum individual statutory tax rate without resulting in liability classification of the award and clarifies that cash payments made to taxing authorities in connection with withheld shares should be classified as financing activities in the statement of cash flows. Additionally, the standard provides for an accounting policy election to either continue to estimate forfeitures or account for them as they occur. For public entities, ASU 2016-09 is effective for fiscal years beginning after December 15, 2016, with early adoption permitted, and is effective for interim periods in the year of adoption.

We early adopted the provisions of ASU 2016-09 during the three months ended September 30, 2016, with an effective date of January 1, 2016. Upon adoption:

- Sempra Energy Parent recognized a cumulative-effect adjustment to retained earnings and a deferred tax asset as of January 1, 2016 of $49 million for previously unrecognized excess tax benefits from share-based compensation.
- Sempra Energy Parent recognized earnings consisting of excess tax benefits on the Condensed Statements of Operations of $17 million in the year ended December 31, 2016, all of which related to the three months ended March 31, 2016. Excess tax benefits of $34 million were previously recorded in Sempra Energy Parent Shareholders' Equity in Common Stock prior to adoption of ASU 2016-09.
- The excess tax benefits from share-based compensation for Sempra Energy Parent were previously classified as a financing activity on Sempra Energy Parent's Condensed Statement of Cash Flows. As now required, excess tax benefits for Sempra Energy Parent are included in Cash Flows From Operating Activities on the Condensed Statements of Cash Flows for the year ended December 31, 2016. This amendment was adopted prospectively, and therefore, we have not adjusted the Condensed Statements of Cash Flows for the prior periods presented.
- As a result of the provision to recognize excess tax benefits in earnings, these benefits are no longer included in the calculation of diluted earnings per share (EPS) effective January 1, 2016. The weighted-average number of common shares outstanding for diluted EPS increased by 75 thousand shares for the three months ended March 31, 2016 and 98 thousand shares and 89 thousand shares for the three months and six months ended June 30, 2016, respectively.

Upon adoption of ASU 2016-09, we elected to continue estimating the number of awards expected to be forfeited and adjusting our estimate on an ongoing basis. All other provisions of ASU 2016-09 did not impact our financial condition, results of operations or cash flows.

ASU 2016-13, "Measurement of Credit Losses on Financial Instruments": ASU 2016-13 changes how entities will measure credit losses for most financial assets and certain other instruments. The standard introduces an "expected credit loss" impairment model that requires immediate recognition of estimated

credit losses expected to occur over the remaining life of most financial assets measured at amortized cost, including trade and other receivables, loan commitments and financial guarantees. ASU 2016-13 also requires use of an allowance to record estimated credit losses on available-for-sale debt securities and expands disclosure requirements regarding an entity's assumptions, models and methods for estimating the credit losses.

For public entities, ASU 2016-13 is effective for fiscal years beginning after December 15, 2019, with early adoption permitted for fiscal years beginning after December 15, 2018. We are currently evaluating the effect of the standard on our ongoing financial reporting and have not yet selected the year in which we will adopt the standard.

ASU 2016-15, "Classification of Certain Cash Receipts and Cash Payments": ASU 2016-15 provides guidance on how certain cash receipts and cash payments are to be presented and classified in the statement of cash flows in order to reduce diversity in practice.

For public entities, ASU 2016-15 is effective for fiscal years beginning after December 15, 2017, with early adoption permitted, and is effective for interim periods in the year of adoption. An entity that elects early adoption must adopt all of the amendments in the same period. Entities must apply the guidance retrospectively to all periods presented, but may apply it prospectively if retrospective application would be impracticable. We are currently evaluating the effect of the standard on our ongoing financial reporting and have not yet selected the year in which we will adopt the standard.

ASU 2017-05, "Clarifying the Scope of Asset Derecognition Guidance and Accounting for Partial Sales of Nonfinancial Assets": ASU 2017-05 clarifies the scope of accounting for the derecognition or partial sale of nonfinancial assets to exclude all businesses and nonprofit activities. ASU 2017-05 also provides a definition for in-substance nonfinancial assets and additional guidance on partial sales of nonfinancial assets. For public entities, ASU 2017-05 is effective for annual reporting periods beginning after December 15, 2017, including interim periods within that reporting period, with early adoption permitted. An entity may elect to apply the amendments under a retrospective or modified retrospective approach. We are currently evaluating the effect of the standard on our ongoing financial reporting and plan to adopt in conjunction with ASU 2014-09 on January 1, 2018, but have not yet selected the method of adoption.

Note 3. Long-Term Debt

The following table shows the detail and maturities of long-term debt outstanding:

LONG-TERM DEBT
(Dollars in millions)

	December 31, 2016	December 31, 2015
6.5% Notes June 1, 2016, including $300 at variable rates after fixed-to-floating rate swaps effective January 2011 (4.77% at December 31, 2015)	$ —	$ 750
2.3% Notes April 1, 2017	600	600
6.15% Notes June 15, 2018	500	500
9.8% Notes February 15, 2019	500	500
1.625% Notes October 7, 2019	500	—
2.4% Notes March 15, 2020	500	500
2.85% Notes November 15, 2020	400	400
2.875% Notes October 1, 2022	500	500
4.05% Notes December 1, 2023	500	500
3.55% Notes June 15, 2024	500	500
3.75% Notes November 15, 2025	350	350
6% Notes October 15, 2039	750	750
Market value adjustments for interest rate swaps, net	(3)	(2)
Build-to-suit lease	137	136
	5,734	5,984
Current portion of long-term debt	(600)	(752)
Unamortized discount on long-term debt	(10)	(10)
Unamortized debt issuance costs	(24)	(27)
Total long-term debt	$ 5,100	$ 5,195

Excluding the build-to-suit lease and market value adjustments for interest rate swaps, maturities of long-term debt are $600 million in 2017, $500 million in 2018, $1 billion in 2019, $900 million in 2020 and $2.6 billion thereafter.

Additional information on Sempra Energy's long-term debt is provided in Note 5 of the Notes to Consolidated Financial Statements in the Annual Report.

Note 4. Commitments and Contingencies

For contingencies and guarantees related to Sempra Energy, refer to Notes 4, 5 and 15 of the Notes to Consolidated Financial Statements in the Annual Report.

Sempra Energy:

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

SEMPRA ENERGY,
(Registrant)

By: /s/ Debra L. Reed
Debra L. Reed
Chairman and Chief Executive Officer

Date: February 28, 2017

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Registrant in the capacities and on the dates indicated.

Name/Title	Signature	Date
Principal Executive Officer: Debra L. Reed Chief Executive Officer	/s/ Debra L. Reed	February 28, 2017
Principal Financial Officer: J. Walker Martin Executive Vice President and Chief Financial Officer	/s/ J. Walker Martin	February 28, 2017
Principal Accounting Officer: Trevor I. Mihalik Senior Vice President, Controller and Chief Accounting Officer	/s/ Trevor I. Mihalik	February 28, 2017
Directors:		
Debra L. Reed, Chairman	/s/ Debra L. Reed	February 28, 2017
Alan L. Boeckmann, Director	/s/ Alan L. Boeckmann	February 28, 2017
Kathleen L. Brown, Director	/s/ Kathleen L. Brown	February 28, 2017
Pablo A. Ferrero, Director	/s/ Pablo A. Ferrero	February 28, 2017
William D. Jones, Director	/s/ William D. Jones	February 28, 2017
William G. Ouchi, Ph.D., Director	/s/ William G. Ouchi	February 28, 2017
William C. Rusnack, Director	/s/ William C. Rusnack	February 28, 2017
William P. Rutledge, Director	/s/ William P. Rutledge	February 28, 2017
Lynn Schenk, Director	/s/ Lynn Schenk	February 28, 2017
Jack T. Taylor, Director	/s/ Jack T. Taylor	February 28, 2017
James C. Yardley, Director	/s/ James C. Yardley	February 28, 2017

San Diego Gas & Electric Company:

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

SAN DIEGO GAS & ELECTRIC COMPANY,
(Registrant)

By: /s/ Scott D. Drury
Scott D. Drury
President

Date: February 28, 2017

Pursuant to the requirements of the Securities Exchange Act of 1934 (the Act), this report has been signed below by the following persons on behalf of the Registrant in the capacities and on the dates indicated.

Name/Title	Signature	Date
Principal Executive Officer:		
Scott D. Drury President	/s/ Scott D. Drury	February 28, 2017
Principal Financial and Accounting Officer:		
Bruce A. Folkmann Vice President, Controller, Chief Financial Officer and Chief Accounting Officer	/s/ Bruce A. Folkmann	February 28, 2017
Directors:		
Steven D. Davis, Non-Executive Chairman	/s/ Steven D. Davis	February 28, 2017
Scott D. Drury, Director	/s/ Scott D. Drury	February 28, 2017
J. Walker Martin, Director	/s/ J. Walker Martin	February 28, 2017
Trevor I. Mihalik, Director	/s/ Trevor I. Mihalik	February 28, 2017
G. Joyce Rowland, Director	/s/ G. Joyce Rowland	February 28, 2017
Caroline A. Winn, Director	/s/ Caroline A. Winn	February 28, 2017
Martha B. Wyrsch, Director	/s/ Martha B. Wyrsch	February 28, 2017

SUPPLEMENTAL INFORMATION TO BE FURNISHED WITH REPORTS FILED PURSUANT TO SECTION 15(d) OF THE ACT BY REGISTRANTS WHICH HAVE NOT REGISTERED SECURITIES PURSUANT TO SECTION 12 OF THE ACT:

No annual report, proxy statement, form of proxy or other soliciting material has been sent to security holders during the period covered by this Annual Report on Form 10-K, and no such materials are to be furnished to security holders subsequent to the filing of this Annual Report on Form 10-K.

Southern California Gas Company:

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

SOUTHERN CALIFORNIA GAS COMPANY,
(Registrant)

By: /s/ Patricia K. Wagner
Patricia K. Wagner
Chief Executive Officer

Date: February 28, 2017

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Registrant in the capacities and on the dates indicated.

Name/Title	Signature	Date
Principal Executive Officer:		
Patricia K. Wagner Chief Executive Officer	/s/ Patricia K. Wagner	February 28, 2017
Principal Financial and Accounting Officer:		
Bruce A. Folkmann Vice President, Controller, Chief Financial Officer and Chief Accounting Officer	/s/ Bruce A. Folkmann	February 28, 2017
Directors:		
Steven D. Davis, Non-Executive Chairman	/s/ Steven D. Davis	February 28, 2017
J. Bret Lane, Director	/s/ J. Bret Lane	February 28, 2017
J. Walker Martin, Director	/s/ J. Walker Martin	February 28, 2017
Trevor I. Mihalik, Director	/s/ Trevor I. Mihalik	February 28, 2017
G. Joyce Rowland, Director	/s/ G. Joyce Rowland	February 28, 2017
Patricia K. Wagner, Director	/s/ Patricia K. Wagner	February 28, 2017
Martha B. Wyrsch, Director	/s/ Martha B. Wyrsch	February 28, 2017

EXHIBIT INDEX

The exhibits filed under the Registration Statements, Proxy Statements and Forms 8-K, 10-K and 10-Q that are incorporated herein by reference were filed under Commission File Number 1-14201 (Sempra Energy), Commission File Number 1-40 (Pacific Lighting Corporation), Commission File Number 1-03779 (San Diego Gas & Electric Company) and/or Commission File Number 1-01402 (Southern California Gas Company).

The following exhibits relate to each registrant as indicated.

EXHIBIT 3 -- BYLAWS AND ARTICLES OF INCORPORATION

Sempra Energy

3.1 Amended and Restated Articles of Incorporation of Sempra Energy effective May 23, 2008 (Appendix B to the 2008 Sempra Energy Definitive Proxy Statement, filed on April 15, 2008).

3.2 Bylaws of Sempra Energy (as amended through December 15, 2015) (Sempra Energy Form 8-K filed on December 17, 2015, Exhibit 3.1).

San Diego Gas & Electric Company (SDG&E)

3.3 Amended and Restated Articles of Incorporation of San Diego Gas & Electric Company effective August 15, 2014 (2014 SDG&E Form 10-K, Exhibit 3.4).

3.4 Bylaws of San Diego Gas & Electric (as amended through October 26, 2016) (SDG&E September 30, 2016 Form 10-Q, Exhibit 3.1).

Southern California Gas Company (SoCalGas)

3.5 Restated Articles of Incorporation of Southern California Gas Company effective October 7, 1996 (1996 SoCalGas Form 10-K, Exhibit 3.01).

3.6 Bylaws of Southern California Gas Company (as amended through January 30, 2017) (SoCalGas Form 8-K filed on January 31, 2017, Exhibit 3.1).

EXHIBIT 4 -- INSTRUMENTS DEFINING THE RIGHTS OF SECURITY HOLDERS, INCLUDING INDENTURES

The companies agree to furnish a copy of each such instrument to the Commission upon request.

Sempra Energy

4.1 Description of rights of Sempra Energy Common Stock (Amended and Restated Articles of Incorporation of Sempra Energy effective May 23, 2008, Exhibit 3.1 above).

4.2 Indenture dated as of February 23, 2000, between Sempra Energy and U.S. Bank Trust National Association, as Trustee (Sempra Energy Registration Statement on Form S-3 (No. 333-153425), filed on September 11, 2008, Exhibit 4.1).

Southern California Gas Company

4.3 Description of preferences of Preferred Stock, Preference Stock and Series Preferred Stock (Southern California Gas Company Restated Articles of Incorporation, Exhibit 3.5 above).

Sempra Energy / San Diego Gas & Electric Company

4.4 Mortgage and Deed of Trust dated July 1, 1940 (SDG&E Registration Statement No. 2-4769, Exhibit B-3).

4.5 Second Supplemental Indenture dated as of March 1, 1948 (SDG&E Registration Statement No. 2-7418, Exhibit B-5B).

4.6 Ninth Supplemental Indenture dated as of August 1, 1968 (SDG&E Registration Statement No. 333-52150, Exhibit 4.5).

4.7 Tenth Supplemental Indenture dated as of December 1, 1968 (SDG&E Registration Statement No. 2-36042, Exhibit 2-K).

4.8 Sixteenth Supplemental Indenture dated August 28, 1975 (SDG&E Registration Statement No. 33-34017, Exhibit 4.2).

Sempra Energy / Southern California Gas Company

4.9 First Mortgage Indenture of Southern California Gas Company to American Trust Company dated October 1, 1940 (Registration Statement No. 2-4504 filed by Southern California Gas Company on September 16, 1940, Exhibit B-4).

4.10 Supplemental Indenture of Southern California Gas Company to American Trust Company dated as of August 1, 1955 (Registration Statement No. 2-11997 filed by Pacific Lighting Corporation on October 26, 1955, Exhibit 4.07).

4.11 Supplemental Indenture of Southern California Gas Company to American Trust Company dated as of December 1, 1956 (2006 Sempra Energy Form 10-K, Exhibit 4.09).

4.12 Supplemental Indenture of Southern California Gas Company to Wells Fargo Bank dated as of June 1, 1965 (2006 Sempra Energy Form 10-K, Exhibit 4.10).

4.13 Supplemental Indenture of Southern California Gas Company to Wells Fargo Bank, National Association dated as of August 1, 1972 (Registration Statement No. 2-59832 filed by Southern California Gas Company on September 6, 1977, Exhibit 2.19).

4.14 Supplemental Indenture of Southern California Gas Company to Wells Fargo Bank, National Association dated as of May 1, 1976 (Registration Statement No. 2-56034 filed by Southern California Gas Company on April 14, 1976, Exhibit 2.20).

4.15 Supplemental Indenture of Southern California Gas Company to Wells Fargo Bank, National Association dated as of September 15, 1981 (Registration Statement No. 333-70654, Exhibit 4.24).

EXHIBIT 10 -- MATERIAL CONTRACTS

Sempra Energy / San Diego Gas & Electric Company / Southern California Gas Company

10.1 Form of Continental Forge and California Class Action Price Reporting Settlement Agreement dated as of January 4, 2006 (Form 8-K filed on January 5, 2006, Exhibit 99.1).

Sempra Energy / San Diego Gas & Electric Company

10.2 Amended and Restated Operating Order between San Diego Gas & Electric Company and the California Department of Water Resources effective March 10, 2011 (Sempra Energy March 31, 2011 Form 10-Q, Exhibit 10.4).

10.3 Amended and Restated Servicing Order between San Diego Gas & Electric Company and the California Department of Water Resources effective March 10, 2011 (Sempra Energy March 31, 2011 Form 10-Q, Exhibit 10.5).

Compensation

Sempra Energy / San Diego Gas & Electric Company / Southern California Gas Company

10.4 Form of Indemnification Agreement with Directors and Executive Officers (executed after January 2011) (Sempra Energy March 31, 2016 Form 10-Q, Exhibit 10.1).

10.5 Form of Sempra Energy Shared Services Executive Incentive Compensation Plan (2013 Sempra Energy Form 10-K, Exhibit 10.19).

10.6 Amended and Restated Sempra Energy 2013 Long-Term Incentive Plan (2015 Sempra Energy Form 10-K, Exhibit 10.5).

10.7 Form of Sempra Energy 2013 Long-Term Incentive Plan 2017 Performance-Based Restricted Stock Unit Award - Relative Total Shareholder Return Performance Measure - S&P 500 Index.

10.8 Form of Sempra Energy 2013 Long-Term Incentive Plan 2017 Performance-Based Restricted Stock Unit Award - Relative Total Shareholder Return Performance Measure - S&P 500 Utilities Index.

10.9 Form of Sempra Energy 2013 Long-Term Incentive Plan 2017 Performance-Based Restricted Stock Unit Award - EPS Growth Performance Measure.

10.10 Form of Sempra Energy 2013 Long-Term Incentive Plan 2016 Performance-Based Restricted Stock Unit Award - Relative Total Shareholder Return Performance Measure (2015 Sempra Energy Form 10-K, Exhibit 10.6).

10.11 Form of Sempra Energy 2013 Long-Term Incentive Plan 2016 Performance-Based Restricted Stock Unit Award - EPS Growth Performance Measure (2015 Sempra Energy Form 10-K, Exhibit 10.7).

10.12 Form of Sempra Energy 2013 Long-Term Incentive Plan 2016 and 2017 Restricted Stock Unit Award (2015 Sempra Energy Form 10-K, Exhibit 10.8).

10.13 Form of Sempra Energy 2013 Long-Term Incentive Plan 2015 Performance-Based Restricted Stock Unit Award - Relative Total Shareholder Return Performance Measure (2014 Sempra Energy Form 10-K, Exhibit 10.19).

10.14 Form of Sempra Energy 2013 Long-Term Incentive Plan 2015 Performance-Based Restricted Stock Unit Award - EPS Growth Performance Measure (2014 Sempra Energy Form 10-K, Exhibit 10.20).

10.15 Form of Sempra Energy 2013 Long-Term Incentive Plan 2015 Performance-Based Restricted Stock Unit Award - Cameron LNG and Cumulative Net Income (2014 Sempra Energy Form 10-K, Exhibit 10.21).

10.16 Form of Sempra Energy 2013 Long-Term Incentive Plan 2015 Restricted Stock Unit Award Agreement (2015 Sempra Energy Form 10-K, Exhibit 10.12).

10.17 Form of Sempra Energy 2013 Long-Term Incentive Plan 2014 Restricted Stock Unit Award (Sempra Energy March 31, 2014 Form 10-Q, Exhibit 10.1).

10.18 Form of Sempra Energy 2013 Long-Term Incentive Plan 2014 Performance-Based Restricted Stock Unit Award - EPS Growth Performance Measure (Sempra Energy March 31, 2014 Form 10-Q, Exhibit 10.2).

10.19 Form of Sempra Energy 2013 Long-Term Incentive Plan 2014 Performance-Based Restricted Stock Unit Award - Relative Total Shareholder Return Performance Measure (Sempra Energy March 31, 2014 Form 10-Q, Exhibit 10.3).

10.20 Sempra Energy 2008 Long Term Incentive Plan (Appendix A to the 2008 Sempra Energy Definitive Proxy Statement, filed on April 15, 2008).

10.21 Sempra Energy 2008 Long Term Incentive Plan for EnergySouth, Inc. Employees and Other Eligible Individuals (Registration Statement on Form S-8 Sempra Energy Registration Statement No. 333-155191 dated November 7, 2008, Exhibit 10.1).

10.22 Form of Sempra Energy 2008 Long-Term Incentive Plan 2013 Restricted Stock Unit Award Agreement (2015 Sempra Energy Form 10-K, Exhibit 10.19).

10.23 Form of Sempra Energy 2008 Long Term Incentive Plan, 2009 Nonqualified Stock Option Agreement (March 31, 2009 Sempra Energy Form 10-Q, Exhibit 10.2).

10.24 Form of Sempra Energy 2008 Long Term Incentive Plan, 2008 Nonqualified Stock Option Agreement (June 30, 2008 Sempra Energy Form 10-Q, Exhibit 10.4).

10.25 Amended and Restated Sempra Energy 1998 Long-Term Incentive Plan (June 30, 2003 Sempra Energy Form 10-Q, Exhibit 10.2).

10.26 Form of Sempra Energy 1998 Long Term Incentive Plan, 2008 Non-Qualified Stock Option Agreement (2007 Sempra Energy Form 10-K, Exhibit 10.10).

10.27 Amended and Restated Sempra Energy 2005 Deferred Compensation Plan, now known as Sempra Energy Employee and Director Retirement Savings Plan.

10.28 Amended and Restated Sempra Energy Deferred Compensation and Excess Savings Plan.

10.29 2009 Amendment and Restatement of the Sempra Energy Supplemental Executive Retirement Plan effective July 1, 2009 (2015 Sempra Energy Form 10-K, Exhibit 10.28).

10.30 First Amendment to the 2009 Amendment and Restatement of the Sempra Energy Supplemental Executive Retirement Plan effective February 11, 2010 (2015 Sempra Energy Form 10-K, Exhibit 10.29).

10.31 Second Amendment to the 2009 Amendment and Restatement of the Sempra Energy Supplemental Executive Retirement Plan effective January 1, 2014 (2014 Sempra Energy Form 10-K, Exhibit 10.43).

10.32 2015 Amendment and Restatement of the Sempra Energy Cash Balance Restoration Plan effective November 10, 2015 (2015 Sempra Energy Form 10-K, Exhibit 10.31).

10.33 Sempra Energy Amended and Restated Executive Life Insurance Plan (2012 Sempra Energy Form 10-K, Exhibit 10.22).

10.34 Sempra Energy Executive Personal Financial Planning Program Policy Document (September 30, 2004 Sempra Energy Form 10-Q, Exhibit 10.11).

10.35 Form of Indemnification Agreement with Directors and Executive Officers (June 30, 2008 Sempra Energy Form 10-Q, Exhibit 10.2).

10.36 Sempra Energy Amended and Restated Executive Medical Plan (2008 Sempra Energy Form 10-K, Exhibit 10.26).

10.37 Sempra Energy Employee Stock Ownership Plan and Trust Agreement effective January 1, 2001 (September 30, 2008 Sempra Energy Form 10-Q, Exhibit 10.1).

Sempra Energy

10.38 Sempra Energy Executive Incentive Plan effective January 1, 2003 (2002 Sempra Energy Form 10-K, Exhibit 10.09).

10.39 Severance Pay Agreement between Sempra Energy and Steven D. Davis, dated January 1, 2017.

10.40 Severance Pay Agreement between Sempra Energy and Trevor Mihalik, dated January 1, 2017.

10.41 Severance Pay Agreement between Sempra Energy and Jeffrey W. Martin, dated January 1, 2017.

10.42 Severance Pay Agreement between Sempra Energy and Dennis Arriola, dated January 1, 2017.

10.43 Amended and Restated Sempra Energy Severance Pay Agreement between Sempra Energy and Debra L. Reed (Sempra Energy Form 8-K filed on July 1, 2011, Exhibit 10.1).

10.44 Amendment to the Amended and Restated Severance Pay Agreement between Sempra Energy and Mark A. Snell (Sempra Energy Form 8-K filed on September 15, 2011, Exhibit 10.1).

10.45 Amended and Restated Sempra Energy Severance Pay Agreement between Sempra Energy and Mark A. Snell, dated November 4, 2008 (2014 Sempra Energy Form 10-K, Exhibit 10.53).

10.46 Severance Pay Agreement between Sempra Energy and Joseph A. Householder (Sempra Energy Form 8-K filed on September 15, 2011, Exhibit 10.2).

10.47 Severance Pay Agreement between Sempra Energy and Martha B. Wyrsch, dated September 3, 2013 (2013 Sempra Energy Form 10-K, Exhibit 10.57).

10.48 Severance Pay Agreement between Sempra Energy and G. Joyce Rowland (2011 Sempra Energy Form 10-K, Exhibit 10.26).

10.49 Form of Sempra Energy Non-Employee Directors' Restricted Stock Unit Award (2014 Sempra Energy Form 10-K, Exhibit 10.59).

10.50 Form of Sempra Energy 2008 Non-Employee Directors' Stock Plan, Nonqualified Stock Option Agreement (June 30, 2008 Sempra Energy Form 10-Q, Exhibit 10.5).

10.51 Form of Sempra Energy 1998 Non-Employee Directors' Stock Plan Non-Qualified Stock Option Agreement (2006 Sempra Energy Form 10-K, Exhibit 10.09).

10.52 Amendment and Restatement of Sempra Energy 1998 Non-Employee Directors' Stock Plan effective March 2, 1999 (2014 Sempra Energy Form 10-K, Exhibit 10.63).

10.53 Sempra Energy 1998 Non-Employee Directors' Stock Plan (Registration Statement on Form S-8 Sempra Energy Registration Statement No. 333-56161 dated June 5, 1998, Exhibit 4.2).

10.54 Sempra Energy Amended and Restated Sempra Energy Retirement Plan for Directors (June 30, 2008 Sempra Energy Form 10-Q, Exhibit 10.7).

Sempra Energy / San Diego Gas & Electric Company

10.55 Form of Sempra Energy and San Diego Gas & Electric Company Executive Incentive Compensation Plan (2013 Sempra Energy Form 10-K, Exhibit 10.64).

10.56 Severance Pay Agreement between Sempra Energy and James P. Avery, dated February 18, 2013 (Sempra Energy March 31, 2013 Form 10-Q, Exhibit 10.2).

10.57 Severance Pay Agreement between Sempra Energy and Erbin Keith, dated February 18, 2013 (Sempra Energy March 31, 2013 Form 10-Q, Exhibit 10.5).

10.58 Severance Pay Agreement between Sempra Energy and Scott D. Drury dated March 5, 2011.

10.59 Severance Pay Agreement between Sempra Energy and Caroline A. Winn dated April 3, 2010.

Sempra Energy / Southern California Gas Company

10.60 Form of Sempra Energy and Southern California Gas Company Executive Incentive Compensation Plan (2013 Sempra Energy

Form 10-K, Exhibit 10.71).

10.61 Severance Pay Agreement between Sempra Energy and John C. Baker, dated February 18, 2013 (2014 Sempra Energy Form 10-K, Exhibit 10.67).

10.62 Severance Pay Agreement between Sempra Energy and Lee Schavrien, dated February 18, 2013 (Sempra Energy March 31, 2013 Form 10-Q, Exhibit 10.3).

10.63 Severance Pay Agreement between Sempra Energy and J. Bret Lane, dated August 4, 2012 (2013 Sempra Energy Form 10-K, Exhibit 10.72).

10.64 Severance Pay Agreement between Sempra Energy and Robert M. Schlax, dated January 17, 2014 (2013 Sempra Energy Form 10-K, Exhibit 10.66).

10.65 Severance Pay Agreement between Sempra Energy and Bruce Folkmann, dated August 4, 2012 (2015 Sempra Energy Form 10-K, Exhibit 10.63).

10.66 Severance Pay Agreement between Sempra Energy and Sharon L. Tomkins, dated August 30, 2014 (2015 Sempra Energy Form 10-K, Exhibit 10.64).

10.67 Severance Pay Agreement between Sempra Energy and Patricia K. Wagner dated January 1, 2014.

Nuclear

Sempra Energy / San Diego Gas & Electric Company

10.68 Nuclear Facilities Qualified CPUC Decommissioning Master Trust Agreement for San Onofre Nuclear Generating Station, approved November 25, 1987 (1992 SDG&E Form 10-K, Exhibit 10.7).

10.69 Amendment No. 1 to the Qualified CPUC Decommissioning Master Trust Agreement dated September 22, 1994 (see Exhibit 10.68 above) (1994 SDG&E Form 10-K, Exhibit 10.56).

10.70 Second Amendment to the San Diego Gas & Electric Company Nuclear Facilities Qualified CPUC Decommissioning Master Trust Agreement for San Onofre Nuclear Generating Station (see Exhibit 10.68 above) (1994 SDG&E Form 10-K, Exhibit 10.57).

10.71 Third Amendment to the San Diego Gas & Electric Company Nuclear Facilities Qualified CPUC Decommissioning Master Trust Agreement for San Onofre Nuclear Generating Station (see Exhibit 10.68 above) (1996 SDG&E Form 10-K, Exhibit 10.59).

10.72 Fourth Amendment to the San Diego Gas & Electric Company Nuclear Facilities Qualified CPUC Decommissioning Master Trust Agreement for San Onofre Nuclear Generating Station (see Exhibit 10.68 above) (1996 SDG&E Form 10-K, Exhibit 10.60).

10.73 Fifth Amendment to the San Diego Gas & Electric Company Nuclear Facilities Qualified CPUC Decommissioning Master Trust Agreement for San Onofre Nuclear Generating Station (see Exhibit 10.68 above) (1999 SDG&E Form 10-K, Exhibit 10.26).

10.74 Sixth Amendment to the San Diego Gas & Electric Company Nuclear Facilities Qualified CPUC Decommissioning Master Trust Agreement for San Onofre Nuclear Generating Station (see Exhibit 10.68 above) (1999 SDG&E Form 10-K, Exhibit 10.27).

10.75 Seventh Amendment to the San Diego Gas & Electric Company Nuclear Facilities Qualified CPUC Decommissioning Master Trust Agreement for San Onofre Nuclear Generating Station dated December 24, 2003 (see Exhibit 10.68 above) (2003 Sempra Energy Form 10-K, Exhibit 10.42).

10.76 Eighth Amendment to the San Diego Gas & Electric Company Nuclear Facilities Qualified CPUC Decommissioning Master Trust Agreement for San Onofre Nuclear Generating Station dated October 12, 2011 (see Exhibit 10.68 above) (2011 SDG&E Form 10-K, Exhibit 10.70).

10.77 Ninth Amendment to the San Diego Gas & Electric Company Nuclear Facilities Qualified CPUC Decommissioning Master Trust Agreement for San Onofre Nuclear Generating Station dated January 9, 2014 (see Exhibit 10.68 above) (2013 Sempra Energy Form 10-K, Exhibit 10.83).

10.78 Tenth Amendment to the San Diego Gas & Electric Company Nuclear Facilities Qualified CPUC Decommissioning Master Trust Agreement for San Onofre Nuclear Generating Station dated August 27, 2014 (see Exhibit 10.68 above) (Sempra Energy September 30, 2014 Form 10-Q, Exhibit 10.1).

10.79 Eleventh Amendment to the San Diego Gas & Electric Company Nuclear Facilities Qualified CPUC Decommissioning Master Trust Agreement for San Onofre Nuclear Generating Station dated August 27, 2014 (see Exhibit 10.68 above) (Sempra Energy September 30, 2014 Form 10-Q, Exhibit 10.2).

10.80 Twelfth Amendment to the San Diego Gas & Electric Company Nuclear Facilities Qualified CPUC Decommissioning Master Trust Agreement for San Onofre Nuclear Generating Station dated August 27, 2014 (see Exhibit 10.68 above) (Sempra Energy September 30, 2014 Form 10-Q, Exhibit 10.3).

10.81 Thirteenth Amendment to the San Diego Gas & Electric Company Nuclear Facilities Qualified CPUC Decommissioning Master Trust Agreement for San Onofre Nuclear Generating Station dated January 1, 2015 (see Exhibit 10.68 above) (Sempra Energy 2015 Form 10-K, Exhibit 10.78).

10.82 Fourteenth Amendment to the San Diego Gas & Electric Company Nuclear Facilities Qualified CPUC Decommissioning Master Trust Agreement for San Onofre Nuclear Generating Station dated February 18, 2016 (see Exhibit 10.68 above) (Sempra Energy September 30, 2016 Form 10-Q, Exhibit 10.1).

10.83 Fifteenth Amendment to the San Diego Gas & Electric Company Nuclear Facilities Qualified CPUC Decommissioning Master Trust Agreement for San Onofre Nuclear Generating Station dated August 31, 2016 (see Exhibit 10.68 above) (Sempra Energy September 30, 2016 Form 10-Q, Exhibit 10.2).

10.84 Nuclear Facilities Non-Qualified CPUC Decommissioning Master Trust Agreement for San Onofre Nuclear Generating Station, approved November 25, 1987 (1992 SDG&E Form 10-K, Exhibit 10.8).

10.85 First Amendment to the San Diego Gas & Electric Company Nuclear Facilities Non-Qualified CPUC Decommissioning Master Trust Agreement for San Onofre Nuclear Generating Station (see Exhibit 10.84 above) (1996 SDG&E Form 10-K, Exhibit 10.62).

10.86 Second Amendment to the San Diego Gas & Electric Company Nuclear Facilities Non-Qualified CPUC Decommissioning Master Trust Agreement for San Onofre Nuclear Generating Station (see Exhibit 10.84 above) (1996 SDG&E Form 10-K, Exhibit 10.63).

10.87 Third Amendment to the San Diego Gas & Electric Company Nuclear Facilities Non-Qualified CPUC Decommissioning Master Trust Agreement for San Onofre Nuclear Generating Station (see Exhibit 10.84 above) (1999 SDG&E Form 10-K, Exhibit 10.31).

10.88 Fourth Amendment to the San Diego Gas & Electric Company Nuclear Facilities Non-Qualified CPUC Decommissioning Master Trust Agreement for San Onofre Nuclear Generating Station (see Exhibit 10.84 above) (1999 SDG&E Form 10-K, Exhibit 10.32).

10.89 Fifth Amendment to the San Diego Gas & Electric Company Nuclear Facilities Non-Qualified CPUC Decommissioning Master Trust Agreement for San Onofre Nuclear Generating Station dated December 24, 2003 (see Exhibit 10.84 above) (2003 Sempra Energy Form 10-K, Exhibit 10.48).

10.90 Sixth Amendment to the San Diego Gas & Electric Company Nuclear Facilities Non-Qualified CPUC Decommissioning Master Trust Agreement for San Onofre Nuclear Generating Station dated October 12, 2011 (see Exhibit 10.84 above) (2011 SDG&E Form 10-K, Exhibit 10.77).

10.91 Seventh Amendment to the San Diego Gas & Electric Company Nuclear Facilities Non-Qualified CPUC Decommissioning Master Trust Agreement for San Onofre Nuclear Generating Station dated January 9, 2014 (see Exhibit 10.84 above) (2013 Sempra Energy Form 10-K, Exhibit 10.91).

10.92 Eighth Amendment to the San Diego Gas & Electric Company Nuclear Facilities Non-Qualified CPUC Decommissioning Master Trust Agreement for San Onofre Nuclear Generating Station dated August 27, 2014 (see Exhibit 10.84 above) (Sempra Energy September 30, 2014 Form 10-Q, Exhibit 10.4).

10.93 Ninth Amendment to the San Diego Gas & Electric Company Nuclear Facilities Non-Qualified CPUC Decommissioning Master Trust Agreement for San Onofre Nuclear Generating Station dated August 27, 2014 (see Exhibit 10.84 above) (Sempra Energy September 30, 2014 Form 10-Q, Exhibit 10.5).

10.94 Tenth Amendment to the San Diego Gas & Electric Company Nuclear Facilities Non-Qualified CPUC Decommissioning Master Trust Agreement for San Onofre Nuclear Generating Station dated August 27, 2014 (see Exhibit 10.84 above) (Sempra Energy September 30, 2014 Form 10-Q, Exhibit 10.6).

10.95 Eleventh Amendment to the San Diego Gas & Electric Company Nuclear Facilities Non-Qualified CPUC Decommissioning Master Trust Agreement for San Onofre Nuclear Generating Station dated January 1, 2015 (see Exhibit 10.84 above) (2015 Sempra Energy Form 10-K, Exhibit 10.90)

10.96 Twelfth Amendment to the San Diego Gas & Electric Company Nuclear Facilities Non-Qualified CPUC Decommissioning Master Trust Agreement for San Onofre Nuclear Generating Station dated February 18, 2016 (see Exhibit 10.84 above) (Sempra Energy September 30, 2016 Form 10-Q, Exhibit 10.3).

10.97 Thirteenth Amendment to the San Diego Gas & Electric Company Nuclear Facilities Non-Qualified CPUC Decommissioning Master Trust Agreement for San Onofre Nuclear Generating Station dated August 31, 2016 (see Exhibit 10.84 above) (Sempra Energy September 30, 2016 Form 10-Q, Exhibit 10.4).

10.98 U. S. Department of Energy contract for disposal of spent nuclear fuel and/or high-level radioactive waste, entered into between the DOE and Southern California Edison Company, as agent for SDG&E and others; Contract DE-CR01-83NE44418, dated June 10, 1983 (1988 SDG&E Form 10-K, Exhibit 10N).

EXHIBIT 12 -- STATEMENTS RE: COMPUTATION OF RATIOS

Sempra Energy

12.1 Sempra Energy Computation of Ratio of Earnings to Combined Fixed Charges and Preferred Stock Dividends for the years ended December 31, 2016, 2015, 2014, 2013 and 2012.

San Diego Gas & Electric Company

12.2 San Diego Gas & Electric Computation of Ratio of Earnings to Combined Fixed Charges and Preferred Stock Dividends for the years ended December 31, 2016, 2015, 2014, 2013 and 2012.

Southern California Gas Company

12.3 Southern California Gas Company Computation of Ratio of Earnings to Combined Fixed Charges and Preferred Stock Dividends for the years ended December 31, 2016, 2015, 2014, 2013, and 2012.

EXHIBIT 13 -- ANNUAL REPORT TO SECURITY HOLDERS

Sempra Energy / San Diego Gas & Electric Company / Southern California Gas Company

13.1 Sempra Energy 2016 Annual Report to Shareholders. (Such report, except for the portions thereof which are expressly incorporated by reference in this Annual Report, is furnished for the information of the Securities and Exchange Commission and is not to be deemed “filed” as part of this Annual Report).

EXHIBIT 14 -- CODE OF ETHICS

San Diego Gas & Electric Company / Southern California Gas Company

14.1 Sempra Energy Code of Business Conduct and Ethics for Board of Directors and Senior Officers (also applies to directors and officers of San Diego Gas & Electric Company and Southern California Gas Company) (2006 SDG&E and SoCalGas Forms 10-K, Exhibit 14.01).

EXHIBIT 21 -- SUBSIDIARIES

Sempra Energy

21.1 Sempra Energy Schedule of Certain Subsidiaries at December 31, 2016.

EXHIBIT 23 -- CONSENTS OF EXPERTS AND COUNSEL

23.1 Consents of Independent Registered Public Accounting Firm and Report on Schedule, pages 55 through 57.

EXHIBIT 31 -- SECTION 302 CERTIFICATIONS

Sempra Energy

31.1 Statement of Sempra Energy’s Chief Executive Officer pursuant to Rules 13a-14 and 15d-14 of the Securities Exchange Act of 1934.

31.2 Statement of Sempra Energy’s Chief Financial Officer pursuant to Rules 13a-14 and 15d-14 of the Securities Exchange Act of 1934.

San Diego Gas & Electric Company

31.3 Statement of San Diego Gas & Electric Company’s Chief Executive Officer pursuant to Rules 13a-14 and 15d-14 of the Securities Exchange Act of 1934.

31.4 Statement of San Diego Gas & Electric Company’s Chief Financial Officer pursuant to Rules 13a-14 and 15d-14 of the Securities Exchange Act of 1934.

Southern California Gas Company

31.5 Statement of Southern California Gas Company's Chief Executive Officer pursuant to Rules 13a-14 and 15d-14 of the Securities Exchange Act of 1934.

31.6 Statement of Southern California Gas Company's Chief Financial Officer pursuant to Rules 13a-14 and 15d-14 of the Securities Exchange Act of 1934.

EXHIBIT 32 -- SECTION 906 CERTIFICATIONS

Sempra Energy

32.1 Statement of Sempra Energy's Chief Executive Officer pursuant to 18 U.S.C. Sec. 1350.

32.2 Statement of Sempra Energy's Chief Financial Officer pursuant to 18 U.S.C. Sec. 1350.

San Diego Gas & Electric Company

32.3 Statement of San Diego Gas & Electric Company's Chief Executive Officer pursuant to 18 U.S.C. Sec. 1350.

32.4 Statement of San Diego Gas & Electric Company's Chief Financial Officer pursuant to 18 U.S.C. Sec. 1350.

Southern California Gas Company

32.5 Statement of Southern California Gas Company's Chief Executive Officer pursuant to 18 U.S.C. Sec. 1350.

32.6 Statement of Southern California Gas Company's Chief Financial Officer pursuant to 18 U.S.C. Sec. 1350.

EXHIBIT 101 -- INTERACTIVE DATA FILE

101.INS XBRL Instance Document

101.SCH XBRL Taxonomy Extension Schema Document

101.CAL XBRL Taxonomy Extension Calculation Linkbase Document

101.DEF XBRL Taxonomy Extension Definition Linkbase Document

101.LAB XBRL Taxonomy Extension Label Linkbase Document

101.PRE XBRL Taxonomy Extension Presentation Linkbase Document

GLOSSARY

AB	Assembly Bill	ISO	Independent System Operator
Annual Report	2016 Annual Report to Shareholders	kV	Kilovolt
ASU	Accounting Standards Update	kW	Kilowatt
Bay Gas	Bay Gas Storage Company, Ltd.	LA Storage	LA Storage, LLC
Bcf	Billion cubic feet (of natural gas)	LNG	Liquefied natural gas
California Utilities	San Diego Gas & Electric Company and Southern California Gas Company	Luz del Sur	Luz del Sur S.A.A. and its subsidiaries
Cameron LNG JV	Cameron LNG Holdings, LLC	Mississippi Hub	Mississippi Hub, LLC
CARB	California Air Resources Board	Mtpa	Million tonnes per annum
CCA	Community Choice Aggregation	MW	Megawatt
CDEC	Centros de Despacho Económico de Carga (Centers for Economic Load Dispatch) (Chile)	MWh	Megawatt hours
CDEC-SIC	Sistema Interconectado Central (Central Interconnected System) (Chile)	NAFTA	North American Free Trade Agreement
CEC	California Energy Commission	NEM	Net energy metering
CFE	Comisión Federal de Electricidad	NRC	Nuclear Regulatory Commission
Chilquinta Energía	Chilquinta Energía S.A. and its subsidiaries	OSINERGMIN	Organismo Supervisor de la Inversión en Energía y Minería (Energy and Mining Investment Supervisory Body) (Peru)
CNBV	Comisión Nacional Bancaria y de Valores (Mexican National Banking and Securities Commission)	PEMEX	Petróleos Mexicanos (Mexican state-owned oil company)
CPUC	California Public Utilities Commission	PG&E	Pacific Gas and Electric Company
CRE	Comisión Reguladora de Energía (Energy Regulatory Commission) (Mexico)	PHMSA	Pipeline and Hazardous Materials Safety Administration
DOE	U.S. Department of Energy	PSEP	Pipeline Safety Enhancement Plan
DOGGR	California Department of Conservation's Division of Oil, Gas, and Geothermal Resources	QF	Qualifying Facility
DOT	U.S. Department of Transportation	RBS Sempra Commodities	RBS Sempra Commodities LLP
DPH	Los Angeles County Department of Public Health	RPS	Renewables Portfolio Standard
Edison	Southern California Edison Company	SB	Senate Bill
EPA	U.S. Environmental Protection Agency	SCAQMD	South Coast Air Quality Management District
EPC	Engineering, procurement and construction	SDG&E	San Diego Gas & Electric Company
EPS	Earnings per common share	SDWA	Safe Drinking Water Act
ERR	Eligible Renewable Energy Resource	SEC	Securities and Exchange Commission
FERC	Federal Energy Regulatory Commission	SEIN	Sistema Eléctrico Interconectado Nacional (Peruvian national interconnected system)
FPA	Federal Power Act	SMV	Superintendencia del Mercado de Valores (Superintendency of Securities Market) (Peru)
FTA	Free Trade Agreement	SoCalGas	Southern California Gas Company
GHG	Greenhouse gas	SONGS	San Onofre Nuclear Generating Station
The Governor's Order	Proclamation of a State of Emergency, by the Governor of the State of California, dated January 6, 2016	The board	Sempra Energy's board of directors
IEnova	Infraestructura Energética Nova, S.A.B. de C.V.	TURN	The Utility Reform Network
IOU	Investor-owned utility	VIE	Variable interest entity
IRS	Internal Revenue Service	U.S. GAAP	Accounting principles generally accepted in the United States of America

SEMPRA ENERGY

2013 LONG TERM INCENTIVE PLAN

<YEAR> PERFORMANCE-BASED RESTRICTED STOCK UNIT AWARD

You have been granted a performance-based restricted stock unit award representing the right to receive the number of shares of Sempra Energy Common Stock set forth below, subject to the vesting conditions set forth below. The restricted stock units, and dividend equivalents with respect to the restricted stock units, under your award may not be sold or assigned and will be subject to forfeiture unless and until they vest based upon the satisfaction of total shareholder return performance criteria for a performance period beginning on <DATE>, <YEAR> and ending at the close of trading on <DATE>, <YEAR>. Shares of Common Stock will be distributed to you after the completion of the performance period if the restricted stock units vest under the terms and conditions of your award.

The terms and conditions of your award are set forth in the attached Year <YEAR> Restricted Stock Unit Award Agreement and in the Sempra Energy 2013 Long Term Incentive Plan, which has been provided to you. The summary below highlights selected terms and conditions but it is not complete and you should carefully read the attachments to fully understand the terms and conditions of your award.

SUMMARY

Date of Award:	**<DATE>, <YEAR>**
Name of Recipient:	**NAME**
Recipient's Employee Number:	**EE ID**
Number of Restricted Stock Units (prior to any dividend equivalents):	
At Target:	**# RSU**
At Maximum:	**200% of Target (e.g. 1,000 at Target = 2,000 at Maximum)**
Award Date Fair Market Value per Share of Common Stock:	**$TBD**

Restricted Stock Units:

Your restricted stock units represent the right to receive shares of Common Stock in the future, subject to the terms and conditions of your award. Your restricted stock units are not shares of Common Stock. The target number of restricted stock units will vest (subject to adjustment as described below), if the target total shareholder return (a return at the 50th percentile) is achieved. If above target total shareholder return is achieved, you may vest in up to the maximum number of restricted stock units plus reinvested dividend equivalents as described below.

Vesting/Forfeiture of Restricted Stock Units:

Subject to certain exceptions set forth in the Year <YEAR> Restricted Stock Unit Award Agreement, your restricted stock units will vest immediately following the Compensation Committee's determination and certification of the extent to which Sempra Energy has met specified total shareholder return performance criteria for the performance period beginning on <DATE>, <YEAR> and ending at the close of trading on <DATE>, <YEAR>. Any restricted stock units that do not vest with the Compensation Committee's determination and certification (or otherwise in accordance with your Restricted Stock Unit Award Agreement) will be forfeited.

Transfer Restrictions:

Your restricted stock units may not be sold or otherwise transferred and will remain subject to forfeiture conditions until they vest.

Termination of Employment:

Your restricted stock units also may be forfeited if your employment terminates.

Dividend Equivalents:

You also have been awarded dividend equivalents with respect to your restricted stock units. Your dividend equivalents represent the right to receive additional shares of Common Stock in the future, subject to the terms and conditions of your award. Your dividend equivalents will be determined based on the dividends that you would have received had you held shares of Common Stock equal to the vested number of your restricted stock units from the date of your award to the date of the distribution of shares of Common Stock following the vesting of your restricted stock units, and assuming that the dividends were reinvested in Common Stock (and any dividends on such shares were reinvested in Common Stock). The dividends will be deemed reinvested in Common Stock in the same manner as dividends reinvested pursuant to the terms of the Sempra Dividend Reinvestment Plan. Your dividend equivalents will be subject to the same transfer restrictions and forfeiture and vesting conditions as the shares represented by your restricted stock units.

Distribution of Shares:

Shares of Common Stock will be distributed to you to the extent your restricted stock units (and corresponding dividend equivalents) vest. Except as provided otherwise in the attached Year <YEAR> Restricted Stock Unit Award Agreement, the shares will be distributed to you after the completion of the performance period ending at the close of trading on <DATE>, <YEAR> and the Compensation Committee's determination and certification of Sempra Energy's total shareholder return for the performance period. The shares of Common Stock will include the additional shares to be distributed pursuant to your vested dividend equivalents.

Taxes:

Upon distribution of shares of Common Stock to you, you will be subject to income taxes on the value of the distributed shares at the time of distribution and must pay applicable withholding taxes.

By your acceptance of this award, you agree to all of the terms and conditions set forth in this Cover Page/Summary, the attached Year <YEAR> Restricted Stock Unit Award Agreement and the Sempra Energy 2013 Long Term Incentive Plan.

Recipient: **X** _____
(Signature)

Sempra Energy: _____
(Signature)

Title: Chairman and Chief Executive Officer

SEMPRA ENERGY
2013 LONG TERM INCENTIVE PLAN

Year <YEAR> Restricted Stock Unit Award Agreement

Award:

You have been granted a performance-based restricted stock unit award under Sempra Energy's 2013 Long Term Incentive Plan. The award consists of the number of restricted stock units set forth on the Cover Page/Summary to this Agreement, and dividend equivalents with respect to the restricted stock units (described below). Capitalized terms used in this Agreement and not defined shall have the meaning set forth in the Plan.

Your restricted stock units represent the right to receive shares of Common Stock in the future, subject to the terms and conditions of your award. Your restricted stock units are not shares of Common Stock.

Each restricted stock unit initially represents the right to receive one share of Common Stock upon the vesting of the unit.

Unless and until they vest, your restricted stock units and any dividend equivalents (as described below) will be subject to transfer restrictions and forfeiture and vesting conditions.

Subject to the provisions below relating to the treatment of your restricted stock units in connection with a Change in Control, your restricted stock units (and dividend equivalents) will vest immediately following and only to the extent that the Compensation Committee of Sempra Energy's Board of Directors (the "Compensation Committee") determines and certifies that Sempra Energy has met specified total shareholder return criteria for the performance period beginning <DATE>, <YEAR> and ending at the close of trading on <DATE>, <YEAR>. Any restricted stock units (and dividend equivalents) that do not vest will be forfeited.

Your restricted stock units (and dividend equivalents) also may be forfeited if your employment terminates before they vest.

See "Vesting/Forfeiture," "Transfer Restrictions," and "Termination of Employment" below.

Vesting/Forfeiture:

Subject to the provisions below relating to the treatment of your restricted stock units in connection with a Change in Control, your restricted stock units (and dividend equivalents, as described below) will vest immediately following and only to the extent that the Compensation Committee determines and certifies that Sempra Energy has met the following total shareholder return performance criteria for the performance period beginning on <DATE>, <YEAR> and ending on the close of trading on <DATE>, <YEAR>:

<u>Preliminary Calculation Based on Sempra Energy's cumulative total shareholder return relative to the S&P 500 Index:</u>

- The percentage of your target number of restricted stock units that vest will be determined as follows, based on the percentile ranking for the performance period (as measured based on the thirty-day average closing stock price immediately preceding the start of the performance period compared to the thirty-day average closing stock price immediately

preceding the end of the performance period) of Sempra Energy's cumulative total shareholder return (consisting of per share appreciation in Common Stock plus reinvested dividends and other distributions paid on Common Stock) among the companies (ranked by cumulative total shareholder returns) in the S&P 500 Index, as determined and certified by the Compensation Committee, subject to adjustment as described below. For the avoidance of doubt, the thirty-day average preceding the beginning of the performance period shall be based on the thirty calendar days prior to and excluding <DATE>, <YEAR> and the thirty day average preceding the end of the performance period shall be based on the thirty calendar days prior to and including <DATE>, <YEAR>.

Sempra Energy Total Shareholder Return Percentile Ranking	Percentage of Target Number of Restricted Stock Units that Vest
90th	200%
80th	175%
70th	150%
60th	125%
50th	100%
40th	70%
35th	55%
30th	40%
25th	0%

If the percentile ranking does not equal a ranking shown in the above table, the percentage of your target number of restricted stock units that vest will be determined by a linear interpolation between the next lowest percentile shown in the table and the next highest percentile shown on the table, subject to adjustment as described below.

- If the percentile ranking is at or above the 90th percentile, 200% of your target number of restricted stock units will vest, subject to adjustment as described below.

- If the percentile ranking is at or below the 25th percentile, none of your restricted stock units will vest.

Final Calculation with Potential Adjustment based on Sempra Energy's cumulative total shareholder return:

§ The Compensation Committee will then determine and certify the final percentage of your target restricted stock units that vest (based on the relative total shareholder return performance criteria described above) and as adjusted by the cumulative total shareholder return performance criteria described below:

- If Sempra Energy's cumulative total shareholder return for the performance period (as measured based on the thirty-day average closing stock price immediately preceding the start of the performance period compared to the thirty-day average closing stock price immediately preceding the end of the performance period) is at or above <PERCENTAGE>, the percentage of your restricted stock units that vest will be increased by 20%, but in no event shall the percentage of your target restricted stock unit that vest exceed 200%.

- If Sempra Energy's cumulative total shareholder return for the performance period (as measured based on the thirty-day average closing stock price immediately preceding the start of the performance period compared to the thirty-day average closing stock price immediately preceding the end of the performance period) is at or below <PERCENTAGE>, the percentage of your restricted stock units that vest will be decreased by 20%.

- If Sempra Energy's cumulative total shareholder return for the performance period (as measured based on the thirty-day average closing stock price immediately preceding the start of the performance period compared to the thirty-day average closing stock price immediately preceding the end of the performance period) is above <PERCENTAGE> but below <PERCENTAGE>, no adjustment will be applied.

§ As soon as reasonably practicable following the end of the performance period, the Compensation Committee will determine and certify the extent to which Sempra Energy has met the performance criteria and the extent, if any, as to which your restricted stock units have then vested and any such vesting shall occur immediately following such determination and certification by the Compensation Committee. You will receive the number of shares of Common Stock equal to the number of your vested restricted stock units after the Compensation Committee's determination and certification. Also, you will receive the number of shares of Common Stock equal to your vested dividend equivalents after the Compensation Committee's determination and certification. Certificates for the shares will be issued to you or transferred to an account that you designate. When the shares of Common Stock are issued to you, your restricted stock units (vested and unvested) and your dividend equivalents will terminate.

§ Examples illustrating the application of the vesting provisions are shown in Exhibit A to this Award Agreement.

Transfer Restrictions:

You may not sell or otherwise transfer or assign your restricted stock units (or your dividend equivalents).

Dividend Equivalents:

You also have been awarded dividend equivalents with respect to your restricted stock units. Your dividend equivalents represent the right to receive additional shares of Common Stock in the future, subject to the terms and conditions of your award. Your dividend equivalents will be determined based on the dividends that you would have received had you held shares of Common Stock equal to the vested number of your restricted stock units from the date of your award to the date of the distribution of shares of Common Stock following the vesting of your restricted stock units, and assuming that the dividends were reinvested in Common Stock (and any dividends on such shares were reinvested in Common Stock). The dividends will be deemed reinvested in Common Stock in the same manner as dividends reinvested pursuant to the terms of the Sempra Dividend Reinvestment Plan.

Your dividend equivalents will be subject to the same transfer restrictions and forfeiture and vesting conditions as your restricted stock units. They will vest when and to the extent your restricted stock units vest.

Also, your restricted stock units (and dividend equivalents), including the terms and conditions thereof, will be adjusted to prevent dilution or enlargement of

your rights in the event of a stock dividend on shares of Common Stock or as the result of a stock-split, recapitalization, reorganization or other similar transaction in accordance with the terms and conditions of the 2013 Long Term Incentive Plan. Any additional restricted stock units (and dividend equivalents) awarded to you as a result of such an adjustment also will be subject to the same transfer restrictions, forfeiture and vesting conditions and other terms and conditions that are applicable to your restricted stock units (and dividend equivalents).

No Shareholder Rights:

Your restricted stock units (and dividend equivalents) are not shares of Common Stock. You will have no rights as a shareholder unless and until shares of Common Stock are issued to you following the vesting of your restricted stock units (and dividend equivalents) as provided in this Agreement and the 2013 Long Term Incentive Plan.

Distribution of Shares:

As described in "Vesting/Forfeiture" above, the Compensation Committee will determine and certify the extent to which Sempra Energy has met the performance criteria and the extent, if any, as to which your restricted stock units have then vested.

You will receive the number of shares of Common Stock equal to the number of your restricted stock units that have vested. However, in no event will you receive under this award, and other awards granted to you under the 2013 Long Term Incentive Plan in the same fiscal year of Sempra Energy, more than the maximum number of shares of Common Stock permitted under the 2013 Long Term Incentive Plan. Also, you will receive the number of shares of Common Stock equal to your vested dividend equivalents after the Compensation Committee's determination and certification.

You will receive the shares as soon as reasonably practicable following the Compensation Committee's determination and certification (and in no event later than March 15, <YEAR>). Once you receive the shares of Common Stock, your vested and unvested restricted stock units (and dividend equivalents) will terminate.

Termination of Employment:

§ *Termination:*

If your employment with Sempra Energy and its Subsidiaries terminates for any reason prior to the vesting of your restricted stock units (and dividend equivalents) (other than under the circumstances set forth in the next paragraph), all of your restricted stock units (and dividend equivalents) will be forfeited. Subject to the provisions below relating to the treatment of your restricted stock units in connection with a Change in Control, the vesting of your restricted stock units (and dividend equivalents) does not occur until the date of the Compensation Committee's determination and certification described above.

If your employment terminates prior to a Change in Control, other than by termination for cause, and you had both completed at least five years of continuous service with Sempra Energy and its Subsidiaries AND met any of the following conditions:

1.) your employment terminates after <DATE>, <YEAR> and at the date of termination you had attained age 55; or

2.) your employment terminates after <DATE>, <YEAR> and at the date of termination you had attained age 62; or

3.) at the date of termination you had attained age 65 and you were an officer subject to the company's mandatory retirement policy;

your restricted stock units (and dividend equivalents) will not be forfeited but will continue to be subject to the transfer restrictions and vesting conditions and other terms and conditions of this Agreement.

§ *Termination for Cause:*

If your employment with Sempra Energy and its Subsidiaries terminates for cause, or your employment would have been subject to termination for cause, prior to the vesting of your restricted stock units (and dividend equivalents), all of your restricted stock units (and dividend equivalents) will be cancelled.

Prior to the consummation of a Change in Control, a termination for cause is (i) the willful failure by you to substantially perform your duties with the Company (other than any such failure resulting from your incapacity due to physical or mental illness), (ii) the grossly negligent performance of such obligations referenced in clause (i) of this definition, (iii) your gross insubordination; and/or (iv) your commission of one or more acts of moral turpitude that constitute a violation of applicable law (including but not limited to a felony) which have or result in an adverse effect on the Company, monetarily or otherwise, or one or more significant acts of dishonesty. For purposes of clause (i), no act, or failure to act, on your part shall be deemed "willful" unless done, or omitted to be done, by you not in good faith and without reasonable belief that your act, or failure to act, was in the best interests of the Company. If your restricted stock units remain outstanding following a Change in Control pursuant to a Replacement Award, a termination for cause following such Change in Control shall be determined in accordance with Section 2.8 of the 2013 Long Term Incentive Plan (which defines "Cause" for purposes of the plan), including reasonable notice and, if possible, a reasonable opportunity to cure as provided therein.

§ *Leaves of Absence:*

Your employment does not terminate when you go on military leave, a sick leave or another *bona fide* leave of absence, if the leave was approved by your employer in writing. But your employment will be treated as terminating 90 days after you went on leave, unless your right to return to active work is guaranteed by law or by a contract. And your employment terminates in any event when the approved leave ends, unless you immediately return to active work. Your employer determines which leaves count for this purpose.

Taxes:

§ *Withholding Taxes:*

When you become subject to withholding taxes upon distribution of the shares of Common Stock or otherwise, Sempra Energy or its Subsidiary is required to withhold taxes. Unless you instruct otherwise and pay or make arrangements satisfactory to Sempra Energy to pay these taxes, upon the distribution of your shares, Sempra Energy will withhold a sufficient number of shares of common stock or restricted stock units to cover the minimum required withholding taxes and transfer to you only the remaining balance of your shares. In the event that, following a Change in Control, your restricted stock units become eligible for a distribution upon your Retirement by reason of your combined age and service, your restricted stock units may become subject to employment tax withholding prior to the distribution of shares with respect to such units.

§ *Code Section 409A:* Your restricted stock units are subject to Sections 16.5 and 20.12 of the 2013 Long Term Incentive Plan, which set forth terms to comply with Code Section 409A.

Recoupment ("Clawback") Policy:

The Company shall require the forfeiture, recovery or reimbursement of awards or compensation under the Plan and this Award as (i) required by applicable law, or (ii) required under any policy implemented or maintained by the Company pursuant to any applicable rules or requirements of a national securities exchange or national securities association on which any securities of the Company are listed. The Company reserves the right to recoup compensation paid if it determines that the results on which the compensation was paid were not actually achieved.

The Compensation Committee may, in its sole discretion, require the recovery or reimbursement of long-term incentive compensation awards from any employee whose fraudulent or intentional misconduct materially affects the operations or financial results of the Company or its Subsidiaries.

Retention Rights:

Neither your restricted stock unit award nor this Agreement gives you any right to be retained by Sempra Energy or any of its Subsidiaries in any capacity and your employer reserves the right to terminate your employment at any time, with or without cause. The value of your award will not be included as compensation or earnings for purposes of any other benefit plan offered by Sempra Energy or any of its Subsidiaries.

Change in Control:

In the event of a Change in Control, the following terms shall apply:

§ If (i) you have achieved age 55 and have completed at least five years of continuous service with Sempra Energy and its Subsidiaries as of the date of a Change in Control and your restricted stock units have not been forfeited prior to the Change in Control, (ii) your outstanding restricted stock units as of the date of a Change in Control are not subject to a "substantial risk of forfeiture" within the meaning of Code Section 409A and/or (iii) your outstanding restricted stock units are not assumed or substituted with one or more Replacement Awards (as defined in Section 16.1 of the 2013 Long Term Incentive Plan), then in each case your outstanding restricted stock units and any associated dividend equivalents will vest immediately prior to the Change in Control with the applicable performance goals deemed to have been achieved at the greater of target level as of the date of such vesting or the actual performance level had the performance period ended on the date of the Change in Control. If the foregoing terms apply, immediately prior to the date of the Change in Control you will receive a number of shares of Common Stock equal to the number of your restricted stock units and dividend equivalents that have vested.

§ If your outstanding restricted stock awards are assumed or substituted with one or more Replacement Awards (as defined in Section 16.1 of the 2013 Long Term Incentive Plan), then, except as provided otherwise in an individual severance agreement or employment agreement to which you are a party, the terms set forth in Sections 16.3 and 16.4 of the 2013 Long Term Incentive Plan shall apply with respect to such Replacement Award following the Change in Control. If the foregoing terms apply and the Replacement Award vests upon your separation from service or death, on such date, you will receive a number of shares or other property in settlement of the Replacement Awards.

Further Actions:

You agree to take all actions and execute all documents appropriate to carry out the provisions of this Agreement.

You shall not be deemed to have accepted this award unless you execute the Arbitration Agreement provided with your award letter.

You also appoint as your attorney-in-fact each individual who at the time of so acting is the Secretary or an Assistant Secretary of Sempra Energy with full authority to effect any transfer of any shares of Common Stock distributable to you, including any transfer to pay withholding taxes, that is authorized by this Agreement.

Applicable Law:

This Agreement will be interpreted and enforced under the laws of the State of California.

Disputes:

Any and all disputes between you and the Company relating to or arising out of the Plan or your restricted stock unit award shall be subject to the Arbitration Agreement provided with your award letter, including, but not limited to, any disputes referenced in Section 16.4 of the Plan.

Other Agreements:

In the event of any conflict between the terms of this Agreement and any written employment, severance or other employment-related agreement between you and Sempra Energy, the terms of this Agreement, or the terms of such other agreement, whichever are more favorable to you, shall prevail, provided that in each case a conflict shall be resolved in a manner consistent with the intent that your restricted stock units comply with Code Section 409A. In the event of a conflict between the terms of this Agreement and the 2013 Long Term Incentive Plan, the plan document shall prevail.

By your acceptance of this award, you agree
to all of the terms and conditions described above and in the 2013 Long Term Incentive Plan

Exhibit A

Examples Illustrating the Determination of the Vested Percentage of the Target Number of Restricted Stock Units

The following examples illustrate how the percentage of the target number of restricted stock units is to be determined. The examples assume that Sempra Energy achieves certain total cumulative shareholder returns for the performance period. The vested percentage of your target number of restricted stock units will be determined based on Sempra Energy's actual cumulative total shareholder return for the performance period as measured at the end of the performance period. No assurance is given that Sempra Energy will achieve the cumulative total shareholder returns shown in the examples.

Example 1

Sempra Energy's cumulative total shareholder return for the performance period among the companies (ranked by total shareholder returns) in the S&P 500 Index, as determined and certified by the Compensation Committee, is at the 94th percentile. Sempra Energy's cumulative total shareholder return for the performance period is <PERCENTAGE>.

Because Sempra Energy's cumulative total cumulative shareholder return is above the 90th percentile, 200% of the target number of restricted stock units vest. This is the maximum number of restricted stock units under the award and no further award adjustment can be made even though Sempra Energy's cumulative total shareholder return is above <PERCENTAGE>.

Example 2

Sempra Energy's cumulative total shareholder return for the performance period among the companies (ranked by total shareholder returns) in the S&P 500 Index, as determined and certified by the Compensation Committee, is at the 67th percentile and Sempra Energy's cumulative total shareholder return for the performance period is <PERCENTAGE>.

The percentage of the target number of restricted stock units that vest is determined by a linear interpolation between the percentage based on the achievement of the 60th percentile (125%) and the percentage based on the achievement of the 70th percentile (150%).

Based on Sempra Energy's cumulative total shareholder return relative to the S&P 500 Index and prior to consideration of the cumulative total shareholder return performance criteria,142.5% of the target number of restricted stock units would vest. Because Sempra Energy's cumulative total shareholder return of <PERCENTAGE> is higher than <PERCENTAGE> (the trigger for the adjustment based on cumulative total shareholder return performance), the preliminary performance score is increased by 20% and the final performance score is 171%. [Calculation is 142.5% x 1.2 = 171%.]

Example 3

Sempra Energy's cumulative total shareholder return for the performance period among the companies (ranked by total shareholder returns) in the S&P 500 Index, as determined and certified by the Compensation Committee, is at the 45th percentile. Sempra Energy's cumulative total shareholder return for the performance period is <PERCENTAGE>.

Because Sempra Energy's cumulative total shareholder return is at the 45th percentile when ranked among the companies in the S&P 500 Index, 85% of the target number of restricted stock units would vest prior to consideration of the cumulative total shareholder return performance criteria. Because Sempra Energy's cumulative

total shareholder return of <PERCENTAGE> is less than <PERCENTAGE> (the trigger for the adjustment based on cumulative total shareholder return performance), the preliminary performance score is decreased by 20% and the final performance score is 68%. [Calculation is 85% x 0.80 = 68%.]

Example 4

Sempra Energy's cumulative total shareholder return for the performance period among the companies (ranked by total shareholder returns) in the S&P 500 Index, as determined and certified by the Compensation Committee, is at the 25th percentile. Sempra Energy's cumulative total shareholder return for the performance period is <PERCENTAGE>.

Because Sempra Energy's total shareholder return for the performance period among companies in the S&P 500 Index is at the 25th percentile, none of the target number of restricted stock units vest. Because no shares vest, there is no need to determine whether any adjustment applies based on cumulative total shareholder return.

SEMPRA ENERGY

2013 LONG TERM INCENTIVE PLAN

<YEAR> PERFORMANCE-BASED RESTRICTED STOCK UNIT AWARD

You have been granted a performance-based restricted stock unit award representing the right to receive the number of shares of Sempra Energy Common Stock set forth below, subject to the vesting conditions set forth below. The restricted stock units, and dividend equivalents with respect to the restricted stock units, under your award may not be sold or assigned and will be subject to forfeiture unless and until they vest based upon the satisfaction of total shareholder return performance criteria for a performance period beginning on <DATE>, <YEAR> and ending at the close of trading on <DATE>, <YEAR>. Shares of Common Stock will be distributed to you after the completion of the performance period if the restricted stock units vest under the terms and conditions of your award.

The terms and conditions of your award are set forth in the attached Year <YEAR> Restricted Stock Unit Award Agreement and in the Sempra Energy 2013 Long Term Incentive Plan, which has been provided to you. The summary below highlights selected terms and conditions but it is not complete and you should carefully read the attachments to fully understand the terms and conditions of your award.

SUMMARY

Date of Award:	**<DATE>, <YEAR>**
Name of Recipient:	**NAME**
Recipient's Employee Number:	**EE ID**
Number of Restricted Stock Units (prior to any dividend equivalents):	
At Target:	**# RSU**
At Maximum:	**200% of Target (e.g. 1,000 at Target = 2,000 at Maximum)**
Award Date Fair Market Value per Share of Common Stock:	**$TBD**

Restricted Stock Units:

Your restricted stock units represent the right to receive shares of Common Stock in the future, subject to the terms and conditions of your award. Your restricted stock units are not shares of Common Stock. The target number of restricted stock units will vest, if the target total shareholder return (a return at the 50th percentile) is achieved. If above target total shareholder return is achieved, you may vest in up to the maximum number of restricted stock units plus reinvested dividend equivalents as described below.

Vesting/Forfeiture of Restricted Stock Units:

Subject to certain exceptions set forth in the Year <YEAR> Restricted Stock Unit Award Agreement, your restricted stock units will vest immediately following the Compensation Committee's determination and certification of the extent to which Sempra Energy has met specified total shareholder return performance criteria for the performance period beginning on January 1, <YEAR> and ending at the close of trading on <DATE>, <YEAR>. Any restricted stock units that do not vest with the Compensation Committee's determination and certification (or otherwise in accordance with your Restricted Stock Unit Award Agreement) will be forfeited.

Transfer Restrictions:

Your restricted stock units may not be sold or otherwise transferred and will remain subject to forfeiture conditions until they vest.

Termination of Employment:

Your restricted stock units also may be forfeited if your employment terminates.

Dividend Equivalents:

You also have been awarded dividend equivalents with respect to your restricted stock units. Your dividend equivalents represent the right to receive additional shares of Common Stock in the future, subject to the terms and conditions of your award. Your dividend equivalents will be determined based on the dividends that you would have received had you held shares of Common Stock equal to the vested number of your restricted stock units from the date of your award to the date of the distribution of shares of Common Stock following the vesting of your restricted stock units, and assuming that the dividends were reinvested in Common Stock (and any dividends on such shares were reinvested in Common Stock). The dividends will be deemed reinvested in Common Stock in the same manner as dividends reinvested pursuant to the terms of the Sempra Dividend Reinvestment Plan. Your dividend equivalents will be subject to the same transfer restrictions and forfeiture and vesting conditions as the shares represented by your restricted stock units.

Distribution of Shares:

Shares of Common Stock will be distributed to you to the extent your restricted stock units (and corresponding dividend equivalents) vest. Except as provided otherwise in the attached Year <YEAR> Restricted Stock Unit Award Agreement, the shares will be distributed to you after the completion of the performance period ending at the close of trading on <DATE>, <YEAR> and the Compensation Committee's determination and certification of Sempra Energy's total shareholder return for the performance period. The shares of Common Stock will include the additional shares to be distributed pursuant to your vested dividend equivalents.

Taxes:

Upon distribution of shares of Common Stock to you, you will be subject to income taxes on the value of the distributed shares at the time of distribution and must pay applicable withholding taxes.

By your acceptance of this award, you agree to all of the terms and conditions set forth in this Cover Page/Summary, the attached Year <YEAR> Restricted Stock Unit Award Agreement and the Sempra Energy 2013 Long Term Incentive Plan.

Recipient: **X** _____
(Signature)

Sempra Energy: _____
(Signature)

Title: Chairman and Chief Executive Officer

SEMPRA ENERGY
2013 LONG TERM INCENTIVE PLAN

Year <YEAR> Restricted Stock Unit Award Agreement

Award:

You have been granted a performance-based restricted stock unit award under Sempra Energy's 2013 Long Term Incentive Plan. The award consists of the number of restricted stock units set forth on the Cover Page/Summary to this Agreement, and dividend equivalents with respect to the restricted stock units (described below). Capitalized terms used in this Agreement and not defined shall have the meaning set forth in the Plan.

Your restricted stock units represent the right to receive shares of Common Stock in the future, subject to the terms and conditions of your award. Your restricted stock units are not shares of Common Stock.

Each restricted stock unit initially represents the right to receive one share of Common Stock upon the vesting of the unit.

Unless and until they vest, your restricted stock units and any dividend equivalents (as described below) will be subject to transfer restrictions and forfeiture and vesting conditions.

Subject to the provisions below relating to the treatment of your restricted stock units in connection with a Change in Control, your restricted stock units (and dividend equivalents) will vest immediately following and only to the extent that the Compensation Committee of Sempra Energy's Board of Directors (the "Compensation Committee") determines and certifies that Sempra Energy has met specified total shareholder return criteria for the performance period beginning <DATE>, <YEAR> and ending at the close of trading on <DATE>, <YEAR>. Any restricted stock units (and dividend equivalents) that do not vest will be forfeited.

Your restricted stock units (and dividend equivalents) also may be forfeited if your employment terminates before they vest.

See "Vesting/Forfeiture," "Transfer Restrictions," and "Termination of Employment" below.

Vesting/Forfeiture:

Subject to the provisions below relating to the treatment of your restricted stock units in connection with a Change in Control, your restricted stock units (and dividend equivalents, as described below) will vest immediately following and only to the extent that the Compensation Committee determines and certifies that Sempra Energy has met the following total shareholder return performance criteria for the performance period beginning on <DATE>, <YEAR> and ending on the close of trading on <DATE>, <YEAR>:

- The percentage of your target number of restricted stock units that vest will be determined as follows, based on the percentile ranking for the performance period (as measured based on the thirty-day average closing stock price immediately preceding the start of the performance period compared to the thirty-day average closing stock price immediately preceding the end of the performance period) of Sempra Energy's cumulative total shareholder return (consisting of per share appreciation in Common Stock plus reinvested dividends and other distributions paid on Common Stock) among the companies (ranked by cumulative total

shareholder returns) in the S&P 500 Utilities Index (excluding water companies), as determined and certified by the Compensation Committee. For the avoidance of doubt, the thirty-day average preceding the beginning of the performance period shall be based on the thirty calendar days prior to and excluding <DATE>, <YEAR> and the thirty day average preceding the end of the performance period shall be based on the thirty calendar days prior to and including <DATE>, <YEAR>.

Sempra Energy Total Shareholder Return Percentile Ranking	Percentage of Target Number of Restricted Stock Units that Vest
90th	200%
80th	175%
70th	150%
60th	125%
50th	100%
40th	70%
35th	55%
30th	40%
25th	0%

If the percentile ranking does not equal a ranking shown in the above table, the percentage of your target number of restricted stock units that vest will be determined by a linear interpolation between the next lowest percentile shown in the table and the next highest percentile shown on the table.

- If the percentile ranking is at or above the 90th percentile, 200% of your target number of restricted stock units will vest.
- If the percentile ranking is at or below the 25th percentile, none of your restricted stock units will vest.

§ As soon as reasonably practicable following the end of the performance period, the Compensation Committee will determine and certify the extent to which Sempra Energy has met the performance criteria and the extent, if any, as to which your restricted stock units have then vested and any such vesting shall occur immediately following such determination and certification by the Compensation Committee. You will receive the number of shares of Common Stock equal to the number of your vested restricted stock units after the Compensation Committee's determination and certification. Also, you will receive the number of shares of Common Stock equal to your vested dividend equivalents after the Compensation Committee's determination and certification. Certificates for the shares will be issued to you or transferred to an account that you designate. When the shares of Common Stock are issued to you, your restricted stock units (vested and unvested) and your dividend equivalents will terminate.

Transfer Restrictions: You may not sell or otherwise transfer or assign your restricted stock units (or your dividend equivalents).

Dividend Equivalents:

You also have been awarded dividend equivalents with respect to your restricted stock units. Your dividend equivalents represent the right to receive additional shares of Common Stock in the future, subject to the terms and conditions of your award. Your dividend equivalents will be determined based on the dividends that you would have received had you held shares of Common Stock equal to the vested number of your restricted stock units from the date of your award to the date of the distribution of shares of Common Stock following the vesting of your restricted stock units, and assuming that the dividends were reinvested in Common Stock (and any dividends on such shares were reinvested in Common Stock). The dividends will be deemed reinvested in Common Stock in the same manner as dividends reinvested pursuant to the terms of the Sempra Dividend Reinvestment Plan.

Your dividend equivalents will be subject to the same transfer restrictions and forfeiture and vesting conditions as your restricted stock units. They will vest when and to the extent your restricted stock units vest.

Also, your restricted stock units (and dividend equivalents), including the terms and conditions thereof, will be adjusted to prevent dilution or enlargement of your rights in the event of a stock dividend on shares of Common Stock or as the result of a stock-split, recapitalization, reorganization or other similar transaction in accordance with the terms and conditions of the 2013 Long Term Incentive Plan. Any additional restricted stock units (and dividend equivalents) awarded to you as a result of such an adjustment also will be subject to the same transfer restrictions, forfeiture and vesting conditions and other terms and conditions that are applicable to your restricted stock units (and dividend equivalents).

No Shareholder Rights:

Your restricted stock units (and dividend equivalents) are not shares of Common Stock. You will have no rights as a shareholder unless and until shares of Common Stock are issued to you following the vesting of your restricted stock units (and dividend equivalents) as provided in this Agreement and the 2013 Long Term Incentive Plan.

Distribution of Shares:

As described in “Vesting/Forfeiture” above, the Compensation Committee will determine and certify the extent to which Sempra Energy has met the performance criteria and the extent, if any, as to which your restricted stock units have then vested.

You will receive the number of shares of Common Stock equal to the number of your restricted stock units that have vested. However, in no event will you receive under this award, and other awards granted to you under the 2013 Long Term Incentive Plan in the same fiscal year of Sempra Energy, more than the maximum number of shares of Common Stock permitted under the 2013 Long Term Incentive Plan. Also, you will receive the number of shares of Common Stock equal to your vested dividend equivalents after the Compensation Committee’s determination and certification.

You will receive the shares as soon as reasonably practicable following the Compensation Committee’s determination and certification (and in no event later than March 15, <YEAR>). Once you receive the shares of Common Stock, your vested and unvested restricted stock units (and dividend equivalents) will terminate.

Termination of Employment:

§ *Termination:*

If your employment with Sempra Energy and its Subsidiaries terminates for any reason prior to the vesting of your restricted stock units (and dividend equivalents) (other than under the circumstances set forth in the next paragraph), all of your restricted stock units (and dividend equivalents) will be forfeited. Subject to the provisions below relating to the treatment of your restricted stock units in connection with a Change in Control, the vesting of your restricted stock units (and dividend equivalents) does not occur until the date of the Compensation Committee's determination and certification described above.

If your employment terminates prior to a Change in Control, other than by termination for cause, and you had both completed at least five years of continuous service with Sempra Energy and its Subsidiaries AND met any of the following conditions:

1.) your employment terminates after <DATE>, <YEAR> and at the date of termination you had attained age 55; or

2.) your employment terminates after <DATE>, <YEAR> and at the date of termination you had attained age 62; or

3.) at the date of termination you had attained age 65 and you were an officer subject to the company's mandatory retirement policy;

your restricted stock units (and dividend equivalents) will not be forfeited but will continue to be subject to the transfer restrictions and vesting conditions and other terms and conditions of this Agreement.

§ *Termination for Cause:*

If your employment with Sempra Energy and its Subsidiaries terminates for cause, or your employment would have been subject to termination for cause, prior to the vesting of your restricted stock units (and dividend equivalents), all of your restricted stock units (and dividend equivalents) will be cancelled.

Prior to the consummation of a Change in Control, a termination for cause is (i) the willful failure by you to substantially perform your duties with the Company (other than any such failure resulting from your incapacity due to physical or mental illness), (ii) the grossly negligent performance of such obligations referenced in clause (i) of this definition, (iii) your gross insubordination; and/or (iv) your commission of one or more acts of moral turpitude that constitute a violation of applicable law (including but not limited to a felony) which have or result in an adverse effect on the Company, monetarily or otherwise, or one or more significant acts of dishonesty. For purposes of clause (i), no act, or failure to act, on your part shall be deemed "willful" unless done, or omitted to be done, by you not in good faith and without reasonable belief that your act, or failure to act, was in the best interests of the Company. If your restricted stock units remain outstanding following a Change in Control pursuant to a Replacement Award, a termination for cause following such Change in Control shall be determined in accordance with Section 2.8 of the 2013 Long Term Incentive Plan (which defines "Cause" for purposes of the plan), including reasonable notice and, if possible, a reasonable opportunity to cure as provided therein.

§ *Leaves of Absence:*

Your employment does not terminate when you go on military leave, a sick leave or another *bona fide* leave of absence, if the leave was approved by your employer in writing. But your employment will be treated as terminating 90 days after you went on leave, unless your right to return to active work is guaranteed by law or by a contract. And your employment terminates in any event when the approved leave ends, unless you immediately return to active work. Your employer determines which leaves count for this purpose.

Taxes:

§ *Withholding Taxes:* When you become subject to withholding taxes upon distribution of the shares of Common Stock or otherwise, Sempra Energy or its Subsidiary is required to withhold taxes. Unless you instruct otherwise and pay or make arrangements satisfactory to Sempra Energy to pay these taxes, upon the distribution of your shares, Sempra Energy will withhold a sufficient number of shares of common stock or restricted stock units to cover the minimum required withholding taxes and transfer to you only the remaining balance of your shares. In the event that, following a Change in Control, your restricted stock units become eligible for a distribution upon your Retirement by reason of your combined age and service, your restricted stock units may become subject to employment tax withholding prior to the distribution of shares with respect to such units.

§ *Code Section 409A:* Your restricted stock units are subject to Sections 16.5 and 20.12 of the 2013 Long Term Incentive Plan, which set forth terms to comply with Code Section 409A.

Recoupment ("Clawback") Policy:

The Company shall require the forfeiture, recovery or reimbursement of awards or compensation under the Plan and this Award as (i) required by applicable law, or (ii) required under any policy implemented or maintained by the Company pursuant to any applicable rules or requirements of a national securities exchange or national securities association on which any securities of the Company are listed. The Company reserves the right to recoup compensation paid if it determines that the results on which the compensation was paid were not actually achieved.

The Compensation Committee may, in its sole discretion, require the recovery or reimbursement of long-term incentive compensation awards from any employee whose fraudulent or intentional misconduct materially affects the operations or financial results of the Company or its Subsidiaries.

Retention Rights:

Neither your restricted stock unit award nor this Agreement gives you any right to be retained by Sempra Energy or any of its Subsidiaries in any capacity and your employer reserves the right to terminate your employment at any time, with or without cause. The value of your award will not be included as compensation or earnings for purposes of any other benefit plan offered by Sempra Energy or any of its Subsidiaries.

Change in Control:

In the event of a Change in Control, the following terms shall apply:

§ If (i) you have achieved age 55 and have completed at least five years of continuous service with Sempra Energy and its Subsidiaries as of the date of a Change in Control and your restricted stock units have not been

forfeited prior to the Change in Control, (ii) your outstanding restricted stock units as of the date of a Change in Control are not subject to a "substantial risk of forfeiture" within the meaning of Code Section 409A and/or (iii) your outstanding restricted stock units are not assumed or substituted with one or more Replacement Awards (as defined in Section 16.1 of the 2013 Long Term Incentive Plan), then in each case your outstanding restricted stock units and any associated dividend equivalents will vest immediately prior to the Change in Control with the applicable performance goals deemed to have been achieved at the greater of target level as of the date of such vesting or the actual performance level had the performance period ended on the date of the Change in Control. If the foregoing terms apply, immediately prior to the date of the Change in Control you will receive a number of shares of Common Stock equal to the number of your restricted stock units and dividend equivalents that have vested.

§ If your outstanding restricted stock awards are assumed or substituted with one or more Replacement Awards (as defined in Section 16.1 of the 2013 Long Term Incentive Plan), then, except as provided otherwise in an individual severance agreement or employment agreement to which you are a party, the terms set forth in Sections 16.3 and 16.4 of the 2013 Long Term Incentive Plan shall apply with respect to such Replacement Award following the Change in Control. If the foregoing terms apply and the Replacement Award vests upon your separation from service or death, on such date, you will receive a number of shares or other property in settlement of the Replacement Awards.

Further Actions:

You agree to take all actions and execute all documents appropriate to carry out the provisions of this Agreement.

You shall not be deemed to have accepted this award unless you execute the Arbitration Agreement provided with your award letter.

You also appoint as your attorney-in-fact each individual who at the time of so acting is the Secretary or an Assistant Secretary of Sempra Energy with full authority to effect any transfer of any shares of Common Stock distributable to you, including any transfer to pay withholding taxes, that is authorized by this Agreement.

Applicable Law:

This Agreement will be interpreted and enforced under the laws of the State of California.

Disputes: Any and all disputes between you and the Company relating to or arising out of the Plan or your restricted stock unit award shall be subject to the Arbitration Agreement provided with your award letter, including, but not limited to, any disputes referenced in Section 16.4 of the Plan.

Other Agreements: In the event of any conflict between the terms of this Agreement and any written employment, severance or other employment-related agreement between you and Sempra Energy, the terms of this Agreement, or the terms of such other agreement, whichever are more favorable to you, shall prevail, provided that in each case a conflict shall be resolved in a manner consistent with the intent that your restricted stock units comply with Code Section 409A. In the event of a conflict between the terms of this Agreement and the 2013 Long Term Incentive Plan, the plan document shall prevail.

By your acceptance of this award, you agree
to all of the terms and conditions described above and in the 2013 Long Term Incentive Plan

SEMPRA ENERGY

2013 LONG TERM INCENTIVE PLAN

<YEAR> PERFORMANCE-BASED RESTRICTED STOCK UNIT AWARD

You have been granted a performance-based restricted stock unit award representing the right to receive the number of shares of Sempra Energy Common Stock set forth below, subject to the vesting conditions set forth below. The restricted stock units, and dividend equivalents with respect to the restricted stock units, under your award may not be sold or assigned. They will be subject to forfeiture unless and until they vest based upon the satisfaction of performance criteria for a performance period beginning on January 1, <YEAR> and ending in December <YEAR>. Shares of Common Stock will be distributed to you after the completion of the performance period ending on December 31, <YEAR>, if the restricted stock units vest under the terms and conditions of your award.

The terms and conditions of your award are set forth in the attached Year <YEAR> Restricted Stock Unit Award Agreement and in the Sempra Energy 2013 Long Term Incentive Plan, which has been provided to you. The summary below highlights selected terms and conditions but it is not complete and you should carefully read the attachments to fully understand the terms and conditions of your award.

SUMMARY

Date of Award:	**<DATE>, <YEAR>**
Name of Recipient:	**NAME**
Recipient's Employee Number:	**EE ID**
Number of Restricted Stock Units (prior to any dividend equivalents):	
At Target:	**# RSU**
At Maximum:	**200% of Target (e.g. 1,000 at Target = 2,000 at Maximum)**
Award Date Fair Market Value per Share of Common Stock:	**$TBD**

Restricted Stock Units:

Your restricted stock units represent the right to receive shares of Common Stock in the future, subject to the terms and conditions of your award. Your restricted stock units are not shares of Common Stock. The target number of restricted stock units will vest (as described below), if the target "Earnings Per Share Growth" (as defined in the attached Year <YEAR> Restricted Stock Unit Award Agreement) is achieved. If above target Earnings Per Share Growth is achieved, you may vest in up to the maximum number of restricted stock units plus reinvested dividend equivalents as described below.

Vesting/Forfeiture of Restricted Stock Units:

Subject to certain exceptions set forth in the Year <YEAR> Restricted Stock Unit Award Agreement, your restricted stock units will vest only in the event the Compensation Committee determines and certifies that Sempra Energy has achieved positive cumulative net income (to be determined in accordance with GAAP) for the performance period beginning on January 1, <YEAR> and ending December 31, <YEAR>. In such event, the percentage of restricted stock units that vest shall be a maximum of 200% of target, subject to the Compensation Committee's exercise of negative discretion and the Compensation Committee's determination and certification that Sempra Energy has met specified earnings per share growth criteria, as described below, for the performance period beginning on January 1, <YEAR> and ending December 31, <YEAR>. Any restricted stock units that do not vest with the Compensation Committee's determination and certification (or otherwise in accordance with your Restricted Stock Unit Award Agreement) will be forfeited.

Transfer Restrictions:

Your restricted stock units may not be sold or otherwise transferred and will remain subject to forfeiture conditions until they vest.

Termination of Employment:

Your restricted stock units also may be forfeited if your employment terminates.

Dividend Equivalents:

You also have been awarded dividend equivalents with respect to your restricted stock units. Your dividend equivalents represent the right to receive additional shares of Common Stock in the future, subject to the terms and conditions of your award. Your dividend equivalents will be determined based on the dividends that you would have received had you held shares of Common Stock equal to the vested number of your restricted stock units from the date of your award to the date of the distribution of shares of Common Stock following the vesting of your restricted stock units, and assuming that the dividends were reinvested in Common Stock (and any dividends on such shares were reinvested in Common Stock). The dividends will be deemed reinvested in Common Stock in the same manner as dividends reinvested pursuant to the terms of the Sempra Dividend Reinvestment Plan. Your dividend equivalents will be subject to the same transfer restrictions and forfeiture and vesting conditions as the shares represented by your restricted stock units.

Distribution of Shares:

Shares of Common Stock will be distributed to you to the extent your restricted stock units and corresponding dividend equivalents vest. Except as provided otherwise in the attached Year <YEAR> Restricted Stock Unit Award Agreement, the shares will be distributed to you after the completion of the performance period ending on December 31, <YEAR> and the Compensation Committee's determination and certification of Sempra Energy's Earnings Per Share Growth for the performance period. The shares of Common Stock will include the additional shares to be distributed pursuant to your vested dividend equivalents.

Taxes:

Upon distribution of shares of Common Stock to you, you will be subject to income taxes on the value of the distributed shares at the time of distribution and must pay applicable withholding taxes.

By your acceptance of this award, you agree to all of the terms and conditions set forth in this Cover Page/Summary, the attached Year <YEAR> Restricted Stock Unit Award Agreement and the Sempra Energy 2013 Long Term Incentive Plan.

Recipient: **X** _____
(Signature)

Sempra Energy: _____
(Signature)

Title: Chairman and Chief Executive Officer

SEMPRA ENERGY

2013 LONG TERM INCENTIVE PLAN

Year <YEAR> Restricted Stock Unit Award Agreement

Award:

You have been granted a performance-based restricted stock unit award under Sempra Energy's 2013 Long Term Incentive Plan. The award consists of the number of restricted stock units set forth on the Cover Page/Summary to this Agreement, and dividend equivalents with respect to the restricted stock units (described below). Capitalized terms used in this Agreement and not defined shall have the meaning set forth in the Plan.

Your restricted stock units represent the right to receive shares of Common Stock in the future, subject to the terms and conditions of your award. Your restricted stock units are not shares of Common Stock.

Each restricted stock unit initially represents the right to receive one share of Common Stock upon the vesting of the unit.

Unless and until they vest, your restricted stock units and any dividend equivalents (as described below) will be subject to transfer restrictions and forfeiture and vesting conditions.

Subject to the provisions below relating to the treatment of your restricted stock units in connection with a Change in Control, your restricted stock units (and dividend equivalents) will vest immediately following and only to the extent that the Compensation Committee of Sempra Energy's Board of Directors (the "Compensation Committee") determines and certifies that Sempra Energy has met specified positive cumulative net income and earnings per share growth performance criteria for the performance period beginning January 1, <YEAR> and ending on December 31, <YEAR>. Any restricted stock units (and dividend equivalents) that do not vest will be forfeited.

Your restricted stock units (and dividend equivalents) also may be forfeited if your employment terminates before they vest.

See "Vesting/Forfeiture," "Transfer Restrictions," and "Termination of Employment" below.

Vesting/Forfeiture:

Subject to the provisions below relating to the treatment of your restricted stock units in connection with a Change in Control, your restricted stock units (and dividend equivalents, as described below) will vest only in the event that the Compensation Committee determines and certifies that Sempra Energy has achieved positive cumulative fiscal <YEAR> through fiscal <YEAR> net income (to be determined in accordance with GAAP). In such event, the percentage of restricted stock units that vest shall be a maximum of 200% of target, **SUBJECT TO THE COMPENSATION COMMITTEE'S EXERCISE OF NEGATIVE DISCRETION BASED ON THE EARNINGS PER SHARE GROWTH PERFORMANCE CRITERIA DESCRIBED BELOW AND CERTIFIED BY THE COMPENSATION COMMITTEE:**

Earnings Per Share Growth is determined based upon the compound annual growth rate (CAGR) of Sempra Energy's fiscal <YEAR> and fiscal <YEAR> earnings per share, subject to adjustments by the Committee in its sole discretion. For purposes of this calculation, (i) the starting point to calculate Earnings Per Share Growth shall be Sempra Energy's <YEAR> earnings per share, (ii) the ending point to calculate Earnings Per Share Growth shall be Sempra Energy's <YEAR> earnings per share and (iii) earnings per share shall be calculated using weighted average shares outstanding (WASO) for fiscal<YEAR> and fiscal <YEAR>, as diluted to reflect outstanding stock

options and RSUs (Diluted WASO). For fiscal <YEAR>, earnings per share shall exclude the effect of any common stock buybacks not contemplated in Sempra Energy's 2016 to 2020 five-year financial plan presented at the Analyst Conference on July 19, 2016. For the avoidance of doubt, Diluted WASO shall include the impact of any compensation or incentive plan transactions that reduce diluted WASO including, without limitation, transactions from tax withholding obligations and expirations or forfeitures of stock options and restricted stock units.

The calculation of the Earnings component of Earnings Per Share is intended to be consistent with the calculation of the Earnings under the Sempra Energy Incentive Compensation Plans (ICP) and Executive Incentive Compensation Plans (EICP). Adjustments to Earnings are intended to be generally consistent with the adjustments applied under the ICP and EICP, but the Committee shall determine which adjustments shall apply for purposes of calculating Earnings Per Share Growth. The Committee in its sole discretion shall determine the extent to which the Earnings Per Share Growth performance criteria have been achieved.

In exercising negative discretion, the percentage of your target number of restricted stock units that vest will be determined as follows:

Earnings Per Share Growth <YEAR> - <YEAR>	**Percentage of Target Number of Restricted Stock Units That Vest**
<PERCENT>%	200%
<PERCENT>%	150%
<PERCENT>%	100%
<PERCENT>%	0%

If the Earnings Per Share Growth does not equal a growth rate level shown in the above table, the percentage of your target number of restricted stock units that vest will be determined by a linear interpolation between the next lowest percentage shown in the table and the next highest percentage shown on the table.

If the Earnings Per Share Growth is at or above <PERCENT>%, 200% of your target number of restricted stock units will vest.

If the Earnings Per Share Growth is at or below <PERCENT>%, none of your restricted stock units will vest.

As soon as reasonably practicable following the end of the performance period, the Compensation Committee will determine and certify the extent to which Sempra Energy has met the cumulative net income performance measure and, after the application of negative discretion based on the earnings per share growth performance criteria, the extent, if any, as to which your restricted stock units have then vested and any such vesting shall occur immediately following such determination and certification by the Compensation Committee. You will receive the number of shares of Common Stock equal to the number of your vested restricted stock units after the Compensation Committee's determination and certification. Also, you will receive the number of shares of Common Stock equal to your vested dividend equivalents after the Compensation Committee's determination and certification. Certificates for the shares will be issued to you or transferred to an account that you designate. When the shares of Common Stock are issued to you, your restricted stock units (vested and unvested) and your dividend equivalents will terminate. **Notwithstanding anything to the contrary herein, the Compensation Committee, in its sole discretion, may exercise negative discretion in determining Earnings Per Share Growth to reduce the number of restricted stock units that otherwise would vest based on achievement of the applicable performance criteria set forth herein.**

Transfer Restrictions:

You may not sell or otherwise transfer or assign your restricted stock units (or your dividend equivalents).

Dividend Equivalents:

You also have been awarded dividend equivalents with respect to your restricted stock units. Your dividend equivalents represent the right to receive additional shares of Common Stock in the future, subject to the terms and conditions of your award. Your dividend equivalents will be determined based on the dividends that you would have received had you held shares of Common Stock equal to the vested number of your restricted stock units from the date of your award to the date of the distribution of shares of Common Stock following the vesting of your restricted stock units, and assuming that the dividends were reinvested in Common Stock (and any dividends on such shares were reinvested in Common Stock). The dividends will be deemed reinvested in Common Stock in the same manner as dividends reinvested pursuant to the terms of the Sempra Dividend Reinvestment Plan.

Your dividend equivalents will be subject to the same transfer restrictions and forfeiture and vesting conditions as your restricted stock units. They will vest when and to the extent that your restricted stock units vest.

Also, your restricted stock units (and dividend equivalents), including the terms and conditions thereof, will be adjusted to prevent dilution or enlargement of your rights in the event of a stock dividend on shares of Common Stock or as the result of a stock-split, recapitalization, reorganization or other similar transaction in accordance with the terms and conditions of the 2013 Long Term Incentive Plan. Any additional restricted stock units (and dividend equivalents) awarded to you as a result of such an adjustment also will be subject to the same transfer restrictions, forfeiture and vesting conditions and other terms and conditions that are applicable to your restricted stock units (and dividend equivalents).

No Shareholder Rights:

Your restricted stock units (and dividend equivalents) are not shares of Common Stock. You will have no rights as a shareholder unless and until shares of Common Stock are issued to you following the vesting of your restricted stock units (and dividend equivalents) as provided in this Agreement and the 2013 Long Term Incentive Plan.

Distribution of Shares:

As described in "Vesting/Forfeiture" above, the Compensation Committee will determine and certify the extent to which Sempra Energy has met the performance criteria and the extent, if any, as to which your restricted stock units have then vested in accordance with the terms of the Award.

You will receive the number of shares of Common Stock equal to the number of your restricted stock units that have vested. However, in no event will you receive under this award, and other awards granted to you under the 2013 Long Term Incentive Plan in the same fiscal year of Sempra Energy, more than the maximum number of shares of Common Stock permitted under the 2013 Long Term Incentive Plan. Also, you will receive the number of shares of Common Stock equal to your vested dividend equivalents after the Compensation Committee's determination and certification.

You will receive the shares as soon as reasonably practicable following the Compensation Committee's determination and certification (and in no event later than March 15, <YEAR>). Once you receive the shares of Common Stock, your vested and unvested restricted stock units (and dividend equivalents) will terminate.

Termination of Employment:

Termination

If your employment with Sempra Energy and its Subsidiaries terminates for any reason prior to the vesting of your restricted stock units (and dividend equivalents) (other than under the circumstances set forth in the next paragraph), all of your restricted stock units (and dividend equivalents) will be forfeited. Subject to the provisions below relating to the treatment of your restricted stock units in connection with a Change in Control, the vesting of your restricted stock units (and dividend equivalents) does not occur until the date of the Compensation Committee's determination and certification described above.

If your employment terminates prior to a Change in Control, other than by Termination for cause, and you had both completed at least five years of continuous service with Sempra Energy and its Subsidiaries AND met any of the following conditions:

1.) your employment terminates after <DATE>, <YEAR> and at the date of termination you had attained age 55; or

2.) your employment terminates after <DATE>, <YEAR> and at the date of termination you had attained age 62; or

3.) at the date of termination you had attained age 65 and you were an officer subject to the company's mandatory retirement policy;

your restricted stock units (and dividend equivalents) will not be forfeited but will continue to be subject to the transfer restrictions and vesting conditions and other terms and conditions of this Agreement.

Termination for Cause

If your employment with Sempra Energy and its Subsidiaries terminates for cause, or your employment would have been subject to termination for cause, prior to the vesting of your restricted stock units (and dividend equivalents), all of your restricted stock units (and dividend equivalents) will be cancelled.

Prior to the consummation of a Change in Control, a termination for cause is (i) the willful failure by you to substantially perform your duties with the Company (other than any such failure resulting from your incapacity due to physical or mental illness), (ii) the grossly negligent performance of such obligations referenced in clause (i) of this definition, (iii) your gross insubordination; and/or (iv) your commission of one or more acts of moral turpitude that constitute a violation of applicable law (including but not limited to a felony) which have or result in an adverse effect on the Company, monetarily or otherwise, or one or more significant acts of dishonesty. For purposes of clause (i), no act, or failure to act, on your part shall be deemed "willful" unless done, or omitted to be done, by you not in good faith and without reasonable belief that your act, or failure to act, was in the best interests of the Company. If your restricted stock units remain outstanding following a Change in Control pursuant to a Replacement Award, a termination for cause following such Change in Control shall be determined in accordance with Section 2.8 of the 2013 Long Term Incentive Plan (which defines "Cause" for purposes of the plan), including reasonable notice and, if possible, a reasonable opportunity to cure as provided therein.

Leaves of Absence

Your employment does not terminate when you go on military leave, a sick leave or another *bona fide* leave of absence, if the leave was approved by your employer in writing. But your employment will be treated as terminating 90 days after you went on leave, unless your right to return to active work is guaranteed by law or by a contract. And your employment terminates in any event when the approved leave ends, unless you immediately return to active work. Your employer determines which leaves count for this purpose.

Taxes:

Withholding Taxes

When you become subject to withholding taxes upon distribution of the shares of Common Stock or otherwise, Sempra Energy or its Subsidiary is required to withhold taxes. Unless you instruct otherwise and pay or make arrangements satisfactory to Sempra Energy to pay these taxes, upon the distribution of your shares, Sempra Energy will withhold a sufficient number of shares of common stock or restricted stock units to cover the minimum required withholding taxes and transfer to you only the remaining balance of your shares. In the event that, following a Change in Control, your restricted stock units become eligible for a distribution upon your Retirement by reason of your combined age and service, your restricted stock units may become subject to employment tax withholding prior to the distribution of shares with respect to such units.

Code Section 409A

Your restricted stock units are subject to Sections 16.5 and 20.12 of the 2013 Long Term Incentive Plan, which set forth terms to comply with Code Section 409A.

Recoupment ("Clawback") Policy:

The Company shall require the forfeiture, recovery or reimbursement of awards or compensation under the Plan and this Award as (i) required by applicable law, or (ii) required under any policy implemented or maintained by the Company pursuant to any applicable rules or requirements of a national securities exchange or national securities association on which any securities of the Company are listed. The Company reserves the right to recoup compensation paid if it determines that the results on which the compensation was paid were not actually achieved.

The Compensation Committee may, in its sole discretion, require the recovery or reimbursement of long-term incentive compensation awards from any employee whose fraudulent or intentional misconduct materially affects the operations or financial results of the Company or its Subsidiaries.

Retention Rights:

Neither your restricted stock unit award nor this Agreement gives you any right to be retained by Sempra Energy or any of its Subsidiaries in any capacity and your employer reserves the right to terminate your employment at any time, with or without cause. The value of your award will not be included as compensation or earnings for purposes of any other benefit plan offered by Sempra Energy or any of its Subsidiaries.

Change in Control:

In the event of a Change in Control, the following terms shall apply:

- If (i) you have achieved age 55 and have completed at least five years of continuous service with Sempra Energy and its Subsidiaries as of the date of a Change in Control and your restricted stock units have not been forfeited prior to the Change in Control, (ii) your outstanding restricted stock units as of the date of a Change in Control are not subject to a "substantial risk of forfeiture" within the meaning of Code Section 409A and/or (iii) your outstanding restricted stock units are not assumed or substituted with one or more Replacement Awards (as defined in Section 16.1 of the 2013 Long Term Incentive Plan), then in each case your outstanding restricted stock units and any associated dividend equivalents will vest immediately prior to the Change in Control with the applicable performance goals deemed to have been achieved at the greater of target level as of the date of such vesting or the actual performance level had the performance period ended on the last day of the calendar year immediately preceding the date of the Change in Control. If the foregoing terms apply, immediately prior to the date of the Change in Control you will receive a number of shares of Common Stock equal to the number of your restricted stock units and dividend equivalents that have vested.

- If your outstanding restricted stock awards are assumed or substituted with one or more Replacement Awards (as defined in Section 16.1 of the 2013 Long Term Incentive Plan), then, except as provided otherwise in an individual severance agreement or employment agreement to which you are a party, the terms set forth in Sections 16.3 and 16.4 of the 2013 Long Term Incentive Plan shall apply with respect to such Replacement Award following the Change in Control. If the foregoing terms apply and the Replacement Award vests upon your separation from service or death, on such date, you will receive a number of shares or other property in settlement of the Replacement Awards.

Further Actions:

You agree to take all actions and execute all documents appropriate to carry out the provisions of this Agreement.

You shall not be deemed to have accepted this award unless you execute the Arbitration Agreement provided with your award letter.

You also appoint as your attorney-in-fact each individual who at the time of so acting is the Secretary or an Assistant Secretary of Sempra Energy with full authority to effect any transfer of any shares of Common Stock distributable to you, including any transfer to pay withholding taxes, that is authorized by this Agreement.

Applicable Law:

This Agreement will be interpreted and enforced under the laws of the State of California.

Disputes:

Any and all disputes between you and the Company relating to or arising out of the Plan or your restricted stock unit award shall be subject to the Arbitration Agreement provided with your award letter, including, but not limited to, any disputes referenced in Section 16.4 of the Plan.

Other Agreements:

In the event of any conflict between the terms of this Agreement and any written employment, severance or other employment-related agreement between you and Sempra Energy, the terms of this Agreement, or the terms of such other agreement, whichever are more favorable to you, shall prevail, provided that in each case a conflict shall be resolved in a manner consistent with the intent that your restricted stock units comply with Code Section 409A. In the event of a conflict between the terms of this Agreement and the 2013 Long Term Incentive Plan, the plan document shall prevail.

By your acceptance of this award, you agree
to all of the terms and conditions described above and in the 2013 Long Term Incentive Plan

THE SEMPRA ENERGY EMPLOYEE AND DIRECTOR SAVINGS PLAN
(As Amended and Restated Effective as of November 10, 2016)

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THE SEMPRA ENERGY EMPLOYEE AND DIRECTOR SAVINGS PLAN
(As Amended and Restated Effective as of June 16, 2015)

Effective as of January 1, 2005, Sempra Energy, a California corporation, established the Sempra Energy 2005 Deferred Compensation Plan (the "Plan") which was designed to provide supplemental retirement income benefits for certain directors of Sempra Energy and for a select group of management and highly compensated employees of the Company (as defined herein) through deferrals of salary and incentive compensation and employer matching contributions. The Plan has been amended from time to time and, effective as of January 1, 2011, the name of the Plan was changed to "The Sempra Energy Employee and Director Retirement Savings Plan". Effective as of June 29, 2012, the name of the Plan was changed to "The Sempra Energy Employee and Director Savings Plan". The Plan was last amended and restated effective June 16, 2015. The following provisions constitute an amendment, restatement and continuation of the Plan as in effect immediately prior to November 10, 2016.

ARTICLE I.
TITLE AND DEFINITIONS

1.1 Title.

This Plan shall be known as the Sempra Energy Employee and Director Savings Plan.

1.2 Definitions.

Whenever the following words and phrases are used in this Plan, with the first letter capitalized, they shall have the meanings specified below.

(a) "**Account" or "Accounts**" shall mean a Participant's Deferral Account and/or Employer Matching Account.

(b) "**Administrator**" shall mean the individual(s) designated by the Committee (who need not be a member of the Committee) to handle the day-to-day Plan administration. If the Committee does not make such a designation, the Administrator shall be the most senior officer of Human Resources of Sempra Energy.

(c) "**Affiliate**" has the meaning ascribed to such term in Rule 12b-2 promulgated under the Exchange Act.

(d) "**Base Salary**" shall mean, with respect to any Participant, the Participant's annual base salary, excluding bonus, incentive and all other remuneration for services rendered to the Company, prior to reduction for any salary contributions to a plan established pursuant to Section 125 of the Code or qualified pursuant to Section 401(k) of the Code and prior to reduction for deferrals under this Plan.

(e) "**Beneficial Owner**" has the meaning set forth in Rule 13d-3 under the Exchange Act.

(f) "**Beneficiary**" or "**Beneficiaries**" shall mean the person or persons, including a trustee, personal representative or other fiduciary, last designated in writing by a Participant to receive the benefits specified hereunder in the event of the Participant's death in accordance with Section 9.5.

(g) "**Board of Directors**" or "**Board**" shall mean the Board of Directors of Sempra Energy.

(h) "**Bonus**" shall mean the annual cash incentive award earned by a Participant under the Company's short-term incentive plans and other special cash payments or cash awards that may be granted by the Company from time to time to the extent that such other special cash payments or cash awards are permitted by the Committee to be deferred under the Plan.

(i) "**Change in Control**" shall be deemed to have occurred when any event or transaction described in paragraph (1), (2), (3) or (4) occurs, subject to paragraph (5):

(1) Any Person is or becomes the Beneficial Owner, directly or indirectly, of securities of Sempra Energy representing twenty percent (20%) or more of the combined voting power of Sempra Energy's then outstanding securities; or

(2) The following individuals cease for any reason to constitute a majority of the number of directors then serving: individuals who, on the Effective Date, constitute the Board and any new director (other than a director whose initial assumption of office is in connection with an actual or threatened election contest, including, but not limited to, a consent solicitation, relating to the election of directors of Sempra Energy) whose appointment or election by the Board or nomination for election by Sempra Energy's shareholders was approved or recommended by a vote of at least two-thirds (2/3) of the directors then still in office who either were directors on the date hereof or whose appointment, election or nomination for election was previously so approved or recommended; or

(3) There is consummated a merger or consolidation of Sempra Energy or any direct or indirect subsidiary of Sempra Energy with any other corporation, other than (A) a merger or consolidation which would result in the voting securities of Sempra Energy outstanding immediately prior to such merger or consolidation continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity or any parent thereof), in combination with the ownership of any trustee or other fiduciary holding securities under an employee benefit plan of Sempra Energy or any subsidiary of Sempra Energy, at least sixty percent (60%) of the combined voting power of the securities of Sempra Energy or such surviving entity or any parent thereof outstanding immediately after such merger or consolidation, or (B) a merger or consolidation effected to implement a recapitalization of Sempra Energy (or similar transaction) in which no Person is or becomes the Beneficial Owner, directly or indirectly, of securities of Sempra Energy (not including in the securities beneficially owned by such Person any securities acquired directly from Sempra Energy or its affiliates other than in connection with the acquisition by Sempra Energy or its affiliates of a business) representing twenty percent (20%) or more of the combined voting power of Sempra Energy's then outstanding securities; or

(4) The shareholders of Sempra Energy approve a plan of complete liquidation or dissolution of Sempra Energy or there is consummated an agreement for the sale or disposition by Sempra Energy of all or substantially all of Sempra Energy's assets, other than a sale or disposition by Sempra Energy of all or substantially all of Sempra Energy's assets to an entity, at least sixty percent (60%) of the combined voting power of the voting securities of which are owned by shareholders of Sempra Energy in substantially the same proportions as their ownership of Sempra Energy immediately prior to such sale.

(5) An event or transaction described in paragraph (1), (2), (3), or (4) shall be a "Change in Control" only if such event or transaction is also a "change in the ownership or effective

control of the corporation, or in the ownership of a substantial portion of the assets of the corporation," within the meaning of Section 409A of the Code.

(j) "**Code**" shall mean the Internal Revenue Code of 1986, as amended, and all applicable rules and regulations thereunder

(k) "**Committee**" shall mean the compensation committee of the Board of Directors.

(l) "**Company**" shall mean Sempra Energy and any successor corporations. The term **"Company"** shall also include each corporation which is a member of a controlled group of corporations (within the meaning of Section 414(b) of the Code) of which Sempra Energy is a component member if the Committee provides that such corporation shall participate in the Plan and such corporation's governing board of directors adopts the Plan. Any corporation described in the preceding sentence which participates in the Plan immediately prior to the Effective Date shall be deemed to participate in the Plan and to have adopted the Plan without any further action of either such corporation or Sempra Energy, subject to the terms and conditions of the Plan.

(m) "**Compensation**" shall mean, with respect to a Participant, the following:

(1) with respect to any Participant who is an employee, Base Salary and Bonus that the Participant is entitled to receive for services rendered to the Company. In addition, for any Participant who is an Executive Officer "**Compensation**" includes (i) SERP Lump Sum, and (ii) Restricted Stock Units. The Committee may also permit Eligible Individuals who are not Executive Officers to defer Restricted Stock Units (or any other compensation specifically designated by the Committee) provided that such Eligible Individual shall not be an Executive Officer for purposes of the Plan solely as a result of such deferral unless such Eligible Individual is otherwise designated as such by the Committee; and

(2) with respect to any Director, retainer payments and/or meeting and other fees (including Elective Phantom Share Amounts and Nonelective Phantom Share Amounts), received from Sempra Energy for services performed by the Participant as a Director.

(n) "**Deferral Account**" shall mean the bookkeeping account maintained under the Plan for each Participant that is credited with amounts equal to the portion of the Participant's Compensation that he elects to defer pursuant to Section 3.1, debited by amounts equal to all distributions to and withdrawals made by the Participant and/or his Beneficiary and adjusted for investment earnings and losses pursuant to Article V. The Deferral Account may be further subdivided into subaccounts as determined by the Committee or the Administrator.

(o) "**Deferral Election Form**" shall mean the form designated by the Committee or the Administrator for purposes of making deferrals under Section 3.1.

(p) "**Director**" shall mean an individual who is a non-employee member of the Board.

(q) "**Disability**" **or** "**Disabled**" means, with respect to a Participant, that the Participant:

(1) is unable to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment which can be expected to result in death or can be expected to last for a continuous period of not less than twelve (12) months, or

(2) is, by reason of any medically determinable physical or mental impairment which can be expected to result in death or can be expected to last for a continuous period of not less than twelve (12) months, receiving income replacement benefits for a period of not less than three (3) months under an accident or health plan covering employees of such Participant's employer,

in either case, as determined in accordance with Section 409A of the Code.

(r) "**Distributable Amount**" of a Participant's subaccounts with respect to a Plan Year shall mean the sum of the vested balance of the subaccount in a Participant's Deferral Account and Employer Matching Account with respect to such Plan Year.

(s) "**Effective Date**" shall mean November 10, 2016.

(t) (1) "**Election Period**" with respect to a Plan Year shall mean the period designated by the Committee or the Administrator; provided, however, that such period shall be no less than ten (10) business days. The Election Period with respect to a Plan Year shall end not later than the last day of the prior Plan Year; *provided*, *however*, that, in the case of an Eligible Individual who first becomes eligible to participate in the Plan during a Plan Year, the Election Period, if any, shall be the thirty (30) calendar day period (or such shorter period specified by the Committee or the Administrator) commencing on the date such Eligible Individual first becomes eligible to participate in accordance with the provisions of Section 1(v) and Section 409A of the Code; and provided, further, in the case of an Eligible Individual's election to defer a Bonus (or portion thereof) for a Plan Year that is performance-based compensation within the meaning of Section 409A of the Code, the Election Period, if any, shall be a period designated by the Committee or the Administrator during such Plan Year that satisfies the requirements of Section 409A of the Code.

(2) Notwithstanding anything to the contrary in paragraph (1), in the case of a Director who becomes a Participant in accordance with Section 2.2, with respect to the Plan Year in which such Director first becomes eligible to participate in the Plan by reason of appointment or election as a Director, "**Election Period**," for purposes of: (A) such Director's election under paragraph 3.1(b)(3) to defer any Elective Phantom Share Amount with respect to an initial equity award granted during the Plan Year shall be the thirty (30) calendar day period (or such shorter period designated by the Committee or the Administrator) after such appointment or election (which period shall end not later than the day next preceding the grant date of such initial equity award), and (B) such Director's election under subsection 3.1(f) of the time and form of payment of any Nonelective Phantom Share Account (or any prorated Nonelective Phantom Share Amount) credited during such Plan Year shall be the thirty (30) calendar day period (or such shorter period designated by the Committee or the Administrator) after such appointment or election (which period shall end not later than the day next preceding the first day of the calendar quarter with respect to such Nonelective Phantom Share Amount (or such prorated Nonelective Phantom Share Amount) as determined under subsection 3.1(f)); provided that any such election under clause (A) or (B) satisfies the requirements of Section 409A of the Code.

(u) "**Elective Phantom Share Amount**" " shall mean, with respect to an initial or annual equity award by Sempra Energy to a Participant who is a Director, which the Director may elect to receive in the form of (1) an award of Restricted Stock Units, or (2) an amount credited to such Participant's Deferral Account in the Sempra

Energy Stock Fund, the dollar value designated by the Board for such equity award that is used for purposes of determining the number of Restricted Stock Units subject to such award, or the amount to be credited to such Participant's Deferral Account. In the case of a Director who first becomes a Director by reason of appointment or election as a Director, any such initial equity award shall be granted on the tenth New York Stock Exchange trading day after such appointment or election.

(v) "**Eligible Individual**" shall mean those individuals selected by the Committee from (1) those employees of the Company who either (A) are Executive Officers or (B) have Base Salary for a calendar year that is at least $165,000, as adjusted by the Committee from time to time and (2) those Directors who are not employees of the Company. The Committee may, in its sole discretion, select such other individuals to participate in the Plan who do not otherwise meet the foregoing criteria. Except as otherwise provided by the Committee or the Administrator, an Eligible Individual who is not a Director shall first become eligible to participate in the Plan on first day of the first calendar quarter that occurs at least thirty (30) days after the Eligible Individual commences employment in a covered category as set forth in clause (A) or (B) of this Section 1.2(v) (and, to the extent applicable, is selected as an Eligible Individual under the Plan). A Director shall become a Participant in the Plan in accordance with Section 2.2 on the date of such Director's appointment or election as a Director.

(w) "**Employer Matching Account**" shall mean the bookkeeping account maintained under the Plan for each Participant that is credited with an amount equal to the Employer Matching Contribution, if any, debited by amounts equal to all distributions to and withdrawals made by the Participant and/or his Beneficiary and adjusted for investment earnings and losses pursuant to Article V.

(x) "**Employer Matching Contributions**" shall mean the employer matching contribution made to the Plan pursuant to Section 3.3.

(y) "**ERISA**" shall mean the Employee Retirement Income Security Act of 1974, as amended, and all applicable rules and regulations thereunder.

(z) "**Exchange Act**" shall mean the Securities Exchange Act of 1934, as amended, and the applicable rules and regulations thereunder.

(aa) "**Executive Officer**" shall mean an employee of the Company who (i) is designated by the Board as an executive officer of Sempra Energy pursuant to Rule 3b-7 of the Exchange Act, (ii) participates in the Sempra Energy Supplemental Executive Retirement Plan, or (iii) who is otherwise designated as an Executive Officer by the Committee.

(bb) "**401(k) Plan**" shall mean the Sempra Energy Savings Plan, as in effect from time to time, maintained by Sempra Energy under Section 401(k) of the Code.

(cc) "**Manager**" shall mean an employee of the Company who is an Eligible Individual, other than an Executive Officer or a Director.

(dd) "**Measurement Fund**" shall mean one or more of the investment funds selected by the Committee pursuant to Section 4.1.

(ee) "**Moody's Plus Rate**" shall mean the Moody's Rate (as defined below) plus the greater of (1) 10% of the Moody's Corporate Bond Yield Average - Monthly Average Corporates as published by Moody's Investors Service, Inc. (or any successor) or (2) one percentage point per annum. The Moody's Rate for a month means the average of the daily Moody's Corporate Bond Yield Average - Monthly Average Corporates for the applicable month.

(ff) "**Nonelective Phantom Share Amount**" shall mean the dollar amount designated by the Board for purposes of subsection 3.1(f) to be invested in the Sempra Energy Stock Fund.

(gg) "**Participant**" shall mean any Eligible Individual who becomes a Participant in accordance with Article II and who has not received a complete distribution of the amounts credited to his Accounts.

(hh) "**Payroll Date**" shall mean, with respect to any Participant, the date on which he would otherwise be paid Compensation.

(ii) "**Payment Date**" shall mean the business day determined by the Committee or the Administrator that is on or within thirty (30) calendar days after one of the following dates as designated by the Participant in his distribution form election with respect to a Plan Year:

(1) the first business day of the first calendar month on or next following thirty (30) calendar days after the date of the Participant's Separation from Service or Disability,

(2) the first business day of the first, second, third, fourth or fifth calendar year next following the date of the Participant's Separation from Service or Disability; or

(3) such other date provided by the Committee or the Administrator (or elected by the Participant in accordance with rules established by the Committee or the Administrator), in any case which does not violate the requirements of Section 409A of the Code.

"Payment Date" shall also mean the Scheduled Withdrawal Date elected in accordance with the provisions of subsection 7.1(b).

(jj) "**Person**" means any person, entity or "group" within the meaning of Section 13(d)(3) or Section 14(d)(2) of the Exchange Act, except that such term shall not include (1) Sempra Energy or any of its Affiliates, (2) a trustee or other fiduciary holding securities under an employee benefit plan of Sempra Energy or any of its Affiliates, (3) an underwriter temporarily holding securities pursuant to an offering of such securities, (4) a corporation owned, directly or indirectly, by the shareholders of Sempra Energy in substantially the same proportions as their ownership of stock of Sempra Energy, or (5) a person or group as used in Rule 13d-1(b) under the Exchange Act.

(kk) "**Plan**" shall mean the Sempra Energy Employee and Director Savings Plan set forth herein, as amended from time to time.

(ll) "**Plan Year**" shall mean the twelve (12) consecutive month period beginning on each January 1 and ending on each December 31.

(mm) **"QDRO"** shall mean a domestic relations order that constitutes a "qualified domestic relations order" within the meaning of the Code or ERISA.

(nn) "**Restricted Stock Units**" shall mean restricted stock units granted to a Participant under the Sempra Energy 2008 Long Term Incentive Plan, Sempra Energy 2013 Long-Term Incentive Plan, and any successor plan(s) thereto.

(oo) "**Rule 16b-3**" shall mean that certain Rule 16b-3 under the Exchange Act, as such Rule may be amended from time to time.

(pp) "**Scheduled Withdrawal Date**" shall be in January in the year elected by the Participant for an in-service withdrawal elected in accordance with subsection 3.2(c), as set forth on the election forms for such Plan Year. If the day elected by the Participant is not a business day, the Scheduled Withdrawal Date shall be deemed to be the next following business day.

(qq) "**Sempra Energy Stock Fund**" shall mean the Measurement Fund in which investment earnings and losses parallel the investment return on the common stock of Sempra Energy.

(rr) "**Separation from Service**" shall mean, with respect to a Participant, the Participant's "separation from service," as defined in Treasury Regulation Section 1.409A-1(h).

(ss) "**SERP Lump Sum**" shall mean the lump sum retirement benefit that would be payable to an Executive Officer who is a Plan Participant under either the Sempra Energy Supplemental Executive Retirement Plan or the Sempra Energy Excess Cash Balance Plan.

(tt) "**Specified Employee**" shall mean a specified employee determined in accordance with the requirements of Section 409A of the Code.

(uu) "**Subaccount**" or "**Subaccounts**" shall mean the subaccount or subaccounts maintained with respect to a Participant's Deferral Account or Employer Matching Account.

(vv) **"Valuation Date**", with respect to the Measurement Funds that are available under the 401(k) Plan, shall have the same meaning as under the 401(k) Plan. For purposes of the Measurement Fund based on Moody's Plus Rate, "Valuation Date" shall mean the last day of the calendar month.

ARTICLE II.
PARTICIPATION

2.1 Commencement of Participation

Subject to Section 2.2, an Eligible Individual shall become a Participant in the Plan by (1) electing to make deferrals in accordance with Section 3.1 and (2) filing such other forms as the Committee or the Administrator may reasonably require for participation hereunder.

2.2 Newly Appointed or Elected Directors

A Director who first becomes an Eligible Individual during a Plan Year by reason of appointment or election as a Director shall become a Participant on the date of such appointment or election. Such Eligible Individual may elect to make deferrals in accordance with Section 3.1 and shall file such forms as the Committee or the Administrator reasonably requires.

ARTICLE III.
CONTRIBUTIONS

3.1 Elections to Defer Compensation

(a) General Rule. Each Eligible Individual may defer Compensation for a Plan Year by filing with the Committee or the Administrator a Deferral Election Form for such Plan Year that conforms to the requirements of this Section 3.1, no later than the last day of the applicable Election Period for such Plan Year, and such deferral election shall become irrevocable on the last day of the applicable Election Period for such Plan Year (or such later date permitted by the Committee or the Administrator consistent with the requirements of Section 409A of the Code). Unless otherwise provided by the Committee, an Eligible Individual who first becomes eligible to participate in the Plan during a Plan Year may elect to defer Compensation for such Plan Year; provided, however, that any such election to defer Compensation for such Plan Year must be filed during the Election Period prior to the effective date of such election, shall be irrevocable when made, and shall be effective only for Compensation that constitutes compensation for services performed during periods during the Plan Year beginning after the effective date of such election. Notwithstanding the previous sentence, if an Eligible Individual's Bonus (or portion thereof) is a performance-based compensation within the meaning of Section 409A of the Code, the Committee or the Administrator may permit such Eligible Individual to file an election to defer such Bonus (or such portion thereof), or change such Eligible Individual's prior election to defer such Bonus (or such portion thereof), no later than the date that is six (6) months before the end of the performance period over which such services are to be performed, under the terms and conditions that may be specified by the Committee or the Administrator, in accordance with Section 409A of the Code, and such deferral election shall become irrevocable on the date that is six (6) months before the end of the performance period.

(b) Special Rules. Notwithstanding the above, the following restrictions apply to deferrals of certain elements of Compensation:

(1) Restricted Stock Units. Each Eligible Individual designated by the Committee as so eligible to defer, may elect to defer Restricted Stock Units (or a portion thereof), in accordance with

such rules as the Committee may establish, which such rules shall not be inconsistent with the deferral election rules set forth in Sections 3.1 and 3.2 or the distribution provisions of Section 7.1. In order to defer Restricted Stock Units (or a portion thereof), an eligible Participant must file the appropriate Deferral Election Form no later than the election date required under Section 409A of the Code. The Participant's election to defer Restricted Stock Units (or a portion thereof) shall apply only if the Restricted Stock Units (or portion thereof) constitute a legally binding right to a payment of compensation in a subsequent taxable year and, absent a deferral election, would be treated as a short-term deferral, within the meaning of Section 409A of the Code. Any deferral election that does not satisfy the requirements for an initial deferral election under Section 409A of the Code shall be irrevocable when made and shall be made in accordance with Section 409A of the Code, applied as if the amount were a deferral of compensation and the scheduled payment date for the amount were the date the substantial risk of forfeiture lapses. Such subsequent deferral election shall be irrevocable when made, shall be made at least twelve (12) months prior to the first date on which Restricted Stock Units are scheduled to be paid (or, in the case of installment payments, twelve (12) months prior to the date on which the first amount is to be paid), and shall not take effect until at least twelve (12) months after the date on which the election is made. Such deferral election shall provide that the amount deferred shall be deferred for a period of not less than five (5) years from the date the payment of the amount deferred would otherwise have been made (or, in the case of installment payments treated as a single payment as determined under Section 409A of the Code, five (5) years from the date the first amount was scheduled to be paid); provided, however, that such deferral election may provide that the deferred amounts will be payable upon a change in control event (within the meaning of Section 409A of the Code) without regard to the five (5) year additional deferral requirement. Deferrals of Restricted Stock Units shall be invested in the Sempra Energy Stock Fund and may not be moved to any other Measurement Fund. Notwithstanding anything contained in the Plan to the contrary, a Participant may not elect a Scheduled Withdrawal Date with respect to the deferral of any Restricted Stock Units.

(2) SERP Lump Sum. A Participant may elect to defer a SERP Lump Sum (or a portion thereof), to the extent permitted by the Committee. In order to defer a SERP Lump Sum (or a portion thereof), an eligible Participant must file the appropriate Deferral Election Form no later than the election date required under Section 409A of the Code. The Participant's election to defer a SERP Lump Sum (or a portion thereof) shall satisfy the requirements of Section 409A of the Code as a subsequent deferral. Such deferral election shall be irrevocable when made, and shall not take effect until at least twelve (12) months after the date on which the election is made. Such deferral election shall provide that the amount deferred shall be deferred for a period of not less than five (5) years from the date the payment of the amount deferred would otherwise have been made (or, in the case of installment payments treated as a single payment, five (5) years from the date the first amount was scheduled to be paid) in accordance with Section 409A of the Code.

(3) Elective Phantom Share Amounts. A Participant who is a Director and is entitled to receive an initial or annual equity award from Sempra Energy, in the form of an award of Restricted Stock Units or an amount credited to his Deferral Account, may elect to have the Elective Phantom Share Amount with respect to such award credited to his Deferral Account (in lieu of such award of Restricted Stock Units) and defer such Elective Phantom Share Amount. In order to elect such credit and deferral of the Elective Phantom Share Amount with respect to such an equity award, an eligible Participant must file the appropriate Deferral Election Form no later than the last day of the applicable Election Period for the Plan Year during which such equity award is granted, and such deferral election shall become irrevocable on the last day of the applicable Election Period for such Plan Year. A Director who first becomes a Participant during a Plan Year may make a deferral election during such Plan Year in accordance with subparagraph 1.2(t)(2)(A). Such an election to defer an Elective Phantom Share Amount with respect to

an equity award granted during a Plan Year must be filed during the Election Period prior to the effective date of such election and shall be irrevocable when made and shall be effective only for an Elective Phantom Share Amount that constitutes compensation for services performed after the effective date of such election. If a Participant fails to elect such credit and deferral of the Elective Phantom Share Amount with respect to such an equity award, the Participant's equity award shall be made in the form of an award of Restricted Stock Units. A Participant shall make a separate election to defer Elective Phantom Share Amounts for each Plan Year.

(c) Deferral Amounts. The amount of Compensation which a Participant may elect to defer for a Plan Year is such Compensation earned on or after the time at which the Participant elects to defer each Plan Year in accordance with subsection 3.1(a), and which is earned during such Plan Year (other than with respect to subsequent deferrals of previously deferred amounts or other amounts that are treated as subsequent deferrals for purposes of Section 409A of the Code).

(1) Each Participant who is a Manager shall be permitted to defer, in any whole percentage: (A) from 6% to 85% of Base Salary, (B) from 6% to 85% of his Bonus, and (C) if permitted by the Committee, between 10% and 100% of such Participant's Restricted Stock Units, subject to subsection 3.1(b).

(2) Each Participant who is an Executive Officer shall be permitted to defer, in any whole percentage: (A) from 6% to 85% of Base Salary, (B) from 6% to 85% of his Bonus and (c) from 10% to 100% of such Participant's Restricted Stock Units and SERP Lump Sum, subject to subsection 3.1(b).

(3) Each Participant who is a Director: (A) shall be permitted to defer, in any whole percentage, from 10% to 100% of his Compensation (other than Elective Phantom Share Amounts and Nonelective Phantom Share Amounts), and (B) shall be permitted to defer 100% of his Elective Phantom Share Amounts. In the case of a Participant who is a Director, 100% of such Participant's Nonelective Phantom Share Amounts shall be deferred under subsection 3.1(f).

Notwithstanding the limitations established above, the total amount deferred by a Participant shall be limited in any calendar year, if necessary, to satisfy the Participant's income and employment tax withholding obligations (including Social Security, unemployment and Medicare), and the Participant's employee benefit plan contribution requirements, determined on the first day of the Election Period for such Plan Year, in any case as determined by the Committee or the Administrator, as applicable.

(d) Duration of Deferral Election.

(1) A Participant shall not modify or suspend his election to defer Compensation during a Plan Year.

(2) A Participant must file a new deferral election for each subsequent Plan Year. In the event a Participant fails to file a timely deferral election for the next Plan Year, he shall be deemed to have elected not to defer any Compensation for such Plan Year.

(3) A Participant's election to defer all or any portion of his SERP Lump Sum shall automatically become void in the event the Participant dies or becomes disabled while employed by the Company.

(4) A Participant who is a Director must file a new deferral election for the Elective Phantom Share Amounts for the equity awards granted during each Plan Year. In the event a Participant fails to file a timely deferral election for the next Plan Year, he shall be deemed to have elected not to defer the Elective Phantom Share Amounts for the equity awards granted during such Plan Year.

(e) Elections. Any Eligible Individual who does not elect to defer Compensation during his Election Period for a Plan Year may subsequently participate in the Plan in accordance with the terms and conditions of the Plan.

(f) Nonelective Compensation Deferrals for Directors. The Board may determine from time to time whether deferrals of Nonelective Phantom Share Amounts shall be credited to the Deferral Accounts of one or more Participants who are Directors. The Board shall designate the Nonelective Phantom Share Amounts and any conditions under which a Director shall be entitled to have Nonelective Phantom Share Amounts credited to his Deferral Account. A Nonelective Phantom Share Amount credited to a Director's Deferral Account shall constitute compensation for services to be performed by the Director during a calendar quarter, and the Nonelective Phantom Share Amount for such calendar quarter shall be credited to the Director's Deferral Account on the first New York Stock Exchange trading day of such calendar quarter; provided, however, that, in the case of a Director who first becomes a Director by reason of appointment or election as a Director, for purposes of the calendar quarter during which such appointment or election occurs, such Director's Deferral Account shall be credited with a prorated portion of the Nonelective Phantom Share Amount for the portion of such calendar quarter (if any), commencing on the tenth New York Stock Exchange trading day after such Director's appointment or election and ending on the last day of the calendar quarter, and any such prorated portion of the Nonelective Phantom Share Amount shall constitute compensation for services to be performed by the Director during the period commencing on such tenth New York Stock Exchange trading day and ending on the last day of such calendar quarter and shall be determined based on the portion of such calendar quarter that comprises such period and such prorated portion of the Nonelective Phantom Share Amount shall be credited to the Director's Deferral Account on the New York Stock Exchange trading day next following the last day of such calendar quarter. The service period for a Nonelective Phantom Share Amount (or a prorated Nonelective Phantom Share Amount) shall be the calendar quarter, or portion thereof, during which the Director performs services for which such Nonelective Phantom Share Amount (or prorated Phantom Share Amount) constitutes compensation. Such Nonelective Phantom Share Amounts shall be deferred on a nonelective basis. An eligible Participant must file the appropriate Deferral Election Form with respect to the Nonelective Phantom Share Amounts that constitute compensation for services performed during periods during the Plan Year beginning after the effective date of such election, for purposes of electing the Payment Date and the form of distribution of such Nonelective Phantom Share Amounts, no later than the last day of the applicable Election Period for the Plan Year during which such Nonelective Phantom Share Amounts are credited, and such deferral election shall become irrevocable on the last day of the applicable Election Period for such Plan Year. The Committee or the Administrator shall permit such a Participant who first becomes a Participant during a Plan Year to have his first Election Period with

respect to such election of the Payment Date and the form of distribution during such Plan Year determined in accordance with subparagraph 1.2(t)(2)(B). Such an election as to the Payment Date and the form of distribution must be filed during the Election Period prior to the effective date of such election and shall be irrevocable when made and shall be effective only for a Nonelective Phantom Share Amount that constitutes compensation for services performed after the date of such election.

(g) Termination of Participation and/or Deferrals. If the Committee or the Administrator determines in good faith that a Participant no longer qualifies as a Director or a member of a select group of management or highly compensated employees, as membership in such group is determined in accordance with Sections 201(2), 301(a)(3) and 401(a)(1) of ERISA, the Committee or the Administrator shall have the right, in its sole discretion and only for purposes of preserving the Plan's exemption from Title I of ERISA, to prevent the Participant from making deferral elections for future Plan Years.

3.2 Distribution Elections.

(a) General Rule. Each Participant shall make a separate distribution election with respect to each Plan Year for which such Participant elects to defer Compensation in accordance with Section 3.1. In the case of each Participant who is a Director, such Participant shall make a separate distribution election with respect to each Plan Year without regard to whether such Participant elects to defer Compensation in accordance with Section 3.1. A Participant's distribution election with respect to a Plan Year shall apply to: (1) the subaccount in his Deferral Account to which shall be credited the amount equal to the portion of his Compensation earned during such Plan Year that he elects to defer pursuant to Section 3.1, (2) in the case of a Participant who is a Director, the subaccount in his Deferred Account to which shall be credited any Elective Phantom Share Amounts for equity awards granted during such Plan Year that he elects to defer pursuant to Section 3.1, and the subaccount in his Deferral Account to which shall be credited any Nonelective Phantom Share Amounts during such Plan Year pursuant to subsection 3.1(f), and (3) the subaccount in his Employer Matching Account to which shall be credited the amount equal to the Employer Matching Contribution for such Plan Year. A Participant may elect any Payment Date described in subsection 1.2(ii), and may elect distribution in the normal form, as described in paragraph 7.1(a)(1), or an optional form described in paragraph 7.1(a)(2). Such Payment Date and distribution form elections shall be made on such Participant's Deferral Election Form during the Election Period for which such Participant elects to defer Compensation under Section 3.1 for such Plan Year, and such Payment Date and distribution form elections with respect to such Plan Year shall be irrevocable, except as provided in subsection 3.2(b). In the event a Participant fails to elect a Payment Date for his Distributable Amount with respect to a Plan Year, his Payment Date for his Distributable Amount with respect to such Plan Year shall be the date described in paragraph 1.2(ii)(1). In the event a Participant fails to make a distribution form election for his Distributable Amount with respect to a Plan Year, his Distributable Amount with respect to such Plan Year shall be distributed in the normal form, as described in paragraph 7.1(a)(1) in the event of his Separation from

Service or Disability, except as provided in subsection 3.2(b). Except as provided in subsection 3.2(b), a Participant's distribution for his Distributable Amount with respect to a Plan Year shall be made or commence on such Participant's Payment Date.

(b) Changes to Distribution Form Election. Subject to subsection 3.2(e), a Participant may change his distribution form election for his Distributable Amount with respect to a Plan Year in accordance with this subsection 3.2(b) as follows:

(1) Change from Lump Sum. If such Participant elected to receive the distribution of his Distributable Amount with respect to a Plan Year in the event of his Separation from Service or Disability in a lump sum, such Participant may change such distribution form election by making a new distribution form election for his Distributable Amount with respect to such Plan Year providing for distribution in one of the following forms, with such distribution made or commencing on the fifth anniversary of his Payment Date:

(A) a lump sum,

(B) annual installments (calculated as set forth at paragraph 7.1(a)(6)) over five (5) years,

(C) annual installments (calculated as set forth at paragraph 7.1(a)(6) over ten (10) years, or

(D) annual installments (calculated as set forth at paragraph 7.1(a)(6)) over fifteen (15) years.

(2) Change from Installments. If such Participant elected to receive the distribution of his Distributable Amount with respect to a Plan Year in the event of his Separation from Service or Disability in annual installments over five (5), ten (10) or fifteen (15) years, such Participant may change such distribution form election by making a new distribution form election for his Distributable Amount with respect to such Plan Year providing for distribution in one of the following forms, with such distribution commencing on the fifth anniversary of his Payment Date:

(i) annual installments (calculated as set forth at paragraph 7.1(a)(6)) over the period of years specified in such Participant's initial distribution form election, or

(ii) annual installments (calculated as set forth at paragraph 7.1(a)(6)) over a period of either ten (10) years or fifteen (15) years, provided that such period exceeds the period of years specified in such Participant's initial distribution form election.

(3) A Participant may make only one change to his distribution form election with respect to a Plan Year under this subsection 3.2(b).

(c) Election of Scheduled Withdrawal Date. A Participant may elect a Scheduled Withdrawal Date with respect to his deferrals of Compensation (the "Withdrawal Amount") with respect to a Plan Year. Such election of a Scheduled Withdrawal Date for such Participant's Withdrawal Amount with respect to a Plan Year shall be made by such Participant during the Election Period for which such Participant

elects to defer Compensation under Section 3.1 for such Plan Year, and such election of a Scheduled Withdrawal Date shall be irrevocable, except as provided in subsection 3.2(d). A Participant may make separate Scheduled Withdrawal Date elections for his deferrals of Compensation with respect to different Plan Years. A Participant's Withdrawal Amount with respect to a Plan Year shall be credited to subaccounts under such Participant's Accounts for such Plan Year. A Participant shall not be required to elect a Scheduled Withdrawal Date with respect to his deferrals of Compensation for a Plan Year and, if a Participant fails to make an election of a Scheduled Withdrawal Date for a Plan Year, no Scheduled Withdrawal Date shall apply with respect to his deferrals of Compensation for such Plan Year. For purposes of the Plan, the deferrals of Compensation included as part of the Withdrawal Amount (i) shall be adjusted for investment earnings and losses in the case of elections made on or after the Effective Date and (ii) shall be adjusted for investment losses(but not investment earnings) in the case of elections made prior to the Effective Date.

(d) Change of Scheduled Withdrawal Date. Subject to subsection 3.2(e), if a Participant elected a Scheduled Withdrawal Date with respect to his deferrals of Compensation with respect to a Plan Year in accordance with subsection 3.2(c), such Participant may change such Scheduled Withdrawal Date for the Withdrawal Amount with respect to such Plan Year by electing a new Scheduled Withdrawal Date for the Withdrawal Amount with respect to such Plan Year that is not less than five (5) years later than the Scheduled Withdrawal Date previously elected by such Participant for such Plan Year. A Participant who has not elected a Scheduled Withdrawal Date for his deferrals of Compensation in accordance with subsection 3.2(c) for a Plan Year may not subsequently elect a Scheduled Withdrawal Date for his deferrals of Compensation for such Plan Year. A Participant may make only one change to the Scheduled Withdrawal Date with respect to each Plan Year under this subsection 3.2(d).

(e) Limitation on Distribution Changes. A Participant's election to change his distribution form election with respect to a Plan Year under subsection 3.2(b), or change of a Scheduled Withdrawal Date with respect to a Plan Year under subsection 3.2(d), shall be subject to the following limitations:

(1) The Participant's election to change his distribution election form with respect to a Plan Year, or change his Scheduled Withdrawal Date with respect to a Plan Year, shall not take effect until at least twelve (12) months after his election to change the distribution form election, or Scheduled Withdrawal Date, is made. If the distribution of such Participant's Distributable Amount with respect to a Plan Year (in the case of a change in his distribution election form), or the distribution of the Withdrawal Amount with respect to such Plan Year (in the case of a change in his Scheduled Withdrawal Date), is made or commence before the election to change his distribution form election or Scheduled Withdrawal Date, as the case may be, becomes effective, the election to change his distribution form election or Scheduled Withdrawal Date shall not thereafter become effective, and distributions shall be made in accordance with the distribution form election, and Scheduled Withdrawal Date (if any), as applicable, in effect prior to the Participant's election to change.

(2) The Participant's election to change his distribution election form with respect to a Plan Year, or change his Scheduled Withdrawal Date with respect to a Plan Year, shall provide that each

payment with respect to such new distribution form election, or new Scheduled Withdrawal Date, shall be deferred for a period of not less than five (5) years from the date such payment would otherwise have been made.

(3) The Participant's election to change his Scheduled Withdrawal Date with respect to a Plan Year shall not be made less than twelve (12) months prior to the date of the first scheduled payment under the Participant's initial election of the Scheduled Withdrawal Date with respect to such Plan Year.

The limitations under this subsection 3.2(e) shall be applied in accordance with Section 409A of the Code.

3.3 Employer Matching Contributions

(a) The Company shall make an Employer Matching Contribution for each payroll date during a Plan Year, on behalf of each Participant who is employed by the Company on such payroll date, who has been employed by the Company for at least one (1) year as of such payroll date, and who makes deferrals of Base Salary and/or Bonus under Article III, in an amount equal to:

(1) the product of (A) 3% and (B) the sum of the deferrals of Base Salary and/or Bonus deferred under Article III for such payroll period; plus

(2) the product of (A) 3% and (B) the difference between (I) the Participant's Compensation for such payroll period and (II) the sum of the deferrals of Base Salary and/or Bonus deferred under Article III for such payroll period, reduced by (C) the amount of the matching contribution made under the 401(k) Plan for such payroll period not in excess of 3% of the Participant's eligible 401(k) Plan compensation. Notwithstanding any other provision of the Plan to the contrary, no Employer Matching Contributions shall be made under this paragraph (2) unless and until the Participant has made to the 401(k) Plan the maximum elective contributions permitted under Section 402(g) or the maximum pre-tax elective contributions permitted under the terms of the 401(k) Plan and in no event shall the Employer Matching Contributions made pursuant to this paragraph (2) exceed 100% of the matching contributions that would be provided under the 401(k) Plan absent any plan-based restrictions on contributions to qualified plans under the Code.

If a Participant is employed by more than one corporation that is included in the Company, the foregoing computation shall be applied to each such corporation based on the portion of the Plan Year during which the Participant was employed by such corporation. Notwithstanding the above, the Committee reserves the right to change or eliminate the Employer Matching Contribution in its sole discretion for any subsequent Plan Year.

(b) The Employer Matching Contribution for a Plan Year shall be credited to a Participant's Employer Matching Account in the manner determined by the Committee or the Administrator.

3.4 FICA and Other Taxes.

(a) Withholding, Generally. The Company shall have the right to withhold from any payments due under the Plan (or with respect to amounts credited to the Plan) any taxes required by law to be withheld in respect of such payment (or credit).

(b) Annual Deferral Amounts. For each Plan Year in which a Participant who is an employee makes a deferral under Section 3.1, the Participant's employer shall withhold from that portion of the Participant's Compensation that is not being deferred, in a manner determined by the employer, the Participant's share of FICA and other employment taxes on such amount. If necessary, the Committee or the Administrator may reduce the Participant's deferrals under Section 3.1 or make deductions from his Deferral Account in order to comply with this Section 3.4, to the extent permitted under Section 409A of the Code.

(c) Employer Matching Amounts. For each Plan Year in which a Participant is credited with a contribution to his Employer Matching Account under Section 3.3, the Participant's employer shall withhold from the Participant's Compensation that is not deferred, in a manner determined by the employer, the Participant's share of FICA and other employment taxes. If necessary, the Committee or the Administrator may reduce the Participant's Employer Matching Account in order to comply with this Section 3.4, to the extent permitted under Section 409A of the Code.

(d) Sempra Energy Stock Fund. With respect to distributions of all or a portion of balances invested in the Sempra Energy Stock Fund, withholding obligations shall be satisfied through the surrender of the applicable withholding percentage of such distributed balances (or portion thereof) in the Sempra Energy Stock Fund. Unless otherwise approved by the Committee, withholding obligations for Restricted Stock Units deferred into the Plan shall be satisfied by payment by the applicable Participant, deducted from other Compensation payable to such Participant which has not been deferred under the Plan, or a combination of these methods.

ARTICLE IV.
INVESTMENTS

4.1 Measurement Funds.

(a) Election of Measurement Funds, In the manner designated by the Committee or the Administrator, Participants may elect one or more Measurement Funds to be used to determine the additional amounts to be credited to their Accounts. Although the Participant may designate the available Measurement Funds that will be used to determine additional amounts to be credited to their Accounts, neither the Committee nor the Administrator shall be bound to make actual investments in such Measurement Funds based on the Participant's election. If the Committee designates a substitute Measurement Fund for a Participant (without regard to the Participant's election), the substitute Measurement Fund must provide the Participant with an investment opportunity reasonably comparable to the original Measurement Funds elected by the Participant, as determined by the Committee in its sole discretion. The Committee shall select from time to time, in its sole discretion, the Measurement Funds to be available under the Plan.

(b) No Actual Investment. Notwithstanding any other provision of this Plan that may be interpreted to the contrary, the Measurement Funds are to be used for measurement purposes only, and a Participant's election of any such Measurement Fund, the allocation to his Accounts thereto, the calculation of additional amounts

and the crediting or debiting of such amounts to a Participant's Accounts shall not be considered or construed in any manner as an actual investment of his Accounts in any such Measurement Fund. In the event that the Committee, the Administrator, or the trustee, as applicable, in its own discretion, decides to invest funds in any or all of the Measurement Funds, no Participant shall have any rights in or to such investments themselves. Without limiting the foregoing, a Participant's Accounts shall at all times be a bookkeeping entry only and shall not represent any investment made on his behalf by the Company. The Participant shall at all times remain an unsecured creditor of the Company

4.2 Investment Elections.

(a) Participants.

(1) Deferral Accounts. Except as provided in paragraph 4.2(a)(2) and Section 4.3, Participants may designate how their Deferral Accounts shall be deemed to be invested under the Plan.

(A) Such Participants may make separate investment elections for (I) their future deferrals of Compensation and (II) the existing balances of their Deferral Accounts.

(B) Such Participants may make and change their investment elections by choosing from the Measurement Funds designated by the Committee in accordance with the procedures established by the Committee or the Administrator.

(C) Except as otherwise designated by the Committee, the available Measurement Funds under this paragraph 4.2(a)(1) shall be the investment funds under the 401(k) Plan (excluding the Stable Value Fund and any brokerage account option), the Sempra Energy Stock Fund and the Measurement Fund based on the Moody's Plus Rate.

(D) If a Participant fails to elect a Measurement Fund under this subsection 4.2(a), he shall be deemed to have elected the Measurement Fund based on the Moody's Plus Rate (unless a different default fund is designated by the Committee) for all of his Accounts.

(2) Employer Matching Account and Certain Deferral Subaccounts.

(A) (2) Employer Matching Account and Certain Deferral Subaccounts. Unless otherwise provided by the Committee or the Administrator, Employer Matching Contributions credited to a Participant's Employer Matching Account shall be invested in Measurement Funds in the same proportion as the corresponding deferrals of Compensation that are credited to his Deferral Account. Unless otherwise provided by the Committee, a Participant may, however, transfer the investment of the Employer Matching Contributions credited to his Employer Matching Account into any Measurement Fund and may change their investment elections by choosing from the Measurement Funds designated by the Committee in accordance with the procedures established by the Committee or the Administrator. The deferrals of a Participant's Restricted Stock Units credited to such Participant's Deferral Account shall be deemed invested in the Sempra Energy Stock Fund and may not be moved into any other Measurement Fund.

(B) The deferrals of Elective Phantom Share Amounts and Nonelective Phantom Share Amounts credited to a Participant's Deferral Account shall be initially deemed

invested in the Sempra Energy Stock Fund and shall remain deemed invested in the Sempra Energy Stock Fund until the Participant's Separation from Service. After the Participant's Separation from Service, a Participant may direct the investment of the Elective Phantom Share Amount subaccounts or Nonelective Phantom Share Amount subaccounts of the Participant's Deferral Account into any other Measurement Fund, as permitted by the Committee.

(b) Continuing Investment Elections. Participants who have had a Separation From Service but not yet commenced distributions under Article VII or Participants or Beneficiaries who are receiving installment payments may continue to make investment elections as permitted under subsection 4.2(a) except as otherwise determined by the Committee.

4.3 Compliance with Section 16 of the Exchange Act.

(a) Any Participant or Beneficiary who is subject to Section 16 of the Exchange Act shall have his Measurement Fund elections under the Plan subject to the requirements of the Exchange Act, as interpreted by the Committee. Any such Participant or Beneficiary who either (i) transferred amounts from another available Measurement Fund under the Plan into the Sempra Energy Stock Fund or (ii) transferred any amounts from the Sempra Energy Stock Fund to another available Measurement Fund under the Plan may not make an election with the opposite effect under this Plan or any other Company-sponsored plan until six (6) months and one (1) day following the original election.

(b) Notwithstanding any other provision of the Plan or any rule, instruction, election form or other form, the Plan and any such rule, instruction or form shall be subject to any additional conditions or limitations set forth in any applicable exemptive rule under Section 16 of the Exchange Act (including any amendment to Rule 16b-3) that are requirements for the application of such exemptive rule. To the extent permitted by applicable law, such Plan provision, rule, instruction or form shall be deemed amended to the extent necessary to conform to such applicable exemptive rule.

ARTICLE V.
ACCOUNTS

5.1 Accounts.

(a) The Committee or the Administrator shall establish and maintain a Deferral Account, and an Employer Matching Account for each Participant under the Plan. Each Participant's Accounts shall be divided into separate subaccounts in accordance with Section 5.2. Each such subaccount shall be further divided into separate investment fund subaccounts, each of which corresponds to a Measurement Fund elected by the Participant pursuant to Section 4.2. In addition, Participants' Deferral Accounts shall be further divided into subaccounts consisting of deferred Restricted Stock Units, Elective Phantom Share Amounts, and Nonelective Phantom Share Amounts. A separate subaccount shall be maintained for each deferral of Restricted Stock Units, Nonelective Phantom Share Amount and Elective Phantom Share Amount.

(b) The performance of each elected Measurement Fund (either positive or negative) shall be determined by the Committee or the Administrator, in its reasonable discretion, based on the performance of the Measurement Funds themselves. A Participant's Accounts shall be credited or debited on each Valuation Date, as determined by the Committee or the Administrator in its reasonable discretion, based on the performance of each Measurement Fund selected by the Participant as though (i) a Participant's Accounts were invested in the Measurement Fund(s) selected by the Participant, in the percentages applicable to such period, as of the close of business on the first business day of such period, at the closing price on such date; (ii) the portion of the Participant's Compensation that was actually deferred pursuant to Section 3.1 during any period were invested in the Measurement Fund(s) selected by the Participant, in the percentages applicable to such period, no later than the close of business on the first business day after the day on which such amounts are actually deferred from the Participant's Compensation, at the closing price on such date; and (iii) any withdrawal or distribution made to a Participant that decreases such Participant's Accounts ceased being invested in the Measurement Fund(s), in the percentages applicable to such period, no earlier than one (1) business day prior to the distribution, at the closing price on such date. The Participant's Employer Matching Contribution for a Plan Year shall be credited to his Employer Matching Account for purposes of this subsection 5.1(b), in the manner determined on the first day of the Election Period for such Plan Year, as determined by the Committee or the Administrator.

5.2 Subaccounts.

(a) The Committee or the Administrator shall establish and maintain, with respect to a Participant's Deferral Account, a subaccount with respect to each Plan Year, to which shall be credited the amount equal to the portion of the Participant's Compensation earned during such Plan Year that he elects to defer pursuant to Section 3.1, debited by amounts equal to distributions to and withdrawals made by the Participant and/or his Beneficiary and adjusted for investment earnings and losses pursuant to Article V.

(b) The Committee or the Administrator shall establish and maintain, with respect to a Participant's Employer Matching Account, a subaccount with respect to each Plan Year, to which shall be credited the amount equal to the Employer Matching Contributions made pursuant to Section 3.3 on behalf of such Participant in respect of such Participant's Compensation earned during such Plan Year that he elects to defer pursuant to Section 3.1, debited by amounts equal to distributions to and withdrawals made by the Participant and/or his Beneficiary and adjusted for investment earnings and losses pursuant to Article V.

ARTICLE VI.
VESTING

(a) Subject to subsections (b) and (c), each Participant shall be 100% vested in his Deferral Account and his Matching Account at all times.

(b) A Participant's deferred Restricted Stock Units credited to a subaccount of such Deferred Account shall be subject to the vesting conditions applicable to the Restricted Stock Unit award. The subaccount of such Participant's Deferral Amount for a deferred Restricted Stock Unit award shall become vested in accordance with the vesting conditions applicable to such Restricted Stock Unit award. To the extent such Restricted Stock Unit award is forfeited, the subaccount of such Participant's Deferral Account for such award shall be forfeited immediately following the event causing such forfeiture and the amount of such subaccount shall be debited from such Deferral Account.

(c) A Participant's deferred Elective Phantom Share Amount credited to a subaccount of such Participant's Deferral Account shall be subject to the vesting conditions applicable to the initial or annual equity award for which such Elective Phantom Share Amount is credited. The subaccount of such Participant's Deferral Account for a deferred Elective Phantom Share Amount shall become vested in accordance with the vesting conditions applicable to such equity award. To the extent such equity award is forfeited, the subaccount of such Participant's Deferral Account for such Elective Phantom Share Amount shall be forfeited immediately following the event causing such forfeiture and the amount of such subaccount shall be debited from such Deferral Account.

ARTICLE VII.
DISTRIBUTIONS

7.1 Distribution of Accounts.

(a) Distribution at Separation from Service or Disability.

(1) Normal Form.

(A) Except as provided in subparagraph (B), paragraph (2), paragraph (3) or Section 7.3, upon the Separation from Service or Disability of a Participant, a Participant's Distributable Amount with respect to each Plan Year beginning on or after January 1, 2011 shall be paid to the Participant in a lump sum in cash (or shares of Sempra Energy common stock for Restricted Stock Unit subaccounts) on the Participant's Payment Date. Except as provided in subparagraph (B), paragraph (2), paragraph (3) or Section 7.3, upon the Separation from Service or Disability of a Participant, a Participant's Distributable Amount with respect to each Plan Year beginning prior to January 1, 2011 shall be paid to the Participant in substantially equal annual installments in cash (calculated as set forth in paragraph 7.1(a)(6) over ten (10) years beginning on the Participant's Payment Date.

(B) Upon the Separation from Service of a Participant who is a Specified Employee (determined as of the date of Separation from Service), the distribution of the Participant's Distributable Amount shall be delayed until the first business day which is six (6) months after the date of such Participant's Separation from Service (or, if earlier, the date of such Participant's death) in accordance with Section 409A of the Code and shall be paid on the business day determined by the Committee or the Administrator that is on or within thirty (30) business days thereafter; provided, however, that if the Payment Date applicable to the Distributable

Amount is later than the delayed payment date determined pursuant to this subparagraph 7.1(a)(1)(B), payment of the Distributable Amount shall be made on the Payment Date.

(2) Optional Forms. Instead of receiving his Distributable Amount with respect to each Plan Year as described at subparagraph 7.1(a)(1)(A), the Participant may elect in accordance with Section 3.2 one of the following optional forms of payment (on the form provided by Committee or the Administrator) (or shares of Sempra Energy common stock for Restricted Stock Unit subaccounts) at the time of his deferral election for such Plan Year:

(i) equal annual installments in cash (or shares of Sempra Energy common stock for Restricted Stock Unit subaccounts) (calculated as set forth in paragraph 7.1(a)(6)) over five (5) years beginning on the Participant's Payment Date,

(ii) equal annual installments in cash (or shares of Sempra Energy common stock for Restricted Stock Unit subaccounts) (calculated as set forth in paragraph 7.1a(a)(6)) over ten (10) years beginning on the Participant's Payment Date, or

(iii) equal annual installments in cash (or shares of Sempra Energy common stock for Restricted Stock Unit subaccounts) (calculated as set forth in paragraph 7.1(a)(6)) over fifteen (15) years beginning on the Participant's Payment Date, or

(iv) a lump sum in cash (or shares of Sempra Energy common stock for Restricted Stock Unit subaccounts) .

The payment of such Participant's Distributable Amount with respect each Plan Year shall be made or commence on such Participant's Payment Date (or, if applicable, the date determined under subparagraph (a)(1)(B)).

(3) Distribution Election Changes. In the event that a Participant changes his distribution form election with respect to a Plan Year in accordance with subsection 3.2(b), and such new distribution form election becomes effective, upon the Separation from Service or Disability of such Participant, the Distributable Amount with respect to such Plan Year shall be paid to the Participant in accordance with such new distribution form election.

(4) Small Accounts. Notwithstanding provision to the contrary, in the event the total of a Participant's Distributable Amounts with respect to all Plan Years is equal to or less than $25,000, such Distributable Amounts shall be distributed to the Participant (or his Beneficiary, as applicable) in a lump sum.

(5) Investment Adjustments. The Participant's Accounts shall continue to be adjusted for investment earnings and losses pursuant to Section 4.2 and Section 4.3 of the Plan until all amounts credited to his Accounts under the Plan have been distributed.

(6) Calculating Payments. All payments made under the Plan shall be determined in accordance with the following:

(i) All installment payments made under the Plan shall be determined in accordance with the annual fractional payment method, calculated as follows: the balance of subaccounts in the Participant's Accounts with respect to a Plan Year shall be calculated as of the Payment Date. The annual installment shall be calculated by multiplying this balance by a fraction, the numerator of which is one, and the denominator of which is the remaining number of annual payments due the Participant. By way

of example, if the Participant elects ten (10) year installments for the distribution of the subaccounts in his Accounts with respect to a Plan Year, the first payment shall be 1/10 of the balance of such subaccounts in his Accounts calculated as described in this definition. The following year, the payment shall be 1/9 of such subaccounts in the balance of the Participant's Accounts, calculated as described in this definition. Each annual installment for an applicable year shall be paid on or as soon as practicable after the Payment Date (but in any event no later than the last business day of such applicable year).

(ii) All lump sum payments made under the Plan shall be calculated as of the close of business on the Payment Date. The lump sum shall be paid in accordance with the provisions of the Plan applicable thereto.

(b) Distribution on a Scheduled Withdrawal Date.

(1) In the case of a Participant who has elected a Scheduled Withdrawal Date for a distribution to be made prior to the Participant's Separation from Service or while still a Director, in each case to the extent permitted by the Plan, such Participant shall receive his Withdrawal Amount as shall have been elected by the Participant to be subject to the Scheduled Withdrawal Date. A Participant's Scheduled Withdrawal Date with respect to amounts of Compensation deferred in a given Plan Year must be at least three (3) years from the last day of the Plan Year for which such deferrals are made.

(2) The Withdrawal Amount shall be paid in a lump sum in cash.

(3) A Participant may elect to change the Scheduled Withdrawal Date for the Withdrawal Amount for any Plan Year in accordance with subsection 3.2(d).

(4) In the event of Participant's Separation from Service or Disability prior to a Scheduled Withdrawal Date, the Participant's entire Withdrawal Amount shall be paid in accordance with the Participant's election with respect to such Plan Year under subsection 7.1(a). In the event of a Participant's death prior to a Scheduled Withdrawal Date, the Participant's entire Withdrawal Amount shall be paid as soon as practicable after the Participant's death in a lump sum in cash.

(c) Distribution upon Death. In the event a Participant dies before he has begun receiving distributions under subsection 7.1(a), his Accounts shall be paid to his Beneficiary in the same manner elected by the Participant. In the event a Participant dies after he has begun receiving distributions under subsection 7.1(a) with a remaining balance in his Accounts, the balance shall continue to be paid to his Beneficiary in the same manner.

7.2 Hardship Distribution.

A Participant shall be permitted to elect a Hardship Distribution of all or a portion of his Accounts under the Plan prior to the Payment Date, subject to the following restrictions:

(a) The election to take a Hardship Distribution shall be made by filing the form provided by the Committee or the Administrator before the date established by the Committee or the Administrator.

(b) The Committee or the Administrator shall have made a determination that the requested distribution constitutes a Hardship Distribution in accordance with subsection 7.2(d).

(c) The amount determined by the Committee or the Administrator as a Hardship Distribution shall be paid in a single lump sum in cash as soon as practicable after the end of the calendar month in which the Hardship Distribution election is made and approved by the Committee or the Administrator. The Hardship Distribution shall be distributed proportionately from the subaccounts in the Participant's Accounts.

(d) If a Participant receives a Hardship Distribution, the Participant shall be ineligible to contribute deferrals to the Plan for the remainder of the Plan Year in which the Hardship Distribution is received or the immediately following Plan Year. "Hardship Distribution" shall mean a severe financial hardship to the Participant resulting from (i) an illness or accident of the Participant, the Participant's spouse or of his dependent (as defined in Section 152(a) of the Code), (ii) loss of a Participant's property due to casualty, or (iii) other similar extraordinary and unforeseeable circumstances arising as a result of events beyond the control of the Participant, as determined by the Committee or the Administrator in accordance with Section 409A of the Code. The amount of the Hardship Distribution with respect to a severe financial hardship shall not exceed the amounts necessary to satisfy such hardship, plus amounts necessary to pay taxes reasonably anticipated as a result of the distribution, after taking into account the extent to which such hardship is or may be relieved through reimbursement or compensation by insurance or otherwise or by liquidation of the Participant's assets (to the extent the liquidation of such assets would not itself cause severe financial hardship), as determined by the Committee or the Administrator in accordance with Section 409A of the Code.

7.3 Effect of a Change in Control.

(a) In the event there is a Change in Control, the person who is the chief executive officer (or, if not so identified, Sempra Energy's highest ranking officer) shall name a third-party fiduciary as the sole member of the Committee immediately prior to such Change in Control. The appointed fiduciary, shall provide for the immediate distributions of the accounts under the Plan in lump sum payments and cash to the extent permitted under Section 409A of the Code.

(b) Upon and after the occurrence of a Change in Control, the Company must (i) pay all reasonable administrative fees and expenses of the appointed fiduciary, (ii) indemnify the appointed fiduciary against any costs, expenses and liabilities including, without limitation, attorney's fees and expenses arising in connection with the appointed fiduciary's duties hereunder, other than with respect to matters resulting from the gross negligence of the appointed fiduciary or its agents or employees and (iii) timely provide the appointed fiduciary with all necessary information related to the Plan, the Participants and Beneficiaries.

(c) Notwithstanding Section 9.3, in the event there is a Change in Control no amendment may be made to this Plan except as approved by the third-party fiduciary; provided, however, that in no event shall any amendment approved by the third-party fiduciary have any retroactive effect to reduce any vested amounts allocated to a Participant's Accounts. Upon a Change in Control, assets shall be

placed in a rabbi trust in an amount which shall equal the full accrued liability under this Plan as determined by an actuarial firm appointed by the Board immediately prior to such Change in Control or, in the absence of such appointment, Willis Towers Watson or a successor actuarial firm.

7.4 Inability to Locate Participant.

In the event that the Committee or the Administrator is unable to locate a Participant or Beneficiary within two (2) years following the required Payment Date, the amount allocated to the Participant's Accounts shall be forfeited. If, after such forfeiture, the Participant or Beneficiary later claims such benefit, such benefit shall be reinstated without interest or earnings from the date of forfeiture, subject to applicable escheat laws.

7.5 Prohibition on Acceleration of Distributions.

The time or schedule of payment of any withdrawal or distribution under the Plan shall not be subject to acceleration, except as provided or permitted under Section 409A of the Code (including, without limitation, acceleration on termination of the Plan or in connection with a change in control event within the meaning of Section 409A of the Code).

7.6 Distributions Pursuant To QDROs.

Except as otherwise provided by the Committee or the Administrator, distributions to alternate payees pursuant to a QDRO will be made or commence within ninety (90) days of the date on which the domestic relations order is determined to be a QDRO in one of the following forms elected by the alternate payee (including by the terms of the QDRO):

(a) a lump sum,

(b) annual installments (calculated as set forth at paragraph 7.1(a)(6)) over five (5) years,

(c) annual installments (calculated as set forth at paragraph 7.1(a)(6) over ten (10) years, or

(d) annual installments (calculated as set forth at paragraph 7.1(a)(6)) over fifteen (15) years.

If no election is made by the alternate payee within sixty (60) days following the date on which the domestic relations order is determined to be a QDRO, the alternate payee's benefit will be paid in a lump sum in accordance with the provisions of this Section 7.6.

ARTICLE VIII.
ADMINISTRATION

8.1 Committee.

The Committee shall administer the Plan in accordance with this Article.

8.2 Administrator.

The Administrator, unless restricted by the Committee, shall exercise the powers under Sections 8.4 and 8.5 except when the exercise of such authority would materially affect the cost of the Plan to the Company or materially increase benefits to Participants.

8.3 Committee Action.

The Committee shall act at meetings by affirmative vote of a majority of the members of the Committee present at a meeting at which a quorum is present. Any action permitted to be taken at a meeting may be taken without a meeting if, prior to such action, a written consent to the action is signed by all members of the Committee and such written consent is filed with the minutes of the proceedings of the Committee. A member of the Committee shall not vote or act upon any matter which relates solely to himself or herself as a Participant. The chairman or any other member or members of the Committee designated by the chairman may execute any certificate or other written direction on behalf of the Committee.

8.4 Powers and Duties of the Committee.

The Committee, on behalf of the Participants and their Beneficiaries, shall enforce the Plan in accordance with its terms and shall have all powers necessary to accomplish its purposes as set forth herein, including, but not by way of limitation, the following:

(a) To select the Measurement Funds in accordance with Section 4.1 hereof;

(b) To conclusively construe and interpret the terms and provisions of the Plan and to remedy any inconsistencies or ambiguities hereunder;

(c) To select employees eligible to participate in the Plan;

(d) To compute and certify to the amount and kind of benefits payable to Participants and their Beneficiaries;

(e) To maintain all records that may be necessary for the administration of the Plan;

(f) To provide for the disclosure of all information and the filing or provision of all reports and statements to Participants, Beneficiaries or governmental agencies as shall be required by law;

(g) To make and publish such rules for the regulation and operation of the Plan and procedures for the administration of the Plan as are not inconsistent with the terms hereof;

(h) To appoint a plan administrator or any other agent, and to delegate to them such powers and duties in connection with the administration of the Plan as the Committee may from time to time prescribe; and

(i) To take all actions necessary for the administration of the Plan.

8.5 Construction and Interpretation.

The Committee shall have full discretion to conclusively construe and interpret the terms and provisions of this Plan, which interpretations or construction shall be final and binding on all parties, including but not limited to the Company and any Participant or Beneficiary. The Committee shall administer such terms and provisions in accordance with any and all laws applicable to the Plan. The Committee or the Administrator may provide for different rules, rights and procedures for different Participants or Eligible Individuals and there is no requirement under the Plan that all Participants or Eligible Individuals receive the same benefits, payment rights, election rights or any other benefits or rights, subject to the requirements of applicable law.

8.6 Information.

The Company shall furnish the Committee or the Administrator with such data and information as may be required for it to discharge its duties. Participants and other persons entitled to benefits under the Plan must furnish the Committee or the Administrator such evidence, data or information as the Committee or the Administrator considers necessary or desirable to carry out the terms of the Plan.

8.7 Compensation, Expenses and Indemnity.

(a) The members of the Committee shall serve without compensation for their services hereunder.

(b) The Committee is authorized at the expense of the Company to employ such legal counsel and other advisors as it may deem advisable to assist in the performance of its duties hereunder. Expenses and fees in connection with the administration of the Plan shall be paid by the Company.

(c) To the extent permitted by applicable state law, the Company shall indemnify and save harmless the Committee and each member thereof, the Board of Directors and any delegate of the Committee who is an employee of the Company or any Affiliate and the Administrator against any and all expenses, liabilities and claims, including legal fees to defend against such liabilities and claims arising out of their discharge in good faith of responsibilities under or incident to the Plan, other than expenses and liabilities arising out of willful misconduct. This indemnity shall not preclude such further indemnities as may be available under insurance purchased by the Company or provided by the any bylaw, agreement or otherwise, of the Company as such indemnities are permitted under state law.

8.8 Quarterly Statements.

Under procedures established by the Committee or the Administrator, a Participant shall receive a statement with respect to such Participant’s Accounts on a quarterly basis as of each March 31, June 30, September 30 and December 31.

8.9 Disputes.

(a) Claim.

A person who believes that he is being denied a benefit to which he is entitled under the Plan (hereinafter referred to as "Claimant") may file a written request for such benefit with the Administrator, setting forth his claim. The request must be addressed to the Administrator at Sempra Energy at its then principal place of business.

(b) Claim Decision.

Upon receipt of a claim, the Administrator shall advise the Claimant that a reply shall be forthcoming within ninety (90) days and shall, in fact, deliver such reply within such period. The Administrator may, however, extend the reply period for an additional ninety (90) days for special circumstances.

If the claim is denied in whole or in part, the Administrator shall inform the Claimant in writing, using language calculated to be understood by the Claimant, setting forth: (i) the specified reason or reasons for such denial; (ii) the specific reference to pertinent provisions of this Plan on which such denial is based; (iii) a description of any additional material or information necessary for the Claimant to perfect his claim and an explanation of why such material or such information is necessary; (iv) appropriate information as to the steps to be taken if the Claimant wishes to submit the claim for review; and (v) the time limits for requesting a review under subsection 8.9(c).

(c) Request For Review.

With sixty (60) days after the receipt by the Claimant of the written opinion described above, the Claimant may request in writing a review the determination of the Administrator. Such review shall be completed by the most senior officer of Human Resources of Sempra Energy for Participants who are Managers and by the Committee for Participants who are Executive Officers or Directors. Such request must be addressed to the Secretary of Sempra Energy, at its then principal place of business. The Claimant or his duly authorized representative may, but need not, review the pertinent documents and submit issues and comments in writing for consideration by the most senior officer of Human Resources of Sempra Energy or the Committee, as applicable. If the Claimant does not request a review within such sixty (60) day period, he shall be barred and estopped from challenging the Administrator's determination.

(d) Review of Decision.

Within sixty (60) days after the receipt of a request for review by the most senior officer of Human Resources of Sempra Energy or the Committee, as applicable, after considering all materials presented by the Claimant, the most senior officer of Human Resources of Sempra Energy or the Committee, as applicable, shall inform the Participant in writing, in a manner calculated to be understood by the Claimant, the decision setting forth the specific reasons for the decision contained specific references to the pertinent provisions of this Plan on which the decision is based. If special circumstances require that the sixty (60) day period be extended, the most senior officer of Human Resources of Sempra Energy or the Committee, as applicable, shall so notify the Claimant and shall render the decision as soon as possible, but no later than one hundred and twenty (120) days after receipt of the request for review.

ARTICLE IX.
MISCELLANEOUS

9.1 Unsecured General Creditor.

Participants and their Beneficiaries, heirs, successors, and assigns shall have no legal or equitable rights, claims, or interest in any specific property or assets of the Company. No assets of the Company shall be held in any way as collateral security for the fulfilling of the obligations of the Company under this Plan. Any and all of the Company's assets shall be, and remain, the general unpledged, unrestricted assets of the Company. The Company's obligation under the Plan shall be merely that of an unfunded and unsecured promise of the Company to pay money in the future, and the rights of a Participant or Beneficiary shall be no greater than those of an unsecured general creditor of the Company. It is the intention of the Company that this Plan be unfunded for purposes of the Code and Title I of ERISA.

9.2 Restriction Against Assignment.

(a) The Company shall pay all amounts payable hereunder only to the person or persons designated by the Plan and not to any other person or entity. No right, title or interest in the Plan or in any account may be sold, pledged, assigned or transferred in any manner other than by will or the laws of descent and distribution. No right, title or interest in the Plan or in any Account shall be liable for the debts, contracts or engagements of the Participant or his successors in interest or shall be subject to disposition by transfer, alienation, anticipation, pledge, encumbrance, assignment or any other means whether such disposition be voluntary or involuntary or by operation of law by judgment, levy, attachment, garnishment or any other legal or equitable proceedings (including bankruptcy), and any attempted disposition thereof shall be null and void and of no effect, except to the extent that such disposition is permitted by the preceding sentence.

(b) Notwithstanding the provisions of subsection 9.2(a), a Participant's interest in his Account may be transferred by the Participant pursuant to a QDRO.

9.3 Amendment, Modification, Suspension or Termination.

(a) Subject to Section 7.3, the Committee may amend, modify, suspend or terminate the Plan in whole or in part, except that no amendment, modification, suspension or termination shall have any retroactive effect to reduce any vested amounts allocated to a Participant's Accounts. In the event of Plan termination, distributions shall continue to be made in accordance with the terms of the Plan, subject to the provisions of subsection 7.3(a).

(b) Notwithstanding anything to the contrary in the Plan, if and to the extent Sempra Energy shall determine that the terms of the Plan may result in the failure of the Plan, or amounts deferred by or for any Participant under the Plan, to comply with the requirements of Section 409A of the Code, Sempra Energy shall have authority to take such action to amend, modify, cancel or terminate the Plan or distribute any or all of the amounts deferred by or for a Participant, as it deems necessary or advisable, including without limitation:

(1) Any amendment or modification of the Plan to conform the Plan to the requirements of Section 409A of the Code (including, without limitation, any amendment or modification of the terms of any applicable to any Participant's Accounts regarding the timing or form of payment).

(2) Any cancellation or termination of any unvested interest in a Participant's Accounts without any payment to the Participant.

(3) Any cancellation or termination of any vested interest in any Participant's Accounts, with immediate payment to the Participant of the amount otherwise payable to such Participant.

Any such amendment, modification, cancellation, or termination of the Plan may adversely affect the rights of a Participant without the Participant's consent.

9.4 Designation of Beneficiary.

(a) Each Participant shall have the right to designate, revoke and redesignate Beneficiaries hereunder and to direct payment of his Distributable Amount to such Beneficiaries upon his death.

(b) Designation, revocation and redesignation of Beneficiaries must be made in writing in accordance with the procedures established by the Committee or the Administrator and shall be effective upon delivery to the Committee or the Administrator.

(c) If there is no Beneficiary designation in effect, or if no designated beneficiary survives the Participant, then the Participant's spouse shall be the Beneficiary; provided, however, that if there is no surviving spouse, the duly appointed and currently acting personal representative of the Participant's estate (which shall include either the Participant's probate estate or living trust) shall be the Beneficiary.

(d) After the Participant's death, any Beneficiary (other than the Participant's estate) who is to receive installment payments may designate a secondary beneficiary to receive amounts due under this Plan to the Beneficiary in the event of the Beneficiary's death prior to receiving full payment from the Plan. If no secondary beneficiary is designated, it shall be the Beneficiary's estate.

9.5 Insurance.

(a) As a condition of participation in this Plan, each Participant shall, if requested by the Committee, the Administrator, or the Company, undergo such examination and provide such information as may be required by the Company with respect to any insurance contracts on the Participant's life and shall authorize the Company to purchase life insurance on his life, payable to the Company

(b) If the Company maintains an insurance policy on a Participant's life to fund benefits under the Plan and such insurance policy is invalidated because (i) the Participant commits suicide during the two (2) year period beginning on the first day of the first Plan Year of such Participant's participation in the Plan or because (ii) the Participant makes any material misstatement of information or nondisclosure of medical history, then, to the extent determined by the Committee or the Administrator in its sole discretion, the only benefits that shall be payable hereunder to such Participant or his Beneficiary are the payment of the amount of deferrals of Compensation then credited to the Participant's Accounts but without any interest including interest theretofore credited under this Plan.

9.6 Governing Law.

Subject to ERISA, this Plan shall be construed, governed and administered in accordance with the laws of the State of California.

9.7 Receipt of Release.

Any payment to a Participant or the Participant's Beneficiary in accordance with the provisions of the Plan shall, to the extent thereof, be in full satisfaction of all claims against the the Committee, the Administrator, and the Company. The Committee or the Administrator may require such Participant or Beneficiary, as a condition precedent to such payment, to execute a receipt and release to such effect prior to the payment date specified under the Plan.

9.8 Payments Subject to Section 162(m) of the Code

To the extent Sempra Energy reasonably anticipates that, if a distribution under the Plan were made as scheduled, Sempra Energy's deduction with respect to such payment would not be permitted due to the application of Section 162(m) of the Code, Sempra Energy, in the discretion of the Committee, may delay the distribution; provided, however, that any such delayed distribution shall be made either (a) during the Participant's first taxable year in which Sempra Energy reasonably anticipates, or should reasonably anticipate, that, if the payment is made during such year, the deduction of such payment will not be barred by application of Section 162(m) of the Code or (b) during the period beginning with the date of the Participant's Separation from Service and ending on the later of (i) the last day of the year in which the Participant's Separation from Service occurs or (ii) within 2-1/2 months following the Participant's Separation from Service; and provided further that, where any scheduled payment to a specific Participant is delayed in Sempra Energy's taxable year accordance with this Section 9.9, the delay in payment will be treated as a subsequent deferral election under Section 409A of the Code unless all scheduled payments to that Participant that could be delayed in accordance with this Section 9.9 are also delayed. Any amounts deferred pursuant to this limitation shall continue to be credited/debited with additional amounts in accordance with Article IV, even if such amount is being paid out in installments. Notwithstanding anything to the contrary in this Plan, this Section 9.9 shall not apply to any distributions made after a Change in Control.

9.9 Payments on Behalf of Persons Under Incapacity.

In the event that any amount becomes payable under the Plan to a person who, in the sole judgment of the Committee or the Administrator, is considered by reason of physical or mental condition to be unable to give a valid receipt therefore, the Committee or the Administrator may direct that such payment be made to any person found by the Committee or the Administrator, in its sole judgment, to have assumed the care of such person. Any payment made pursuant to such termination shall constitute a full release and discharge of the Committee, the Administrator, and the Company.

9.10 Limitation of Rights

Neither the establishment of the Plan nor any modification thereof, nor the creating of any fund or account, nor the payment of any benefits shall be construed as giving to any Participant or other person any legal or equitable right against the Company except as provided in the Plan. In no event shall the terms of employment of, or membership on the Board by, any Participant be modified or in any be effected by the provisions of the Plan.

9.11 Exempt ERISA Plan

The Plan is intended to be an unfunded plan maintained primarily to provide deferred compensation benefits for directors and a select group of management or highly compensated employees within the meaning of Sections 201, 301 and 401 of ERISA and therefore to be exempt from Parts 2, 3 and 4 of Title I of ERISA.

9.12 Notice

Any notice or filing required or permitted to be given to the Committee or the Administrator under the Plan shall be sufficient if in writing and hand delivered, or sent by registered or certified mail, to the principal office of Sempra Energy, directed, in the case of the Committee, to the attention of the General Counsel and Secretary of Sempra Energy and in the case of the Administrator, to the Administrator. Such notice shall be deemed given as of the date of delivery or, if delivery is made by mail, as of the date shown on the postmark on the receipt for registration or certification.

9.13 Errors and Misstatements

In the event of any misstatement or omission of fact by a Participant to the Committee or the Administrator or any clerical error resulting in payment of benefits in an incorrect amount, the Committee or the Administrator, as applicable, shall promptly cause the amount of future payments to be corrected upon discovery of the facts and shall pay or, if applicable, cause the Plan to pay, the Participant or any other person entitled to payment under the Plan any underpayment in a lump sum or to recoup any overpayment from future payments to the Participant or any other person entitled to payment under the Plan in such amounts as the Committee or the Administrator shall direct or to proceed against the Participant or any other person entitled to payment under the Plan for recovery of any such overpayment.

9.14 Pronouns and Plurality

The masculine pronoun shall include the feminine pronoun, and the singular the plural where the context so indicates.

9.15 Severability

In the event that any provision of the Plan shall be declared unenforceable or invalid for any reason, such unenforceability or invalidity shall not affect the remaining provisions of the Plan but shall be fully severable, and the Plan shall be construed and enforced as if such unenforceable or invalid provision had never been included herein.

9.16 Status

The establishment and maintenance of, or allocations and credits to, the Accounts of any Participant shall not vest in any Participant any right, title or interest in and to any Plan assets or benefits except at the time or times and upon the terms and conditions and to the extent expressly set forth in the Plan.

9.17 Headings.

Headings and subheadings in this Plan are inserted for convenience of reference only and are not to be considered in the construction of the provisions hereof.

ARTICLE X.

EMPLOYEES OF SEMPRA ENERGY TRADING CORPORATION AND SEMPRA ENERGY SOLUTIONS LLC

This Article X includes special provisions relating to the benefits of the Participants in the Plan who are employed by Sempra Energy Trading Corporation ("SET") and Sempra Energy Solutions LLC ("SES").

(a) Background. Certain SET and SES employees are Participants in this Plan.

On July 9, 2007, Sempra Energy, Sempra Global, Sempra Energy Trading International, B.V. ("SETI") and The Royal Bank of Scotland plc ("RBS") entered into the Master Formation and Equity Interest Purchase Agreement, dated as of July 9, 2007 (the "Master Formation Agreement"), which provides for the formation of a partnership, RBS Sempra Commodities LLP ("RBS Sempra Commodities"), to purchase and operate Sempra Energy's commodity-marketing businesses. Pursuant to a Master Formation Agreement, RBS Sempra Commodities will be formed as a United Kingdom limited liability partnership and RBS Sempra Commodities will purchase Sempra Energy's commodity-marketing subsidiaries.

Prior to the Closing, SET will be converted into a limited liability company ("SET LLC"). Following such conversion, SET employees will be employed by SET LLC. Prior to the Closing, SES will become a wholly-owned subsidiary of SET LLC.

Also, prior to the Closing, Sempra Energy will own, directly or indirectly through wholly-owned subsidiaries, 100% of the membership interests in SET LLC and SES. Prior to the Closing, SET LLC and SES will be disregarded entities for federal income tax purposes.

Effective as of the Closing, RBS Sempra Commodities will purchase 100% of the membership interests in SET LLC.

As provided in the Master Formation Agreement, an employee of SET LLC who is actively at work on the Closing Date will continue to be employed by SET LLC immediately after the Closing Date, and an employee of SES who is actively at work on the Closing Date will continue to be employed by SES (each such employee is referred to as a Transferred Employee).

Also, as provided in the Master Formation Agreement, with respect to an employee of SET LLC or SES who is not actively at work on the Closing Date because such employee is on approved short-term disability or long-term disability leave in accordance with the Sempra Plans (such employee is referred to as an Inactive Employee), if such Inactive Employee returns to active work at the conclusion of such leave, and in any case within six (6) months following the Closing Date (or such longer period as is required by applicable law), such Inactive Employee shall become a Transferred Employee as of the date of such person's return to active employment with the SET LLC or SES (such date is referred to as the Transfer Date).

Effective as of the Closing, SET LLC will be a wholly-owned subsidiary of RBS Sempra Commodities, SES will be an indirect, wholly-owned subsidiary of RBS Commodities, Sempra Global and SETI will be partners in RBS Sempra Commodities, and Sempra Energy will own, indirectly through wholly-owned subsidiaries, at least a 50% profits interest in RBS Sempra Commodities.

(b) Separation from Service

(1) Effective as of the Closing, RBS Sempra Commodities will be a member of a group of trades or businesses (whether or not incorporated) under common control for purposes of Section 414(c) of the Code and Treasury Regulation Section 1.414(c)-2, as determined under Section 409A of the Code, that includes Sempra Energy and its wholly-owned subsidiaries. Consequently, effective as of the Closing, RBS Sempra Commodities will be included in the "service recipient" that includes Sempra Energy and its wholly-owned subsidiaries, as defined under Section 409A of the Code.

(2) A Participant who is an employee of SET LLC or SES, and who is a Transferred Employee effective as of the Closing Date, will not have a Separation from Service solely as a result of the purchase of the membership interests of SET LLC by RBS Sempra Commodities effective as of the Closing.

(3) A Participant who is an employee of SET LLC or SES, who is an Inactive Employee, and who becomes a Transferred Employee effective on a Transfer Date after the Closing Date, will not have a Separation from Service solely as a result of the purchase of the membership interests of SET LLC by RBS Sempra Commodities or becoming a Transferred Employee on a Transfer Date after the Closing Date.

(4) For purposes of the Plan, a participant in the Plan who is an employee of SET LLC or SES, and who is or becomes a Transferred Employee, will have a Separation from Service on or after the Closing Date (or the Transfer Date, if applicable), as determined under subsection 1.2(rr) and Section 409A of the Code.

(c) Certain Defined Terms.

For purposes of this Article X, the terms "Closing," "Closing Date," "Inactive Employee," "Sempra Plans," "Transferred Employees" and "Transfer Date" shall have the meanings ascribed to such terms under the Master Formation Agreement.

ARTICLE XI.

SECTION 409A OF THE CODE

Anything in this Plan to the contrary notwithstanding, it is intended that any amounts payable under this Plan shall either be exempt from or comply with Section 409A of the Code so as not to subject any Participant to payment of any additional tax, penalty or interest imposed under Section 409A of the Code. The provisions of this Plan shall be construed and interpreted to avoid the imputation of any such additional tax, penalty or interest under Section 409A of the Code yet preserve (to the nearest extent reasonably possible) the intended benefit payable to Participant. In no event shall the Company guarantee the tax treatment of participation in the Plan or any benefit provided hereunder. Notwithstanding any other provision of the Plan, in the event any of the amounts deferred or payable under the Plan are grandfathered for purposes of Section 409A of the Code, such amounts shall be subject to the terms and conditions "that applied to such amounts prior to the effective date of Section 409A of the Code.

Executed at San Diego, California this ___ day of _____, 2016.

SEMPRA ENERGY

By: _____

Title: Senior Vice President and
Chief Human Resources and
Administrative Officer

Date: _____, 2016

THE SEMPRA ENERGY
DEFERRED COMPENSATION AND EXCESS SAVINGS PLAN

(As Amended and Restated Effective as of November 10, 2016)

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Sempra Energy, a California corporation ("Sempra Energy"), and its direct and indirect subsidiaries previously maintained the Sempra Energy Deferred Compensation Plan for Directors, the Sempra Energy Executive Deferred Compensation Plan, the Sempra Energy Deferred Compensation Plan, the Sempra Energy Excess Savings Plan, the Pacific Enterprises Executive Deferred Compensation Plan, the Pacific Enterprises Deferred Compensation Plan for Directors, the Pacific Enterprises Deferred Compensation Plan, the San Diego Gas & Electric Co. deferred compensation agreements and the Enova deferred compensation agreements to provide supplemental retirement income benefits for certain directors and for a select group of management and highly compensated employees. Effective as of January 1, 2000, these plans and agreements were merged into the form of the Sempra Energy Deferred Compensation and Excess Savings Plan (the "Plan") which was designed to provide supplemental retirement income benefits for certain directors and for a select group of management and highly compensated employees through deferrals of salary and incentive compensation and Company matching contributions. The Plan was also designed to provide for benefits that could not be provided under the Sempra Energy Savings Plan due to the limitations of Code Sections 401(a)(17), 402(g) and 415.

Effective as of January 1, 2005, Sempra Energy established the Sempra Energy 2005 Deferred Compensation Plan (now known as The Sempra Energy Employee and Director Savings Plan. Effective as of December 31, 2004, the Plan was frozen as to participation and contributions and all amounts deferred under the Plan as of December 31, 2004 are intended to be "grandfathered" under Section 409A of the Code (as defined herein). No person became a participant under the Plan and no amounts of compensation were deferred under the Plan after December 31, 2004, no deferral elections were made, or given effect for any period after, December 31, 2004, and any references to deferrals of compensation or other amounts shall be inoperative after December 31, 2004; provided, however, that further deferrals made in accordance with the terms and conditions of the Plan with respect to amounts deferred on or prior to December 31, 2004 are not affected by the cessation of deferrals of compensation after December 31, 2004.

The Plan is hereby amended and restated in the form set forth herein, effective as of November 10, 2016, to make clarifying and conforming changes. None of the changes included in this amendment and restatement are intended to cause any amounts deferred hereunder to cease to qualify as "grandfathered" amounts subject to Section 409A of the Code and the Plan shall continue to be interpreted and administered in all respects as a "grandfathered" plan for purposes of Section 409A of the Code.

ARTICLE I.

DEFINITIONS

Whenever the following words and phrases are used in this Plan, with the first letter capitalized, they shall have the meanings specified below.

(a) "**Account**" or "**Accounts**" shall mean a Participant's Deferral Account, 401(k) Excess Account, Company Matching Account and/or Transferred Account.

(b) **"Administrator"** shall mean the individual(s) designated by the Committee (who need not be a member of the Committee) to handle the day-to-day Plan administration. If the Committee does not make such a designation, the Administrator shall be the most senior officer of the Sempra Energy Human Resources Department.

(c) "**Affiliate**" has the meaning ascribed to such term in Rule 12b-2 promulgated under the Exchange Act.

(d) "**Base Salary**" shall mean a Participant's annual base salary, excluding bonus, incentive and all other remuneration for services rendered to the Company, prior to reduction for any salary contributions to a plan established pursuant to Section 125 of the Code or qualified pursuant to Section 401(k) of the Code.

(e) "**Beneficial Owner**" has the meaning set forth in Rule 13d-3 under the Exchange Act.

(f) "**Beneficiary**" or "**Beneficiaries**" shall mean the person or persons, including a trustee, personal representative or other fiduciary, last designated in writing by a Participant to receive the benefits specified hereunder in the event of the Participant's death in accordance with Section 9.5.

(g) "**Board of Directors**" or "**Board**" shall mean the Board of Directors of Sempra Energy.

(h) "**Bonus**" shall mean the annual incentive award earned by a Participant under the Company's short-term incentive plan and other special payments or awards that may be granted by the Company from time to time.

(i) "**Change in Control**" shall be deemed to have occurred when:

(1) Any Person is or becomes the Beneficial Owner, directly or indirectly, of securities of Sempra Energy representing twenty percent (20%) or more of the combined voting power of Sempra Energy's then outstanding securities; or

(2) The following individuals cease for any reason to constitute a majority of the number of directors then serving: individuals who, on the Effective Date, constitute the Board and any new director (other than a director whose initial assumption of office is in connection with an actual or threatened election contest, including, but not limited to, a consent solicitation, relating to the election of directors of Sempra Energy) whose appointment or election by the Board or nomination for election by Sempra Energy's shareholders was approved or recommended by a vote of at least two-thirds (2/3) of the directors then still in office who either were directors on the date hereof or whose appointment, election or nomination for election was previously so approved or recommended; or

(3) There is consummated a merger or consolidation of Sempra Energy or any direct or indirect subsidiary of Sempra Energy with any other corporation, other than (A) a merger or consolidation which would result in the voting securities of Sempra Energy outstanding immediately prior to such merger or consolidation continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity or any parent thereof), in combination with the ownership of any trustee or other fiduciary holding securities under an employee benefit plan of Sempra Energy or any subsidiary of Sempra Energy, at least sixty percent (60%) of the combined voting power of the securities of Sempra Energy or such surviving entity or any parent thereof outstanding immediately after such merger or consolidation, or (B) a merger or consolidation effected to implement a recapitalization of Sempra Energy (or similar transaction) in which no Person is or becomes the Beneficial Owner, directly

or indirectly, of securities of Sempra Energy (not including in the securities beneficially owned by such Person any securities acquired directly from Sempra Energy or its affiliates other than in connection with the acquisition by Sempra Energy or its affiliates of a business) representing twenty percent (20%) or more of the combined voting power of Sempra Energy's then outstanding securities; or

(4) The shareholders of Sempra Energy approve a plan of complete liquidation or dissolution of Sempra Energy or there is consummated an agreement for the sale or disposition by Sempra Energy of all or substantially all of Sempra Energy's assets, other than a sale or disposition by Sempra Energy of all or substantially all of Sempra Energy's assets to an entity, at least sixty percent (60%) of the combined voting power of the voting securities of which are owned by shareholders of Sempra Energy in substantially the same proportions as their ownership of Sempra Energy immediately prior to such sale.

(j) "**Code**" shall mean the Internal Revenue Code of 1986, as amended.

(k) "**Committee**" shall mean the compensation committee of the Board of Directors.

(l) "**Company**" shall mean Sempra Energy and any successor corporations. Company shall also include each corporation which is a member of a controlled group of corporations (within the meaning of Section 414(b) of the Code) of which Sempra Energy is a component member, if the Board provides that such corporation shall participate in the Plan and such corporation's governing board of directors adopts this Plan.

(m) "**Company Matching Account**" shall mean the bookkeeping account maintained by the Company for each Participant that is credited with an amount equal to the Company Matching Contribution, if any, debited by amounts equal to all distributions to and withdrawals made by the Participant and/or his Beneficiary and adjusted for investment earnings and losses pursuant to Article V. The Company Matching Account may be further subdivided into sub-accounts, one representing the Company Matching Contribution, if any, related to any deferral of Compensation, and a second representing the Company Matching Contribution, if any, related to any 401(k) Excess contributed to the Plan.

(n) "**Company Matching Contributions**" shall mean the employer matching contribution made to the Plan on behalf of Participants who make deferrals under Article III.

(o) "**Compensation**" shall mean Base Salary, Bonus and Dividend Equivalents that the Participant who is an employee is entitled to receive for services rendered to the Company. In addition, for any Participant who is an Executive Officer, Compensation includes (i) SERP Lump Sum and (ii) Severance Payments. Compensation shall mean retainer payments and/or meeting and other fees, received from the Company for services performed by any Participant as a Director. Compensation earned for periods after December 31, 2004 shall not be taken into account under the Plan.

(p) "**Deferral Account**" shall mean the bookkeeping account maintained by the Company for each Participant that is credited with amounts equal to the portion of the Participant's Compensation that he elects to defer pursuant to Section 3.1, debited by amounts equal to all distributions to and withdrawals made by the Participant and/or his Beneficiary and adjusted for investment earnings and losses pursuant to Article V. The Deferral Account may be further subdivided into subaccounts as determined by the Committee or the Administrator.

(q) "**Deferral Election Form**" shall mean the form designated by the Committee or the Administrator for purposes of making deferrals under Section 3.1.

(r) "**Director**" shall mean an individual who is a non-employee member of the Board.

(s) "**Disability**" shall mean a "disability" as defined in the Company's long-term disability plan, as then in effect.

(t) "**Distributable Amount**" shall mean the sum of the vested balance of a Participant's Deferral Account, 401(k) Excess Account, Company Matching Account and Transferred Account.

(u) "**Dividend Equivalent**" shall mean the phantom dividends relating to post-July 1, 1998 stock option grants under the 1998 Sempra Energy Long-Term Incentive Plan which are eligible for deferral.

(v) "**Early Distribution**" shall mean an election by a Participant in accordance with Section 7.2 to receive a withdrawal of amounts from his or her Deferral Account, Transferred Account, Company Matching Account and 401(k) Excess Account prior to the time in which such Participant would otherwise be entitled to such amounts.

(w) "**Effective Date**" shall mean January 1, 2000.

(x) "**Election Period**" shall mean the period designated by the Committee or the Administrator; provided, however, that such period shall be no less than ten (10) business days.

(y) "**Eligible Individual**" shall mean those individuals selected by the Committee from (i) those employees of the Company who either (A) are Executive Officers or (B) have Base Salary for a calendar year that is at least $120,000, as adjusted by the Committee from time to time and (ii) those Directors who are not employees of the Company. The Committee may, in its sole discretion, select such other individuals to participate in the Plan who do not otherwise meet the foregoing criteria. No person shall be an Eligible Individual for periods after December 31, 2004.

(z) "**ERISA**" shall mean the Employee Retirement Income Security Act of 1974, as amended.

(aa) "**Exchange Act**" shall mean the Securities Exchange Act of 1934, as amended, and the applicable rules and regulations thereunder.

(bb) "**Executive Officer**" shall mean an employee of the Company who was a Participant in the Plan as an Executive Officer as of December 31, 2004.

(cc) "**401(k) Excess Account**" shall mean the bookkeeping account maintained by the Company for each Participant that is credited with amounts equal to the Participant's 401(k) Excess that he elects to defer pursuant to Section 3.1, debited by amounts equal to all distributions to and withdrawals made by the Participant and/or his Beneficiary and adjusted for investment earnings and losses pursuant to Article V.

(dd) "**401(k) Excess**" shall mean the amount, if any, which a Participant may not contribute to the applicable 401(k) Plan by reason of Code Section 401(a)(17) or 415 and the regulations issued

thereunder, or which may not be contributed to the applicable 401(k) Plan by reason of the limitations set forth in Code Section 402(g).

(ee) "**401(k) Plan**" shall mean the Sempra Energy Savings Plan maintained by the Company under Code Section 401(k), as in effect from time to time or as applicable for any Participant, a plan maintained by a direct or indirect subsidiary of the Company under Code Section 401(k).

(ff) "**Manager**" shall mean an employee of the Company who was a Participant in the Plan as a Manager as of December 31, 2004.

(gg) "**Measurement Fund**" shall mean one or more of the investment funds selected by the Committee pursuant to Section 4.1.

(hh) **Moody's Plus Rate**" shall mean the Moody's Rate (as defined below) plus the greater of (i) 10% of the Moody's Corporate Bond Yield Average - Monthly Average Corporates as published by Moody's Investors Service, Inc. (or any successor) or (ii) one percentage point per annum. The Moody's Rate for the month of June means the average of the daily Moody's Corporate Bond Yield Average - Monthly Average Corporates for the month of June.

(ii) "**Participant**" shall mean any Eligible Individual who became a Participant in accordance with Article II and who has not received a complete distribution of the amounts credited to his Account.

(jj) "**Payroll Date**" shall mean, with respect to any Participant, the date on which he would otherwise be paid Compensation.

(kk) "**Payment Date**" shall mean (1) the first business day of the month which is at least thirty (30) days after the date of the Participant's Termination or Retirement, or (2) if elected, at least one (1) year prior to the Participant's Termination or Retirement, the first business day of January of a designated year which is no later than the first business day of January of the fifth year following the year in which the Participant has a Termination or Retirement. The Scheduled Withdrawal Date elected in accordance with the provisions of Section 7.1(b) shall also be a "Payment Date".

(ll) "**Person**" means any person, entity or "group" within the meaning of Section 13(d)(3) or Section 14(d)(2) of the Exchange Act, except that such term shall not include (i) Sempra Energy or any of its Affiliates, (ii) a trustee or other fiduciary holding securities under an employee benefit plan of Sempra Energy or any of its Affiliates, (iii) an underwriter temporarily holding securities pursuant to an offering of such securities, (iv) a corporation owned, directly or indirectly, by the shareholders of Sempra Energy in substantially the same proportions as their ownership of stock of Sempra Energy, or (v) a person or group as used in Rule 13d-1(b) under the Exchange Act.

(mm) "**Plan**" shall mean The Sempra Energy Deferred Compensation and Excess Savings Plan set forth herein, as amended from time to time.

(nn) "**Plan Year**" shall mean the twelve (12) consecutive month period beginning on each January 1 and ending on each December 31.

(oo) "**Prior Plans**" shall mean the Sempra Energy Deferred Compensation Plan for Directors, the Sempra Energy Executive Deferred Compensation Plan, the Sempra Energy Deferred Compensation Plan, the Sempra Energy Excess Savings Plan, the Pacific Enterprises Executive Deferred Compensation

Plan, the Pacific Enterprises Deferred Compensation Plan for Directors, the Pacific Enterprises Deferred Compensation Plan, the San Diego Gas & Electric Co. deferred compensation agreements and the Enova deferred compensation agreements designed to provide supplemental retirement income benefits for any director or select group of management and highly compensated employees of the Company or its direct and indirect subsidiaries.

(pp) "**Prior Rate**" shall mean the rate of investment return established under the applicable Prior Plan, subject to the terms of such Prior Plan.

(qq) **"QDRO"** shall mean a domestic relations order that constitutes a "qualified domestic relations order" within the meaning of the Code or ERISA.

(rr) "**Retirement**" shall mean, for a Participant who is an employee of the Company, a Participant's voluntary retirement from employment with the Company on or after age 55 and five (5) years of employment with the Company in accordance with the Company's retirement policies as then in effect. Retirement shall mean, for a Participant who is a Director, ceasing to be a Director for any reason other than for death or Disability. If a Participant is both an employee of the Company and a Director, Retirement shall occur only after he resigns from both positions.

(ss) "**Rule 16b-3**" shall mean that certain Rule 16b-3 under the Exchange Act, as such Rule may be amended from time to time.

(tt) "**Scheduled Withdrawal Date**" shall be the day in January in the year elected by the Participant for an in-service withdrawal of all amounts of Compensation or 401(k) Excess deferred in a given Plan Year, but excluding earnings and losses attributable thereto, as set forth on the election forms for such Plan Year. If the day elected by the Participant is not a business day, the Scheduled Withdrawal Date shall be deemed to be the next following business day.

(uu) "**Sempra Energy Stock Fund**" shall mean the Measurement Fund in which investment earnings and losses parallel the investment return on the common stock of the Company.

(vv) **"SERP Lump Sum"** shall mean the lump sum retirement benefit that would be payable to an Executive Officer who is a Plan Participant under either the Sempra Energy Supplemental Executive Retirement Plan or the Sempra Energy Excess Cash Balance Plan.

(ww) **"Severance Payment"** shall mean any severance payments payable to a Participant under an executive employment agreement or severance agreement with the Company.

(xx) **"Termination"** shall mean for any Participant who is an employee, ceasing to be an employee of the Company for reasons other than death, Disability or Retirement. For any Participant who is a Director, "Termination" shall mean ceasing to be a Director for any reason, including death, Disability or Retirement. If a Participant is both an employee of the Company and a Director, he shall not have a Termination until he resigns from both positions.

(yy) "**Transferred Account**" shall mean the bookkeeping account maintained by the Company for each Participant that is credited with amounts which were transferred from a Prior Plan, debited by amounts equal to all distributions and withdrawals made to the Participant or his Beneficiary and adjusted for investment earnings and losses pursuant to Article V.

(zz) "**Valuation Date**", with respect to the Measurement Funds that are available under the 401(k) Plan, shall have the same meaning as under the 401(k) Plan. For purposes of the Moody's Plus Rate, "Valuation Date" shall mean the last day of the calendar month. For purposes of the Prior Rate, "Valuation Date" shall have the same meaning it has under the applicable Prior Plan.

ARTICLE II.

PARTICIPATION

An Eligible Individual shall become a Participant in the Plan by (1) electing to make deferrals in accordance with Section 3.1 and (2) filing such other forms as the Committee or the Administrator may reasonably require for participation hereunder. Additionally, in order to defer 401(k) Excess, the Eligible Individual must be making 401(k) contributions to the 401(k) Plan at the rate of no less than 6% of compensation (as defined in the 401(k) Plan) for the year. An Eligible Individual who completes the requirements of the preceding sentences shall commence participation in this Plan as of the first Payroll Date with respect to which Compensation is deferred. No person shall become a Participant in the Plan after December 31, 2004.

ARTICLE III.

CONTRIBUTIONS

3.1 Elections to Defer Compensation and 401(k) Excess

(a) General Rule. Each Participant may defer Compensation and/or 401(k) Excess by filing with the Administrator a Deferral Election Form that conforms to the requirements of this Section 3.1, no later than the last day of the applicable Election Period. The Committee or the Administrator may permit an Eligible Individual who first becomes eligible to participate in the Plan during a Plan Year to have his first Election Period during such Plan Year. An election to defer Compensation must be filed during the Election Period prior to the effective date of such election and shall be effective for Compensation and/or 401(k) Excess earned during periods beginning after the effective date of such election, unless modified or suspended pursuant to Section 3.1(e). Notwithstanding any other provision of this Article III, no election to defer Compensation shall be given effect with respect to periods after December 31, 2004 and any election to defer Compensation under the Plan in effect on December 31, 2004 shall be of no further force and effect after December 31, 2004; provided, however, that this provision does not affect further deferrals made in accordance with the terms and conditions of the Plan with respect to amounts deferred on or prior to December 31, 2004.

(b) Special Rules. Notwithstanding the above, the following restrictions apply to deferrals of certain elements of Compensation for periods prior to December 31, 2004.

(1) Severance. In order to defer Severance Payments, an eligible Participant must file the appropriate Deferral Election Form on or before the effective date of his executive employment agreement or severance agreement, as applicable, that provides for the Severance Payments to the Participant; provided, however, that if such agreement is already in effect as of September 10, 2002, then the Participant must file the Deferral Election Form within the next Election Period following September 10, 2002 in order to defer any Severance Payments that may become payable following such deferral election.

(2) SERP Lump Sum. In order to defer a SERP Lump Sum, an eligible Participant must file the appropriate Deferral Election Form at least twelve months prior to the date the SERP Lump Sum would otherwise be payable to the Participant; provided, however, that a Participant who participates in the SERP on September 10, 2002 must file the Deferral Election Form within the next Election Period following September 10, 2002 in order to defer the SERP Lump Sum that shall or may become payable within twelve months following such deferral election.

(c) Deferral Amounts. The amount of Compensation and/or 401(k) Excess which a Participant may elect to defer is such Compensation and/or 401(k) Excess earned on or after the time at which the Participant elects to defer each Plan Year in accordance with Section 3.1(a) and (b). The applicable limitations for any Participant shall be determined based on his classification by the Committee.

(1) Each Participant who is a Manager shall be permitted to defer (A) from 5% to 50% of Base Salary and (B) from 5% to 100% of his Bonus and Dividend Equivalents.

(2) Each Participant who is an Executive Officer shall be permitted to defer (A) from 10% to 100% of Base Salary and (B) from 10% to 100% of his Bonus, Dividend Equivalents, Severance Payments and SERP Lump Sum.

(3) Each Participant who is a Director shall be permitted to defer from 10% to 100% of his Compensation.

(4) Each Participant who participates in the 401(k) Plan and makes 401(k) contributions at a rate of 6% of compensation (as defined in the 401(k) Plan) per year shall be deemed to make the same election under this Plan that he has made under the applicable 401(k) Plan unless a contrary election is made under the Plan.

Notwithstanding the limitations established above, the total amount deferred by a Participant may be limited in any calendar year, if necessary, to satisfy the Participant’s income and employment tax withholding obligations (including Social Security, unemployment and Medicare), and the Participant’s employee benefit plan contribution requirements, as determined in the sole and absolute discretion of the Committee or the Administrator. If permitted by the Committee, the Participant may make deferrals with respect to any designated portion of his Compensation (such as meeting fees, for example).

(d) Ordering Rule. If a Participant elects to defer both Compensation and 401(k) Excess, the Compensation deferrals shall be deducted from the Participant's compensation and contributed to the Plan before any 401(k) Excess deferrals.

(e) Duration of Deferral Election.

(1) Except as provided in this Section 3.1(e)(1), if permitted by the Administrator, a Participant may modify or suspend his election to defer Compensation and/or 401(k) Excess during a Plan Year only in the event that (A) the Participant has a change in marital status, (B) the Participant has a change in the number of his dependents (as defined under Code Section 152(a)) or (C) the Participant or his spouse has a change in employment status (as determined by the Administrator). Such modification or suspension shall be made by filing such an election during the Election Period immediately prior to the date such modification or suspension is to be effective. Notwithstanding the above, all deferral elections with respect to a SERP Lump Sum and Severance Payments may be modified or suspended at the discretion of the Participant; provided, however, that if any such deferral election is filed by a Participant within the one (1) year period ending on the date of the Participant's Termination or Retirement, other than

a Participant's initial election filed with the Administrator in accordance with Section 3.1(b)(1) or 3.1(b)(4), as applicable, such deferral election shall be of no force and effect; provided, further, that if a Participant has timely filed more than one election at least twelve months prior to the date of the Participant's Termination or Retirement, the most recent such election shall govern with respect to a SERP Lump Sum and Severance Payments, as applicable, and all prior elections shall be superseded and shall be of no force or effect.

(2) A Participant's election to defer all or any portion of his SERP Lump Sum shall automatically become void in the event the Participant dies or becomes disabled while employed by the Company.

(3) A Participant's election to defer 401(k) Excess shall automatically be suspended for the remainder of the Plan Year if the Participant's election under the 401(k) Plan falls below 6% of his compensation (as defined under the 401(k) Plan) per year.

(4) Except as provided in Section 3.1(b), a Participant must file a new election for each subsequent Plan Year during the Election Period immediately prior to the next Plan Year, which election shall be effective on the first day of the next following Plan Year. In the event a Participant fails to timely file an election for the next Plan Year, he should be deemed to have elected not to have deferred any Compensation and/or 401(k) Excess for any relevant period.

(f) Elections. Subject to the limitations of subsection (b), any Eligible Individual who does not elect to defer Compensation and/or 401(k) Excess during his Election Period may subsequently become a Participant. Subject to the limitations of subsection (b), any Eligible Individual who has terminated a prior deferral election may elect to again defer Compensation and/or 401(k) Excess by filing a Deferral Election Form during a subsequent Election Period.

(g) Termination of Participation and/or Deferrals. If the Committee or the Administrator determines in good faith that a Participant no longer qualifies as a Director or a member of a select group of management or highly compensated employees, as membership in such group is determined in accordance with Sections 201(2), 301(a)(3) and 401(a)(1) of ERISA, the Committee or the Administrator shall have the right, in its sole discretion and only for purposes of preserving the Plan's exemption from Title I of ERISA, to (i) terminate any deferral election the Participant has made for the remainder of the Plan Year in which the Participant's membership status changes, (ii) prevent the Participant from making future deferral elections and/or (iii) immediately distribute the balance of the Participant's Accounts and terminate the Participant's participation in the Plan.

3.2 Transfers from Prior Plans.

All amounts credited to this Plan as a result of the merger of the Prior Plans shall be credited to Participants' Transferred Accounts under this Plan. Each Participant is always 100% vested in his Transferred Account at all times. No additional amounts may be contributed to a Participant's Transferred Account other than investment earnings. Any amounts so transferred to a Participant's Transferred Account shall be subject to the terms of this Plan for all purposes, except as provided in Section 4.3 and Section 7.1(a)(7).

3.3 Company Matching Contributions

(a) The Company shall make a Company Matching Contribution on behalf of select Participants who make deferrals under Article III in an amount equal to

(1) the product of (A) the rate of the matching contribution under the 401(k) Plan in which the Participant participates and (B) the sum of the Participant's Base Salary and Bonus,

less

(2) the amount credited to the Participant's matching contribution account under the 401(k) Plan for that Plan Year.

Notwithstanding the above, the Company reserves the right to change the Company Matching Contribution in its sole discretion.

(b) Pursuant to the Committee's or the Administrator's procedures, for each Plan Year each Participant's Company Matching Account shall be credited with an amount described in subsection (a) above, if any.

(c) No Company Matching Contributions shall be made under the Plan for any period after December 31, 2004.

3.4 FICA and Other Taxes.

(a) Annual Deferral Amounts. For each Plan Year in which a Participant who is an employee makes a deferral under Section 3.1, the Company shall withhold from that portion of the Participant's Compensation that is not being deferred, in a manner determined by the Company, the Participant's share of FICA and other employment taxes on such amount. If necessary, the Committee or the Administrator may reduce the Participant's deferrals under Section 3.1 or make deductions from his Deferral Account in order to comply with this Section.

(b) Company Matching Amounts. For each Plan Year in which a Participant is credited with a contribution to his or her Company Matching Account under Section 3.3, the Company shall withhold from the Participant's Compensation that is not deferred, in a manner determined by the Company, the Participant's share of FICA and other employment taxes. If necessary, the Committee or the Administrator may reduce the Participant's Company Matching Account in order to comply with this Section.

ARTICLE IV.

INVESTMENTS

4.1 Measurement Funds.

(a) In the manner designated by the Committee or the Administrator, Participants may elect one or more Measurement Funds to be used to determine the additional amounts to be credited to their Accounts. Although the Participant may designate the available Measurement Funds that will be used to determine additional amounts to be credited to their Accounts, neither the Committee nor the Administrator shall be bound to make actual investments in such Measurement Funds based on the Participant's election. If the Committee designates a substitute Measurement Fund for a Participant (without regard to the Participant's election), the substitute Measurement Fund must provide the Participant with an investment opportunity reasonably comparable to the original Measurement Funds elected by the Participant, as determined by the Committee in its sole discretion. The Committee shall select from time to time, in its sole discretion, the Measurement Funds to be available under the Plan.

(b) No Actual Investment. Notwithstanding any other provision of this Plan that may be interpreted to the contrary, the Measurement Funds are to be used for measurement purposes only, and a Participant's election of any such Measurement Fund, the allocation to his Accounts thereto, the calculation of additional amounts and the crediting or debiting of such amounts to a Participant's Accounts shall not be considered or construed in any manner as an actual investment of his Accounts in any such Measurement Fund. In the event that the Committee, the Administrator, or the trustee, as applicable, in its own discretion, decides to invest funds in any or all of the Measurement Funds, no Participant shall have any rights in or to such investments themselves. Without limiting the foregoing, a Participant's Accounts shall at all times be a bookkeeping entry only and shall not represent any investment made on his or her behalf by the Company. The Participant shall at all times remain an unsecured creditor of the Company.

4.2 Investment Elections.

(a) Executive Officers and Director Participants.

(1) Deferral, 401(k) Excess and Transferred Accounts. Except as provided in Sections 4.2(a)(2) and 4.3, Participants who are either Executive Officers or Directors may designate how their Deferral, 401(k) Excess and Transferred Accounts shall be deemed to be invested under the Plan.

(A) Such Participants may make separate investment elections for (I) their future deferrals of Compensation and 401(k) Excess as well as transfers under Section 3.2 and (II) the existing balances of their Deferral, 401(k) Excess and Transferred Accounts.

(B) Such Participants may make and change their investment elections by choosing from the Measurement Funds designated by the Committee in accordance with the procedures established by the Committee or the Administrator.

(C) Except as otherwise designated by the Committee, the available Measurement Funds under this Section 4.2(a)(1) shall be the investment funds under the 401(k) Plan (excluding the Stable Value Fund and any brokerage account option) and the Sempra Energy Stock Fund. Additionally, for the Deferral Account (and the Company Matching Contributions attributable thereto) only, there shall also be a Measurement Fund based on the Moody's Plus Rate. For the avoidance of doubt, the 401(k) Excess Account (and related Company Matching Contributions) may not be invested in the Measurement Fund based on the Moody's Plus Rate.

(D) If a Participant fails to elect a Measurement Fund under this Section, he shall be deemed to have elected the default Measurement Fund (as designated by the Committee) for all of his Accounts.

(2) Company Matching Account and Certain Deferral Subaccounts. Participants may not direct the investment of their Company Matching Account, which amounts shall be deemed to be invested in the Sempra Energy Stock Fund, except as provided by the Committee or the Administrator.

(b) Manager Participants.

(1) 401(k) Excess Accounts. Except as provided in Section 4.3, Participants who are Managers may designate how their 401(k) Excess Accounts shall be deemed to be invested under the Plan.

(A) Manager Participants may make separate investment elections for (I) their future deferrals of 401(k) Excess and (II) the existing balances of their 401(k) Excess Accounts.

(B) Participants may make and change their investment elections by choosing from the Measurement Funds designated by the Committee in accordance with the procedures established by the Committee or the Administrator.

(C) Except as otherwise designated by the Committee, the available Measurement Funds under this Section 4.2(b)(1) for the 401(k) Excess Accounts shall be the investment funds under the 401(k) Plan (excluding the Stable Value Fund and any brokerage account option) and the Sempra Energy Stock Fund.

(D) If a Participant fails to elect a Measurement Fund under this Section, he shall be deemed to have elected the default Measurement Fund (as designated by the Committee) for his 401(k) Excess Account.

(2) Deferral Account. Any Participant who is a Manager shall have his Deferral Account invested in the Measurement Fund based on the Moody's Plus Rate, except as otherwise permitted by the Committee or the Administrator.

(3) Company Matching Account. Participants may not direct the investment of their Company Matching Account which shall be invested in the Sempra Energy Stock Fund, except as provided by the Committee or the Administrator.

(c) Participants who have had a Termination but not yet commenced distributions under Article VII or Participants or Beneficiaries who are receiving installment payments may continue to make investment elections pursuant to subsection (a) and (b) above, as applicable, except as otherwise determined by the Committee or the Administrator.

4.3 Investment of Transferred Accounts.

(a) Each Participant's Transferred Account balance shall be treated as invested in a Measurement Fund with a rate of investment return based solely on the Prior Rate, except as provided in subsection (b).

(b) In accordance with the procedures established by the Committee or the Administrator, once each calendar quarter (or as otherwise permitted by the Committee or the Administrator) a Participant may elect to transfer a designated percentage of the balance of his Transferred Account to new Measurement Funds, as provided in Section 4.2. As of the effective date of such an election, such designated percentage of the balance of his Transferred Account may be allocated to the Participant's other Accounts in accordance with the type of contributions with which it is credited (i.e., pre-tax deferrals shall be credited to the Participant's Deferral Account). Such portion of the Transferred Account shall cease to be credited with investment returns at the Prior Rate and may not be subsequently invested at the Prior Rate.

4.4 Compliance with Section 16 of the Exchange Act.

(a) Any Participant or Beneficiary who is subject to Section 16 of the Exchange Act shall have his Measurement Fund elections under the Plan subject to the requirements of the Exchange Act, as interpreted by the Committee. Any such Participant or Beneficiary who either (i) transferred amounts from another available Measurement Fund under the Plan into the Sempra Energy Stock Fund or (ii)

transferred any amounts from the Sempra Energy Stock Fund to another available Measurement Fund under the Plan may not make an election with the opposite effect under this Plan or any other Company-sponsored plan until six months and one (1) day following the original election.

(b) Notwithstanding any other provision of the Plan or any rule, instruction, election form or other form, the Plan and any such rule, instruction or form shall be subject to any additional conditions or limitations set forth in any applicable exemptive rule under Section 16 of the Exchange Act (including any amendment to Rule 16b-3) that are requirements for the application of such exemptive rule. To the extent permitted by applicable law, such Plan provision, rule, instruction or form shall be deemed amended to the extent necessary to conform to such applicable exemptive rule.

ARTICLE V.

ACCOUNTS

5.1 Accounts.

(a) The Committee or the Administrator shall establish and maintain a Deferral Account, 401(k) Excess Account, Transferred Account and Company Matching Account for each Participant under the Plan. Each Participant's Accounts shall be further divided into separate subaccounts ("investment fund subaccounts"), each of which corresponds to a Measurement Fund elected by the Participant pursuant to Section 4.2.

(b) The performance of each elected Measurement Fund (either positive or negative) shall be determined by the Committee or the Administrator, in its reasonable discretion, based on the performance of the Measurement Funds themselves. A Participant's Accounts shall be credited or debited on each Valuation Date based on the performance of each Measurement Fund selected by the Participant, as determined by the Committee or the Administrator in its sole discretion, as though (i) a Participant's Accounts were invested in the Measurement Fund(s) selected by the Participant, in the percentages applicable to such period, as of the close of business on the first business day of such period, at the closing price on such date; (ii) the portion of the Participant's Compensation that was actually deferred pursuant to Section 3.1 during any period were invested in the Measurement Fund(s) selected by the Participant, in the percentages applicable to such period, no later than the close of business on the first business day after the day on which such amounts are actually deferred from the Participant's Compensation, at the closing price on such date; and (iii) any withdrawal or distribution made to a Participant that decreases such Participant's Accounts ceased being invested in the Measurement Fund(s), in the percentages applicable to such period, no earlier than one (1) business day prior to the distribution, at the closing price on such date. The Participant's Company Matching Contribution shall be credited to his Company Matching Account for purposes of this Section in the manner determined by the Committee or the Administrator.

ATICLE VI.

VESTING

Each Participant shall be 100% vested in his Deferral Account, 401(k) Excess Account, Matching Account and Transferred Account at all times.

ARTICLE VII.

DISTRIBUTIONS

7.1 Distribution of Accounts.

(a) Distribution at Termination, Disability or Retirement.

(1) Normal Form. Except as provided in subsection 7.1(a)(2), subsection 7.1(a)(7) or Section 7.4, upon the Termination, Disability or Retirement of the Participant, the Distributable Amount shall be paid to the Participant in substantially equal annual installments over ten (10) years beginning as of the Participant's Payment Date.

(2) Optional Forms. Instead of receiving his Distributable Amount as described at Section 7.1(a)(1), the Participant may elect one of the following optional forms of payment (on the form provided by Company) at the time of his deferral election:

(i) annual installments (calculated as set forth at subsection 7.1(a)(6)) over five (5) years beginning as of the Participant's Payment Date,

(ii) annual installments (calculated as set forth at subsection 7.1(a)(6)) over fifteen (15) years beginning as of the Participant's Payment Date, or

(iii) a lump sum.

A Participant may change his election with respect to the frequency of payment, provided such change in the frequency of payment occurs at least one (1) year prior to the Participant's Termination or Retirement.

(3) Small Accounts. Notwithstanding any provision to the contrary, in the event the Distributable Amount is equal to or less than $25,000, such Distributable Amount shall be distributed to the Participant (or his Beneficiary, as applicable) in a lump sum.

(4) Investment Adjustments. The Participant's Accounts shall continue to be adjusted for investment earnings and losses pursuant to Section 4.2 and Section 4.3 of the Plan until all amounts credited to his Accounts under the Plan have been distributed.

(5) Calculating Payments. All payments made under the Plan shall be determined in accordance with the following:

(i) All installment payments made under the Plan shall be determined in accordance with the annual fractional payment method, calculated as follows: the balance of the Participant's Accounts shall be calculated as of the close of business on the Payment Date. The annual installment shall be calculated by multiplying this balance by a fraction, the numerator of which is one, and the denominator of which is the remaining number of annual payments due the Participant. By way of example, if the Participant elects ten (10) year installments the first payment shall be 1/10 of the balance of his Accounts calculated as described in this definition. The following year, the payment shall be 1/9 of the balance of the Participant's Accounts, calculated as described in this definition. Each annual installment shall be paid on or as soon as practicable after the Payment Date.

(ii) All lump sum payments made under the Plan shall be calculated as of the close of business on the Payment Date. The lump sum shall paid on or as soon as practicable after the Payment Date.

(7) Distribution of Transferred Accounts. Until a Participant so elects, his Transferred Account shall be subject to his most recent form of distribution election in effect under the applicable Prior Plan. However, if the Participant elects to apply his distribution election in effect under this Plan to the balance of his Transferred Account, then any prior distribution election under the Prior Plan shall automatically be permanently revoked.

(b) Distribution on a Scheduled Withdrawal Date.

(1) In the case of a Participant who has elected a Scheduled Withdrawal Date for a distribution to be made while still in the employ of the Company or while still a Director, such Participant shall receive his or her deferrals of Compensation and 401(k) Excess (but excluding any investment earnings on such amounts) (the "Withdrawal Amount") as shall have been elected by the Participant to be subject to the Scheduled Withdrawal Date. A Participant's Scheduled Withdrawal Date with respect to amounts of Compensation and/or 401(k) Excess deferred in a given Plan Year must be at least three (3) years from the last day of the Plan Year for which such deferrals are made.

(2) The Withdrawal Amount shall be paid in a lump sum in cash.

(3) A Participant may extend the Scheduled Withdrawal Date for the Withdrawal Amount for any Plan Year, provided such extension occurs at least one (1) year before the Scheduled Withdrawal Date and is for a period of not less than five (5) years from the Scheduled Withdrawal Date. The Participant shall have the right to modify any Scheduled Withdrawal Date only once, without the consent of the Committee or the Administrator, by submitting a written notice of such modification to the Committee or the Administrator at least one (1) year in advance of the originally elected Scheduled Withdrawal Date. A Participant who has modified a Scheduled Withdrawal Date, may again once further modify the Scheduled Withdrawal Date, but only with the consent of the Committee or the Administrator.

(4) In the event of Participant's Termination, Disability or Retirement prior to a Scheduled Withdrawal Date, the Participant's entire Withdrawal Amount shall be paid in accordance with the Participant's election under Section 7.1(a). In the event of a Participant's death prior to a Scheduled Withdrawal Date, the Participant's entire Withdrawal Amount shall be paid as soon as practicable after the Termination in a lump sum.

(c) Distribution upon Death. In the event a Participant dies before he has begun receiving distributions under Section 7.1(a), his Accounts shall be paid to his Beneficiary in the same manner elected by the Participant. In the event a Participant dies after he has begun receiving distributions under Section 7.1(a) with a remaining balance in his Accounts, the balance shall continue to be paid to his Beneficiary in the same manner. Notwithstanding the above, the Committee or the Administrator may, in its sole discretion, permit the Beneficiary to receive an immediate lump sum payment of the Participant's Accounts reduced by a penalty of 10% of the balance of the Accounts. The penalty amount shall be permanently forfeited and the Company shall have no obligation to the Beneficiary with respect to such forfeited amount.

(d) Other Distribution. Independent of any termination of this Plan, if the Internal Revenue Service makes a final determination that amounts under this Plan are immediately taxable to any

Participant or Beneficiary, the Committee or the Administrator has the discretion to accelerate distributions under the Plan to such Participants or Beneficiaries.

7.2 Early Distributions.

A Participant shall be permitted to elect an Early Distribution from his or her Deferral Account, 401(k) Excess Account and Transferred Account prior to the Payment Date, whether or not he has had a Termination, Disability or Retirement, subject to the following restrictions:

(a) The election to take an Early Distribution shall be made by filing a form provided by and filed with the Committee or the Administrator prior to the end of any calendar month.

(b) The amount of the Early Distribution shall in all cases be an amount not less than $10,000.

(c) The amount described in subsection (b) above shall be paid in a single lump sum in cash as soon as practicable after the end of the calendar month in which the Early Distribution election is made.

(d) If a Participant requests an Early Distribution, 10% of the gross amount to be distributed shall be permanently forfeited and the Company shall have no obligation to the Participant or his Beneficiary with respect to such forfeited amount.

(e) If a Participant receives an Early Distribution the Participant shall be ineligible to contribute deferrals to the Plan for the remainder of the Plan Year and for the next following Plan Year.

7.3 Hardship Distribution.

A Participant shall be permitted to elect a Hardship Distribution of all or a portion of his Accounts under the Plan prior to the Payment Date, subject to the following restrictions:

(a) The election to take a Hardship Distribution shall be made by filing the form provided by the Committee or the Administrator before the date established by the Committee or the Administrator.

(b) The Committee or the Administrator shall have made a determination in its sole discretion that the requested distribution constitutes a Hardship Distribution in accordance with subsection (d).

(c) The amount determined by the Committee or the Administrator as a Hardship Distribution shall be paid in a single lump sum in cash as soon as practicable after the end of the calendar month in which the Hardship Distribution election is made and approved by the Committee or the Administrator.

(d) If a Participant receives a Hardship Distribution, the Participant shall be ineligible to contribute deferrals to the Plan for the balance of the Plan Year and the following Plan Year. “Hardship Distribution” shall mean a severe financial hardship to the Participant resulting from (i) a sudden and unexpected illness or accident of the Participant or of his or her dependent (as defined in Section 152(a) of the Code), (ii) loss of a Participant’s property due to casualty, or (iii) other similar extraordinary and unforeseeable circumstances arising as a result of events beyond the control of the Participant. The circumstances that would constitute an unforeseeable emergency shall depend upon the facts of each case, but, in any case, a Hardship Distribution may not be made to the extent that such hardship is or may be relieved (A) through reimbursement or compensation by insurance or otherwise, (B) by liquidation of the

Participant's assets, to the extent the liquidation of such assets would not itself cause severe financial hardship or (C) by cessation of deferrals under this Plan.

7.4 Effect of a Change in Control.

(a) In the event there is a Change in Control, the person who is the chief executive officer (or, if not so identified, the Company's highest ranking officer) shall name a third-party fiduciary as the sole member of the Committee immediately prior to such Change in Control. The appointed fiduciary, in its sole discretion, may permit immediate distributions. If permitted by the appointed fiduciary, a Participant who has a Termination within 24 months of the effective date of the Change in Control may elect one of the optional forms of distribution as provided in Section 7.1(a)(2).

(b) Upon and after the occurrence of a Change in Control, the Company must (i) pay all reasonable administrative fees and expenses of the appointed fiduciary, (ii) indemnify the appointed fiduciary against any costs, expenses and liabilities including, without limitation, attorney's fees and expenses arising in connection with the appointed fiduciary's duties hereunder, other than with respect to matters resulting from the gross negligence of the appointed fiduciary or its agents or employees and (iii) timely provide the appointed fiduciary with all necessary information related to the Plan, the Participants and Beneficiaries.

(c) Notwithstanding Section 9.4, in the event there is a Change in Control no amendment may be made to this Plan except as approved by the third-party fiduciary. Upon a Change in Control, assets shall be placed in a rabbi trust in an amount which shall equal the full accrued liability under this Plan as determined by an actuarial firm appointed by the Board immediately prior to such Change in Control or in the absence of such appointment, Willis Towers Watson or a successor actuarial firm.

7.5 Inability to Locate Participant.

In the event that the Committee or the Administrator is unable to locate a Participant or Beneficiary within two (2) years following the required Payment Date, the amount allocated to the Participant's Accounts shall be forfeited. If, after such forfeiture, the Participant or Beneficiary later claims such benefit, such benefit shall be reinstated without interest or earnings from the date of forfeiture, subject to applicable escheat laws.

7.6 Distributions Pursuant To QDROs.

Except as otherwise provided by the Committee or the Administrator, distributions to alternate payees pursuant to a QDRO will be made or commence within ninety (90) days of the date on which the domestic relations order is determined to be a QDRO in one of the following forms elected by the alternate payee (including by the terms of the QDRO) in accordance with the terms of the Plan. If no election is made by the alternate payee within sixty (60) days following the date on which the domestic relations order is determined to be a QDRO, the alternate payee's benefit will be paid in a lump sum in accordance with the provisions of this Section 7.6.

ARTICLE VIII.

ADMINISTRATION

8.1 Committee.

The Committee shall administer the Plan in accordance with this Article.

8.2 Administrator.

The Administrator, unless restricted by the Committee, shall exercise the powers under Sections 8.4 and 8.5 except when the exercise of such authority would materially affect the cost of the Plan to the Company or materially increase benefits to Participants.

8.3 Committee Action.

The Committee shall act at meetings by affirmative vote of a majority of the members of the Committee present at a meeting at which a quorum is present. Any action permitted to be taken at a meeting may be taken without a meeting if, prior to such action, a written consent to the action is signed by all members of the Committee and such written consent is filed with the minutes of the proceedings of the Committee. A member of the Committee shall not vote or act upon any matter which relates solely to himself or herself as a Participant. The chairman or any other member or members of the Committee designated by the chairman may execute any certificate or other written direction on behalf of the Committee.

8.4 Powers and Duties of the Committee.

(a) The Committee, on behalf of the Participants and their Beneficiaries, shall enforce the Plan in accordance with its terms and shall have all powers necessary to accomplish its purposes as set forth herein, including, but not by way of limitation, the following:

(1) To select the Measurement Funds in accordance with Section 4.1 hereof;

(2) To conclusively construe and interpret the terms and provisions of the Plan and to remedy any inconsistencies or ambiguities hereunder;

(3) To compute and certify to the amount and kind of benefits payable to Participants and their Beneficiaries;

(4) To maintain all records that may be necessary for the administration of the Plan;

(5) To provide for the disclosure of all information and the filing or provision of all reports and statements to Participants, Beneficiaries or governmental agencies as shall be required by law;

(6) To make and publish such rules for the regulation and operation of the Plan and procedures for the administration of the Plan as are not inconsistent with the terms hereof;

(7) To appoint a plan administrator or any other agent, and to delegate to them such powers and duties in connection with the administration of the Plan as the Committee may from time to time prescribe; and

(8) To take all actions necessary for the administration of the Plan.

8.5 Construction and Interpretation.

The Committee or the Administrator shall have full discretion to conclusively construe and interpret the terms and provisions of this Plan, which interpretations or construction shall be final and binding on all parties, including but not limited to the Company and any Participant or Beneficiary. The Committee or the Administrator shall administer such terms and provisions in accordance with any and all laws applicable to the Plan. The Committee or the Administrator may provide for different rules, rights and procedures for different Participants or Eligible Individuals and there is no requirement under the Plan that all Participants or Eligible Individuals receive the same benefits, payment rights, election rights or any other benefits or rights, subject to the requirements of applicable law.

8.6 Information.

The Company shall furnish the Committee or the Administrator with such data and information as may be required for it to discharge its duties. Participants and other persons entitled to benefits under the Plan must furnish the Committee or the Administrator such evidence, data or information as the Committee or the Administrator considers necessary or desirable to carry out the terms of the Plan.

8.7 Compensation, Expenses and Indemnity.

(a) The members of the Committee and the Administrator shall serve without compensation for their services hereunder.

(b) The Committee or the Administrator is authorized at the expense of the Company to employ such legal counsel and other advisors as it may deem advisable to assist in the performance of its duties hereunder. Expenses and fees in connection with the administration of the Plan shall be paid by the Company.

(c) To the extent permitted by applicable state law, the Company shall indemnify and save harmless the Committee and each member thereof, the Board of Directors and any delegate of the Committee who is an employee of the Company or any Affiliate and the Administrator against any and all expenses, liabilities and claims, including legal fees to defend against such liabilities and claims arising out of their discharge in good faith of responsibilities under or incident to the Plan, other than expenses and liabilities arising out of willful misconduct. This indemnity shall not preclude such further indemnities as may be available under insurance purchased by the Company or provided by any bylaw, agreement or otherwise of the Company, as such indemnities are permitted under state law.

8.8 Quarterly Statements.

Under procedures established by the Committee or the Administrator, a Participant shall receive a statement with respect to such Participant’s Accounts on a quarterly basis as of each March 31, June 30, September 30 and December 31.

8.9 Disputes.

(a) Claim.

A person who believes that he is being denied a benefit to which he is entitled under the Plan (hereinafter referred to as "Claimant") may file a written request for such benefit with the Administrator, setting forth his claim. The request must be addressed to the Administrator at Sempra Energy at its then principal place of business.

(b) Claim Decision.

Upon receipt of a claim, the Administrator shall advise the Claimant that a reply shall be forthcoming within ninety (90) days and shall, in fact, deliver such reply within such period. The Administrator may, however, extend the reply period for an additional ninety (90) days for special circumstances.

If the claim is denied in whole or in part, the Administrator shall inform the Claimant in writing, using language calculated to be understood by the Claimant, setting forth: (i) the specified reason or reasons for such denial; (ii) the specific reference to pertinent provisions of this Plan on which such denial is based; (iii) a description of any additional material or information necessary for the Claimant to perfect his claim and an explanation of why such material or such information is necessary; (iv) appropriate information as to the steps to be taken if the Claimant wishes to submit the claim for review; and (v) the time limits for requesting a review under subsection 8.9(c).

(c) Request For Review.

With sixty (60) days after the receipt by the Claimant of the written opinion described above, the Claimant may request in writing a review the determination of the Administrator. Such review shall be completed by the most senior officer of Human Resources of Sempra Energy for Participants who are Managers and by the Committee for Participants who are Executive Officers or Directors. Such request must be addressed to the Secretary of Sempra Energy, at its then principal place of business. The Claimant or his duly authorized representative may, but need not, review the pertinent documents and submit issues and comments in writing for consideration by the most senior officer of Human Resources of Sempra Energy or the Committee, as applicable. If the Claimant does not request a review within such sixty (60) day period, he shall be barred and estopped from challenging the Administrator's determination.

(d) Review of Decision.

Within sixty (60) days after the receipt of a request for review by the most senior officer of Human Resources of Sempra Energy or the Committee, as applicable, after considering all materials presented by the Claimant, the most senior officer of Human Resources of Sempra Energy or the Committee, as applicable, shall inform the Participant in writing, in a manner calculated to be understood by the Claimant, the decision setting forth the specific reasons for the decision contained specific references to the pertinent provisions of this Plan on which the decision is based. If special circumstances require that the sixty (60) day period be extended, the most senior officer of Human Resources of Sempra Energy or the Committee, as applicable, shall so notify the Claimant and shall render the decision as soon as possible, but no later than one hundred and twenty (120) days after receipt of the request for review.

ARTICLE IX.

MISCELLANEOUS

9.1 Unsecured General Creditor.

Participants and their Beneficiaries, heirs, successors, and assigns shall have no legal or equitable rights, claims, or interest in any specific property or assets of the Company. No assets of the Company shall be held in any way as collateral security for the fulfilling of the obligations of the Company under this Plan. Any and all of the Company's assets shall be, and remain, the general unpledged, unrestricted assets of the Company. The Company's obligation under the Plan shall be merely that of an unfunded and unsecured promise of the Company to pay money in the future, and the rights of the Participants and Beneficiaries shall be no greater than those of unsecured general creditors. It is the intention of the Company that this Plan be unfunded for purposes of the Code and Title I of ERISA.

9.2 Restriction Against Assignment.

(a) The Company shall pay all amounts payable hereunder only to the person or persons designated by the Plan and not to any other person or entity. No right, title or interest in the Plan or in any account may be sold, pledged, assigned or transferred in any manner other than by will or the laws of descent and distribution. No right, title or interest in the Plan or in any Account shall be liable for the debts, contracts or engagements of the Participant or his successors in interest or shall be subject to disposition by transfer, alienation, anticipation, pledge, encumbrance, assignment or any other means whether such disposition be voluntary or involuntary or by operation of law by judgment, levy, attachment, garnishment or any other legal or equitable proceedings (including bankruptcy), and any attempted disposition thereof shall be null and void and of no effect, except to the extent that such disposition is permitted by the preceding sentence.

(b) Notwithstanding the provisions of subsection (a), a Participant's interest in his Account may be transferred by the Participant pursuant to a domestic relations order that constitutes a "qualified domestic relations order" as defined by the Code or Title I of ERISA.

9.3 Withholding.

There shall be deducted from each payment made under the Plan or any other Compensation payable to the Participant (or Beneficiary) all taxes which are required to be withheld by the Company in respect to such payment or this Plan. The Company shall have the right to reduce any payment (or compensation) by the amount of such of cash sufficient to provide the amount of said taxes.

9.4 Amendment, Modification, Suspension or Termination.

Subject to Section 7.4, the Committee may amend, modify, suspend or terminate the Plan in whole or in part, except that no amendment, modification, suspension or termination shall have any retroactive effect to reduce any vested amounts allocated to a Participant's Accounts. In the event of Plan termination, distributions may be accelerated.

9.5 Designation of Beneficiary.

(a) Each Participant shall have the right to designate, revoke and redesignate Beneficiaries hereunder and to direct payment of his Distributable Amount to such Beneficiaries upon his death.

(b) Designation, revocation and redesignation of Beneficiaries must be made in writing in accordance with the procedures established by the Committee or the Administrator and shall be effective upon delivery to the Committee or the Administrator.

(c) If there is no Beneficiary designation in effect, or the designated beneficiary does not survive the Participant, then the Participant's spouse shall be the Beneficiary. If there is no surviving spouse, the duly appointed and currently acting personal representative of the Participant's estate (which shall include either the Participant's probate estate or living trust) shall be the Beneficiary.

(d) After the Participant's death, any Beneficiary (other than the Participant's estate) who is to receive installment payments may designate a secondary beneficiary to receive amounts due under this Plan to the Beneficiary in the event of the Beneficiary's death prior to receiving full payment from the Plan. If no secondary beneficiary is designated, it shall be the Beneficiary's estate.

9.6 Insurance.

(a) As a condition of participation in this Plan, each Participant shall, if requested by the Committee, the Administrator, or the Company, undergo such examination and provide such information as may be required by the Company with respect to any insurance contracts on the Participant's life and shall authorize the Company to purchase life insurance on his life, payable to the Company.

(b) If the Company maintains an insurance policy on a Participant's life to fund benefits under the Plan and such insurance policy is invalidated because (i) the Participant commits suicide during the two (2)-year period beginning on the first day of the first Plan Year of such Participant's participation in the Plan or because (ii) the Participant makes any material misstatement of information or nondisclosure of medical history, then the only benefits that shall be payable hereunder to such Participant, his Beneficiary or his surviving spouse, are the payment of the amount of deferrals of Compensation and/or 401(k) Excess then credited to the Participant's Accounts but without any interest including interest theretofore credited under this Plan.

9.7 Governing Law.

Subject to ERISA, this Plan shall be construed, governed and administered in accordance with the laws of the State of California.

9.8 Receipt of Release.

Any payment to a Participant or the Participant's Beneficiary in accordance with the provisions of the Plan shall, to the extent thereof, be in full satisfaction of all claims against the Committee, the Administrator, and the Company. The Committee or the Administrator may require such Participant or Beneficiary, as a condition precedent to such payment, to execute a receipt and release to such effect.

9.9 Compliance with Code Section 162(m)

It is the intent of the Company that any Compensation which is deferred under the Plan by a person who is, with respect to the year of distribution, deemed by the Committee to be a "covered employee" within the meaning of Code Section 162(m) and regulations thereunder, which Compensation constitutes either "qualified performance-based compensation" within the meaning of Code Section 162(m) and regulations thereunder or compensation not otherwise subject to the limitation on deductibility under Section 162(m) and regulations thereunder, shall not, as a result of deferral hereunder, become compensation with respect to which the Company in fact would not be entitled to a tax deduction under Code Section 162(m). If the Company determines in good faith prior to a Change in Control that there is a reasonable likelihood that any compensation paid to a Participant for a taxable year of the Company would not be deductible by the Company solely by reason of the limitation under Code Section 162(m), then to the extent deemed necessary by the Company to ensure that the entire amount of any distribution to the Participant pursuant to this Plan prior to the Change in Control is deductible, the Company may defer all or any portion of a distribution under this Plan. Any amounts deferred pursuant to this limitation shall continue to be credited/debited with additional amounts in accordance with Article IV, even if such amount is being paid out in installments. The amounts so deferred and amounts credited thereon shall be distributed to the Participant or his Beneficiary (in the event of the Participant's death) at the earliest possible date, as determined by the Company in good faith, on which the deductibility of compensation paid or payable to the Participant for the taxable year of the Company during which the distribution is made shall not be limited by Section 162(m), or if earlier, the effective date of a Change in Control. Notwithstanding anything to the contrary in this Plan, this Section shall not apply to any distributions made after a Change in Control.

9.10 Payments on Behalf of Persons Under Incapacity.

In the event that any amount becomes payable under the Plan to a person who, in the sole judgment of the Committee or the Administrator, is considered by reason of physical or mental condition to be unable to give a valid receipt therefore, the Committee or the Administrator may direct that such payment be made to any person found by the Committee or the Administrator, in its sole judgment, to have assumed the care of such person. Any payment made pursuant to such termination shall constitute a full release and discharge of the Committee, the Administrator, and the Company.

9.11 Limitation of Rights

Neither the establishment of the Plan nor any modification thereof, nor the creating of any fund or account, nor the payment of any benefits shall be construed as giving to any Participant or other person any legal or equitable right against the Company except as provided in the Plan. In no event shall the terms of employment of, or membership on the Board by, any Participant be modified or in any be effected by the provisions of the Plan.

9.12 Exempt ERISA Plan

The Plan is intended to be an unfunded plan maintained primarily to provide deferred compensation benefits for directors and a select group of management or highly compensated employees within the meaning of Sections 201, 301 and 401 of ERISA and therefore to be exempt from Parts 2, 3 and 4 of Title I of ERISA.

9.13 Notice

Any notice or filing required or permitted to be given to the Committee or the Administrator under the Plan shall be sufficient if in writing and hand delivered, or sent by registered or certified mail, to the principal office of Sempra Energy, directed, in the case of the Committee, to the attention of the General Counsel and Secretary of Sempra Energy and in the case of the Administrator, to the the Administrator. Such notice shall be deemed given as of the date of delivery or, if delivery is made by mail, as of the date shown on the postmark on the receipt for registration or certification.

9.14 Errors and Misstatements

In the event of any misstatement or omission of fact by a Participant to the Committee or the Administrator or any clerical error resulting in payment of benefits in an incorrect amount, the Committee or the Administrator, as applicable, shall promptly cause the amount of future payments to be corrected upon discovery of the facts and shall pay or, if applicable, cause the Plan to pay, the Participant or any other person entitled to payment under the Plan any underpayment in a lump sum or to recoup any overpayment from future payments to the Participant or any other person entitled to payment under the Plan in such amounts as the Committee or the Administrator shall direct or to proceed against the Participant or any other person entitled to payment under the Plan for recovery of any such overpayment.

9.15 Pronouns and Plurality

The masculine pronoun shall include the feminine pronoun, and the singular the plural where the context so indicates.

9.16 Severability

In the event that any provision of the Plan shall be declared unenforceable or invalid for any reason, such unenforceability or invalidity shall not affect the remaining provisions of the Plan but shall be fully severable, and the Plan shall be construed and enforced as if such unenforceable or invalid provision had never been included herein.

9.17 Status

The establishment and maintenance of, or allocations and credits to, the Accounts of any Participant shall not vest in any Participant any right, title or interest in and to any Plan assets or benefits except at the time or times and upon the terms and conditions and to the extent expressly set forth in the Plan.

9.18 Headings.

Headings and subheadings in this Plan are inserted for convenience of reference only and are not to be considered in the construction of the provisions hereof.

Executed at San Diego, California this ___ day of _____, 2016.

SEMPRA ENERGY

By: _____

Title: Senior Vice President and
Chief Human Resources and
Administrative Officer

Date: _____, 2016

SEMPRA ENERGY

SEVERANCE PAY AGREEMENT

THIS AGREEMENT (this "Agreement"), dated as of January 1, 2017 (the "Effective Date"), is made by and between SEMPRA ENERGY, a California corporation ("Sempra Energy"), and Steven D. Davis (the "Executive").

WHEREAS, the Executive is currently employed by Sempra Energy or another corporation or trade or business which is a member of a controlled group of corporations (within the meaning of Section 414(b) or (c) of the Code) of which Sempra Energy is a component member, determined by applying an ownership threshold of 50% rather than 80% (Sempra Energy and such other controlled group members, collectively, "Company");

WHEREAS, Sempra Energy and the Executive desire to enter into this Agreement; and

WHEREAS, the Board of Directors of Sempra Energy (the "Board") or an authorized committee thereof has authorized this Agreement.

NOW, THEREFORE, in consideration of the premises and mutual covenants herein contained, Sempra Energy and the Executive hereby agree as follows:

Section 1. Definitions. For purposes of this Agreement, the following capitalized terms have the meanings set forth below:

"Accounting Firm" has the meaning assigned thereto in Section 8(d) hereof.

"Accrued Obligations" means the sum of (A) the Executive's Annual Base Salary through the Date of Termination to the extent not theretofore paid, (B) an amount equal to any annual Incentive Compensation Awards earned with respect to fiscal years ended prior to the year that includes the Date of Termination to the extent not theretofore paid, (C) any accrued and unpaid vacation, and (D) reimbursement for unreimbursed business expenses, if any, properly incurred by the Executive in the performance of his duties in accordance with Company policies applicable to the Executive from time to time, in each case to the extent not theretofore paid.

"Affiliate" has the meaning set forth in Rule 12b-2 promulgated under the Exchange Act.

"Annual Base Salary" means the Executive's annual base salary from the Company.

"Asset Purchaser" has the meaning assigned thereto in Section 16(e).

"Asset Sale" has the meaning assigned thereto in Section 16(e).

"Average Annual Bonus" means the average of the annual bonuses from the Company earned by the Executive with respect to the three (3) fiscal years of Sempra Energy ending immediately preceding the Date of Termination (the "Bonus Fiscal Years"); *provided*, *however*, that, if the Executive was employed by the Company for less than three (3) Bonus Fiscal Years, "Average Annual Bonus" means the average of the annual bonuses (if any) from the Company earned by the Executive with respect

to the Bonus Fiscal Years during which the Executive was employed by the Company; and, *provided*, *further*, that, if the Executive was not employed by the Company during any of the Bonus Fiscal Years, "Average Annual Bonus" means zero.

"Cause" means:

(a) Prior to a Change in Control, (i) the willful failure by the Executive to substantially perform the Executive's duties with the Company (other than any such failure resulting from the Executive's incapacity due to physical or mental illness), (ii) the grossly negligent performance of such obligations referenced in clause (i) of this definition, (iii) the Executive's gross insubordination; and/or (iv) the Executive's commission of one or more acts of moral turpitude that constitute a violation of applicable law (including but not limited to a felony involving one or more acts of moral turpitude) which have or result in an adverse effect on the Company, monetarily or otherwise, or one or more significant acts of dishonesty. For purposes of clause (i) of this subsection (a), no act, or failure to act, on the Executive's part shall be deemed "willful" unless done, or omitted to be done, by the Executive not in good faith and without reasonable belief that the Executive's act, or failure to act, was in the best interests of the Company.

(b) From and after a Change in Control (or in connection with a termination occurring pursuant to subsection 5(h)), (i) the willful and continued failure by the Executive to substantially perform the Executive's duties with the Company (other than any such failure resulting from the Executive's incapacity due to physical or mental illness or other than any such actual or anticipated failure after the issuance of a Notice of Termination for Good Reason by the Executive pursuant to Section 2 hereof and after the Company's cure period relating to the event on which Good Reason is based, if any and if applicable, has expired) and/or (ii) the Executive's commission of one or more acts of moral turpitude that constitute a violation of applicable law (including but not limited to a felony involving one or more acts of moral turpitude) which have or result in an adverse effect on the Company, monetarily or otherwise, or one or more significant acts of dishonesty. For purposes of clause (i) of this subsection (b), no act, or failure to act, on the Executive's part shall be deemed "willful" unless done, or omitted to be done, by the Executive not in good faith and without reasonable belief that the Executive's act, or failure to act, was in the best interests of the Company. Notwithstanding the foregoing, the Executive shall not be deemed terminated for Cause pursuant to clause (i) of this subsection (b) unless and until the Executive shall have been provided with reasonable notice of and, if possible, a reasonable opportunity to cure the facts and circumstances claimed to provide a basis for termination of the Executive's employment for Cause.

"Change in Control" shall be deemed to have occurred on the date that a change in the ownership of Sempra Energy, a change in the effective control of Sempra Energy, or a change in the ownership of a substantial portion of assets of Sempra Energy occurs (each, as defined in subsection (a) below), except as otherwise provided in subsections (b), (c) and (d) below:

(a) (i) a "change in the ownership of Sempra Energy" occurs on the date that any one person, or more than one person acting as a group, acquires ownership of stock of Sempra Energy that, together with stock held by such person or group, constitutes more than fifty percent (50%) of the total fair market value or total voting power of the stock of Sempra Energy,

(ii) a "change in the effective control of Sempra Energy" occurs only on either of the following dates:

(A) the date any one person, or more than one person acting as a group, acquires (or has acquired during the twelve (12) month period ending on the date of the most recent acquisition by such person or persons) ownership of stock of Sempra Energy possessing thirty percent (30%) or more of the total voting power of the stock of Sempra Energy, or

(B) the date a majority of the members of the Board is replaced during any twelve (12) month period by directors whose appointment or election is not endorsed by a majority of the members of the Board before the date of appointment or election, and

(iii) a "change in the ownership of a substantial portion of assets of Sempra Energy" occurs on the date any one person, or more than one person acting as a group, acquires (or has acquired during the twelve (12) month period ending on the date of the most recent acquisition by such person or persons) assets from Sempra Energy that have a total gross fair market value equal to or more than eighty-five percent (85%) of the total gross fair market value of all of the assets of Sempra Energy immediately before such acquisition or acquisitions.

(b) A "change in the ownership of Sempra Energy" or "a change in the effective control of Sempra Energy" shall not occur under clause (a)(i) or (a)(ii) by reason of any of the following:

(i) an acquisition of ownership of stock of Sempra Energy directly from Sempra Energy or its Affiliates other than in connection with the acquisition by Sempra Energy or its Affiliates of a business,

(ii) a merger or consolidation which would result in the voting securities of Sempra Energy outstanding immediately prior to such merger or consolidation continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity or any parent thereof), in combination with the ownership of any trustee or other fiduciary holding securities under an employee benefit plan of the Company, at least sixty percent (60%) of the combined voting power of the securities of Sempra Energy or such surviving entity or any parent thereof outstanding immediately after such merger or consolidation, or

(iii) a merger or consolidation effected to implement a recapitalization of Sempra Energy (or similar transaction) in which no Person is or becomes the Beneficial Owner (within the meaning of Rule 13d-3 promulgated under the Exchange Act), directly or indirectly, of securities of Sempra Energy (not including the securities beneficially owned by such Person any securities acquired directly from Sempra Energy or its Affiliates other than in connection with the acquisition by Sempra Energy or its Affiliates of a business) representing twenty percent (20%) or more of the combined voting power of Sempra Energy's then outstanding securities.

(c) A "change in the ownership of a substantial portion of assets of Sempra Energy" shall not occur under clause (a)(iii) by reason of a sale or disposition by Sempra Energy of the assets of Sempra Energy to an entity, at least sixty percent (60%) of the combined voting power of the voting securities of which are owned by shareholders of Sempra Energy in substantially the same proportions as their ownership of Sempra Energy immediately prior to such sale.

(d) This definition of "Change in Control" shall be limited to the definition of a "change in control event" with respect to the Executive and relating to Sempra Energy under Treasury Regulation Section 1.409A-3(i)(5).

"Change in Control Date" means the date on which a Change in Control occurs.

"Code" means the Internal Revenue Code of 1986, as amended.

"Compensation Committee" means the compensation committee of the Board.

"Consulting Payment" has the meaning assigned thereto in Section 14(e) hereof.

"Consulting Period" has the meaning assigned thereto in Section 14(f) hereof.

"Date of Termination" has the meaning assigned thereto in Section 2(b) hereof.

"Disability" has the meaning set forth in the long-term disability plan or its successor maintained by the Company entity that is the employer of the Executive; *provided*, *however*, that the Executive's employment hereunder may not be terminated by reason of Disability unless (i) at the time of such termination there is no reasonable expectation that the Executive will return to work within the next ninety (90) day period and (ii) such termination is permitted by all applicable disability laws.

"Exchange Act" means the Securities Exchange Act of 1934, as amended, and the applicable rulings and regulations thereunder.

"Excise Tax" has the meaning assigned thereto in Section 8(a) hereof.

"Good Reason" means:

(a) Prior to a Change in Control, the occurrence of any of the following without the prior written consent of the Executive, unless such act or failure to act is corrected by the Company prior to the Date of Termination specified in the Notice of Termination (as required under Section 2 hereof):

(i) the assignment to the Executive of any duties materially inconsistent with the range of duties and responsibilities appropriate to a senior executive within the Company (such range determined by reference to past, current and reasonable practices within the Company);

(ii) a material reduction in the Executive's overall standing and responsibilities within the Company, but not including (A) a mere change in title or (B) a transfer within the Company, which, in the case of both (A) and (B), does not adversely affect the Executive's overall status within the Company;

(iii) a material reduction by the Company in the Executive's aggregate annualized compensation and benefits opportunities, except for across-the-board reductions (or modifications of benefit plans) similarly affecting all similarly situated executives of the Company of comparable rank with the Executive;

(iv) the failure by the Company to pay to the Executive any portion of the Executive's current compensation and benefits or any portion of an installment of deferred compensation under any deferred compensation program of the Company within thirty (30) days of the date such compensation is due;

(v) any purported termination of the Executive's employment that is not effected pursuant to a Notice of Termination satisfying the requirements of Section 2 hereof;

(vi) the failure by Sempra Energy to perform its obligations under Section 16(c) or (d) hereof;

(vii) the failure by the Company to provide the indemnification and D&O insurance protection Section 10 of this Agreement requires it to provide; or

(viii) the failure by Sempra Energy (or any of the entities comprising the Company, as applicable) to comply with any material provision of this Agreement.

(b) From and after a Change in Control (or in connection with a termination occurring pursuant to subsection 5(h)), the occurrence of any of the following without the prior written consent of the Executive, unless such act or failure to act is corrected by the Company prior to the Date of Termination specified in the Notice of Termination (as required under Section 2 hereof):

(i) an adverse change in the Executive's title, authority, duties, responsibilities or reporting lines as in effect immediately prior to the Change in Control;

(ii) a reduction by the Company in the Executive's aggregate annualized compensation opportunities, except for across-the-board reductions in base salaries, annual bonus opportunities or long-term incentive compensation opportunities of less than ten percent (10%) similarly affecting all similarly situated executives (including, if applicable, of the Person then in control of Sempra Energy) of comparable rank with the Executive; or the failure by the Company to continue in effect any material benefit plan in which the Executive participates immediately prior to the Change in Control, unless an equitable arrangement (embodied in an ongoing substitute or alternative plan) has been made with respect to such plan, or the failure by the Company to continue the Executive's participation therein (or in such substitute or alternative plan) on a basis not materially less favorable, both in terms of the amount of benefits provided and the level of the Executive's participation relative to other participants, as existed at the time of the Change in Control;

(iii) the relocation of the Executive's principal place of employment immediately prior to the Change in Control Date (the "Principal Location") to a location which is both further away from the Executive's residence and more than thirty (30) miles from such Principal Location, or the Company's requiring the Executive to be based anywhere other than such Principal Location (or permitted relocation thereof), or a substantial increase in the Executive's business travel obligations outside of the Southern California area as of immediately prior to the Change in Control (without regard to any changes therein in anticipation of the Change in Control) other than any such increase that (A) arises in connection with extraordinary business activities of the Company of limited duration and (B) is understood not to be part of the Executive's regular duties with the Company;

(iv) the failure by the Company to pay to the Executive any portion of the Executive's current compensation and benefits or any portion of an installment of deferred compensation under any deferred compensation program of the Company within thirty (30) days of the date such compensation is due;

(v) any purported termination of the Executive's employment that is not effected pursuant to a Notice of Termination satisfying the requirements of Section 2 hereof; for purposes of this Agreement;

(vi) the failure by Sempra Energy to perform its obligations under Section 16(c) or (d) hereof;

(vii) the failure by the Company to provide the indemnification and D&O insurance protection Section 10 of this Agreement requires it to provide; or

(viii) the failure by Sempra Energy (or any of the entities comprising the Company, as applicable) to comply with any material provision of this Agreement.

Following a Change in Control, the Executive's determination that an act or failure to act constitutes Good Reason shall be presumed to be valid unless such determination is deemed to be unreasonable by an arbitrator pursuant to the procedure described in Section 13 hereof. The Executive's right to terminate the Executive's employment for Good Reason shall not be affected by the Executive's incapacity due to physical or mental illness. The Executive's continued employment shall not constitute consent to, or a waiver of rights with respect to, any act or failure to act constituting Good Reason hereunder.

"Incentive Compensation Awards" means awards granted under Incentive Compensation Plans providing the Executive with the opportunity to earn, on a year-by-year basis, annual and long-term incentive compensation.

"Incentive Compensation Plans" means annual incentive compensation plans and long-term incentive compensation plans of the Company, which long-term incentive compensation plans may include plans offering stock options, restricted stock and other long-term incentive compensation.

"Involuntary Termination" means (a) the Executive's Separation from Service by reason other than for Cause, death, Disability, or Mandatory Retirement, or (b) the Executive's Separation from Service by reason of resignation of employment for Good Reason.

"JAMS Rules" has the meaning assigned thereto in Section 13 hereof.

"Mandatory Retirement" means termination of employment pursuant to the Company's mandatory retirement policy.

"Medical Continuation Benefits" has the meaning assigned thereto in Section 4(c) hereof.

"Notice of Termination" has the meaning assigned thereto in Section 2(a) hereof.

"Payment" has the meaning assigned thereto in Section 8(a) hereof.

"Payment in Lieu of Notice" has the meaning assigned thereto in Section 2(b) hereof.

"Person" means any person, entity or "group" within the meaning of Section 13(d)(3) or Section 14(d)(2) of the Exchange Act, except that such term shall not include (1) Sempra Energy or any of its Affiliates, (2) a trustee or other fiduciary holding securities under an employee benefit plan of Sempra Energy or any of its Affiliates, (3) an underwriter temporarily holding securities pursuant to an offering of such securities, (4) a corporation owned, directly or indirectly, by the shareholders of Sempra Energy in substantially the same proportions as their ownership of stock of Sempra Energy, or (5) a person or group as used in Rule 13d-1(b) under the Exchange Act.

"Post-Change in Control Severance Payment" has the meaning assigned thereto in Section 5 hereof.

"Pre-Change in Control Severance Payment" has the meaning assigned thereto in Section 4 hereof.

"Principal Location" has the meaning assigned thereto in clause (b)(iii) of the definition of Good Reason, above.

"Proprietary Information" has the meaning assigned thereto in Section 14(a) hereof.

"Pro Rata Bonus" has the meaning assigned thereto in Section 5(b) hereof.

"Release" has the meaning assigned thereto in Section 4 hereof.

"Section 409A Payments" means any payments under this Agreement which are subject to Section 409A of the Code.

"Sempra Energy Control Group" means Sempra Energy and all persons with whom Sempra Energy would be considered a single employer under Section 414(b) or 414(c) of the Code, as determined from time to time.

"Separation from Service" has the meaning set forth in Treasury Regulation Section 1.409A-1(h).

"SERP" has the meaning assigned thereto in Section 5(c) hereof.

"Specified Employee" shall be determined in accordance with Section 409A(a)(2)(B)(i) of the Code and Treasury Regulation Section 1.409A-1(i).

For purposes of this Agreement, references to any "Treasury Regulation" shall mean such Treasury Regulation as in effect on the date hereof.

Section 2. Notice and Date of Termination.

(a) Any termination of the Executive's employment by the Company or by the Executive shall be communicated by a written notice of termination to the other party (the "Notice of Termination"). Where applicable, the Notice of Termination shall indicate the specific termination provision in this Agreement relied upon and shall set forth in reasonable detail the facts and circumstances claimed to provide a basis for termination of the Executive's employment under the provision so indicated. Unless the Board or a committee thereof, in writing, provides a longer notice period, a Notice of Termination by the Executive alleging a termination for Good Reason must be made within 180 days of the act or failure to act that the Executive alleges to constitute Good Reason.

(b) The date of the Executive's termination of employment with the Company (the "Date of Termination") shall be determined as follows: (i) if the Executive's Separation from Service is at the volition of the Company, then the Date of Termination shall be the date specified in the Notice of Termination (which, in the case of a termination by the Company other than for Cause, shall not be less than two (2) weeks from the date such Notice of Termination is given unless the Company elects to pay the Executive, in addition to any other amounts payable hereunder, an amount (the "Payment in Lieu of Notice") equal to two (2) weeks of the Executive's Annual Base Salary in effect on the Date of Termination), and (ii) if the Executive's Separation from Service is by the Executive for Good Reason, the Date of Termination shall be determined by the Executive and specified in the Notice of Termination, but in no event be less than fifteen (15) days nor more than sixty (60) days after the date such Notice of Termination is given. The Payment in Lieu of Notice shall be paid on such date as is required by law, but no later than thirty (30) days after the date of the Executive's Separation from Service.

Section 3. Termination from the Board. Upon the termination of the Executive's employment for any reason, the Executive's membership on the Board, the board of directors of any Affiliates of Sempra Energy, any committees of the Board and any committees of the board of directors of any of the Affiliates of Sempra Energy, if applicable, shall be automatically terminated and the Executive agrees to take any and all actions (including resigning) required by Sempra Energy or any of its Affiliates to evidence and effect such termination of membership.

Section 4. Severance Benefits upon Involuntary Termination Prior to Change in Control. Except as provided in Section 5(h) and Section 19(i) hereof, in the event of the Involuntary Termination of the Executive prior to a Change in Control, Sempra Energy shall, or shall cause one of its Affiliates that is the employer of the Executive to, pay the Executive, in one lump sum cash payment, an amount (the "Pre-Change in Control Severance Payment") equal to the greater of: (X) 180% of the Executive's Annual Base Salary as in effect on the Date of Termination, and (Y) the sum of (I) the Executive's Annual Base Salary as in effect on the Date of Termination, plus (II) the Executive's Average Annual Bonus. In addition to the Pre-Change in Control Severance Payment, the Executive shall be entitled to the following additional benefits specified in subsections (a) through (e). The Company's obligation to pay the Pre-Change in Control Severance Payment or provide the benefits set forth in subsections (c), (d) and (e) are subject to and conditioned upon the Executive executing a release of all claims substantially in the form attached hereto as Exhibit A (the "Release") within fifty (50) days after the date of Involuntary Termination and the Executive not revoking such Release in accordance with the terms thereof. Except as provided in Section 4(f), the Pre-Change in Control Severance Payment shall be paid within sixty (60) days after the date of the Involuntary Termination on such date as is determined by Sempra Energy, but not before the Release becomes effective and irrevocable. If the fifty (50) day period in which the Release could become effective spans more than one taxable year, then the Pre-Change in Control Severance Payment shall not be made until the later taxable year.

(a) Accrued Obligations. The Company shall pay the Executive a lump sum amount in cash equal to Accrued Obligations within the time prescribed by law.

(b) Equity Based Compensation. The Executive shall retain all rights to any equity-based compensation awards to the extent set forth in the applicable plan and/or award agreement.

(c) Welfare Benefits. Subject to the terms and conditions of this Agreement, for a period of twelve (12) months following the date of the Involuntary Termination (and an additional twelve (12) months if the Executive provides consulting services under Section 14(f) hereof), the Executive and his dependents shall be provided with group medical benefits which are substantially similar to those provided from time to time to similarly situated active employees of the Company (and their eligible dependents) ("Medical Continuation Benefits"). Without limiting the generality of the foregoing, such Medical Continuation Benefits shall be provided on substantially the same terms and conditions and at the same cost to the Executive as apply to similarly situated active employees of the Company. Such benefits shall be provided in a manner that complies with Treasury Regulation Section 1.409A-1(a)(5). Notwithstanding the foregoing, if Sempra Energy determines in its sole discretion that the Medical Continuation Benefits cannot be provided without potentially violating applicable law (including, without limitation, Section 2716 of the Public Health Service Act) or that the provision of Medical Continuation Benefits under this Agreement would subject Sempra Energy or any of its Affiliates to a material tax or penalty, (i) the Executive shall be provided, in lieu thereof, with a taxable monthly payment in an amount equal to the monthly premium that the Executive would be required to pay to continue the Executive's and his covered dependents' group medical benefit coverages under COBRA as then in effect (which amount shall be based on the premiums for the first month of COBRA coverage) or (ii) Sempra Energy shall have the authority to amend the Agreement to the limited extent reasonably necessary to avoid such violation of

law or tax or penalty and shall use all reasonable efforts to provide the Executive with a comparable benefit that does not violate applicable law or subject Sempra Energy or any of its Affiliates to such tax or penalty.

(d) Outplacement Services. The Executive shall receive reasonable outplacement services, on an in-kind basis, suitable to his position and directly related to the Executive's Involuntary Termination, for a period of twenty-four (24) months following the date of the Involuntary Termination, in an aggregate amount of cost to the Company not to exceed $50,000. Notwithstanding the foregoing, the Executive shall cease to receive outplacement services on the date the Executive accepts employment with a subsequent employer. Such outplacement services shall be provided in a manner that complies with Treasury Regulation Section 1.409A-1(b)(9)(v)(A).

(e) Financial Planning Services. The Executive shall receive financial planning services, on an in-kind basis, for a period of twenty-four (24) months following the Date of Termination. Such financial planning services shall include expert financial and legal resources to assist the Executive with financial planning needs and shall be limited to (i) current investment portfolio management, (ii) tax planning, (iii) tax return preparation, and (iv) estate planning advice and document preparation (including wills and trusts); provided, however, that the Company shall provide such financial planning services during any taxable year of the Executive only to the extent the cost to the Company for such taxable year does not exceed $25,000. The Company shall provide such financial planning services through a financial planner selected by the Company, and shall pay the fees for such financial planning services. The financial planning services provided during any taxable year of the Executive shall not affect the financial planning services provided in any other taxable year of the Executive. The Executive's right to financial planning services shall not be subject to liquidation or exchange for any other benefit. Such financial planning services shall be provided in a manner that complies with Treasury Regulation Section 1.409A-3(i)(1)(iv).

Section 5. Severance Benefits upon Involuntary Termination in Connection with and after Change in Control. Notwithstanding the provisions of Section 4 above, and except as provided in Section 19(i) hereof, in the event of the Involuntary Termination of the Executive on or within two (2) years following a Change in Control, in lieu of the payments described in Section 4 above, Sempra Energy shall, or shall cause one of its Affiliates that is the employer of the Executive to, pay the Executive, in one lump sum cash payment, an amount (the "Post-Change in Control Severance Payment") equal to two times the greater of: (X) 180 % of the Executive's Annual Base Salary as in effect immediately prior to the Change in Control or the Date of Termination, whichever is greater, and (Y) the sum of (I) the Executive's Annual Base Salary as in effect immediately prior to the Change in Control or on the Date of Termination, whichever is greater, plus (II) the Executive's Average Annual Bonus. In addition to the Post-Change in Control Severance Payment, the Executive shall be entitled to the following additional benefits specified in subsections (a) through (g). The Company's obligation to pay the Post-Change in Control Severance Payment or provide the benefits set forth in subsections (b),(c), (d), (e), and (f) are subject to and conditioned upon the Executive executing the Release within fifty (50) days after the date of Involuntary Termination and the Executive not revoking such Release in accordance with the terms thereof. Except as provided in Section 5(h), the Post-Change in Control Severance Payment, the Pro Rata Bonus, and the payments under Section 5(c) shall be paid within sixty (60) days after the date of Involuntary Termination on such date as is determined by Sempra Energy (or its successor) but not before the Release becomes effective and irrevocable. If the fifty (50) day period in which the Release could become effective spans more than one taxable year, then the Post-Change in Control Severance Payment, the Pro Rata Bonus and the payments under Section 5(c) shall not be made until the later taxable year.

(a) Accrued Obligations. The Company shall pay the Executive a lump sum amount in cash equal to the Accrued Obligations within the time required by law and, to the extent applicable, in accordance with the applicable plan, policy or arrangement pursuant to which such payments are to be made.

(b) Pro Rata Bonus. The Company shall pay the Executive a lump sum amount in cash equal to: (i) the greater of: (X) 80% of the Executive's Annual Base Salary as in effect immediately prior to the Change in Control or on the Date of Termination, whichever is greater, or (Y) the Executive's Average Annual Bonus, multiplied by (ii) a fraction, the numerator of which shall be the number of days from the beginning of such fiscal year to and including the Date of Termination and the denominator of which shall be 365 equal to (the "Pro Rata Bonus").

(c) Pension Supplement. The Executive shall be entitled to receive a Supplemental Retirement Benefit under the Sempra Energy Supplemental Executive Retirement Plan, as in effect from time to time ("SERP"), determined in accordance with this Section 5(c), in the event that the Executive is a "Participant" (as defined in the SERP) as of the Date of Termination. Such Supplemental Retirement Benefit shall be determined by crediting the Executive with additional months of Service (if any) equal to the number of full calendar months from the Date of Termination to the date on which the Executive would have attained age 62. The Executive shall be entitled to receive such Supplemental Retirement Benefit without regard to whether the Executive has attained age 55 or completed five years of "Service" (as defined in the SERP) as of the Date of Termination. The Executive shall be treated as qualified for "Retirement" (as defined in the SERP) as of the Date of Termination, and the Executive's Vesting Factor with respect to the Supplemental Retirement Benefit shall be 100%. The Executive's Supplemental Retirement Benefit shall be calculated based on the Executive's actual age as of the date of commencement of payment of such Supplemental Retirement Benefit (the "SERP Distribution Date"), and by applying the applicable early retirement factors under the SERP, if the Executive has not attained age 62 but has attained age 55 as of the SERP Distribution Date. If the Executive has not attained age 55 as of the SERP Distribution Date, the Executive's Supplemental Retirement Benefit shall be calculated by applying the applicable early retirement factor under the SERP for age 55, and the Supplemental Retirement Benefit otherwise payable at age 55 shall be actuarially adjusted to the Executive's actual age as of the SERP Distribution Date using the following actuarial assumptions: (i) the applicable mortality table promulgated by the Internal Revenue Service under Section 417(e)(3) of the Code, as in effect on the first day of the calendar year in which the SERP Distribution Date occurs, and (ii) the applicable interest rate promulgated by the Internal Revenue Service under Section 417(a)(3) of the Code for the November next preceding the first day of the calendar year in which the SERP Distribution Date occurs. The Executive's Supplemental Retirement Benefit shall be determined in accordance with this Section 5(c), notwithstanding any contrary provisions of the SERP and, to the extent subject to Section 409A of the Code, shall be paid in accordance with Treasury Regulation Section 1.409A-3(c)(1). The Supplemental Retirement Benefit paid to or on behalf of the Executive in accordance with this Section 5(c) shall be in full satisfaction of any and all of the benefits payable to or on behalf of the Executive under the SERP.

(d) Equity-Based Compensation. Notwithstanding the provisions of any applicable equity-compensation plan or award agreement to the contrary, all equity-based Incentive Compensation Awards (including, without limitation, stock options, stock appreciation rights, restricted stock awards, restricted stock units, performance share awards, awards covered under Section 162(m) of the Code, and dividend equivalents) held by the Executive shall immediately vest and become exercisable or payable, as the case may be, as of the Date of Termination, to be exercised or paid, as the case may be, in accordance with the terms of the applicable Incentive Compensation Plan and Incentive Compensation Award agreement, and any restrictions on any such Incentive Compensation Awards shall automatically lapse;

provided, however, that, in the case of any stock option or stock appreciation rights awards granted on or after June 26, 1998 that remain outstanding on the Date of Termination, such stock options or stock appreciation rights shall remain exercisable until the earlier of (A) the later of eighteen (18) months following the Date of Termination or the period specified in the applicable Incentive Compensation Award agreements or (B) the expiration of the original term of such Incentive Compensation Award (or, if earlier, the tenth anniversary of the original date of grant) (it being understood that all Incentive Compensation Awards granted prior to, on or after June 26, 1998 shall remain outstanding and exercisable for a period that is no less than that provided for in the applicable agreement in effect as of the date of grant).

(e) Welfare Benefits. Subject to the terms and conditions of this Agreement, for a period of twenty four (24) months following the date of Involuntary Termination (and an additional twelve (12) months if the Executive provides consulting services under Section 14(f) hereof), the Executive and his dependents shall be provided with life, disability, accident and group medical benefits which are substantially similar to those provided to the Executive and his dependents immediately prior to the date of Involuntary Termination or the Change in Control Date, whichever is more favorable to the Executive. Without limiting the generality of the foregoing, the continuing benefits described in the preceding sentence shall be provided on substantially the same terms and conditions and at the same cost to the Executive as in effect immediately prior to the date of Involuntary Termination or the Change in Control Date, whichever is more favorable to the Executive. Such benefits shall be provided in a manner that complies with Treasury Regulation Section 1.409A-1(a)(5). Notwithstanding the foregoing, if Sempra Energy determines in its sole discretion that the portion of the foregoing continuing benefits that constitute group medical benefits cannot be provided without potentially violating applicable law (including, without limitation, Section 2716 of the Public Health Service Act) or that the provision of such group medical benefits under this Agreement would subject Sempra Energy or any of its Affiliates to a material tax or penalty, (i) the Executive shall be provided, in lieu thereof, with a taxable monthly payment in an amount equal to the monthly premium that the Executive would be required to pay to continue the Executive's and his covered dependents' group medical benefit coverages under COBRA as then in effect (which amount shall be based on the premiums for the first month of COBRA coverage) or (ii) Sempra Energy shall have the authority to amend the Agreement to the limited extent reasonably necessary to avoid such violation of law or tax or penalty and shall use all reasonable efforts to provide the Executive with a comparable benefit that does not violate applicable law or subject Sempra Energy or any of its Affiliates to such tax or penalty.

(f) Outplacement Services. The Executive shall receive reasonable outplacement services, on an in-kind basis, suitable to his position and directly related to the Executive's Involuntary Termination, for a period of thirty-six (36) months following the date of Involuntary Termination (but in no event beyond the last day of the Executive's second taxable year following the Executive's taxable year in which the Involuntary Termination occurs), in the aggregate amount of cost to the Company not to exceed $50,000. Notwithstanding the foregoing, the Executive shall cease to receive outplacement services on the date the Executive accepts employment with a subsequent employer. Such outplacement services shall be provided in a manner that complies with Treasury Regulation Section 1.409A-1(b)(9)(v)(A).

(g) Financial Planning Services. The Executive shall receive financial planning services, on an in-kind basis, for a period of thirty-six (36) months following the date of Involuntary Termination. Such financial planning services shall include expert financial and legal resources to assist the Executive with financial planning needs and shall be limited to (i) current investment portfolio management, (ii) tax planning, (iii) tax return preparation, and (iv) estate planning advice and document preparation (including wills and trusts); provided, however, that the Company shall provide such financial

services during any taxable year of the Executive only to the extent the cost to the Company for such taxable year does not exceed $25,000. The Company shall provide such financial planning services through a financial planner selected by the Company, and shall pay the fees for such financial planning services. The financial planning services provided during any taxable year of the Executive shall not affect the financial planning services provided in any other taxable year of the Executive. The Executive's right to financial planning services shall not be subject to liquidation or exchange for any other benefit. Such financial planning services shall be provided in a manner that complies with Section 1.409A-3(i)(1)(iv).

(h) Involuntary Termination in Connection with a Change in Control. Notwithstanding anything contained herein, in the event of an Involuntary Termination prior to a Change in Control, if the Involuntary Termination (1) was at the request of a third party who has taken steps reasonably calculated to effect such Change in Control or (2) otherwise arose in connection with or in anticipation of such Change in Control, then the Executive shall, in lieu of the payments described in Section 4 hereof, be entitled to the Post-Change in Control Severance Payment and the additional benefits described in this Section 5 as if such Involuntary Termination had occurred within two (2) years following the Change in Control. The amounts specified in Section 5 that are to be paid under this Section 5(h) shall be reduced by any amount previously paid under Section 4. The amounts to be paid under this Section 5(h) shall be paid within sixty (60) days after the Change in Control Date of such Change in Control.

Section 6. Severance Benefits upon Termination by the Company for Cause or by the Executive Other than for Good Reason. If the Executive's employment shall be terminated for Cause, or if the Executive terminates employment other than for Good Reason, the Company shall have no further obligations to the Executive under this Agreement other than the Pre-Change in Control Accrued Obligations and any amounts or benefits described in Section 10 hereof.

Section 7. Severance Benefits upon Termination due to Death or Disability. If the Executive has a Separation from Service by reason of death or Disability, the Company shall pay the Executive or his estate, as the case may be, the Accrued Obligations and the Pro Rata Bonus (without regard to whether a Change in Control has occurred) and any amounts or benefits described in Section 10 hereof. Such payments shall be in addition to those rights and benefits to which the Executive or his estate may be entitled under the relevant Company plans or programs. The Company's obligation to pay the Pro Rata Bonus is conditioned upon the Executive, the Executive's representative or the Executive's estate, as the case may be executing the Release within fifty (50) days after the date of the Executive's Separation from Service and not revoking such Release in accordance with the terms thereof. The Accrued Obligations shall be paid within the time required by law and the Pro Rata Bonus shall be paid within sixty (60) days after the date of the Separation from Service on such date determined by Sempra Energy but not before the Release becomes effective and irrevocable. If the fifty (50) day period in which the Release could become effective spans more than one taxable year, then the Pro Rata Bonus shall not be made until the later taxable year.

Section 8. Limitation on Payments by the Company.

(a) Anything in this Agreement to the contrary notwithstanding and except as set forth in this Section 8 below, in the event it shall be determined that any payment or distribution in the nature of compensation (within the meaning of Section 280G(b)(2) of the Code) to or for the benefit of the Executive, whether paid or payable pursuant to this Agreement or otherwise (the "Payment") would be subject (in whole or in part) to the excise tax imposed by Section 4999 of the Code, (the "Excise Tax"), then, subject to subsection (b), the Pre-Change in Control Severance Benefit or the Post-Change in Control Severance Payment (whichever is applicable) payable under this Agreement shall be reduced

under this subsection (a) to the amount equal to the Reduced Payment. For such Payment payable under this Agreement, the "Reduced Payment" shall be the amount equal to the greatest portion of the Payment (which may be zero) that, if paid, would result in no portion of any Payment being subject to the Excise Tax.

(b) The Pre-Change in Control Severance Benefit or the Post-Change in Control Severance Payment (whichever is applicable) payable under this Agreement shall not be reduced under subsection (a) if:

(i) such reduction in such Payment is not sufficient to cause no portion of any Payment to be subject to the Excise Tax, or

(ii) the Net After-Tax Unreduced Payments (as defined below) would equal or exceed one hundred and five percent (105%) of the Net After-Tax Reduced Payments (as defined below).

For purposes of determining the amount of any Reduced Payment under subsection (a), and the Net-After Tax Reduced Payments and the Net After-Tax Unreduced Payments, the Executive shall be considered to pay federal, state and local income and employment taxes at the Executive's applicable marginal rates taking into consideration any reduction in federal income taxes which could be obtained from the deduction of state and local income taxes, and any reduction or disallowance of itemized deductions and personal exemptions under applicable tax law). The applicable federal, state and local income and employment taxes and the Excise Tax (to the extent applicable) are collectively referred to as the "Taxes".

(c) For purposes of determining the amount of any Reduced Payment under this Section 8, the amount of any Payment shall be reduced in the following order:

(i) first, by reducing the amounts of parachute payments that would not constitute deferred compensation subject to Section 409A of the Code;

(ii) next, if after the reduction described in subparagraph (i), additional reductions are required, then by reducing the cash portion of the Payment that constitutes deferred compensation (within the meaning of Section 409A) subject to Section 409A, with the reductions to be applied first to the portion of the Payment scheduled for the latest distribution date, and then applied to distributions scheduled for progressively earlier distribution dates, to the extent necessary to decrease the Payment as required under this Section 8; and

(iii) next, if after the reduction described in subparagraph (ii), additional reductions are required, then, by reducing the non-cash portion of the Payment that constitutes deferred compensation (within the meaning of subject to 409A), with the reductions to be applied first to the portion of the Payment scheduled for the latest distribution date, and then applied to distributions scheduled for progressively earlier distribution dates, to the extent necessary to decrease the Payment as required under this Section 8.

(d) The following definitions shall apply for purposes of this Section 8:

(i) "Net After-Tax Reduced Payments" shall mean the total amount of all Payments that the Executive would retain, on a Net After-Tax Basis, in the event that the Payments payable under this Agreement are reduced pursuant to subsection (a).

(ii) "Net After-Tax Unreduced Payments" shall mean the total amount of all Payments that the Executive would retain, on a Net After-Tax Basis, in the event that the Payments payable under this Agreement are not reduced pursuant to subsection (a).

(iii) "Net After-Tax Basis" shall mean, with respect to the Payments, either with or without reduction under subsection (a) (as applicable), the amount that would be retained by the Executive from such Payments after the payment of all Taxes.

(e) All determinations required to be made under this Section 8 and the assumptions to be utilized in arriving at such determinations, shall be made by a nationally recognized accounting firm as may be agreed by the Company and the Executive (the "Accounting Firm"); provided, that the Accounting Firm's determination shall be made based upon "substantial authority" within the meaning of Section 6662 of the Code. The Accounting Firm shall provide detailed supporting calculations to both the Company and the Executive within fifteen (15) business days of the receipt of notice from the Executive that there has been a Payment or such earlier time as is requested by the Company. All fees and expenses of the Accounting Firm shall be borne solely by the Company. Any determination by the Accounting Firm shall be binding upon the Company and the Executive. For purposes of determining whether and the extent to which the Payments will be subject to the Excise Tax, (i) no portion of the Payments the receipt or enjoyment of which the Executive shall have waived at such time and in such manner as not to constitute a "payment" within the meaning of Section 280G(b) of the Code shall be taken into account, (ii) no portion of the Payments shall be taken into account which, in the written opinion of the Accounting Firm, does not constitute a "parachute payment" within the meaning of Section 280G(b)(2) of the Code (including by reason of Section 280G(b)(4)(A) of the Code) and, in calculating the Excise Tax, no portion of such Payments shall be taken into account which, in the opinion of the Accounting Firm, constitutes reasonable compensation for services actually rendered, within the meaning of Section 280G(b)(4)(B) of the Code, in excess of the base amount (as defined in Section 280G(b)(3) of the Code) allocable to such reasonable compensation, and (iii) the value of any non-cash benefit or any deferred payment or benefit included in the Payments shall be determined by the Accounting Firm in accordance with the principles of Sections 280G(d)(3) and (4) of the Code.

Section 9. Delayed Distribution under Section 409A of the Code. Notwithstanding any other provision of this Agreement to the contrary, if the Executive is a Specified Employee on the date of the Executive's Involuntary Termination (or on the date of the Executive's Separation from Service by reason of Disability), the Section 409A Payments which are payable upon Separation from Service shall be delayed to the extent necessary in order to avoid a prohibited distribution under Section 409A(a)(2)(B)(i) of the Code, and such delayed payments or benefits shall be paid or distributed to the Executive during the thirty (30) day period commencing on the earlier of (a) the expiration of the six (6) month period measured from the date of the Executive's Separation from Service or (b) the date of the Executive's death. Upon the expiration of the applicable six (6) month period, all payments deferred pursuant to this Section 9 (excluding in-kind benefits) shall be paid in a lump sum payment to the Executive, plus interest thereon from the date of the Executive's Involuntary Termination through the payment date at an annual rate equal to Moody's Rate. The "Moody's Rate" shall mean the average of the daily Moody's Corporate Bond Yield Average - Monthly Average Corporates as published by Moody's Investors Service, Inc. (or any successor) for the month next preceding the Date of Termination. Any remaining payments due under the Agreement shall be paid as otherwise provided herein.

Section 10. Nonexclusivity of Rights. Nothing in this Agreement shall prevent or limit the Executive's continuing or future participation in any benefit, plan, program, policy or practice provided by the Company and for which the Executive may qualify (except with respect to any benefit to which the Executive has waived his rights in writing), including, without limitation, any and all indemnification arrangements in favor of the Executive (whether under agreements or under the Company's charter documents or otherwise), and insurance policies covering the Executive, nor shall anything herein limit or otherwise affect such rights as the Executive may have under any other contract or agreement entered into after the Effective Date with the Company. Amounts which are vested benefits or which the Executive is otherwise entitled to receive under any benefit, plan, policy, practice or program of, or any contract or agreement entered into with, the Company shall be payable in accordance with such benefit, plan, policy, practice or program or contract or agreement except as explicitly modified by this Agreement. At all times during the Executive's employment with the Company and thereafter, the Company shall provide (to the extent permissible under applicable law) the Executive with indemnification and D&O insurance insuring the Executive against insurable events which occur or have occurred while the Executive was a director or executive officer of the Company, that with respect to such insurance is on terms and conditions that, to the extent reasonably practical, are at least as generous as that then currently provided to any other current or former director or executive officer of the Company or any Affiliate. Such indemnification and D&O insurance shall be provided in a manner that complies with Treasury Regulation Section 1.409A-1(b)(10).

Section 11. Clawbacks. Notwithstanding anything herein to the contrary, if Sempra Energy determines, in its good faith judgment, that if the Executive is required to forfeit or to make any repayment of any compensation or benefit(s) to the Company under the Sarbanes-Oxley Act of 2002 or pursuant to the Dodd-Frank Wall Street Reform and Consumer Protection Act or any other law or pursuant to any formal policy of Sempra Energy, such forfeiture or repayment shall not constitute Good Reason.

Section 12. Full Settlement; Mitigation. The Company's obligation to make the payments provided for in this Agreement and otherwise to perform its obligations hereunder shall not be affected by any set-off, counterclaim, recoupment, defense or other claim, right or action which the Company may have against the Executive or others, provided that nothing herein shall preclude the Company from separately pursuing recovery from the Executive based on any such claim. In no event shall the Executive be obligated to seek other employment or take any other action by way of mitigation of the amounts (including amounts for damages for breach) payable to the Executive under any of the provisions of this Agreement, and such amounts shall not be reduced whether or not the Executive obtains other employment.

Section 13. Dispute Resolution.

(a) If any dispute arises between the Executive and Sempra Energy or any of its Affiliates, including, but not limited to, disputes relating to or arising out of this Agreement, any action relating to or arising out of the Executive's employment or its termination, and/or any disputes regarding the interpretation, enforceability, or validity of this Agreement ("Arbitrable Dispute"), the Executive and Sempra Energy waive the right to resolve the dispute through litigation in a judicial forum and agree to resolve the Arbitrable Dispute through final and binding arbitration, except as prohibited by law. Arbitration shall be the exclusive remedy for any Arbitrable Dispute.

(b) As to any Arbitrable Dispute, Sempra Energy and the Executive waive any right to a jury trial or a court bench trial. The Company and the Executive also waive the right to bring, maintain, or participate in any class, collective, or representative proceeding, whether in arbitration or otherwise.

Further, Arbitrable Disputes must be brought in the individual capacity of the party asserting the claim, and cannot be maintained on a class, collective, or representative basis.

(c) Arbitration shall take place at the office of the Judicial Arbitration and Mediation Service ("JAMS") (or, if the Executive is employed outside of California, the American Arbitration Association ("AAA")) nearest to the location where the Executive last worked for the Company. Except to the extent it conflicts with the rules and procedures set forth in this Arbitration Agreement, arbitration shall be conducted in accordance with the JAMs Employment Arbitration Rules & Procedures (if the Executive is employed outside of California, the AAA Employment Arbitration Rules & Mediation Procedures), copies of which are attached for my reference and available at www.jamsadr.com; tel: 800.352.5267 and www.adr.org; tel: 800.778.7879, before a single experienced, neutral employment arbitrator selected in accordance with those rules.

(d) Sempra Energy will be responsible for paying any filing fee and the fees and costs of the arbitrator. Each party shall pay its own attorneys' fees. However, if any party prevails on a statutory claim that authorizes an award of attorneys' fees to the prevailing party, or if there is a written agreement providing for attorneys' fees, the arbitrator may award reasonable attorneys' fees to the prevailing party, applying the same standards a court would apply under the law applicable to the claim.

(e) The arbitrator shall apply the Federal Rules of Evidence, shall have the authority to entertain a motion to dismiss or a motion for summary judgment by any party, and shall apply the standards governing such motions under the Federal Rules of Civil Procedure. The arbitrator does not have the authority to consider, certify, or hear an arbitration as a class action, collective action, or any other type of representative action. Sempra Energy and the Executive recognize that this Agreement arises out of or concerns interstate commerce and that the Federal Arbitration Act shall govern the arbitration and shall govern the interpretation or enforcement of this Arbitration Agreement or any arbitration award.

(f) EXECUTIVE ACKNOWLEDGES THAT BY ENTERING INTO THIS AGREEMENT, EXECUTIVE IS WAIVING ANY RIGHT HE OR SHE MAY HAVE TO A TRIAL BY JURY.

Section 14. Executive's Covenants.

(a) Confidentiality. The Executive acknowledges that in the course of his employment with the Company, he has acquired non-public privileged or confidential information and trade secrets concerning the operations, future plans and methods of doing business ("Proprietary Information") of Sempra Energy and its Affiliates; and the Executive agrees that it would be extremely damaging to Sempra Energy and its Affiliates if such Proprietary Information were disclosed to a competitor of Sempra Energy and its Affiliates or to any other person or corporation. The Executive understands and agrees that all Proprietary Information has been divulged to the Executive in confidence and further understands and agrees to keep all Proprietary Information secret and confidential (except for such information which is or becomes publicly available other than as a result of a breach by the Executive of this provision or information the Executive is required by any governmental, administrative or court order to disclose) without limitation in time. In view of the nature of the Executive's employment and the Proprietary Information the Executive has acquired during the course of such employment, the Executive likewise agrees that Sempra Energy and its Affiliates would be irreparably harmed by any disclosure of Proprietary Information in violation of the terms of this paragraph and that Sempra Energy and its Affiliates shall therefore be entitled to preliminary and/or permanent injunctive relief prohibiting the Executive from engaging in any activity or threatened activity in violation of the terms of this paragraph and to any other

relief available to them. Inquiries regarding whether specific information constitutes Proprietary Information shall be directed to the Company's Senior Vice President, Public Policy (or, if such position is vacant, the Company's then Chief Executive Officer); provided, that the Company shall not unreasonably classify information as Proprietary Information.

(b) Governmental Reporting. Nothing in this Agreement is intended to interfere with or discourage the Executive's good faith disclosure related to a suspected violation of federal or state law or regulation to any governmental agency or entity or making other disclosures that are protected under the whistleblower provisions of federal or state law or regulation. The Executive cannot and will not be held criminally or civilly liable under any federal or state trade secret law for disclosing otherwise protected trade secrets and/or confidential or proprietary information so long as the disclosure is made in (1) confidence to a federal, state, or local government official, directly or indirectly, or to an attorney and solely for the purpose of reporting or investigating a suspected violation of law; or (2) a complaint or other document filed in a lawsuit or other proceeding, so long as such filing is made under seal. Company will not retaliate against the Executive in any way for a disclosure made pursuant to this Section. Further, in the event the Executive makes such a disclosure, and files a lawsuit against the Company alleging that the Company retaliated against the Executive because of the disclosure, the Executive may disclose the relevant trade secret or confidential information to the Executive's attorney, and may use the same in the court proceeding only if (1) the Executive ensures that any court filing that includes the trade secret or confidential information at issue is made under seal; and (2) the Executive does not otherwise disclose the trade secret or confidential information except as required by court order.

(c) Non-Solicitation of Employees. The Executive recognizes that he possesses and will possess confidential information about other employees of Sempra Energy and its Affiliates relating to their education, experience, skills, abilities, compensation and benefits, and inter-personal relationships with customers of Sempra Energy and its Affiliates. The Executive recognizes that the information he possesses and will possess about these other employees is not generally known, is of substantial value to Sempra Energy and its Affiliates in developing their business and in securing and retaining customers, and has been and will be acquired by him because of his business position with Sempra Energy and its Affiliates. The Executive agrees that at all times during the Executive's employment with the Company and for a period of one (1) year thereafter, he will not, directly or indirectly, solicit or recruit any employee of the Company or its Affiliates for the purpose of being employed by him or by any competitor of the Company or its Affiliates on whose behalf he is acting as an agent, representative or employee and that he will not convey any such confidential information or trade secrets about other employees of Sempra Energy and its Affiliates to any other person; provided, however, that it shall not constitute a solicitation or recruitment of employment in violation of this paragraph to discuss employment opportunities with any employee of the Company or its Affiliates who has either first contacted the Executive or regarding whose employment the Executive has discussed with and received the written approval of the Company's most senior Vice President, Human Resources (or, if such position is vacant, the Company's then Chief Executive Officer), prior to making such solicitation or recruitment. In view of the nature of the Executive's employment with the Company, the Executive likewise agrees that Sempra Energy and its Affiliates would be irreparably harmed by any solicitation or recruitment in violation of the terms of this paragraph and that Sempra Energy and its Affiliates shall therefore be entitled to preliminary and/or permanent injunctive relief prohibiting the Executive from engaging in any activity or threatened activity in violation of the terms of this paragraph and to any other relief available to them.

(d) Survival of Provisions. The obligations contained in Sections 14(a), (b) and (c) above shall survive the termination of the Executive's employment within the Company and shall be fully enforceable thereafter. If it is determined by a court of competent jurisdiction in any state that any

restriction in Section 14(a) or Section 14(c) above is excessive in duration or scope or is unreasonable or unenforceable under the laws of that state, it is the intention of the parties that such restriction may be modified or amended by the court to render it enforceable to the maximum extent permitted by the law of that state.

(e) Release; Consulting Payment. In the event of the Executive's Involuntary Termination, if the Executive (i) reconfirms and agrees to abide by the covenants described in Section 14(a) and Section 14(c) above, (ii) executes the Release within fifty (50) days after the date of Involuntary Termination and does not revoke such Release in accordance with the terms thereof, and (iii) agrees to provide the consulting services described in Section 14(f) below, then in consideration for such covenants and consulting services, the Company shall pay the Executive, in one cash lump sum, an amount (the "Consulting Payment") in cash equal to the greater of: (X) 180% of the Executive's Annual Base Salary as in effect on the Date of Termination, and (Y) the Executive's Annual Base Salary as in effect on the Date of Termination, plus the Executive's Average Annual Bonus. Except as provided in this subsection, the Consulting Payment shall be paid on such date as is determined by the Company within the ten (10) day period commencing on the 60th day after the date of the Executive's Involuntary Termination; provided, however, that if the Executive is a Specified Employee on the date of the Executive's Involuntary Termination, the Consulting Payment shall be paid as provided in Section 9 hereof to the extent required.

(f) Consulting. If the Executive agrees to the provisions of Section 14(e) above, then the Executive shall have the obligation to provide consulting services to the Company as an independent contractor, commencing on the Date of Termination and ending on the second anniversary of the Date of Termination (the "Consulting Period"). The Executive shall hold himself available at reasonable times and on reasonable notice to render such consulting services as may be so assigned to him by the Board or the Company's then Chief Executive Officer; provided, however, that unless the parties otherwise agree, the consulting services rendered by the Executive during the Consulting Period shall not exceed twenty (20) hours each month; and, provided, further, that the consulting services rendered by the Executive during the Consulting Period shall in no event exceed twenty percent (20%) of the average level of services performed by the Executive for the Company over the thirty-six (36) month period immediately preceding the Executive's Separation from Service (or the full period of services to the Company, if the Executive has been providing services to the Company for less than thirty-six (36) months). The Company agrees to use its best efforts during the Consulting Period to secure the benefit of the Executive's consulting services so as to minimize the interference with the Executive's other activities, including requiring the performance of consulting services at the Company's offices only when such services may not be reasonably performed off-site by the Executive.

Section 15. Legal Fees.

(a) Reimbursement of Legal Fees. Subject to subsection (b), in the event of the Executive's Separation from Service either (1) prior to a Change in Control, or (2) on or within two (2) years following a Change in Control, the Company shall reimburse the Executive for all legal fees and expenses (including but not limited to fees and expenses in connection with any arbitration) incurred by the Executive in disputing any issue arising under this Agreement relating to the Executive's Separation from Service or in seeking to obtain or enforce any benefit or right provided by this Agreement.

(b) Requirements for Reimbursement. The Company shall reimburse the Executive's legal fees and expenses pursuant to subsection (a) above only to the extent the arbitrator or court determines the following: (i) the Executive disputed such issue, or sought to obtain or enforce such benefit or right, in good faith, (ii) the Executive had a reasonable basis for such claim, and (iii) in the case

of subsection (a)(1) above, the Executive is the prevailing party. In addition, the Company shall reimburse such legal fees and expenses, only if such legal fees and expenses are incurred during the twenty (20) year period beginning on the date of the Executive's Separation from Service. The legal fees and expenses paid to the Executive for any taxable year of the Executive shall not affect the legal fees and expenses paid to the Executive for any other taxable year of the Executive. The legal fees and expenses shall be paid to the Executive on or before the last day of the Executive's taxable year following the taxable year in which the fees or expenses are determined to be payable pursuant to this Agreement. The Executive's right to reimbursement of legal fees and expenses shall not be subject to liquidation or exchange for any other benefit. Such right to reimbursement of legal fees and expenses shall be provided in a manner that complies with Treasury Regulation Section 1.409A-3(i)(1)(iv).

Section 16. Successors.

(a) Assignment by the Executive. This Agreement is personal to the Executive and without the prior written consent of Sempra Energy shall not be assignable by the Executive otherwise than by will or the laws of descent and distribution. This Agreement shall inure to the benefit of and be enforceable by the Executive's legal representatives.

(b) Successors and Assigns of Sempra Energy. This Agreement shall inure to the benefit of and be binding upon Sempra Energy and its successors and assigns. Sempra Energy may not assign this Agreement to any person or entity (except for a successor described in Section 16(c), (d) or (e) below) without the Executive's written consent.

(c) Assumption. Sempra Energy shall require any successor (whether direct or indirect, by purchase, merger, consolidation or otherwise) to all or substantially all of the business and/or assets of Sempra Energy to assume expressly and agree to perform the obligations and satisfy and discharge the liabilities of this Agreement in the same manner and to the same extent that Sempra Energy would have been required to perform the obligations and satisfy and discharge the liabilities under this Agreement if no such succession had taken place, and Sempra Energy shall have no further obligations and liabilities under this Agreement. Upon such assumption, references to Sempra Energy in this Agreement shall be replaced with references to such successor.

(d) Sale of Subsidiary. In the event that (i) the Executive is employed by a direct or indirect subsidiary of Sempra Energy that is a member of the Sempra Energy Control Group, (ii) Sempra Energy, directly or indirectly through one or more intermediaries, sells or otherwise disposes of such subsidiary, and (iii) such subsidiary ceases to be a member of the Sempra Energy Control Group, then if, on the date such subsidiary ceases to be a member of the Sempra Energy Control Group, the Executive continues in employment with such subsidiary and the Executive does not have a Separation from Service, Sempra Energy shall require such subsidiary or any successor (whether direct or indirect, by purchase merger, consolidation or otherwise) to such subsidiary, or the parent thereof, to assume expressly and agree to perform the obligations and satisfy and discharge the liabilities under this Agreement in the same manner and to the same extent that Sempra Energy would have been required to perform the obligations and satisfy and discharge the liabilities under this Agreement, if such subsidiary had not ceased to be part of the Sempra Energy Control Group, and, upon such assumption, Sempra Energy shall have no further obligations and liabilities under the Agreement. Upon such assumption, (i) references to Sempra Energy in this Agreement shall be replaced with references to such subsidiary, or such successor or parent thereof, assuming this Agreement, and (ii) subsection (b) of the definition of "Cause" and subsection (b) of the definition of "Good Reason" shall apply thereafter, as if a Change in Control had occurred on the date of such cessation.

(e) Sale of Assets of Subsidiary. In the event that (i) the Executive is employed by a direct or indirect subsidiary of Sempra Energy, and (ii) such subsidiary sells or otherwise disposes of substantial assets of such subsidiary to an unrelated service recipient, as determined under Treasury Regulation Section 1.409A-1(f)(2)(ii) (the "Asset Purchaser"), in a transaction described in Treasury Regulation Section 1.409A-1(h)(4) (an "Asset Sale"), then if, on the date of such Asset Sale, the Executive becomes employed by the Asset Purchaser, Sempra Energy and the Asset Purchaser may specify, in accordance with Treasury Regulation Section 1.409A-1(h)(4), that the Executive shall not be treated as having a Separation from Service, and in such event, Sempra Energy may require such Asset Purchaser, or the parent thereof, to assume expressly and agree to perform the obligations and satisfy and discharge the liabilities under this Agreement in the same manner and to the same extent that the Company would have been required to perform the obligations and satisfy and discharge the liabilities under this Agreement, if the Asset Sale had not taken place, and, upon such assumption, Sempra Energy shall have no further obligations and liabilities under the Agreement. Upon such assumption, (i) references to Sempra Energy in this Agreement shall be replaced with references to the Asset Purchaser or the parent thereof, as applicable, and (ii) subsection (b) of the definition of "Cause" and subsection (b) of the definition of "Good Reason" shall apply thereafter, as if a Change in Control had occurred on the date of the Asset Sale.

Section 17. Administration Prior to Change in Control. Prior to a Change in Control, the Compensation Committee shall have full and complete authority to construe and interpret the provisions of this Agreement, to determine an individual's entitlement to benefits under this Agreement, to make in its sole and absolute discretion all determinations contemplated under this Agreement, to investigate and make factual determinations necessary or advisable to administer or implement this Agreement, and to adopt such rules and procedures as it deems necessary or advisable for the administration or implementation of this Agreement. All determinations made under this Agreement by the Compensation Committee shall be final, conclusive and binding on all interested persons. Prior to a Change in Control, the Compensation Committee may delegate responsibilities for the operation and administration of this Agreement to one or more officers or employees of the Company. The provisions of this Section 17 shall terminate and be of no further force and effect upon the occurrence of a Change in Control.

Section 18. Compliance with Section 409A of the Code. All payments and benefits payable under this Agreement (including, without limitation, the Section 409A Payments) are intended to comply with the requirements of Section 409A of the Code. Certain payments and benefits payable under this Agreement are intended to be exempt from the requirements of Section 409A of the Code. This Agreement shall be interpreted in accordance with the applicable requirements of, and exemptions from, Section 409A of the Code and the Treasury Regulations thereunder. To the extent the payments and benefits under this Agreement are subject to Section 409A of the Code, this Agreement shall be interpreted, construed and administered in a manner that satisfies the requirements of Sections 409A(a)(2), (3) and (4) of the Code and the Treasury Regulations thereunder If the Company and the Executive determine that any compensation, benefits or other payments that are payable under this Agreement and intended to comply with Sections 409A(a)(2), (3) and (4) of the Code do not comply with Section 409A of the Code, the Treasury Regulations thereunder and other applicable authority issued by the Internal Revenue Service, to the extent permitted under Section 409A of the Code, the Treasury Regulations thereunder and any applicable authority issued by the Internal Revenue Service, the Company and the Executive agree to amend this Agreement, or take such other actions as the Company and the Executive deem reasonably necessary or appropriate, to cause such compensation, benefits and other payments to comply with the requirements of Section 409A of the Code, the Treasury Regulations thereunder and other applicable authority issued by the Internal Revenue Service, while providing compensation, benefits and

other payments that are, in the aggregate, no less favorable than the compensation, benefits and other payments provided under this Agreement. In the case of any compensation, benefits or other payments that are payable under this Agreement and intended to comply with Sections 409A(a)(2), (3) and (4) of the Code, if any provision of the Agreement would cause such compensation, benefits or other payments to fail to so comply, such provision shall not be effective and shall be null and void with respect to such compensation, benefits or other payments to the extent such provision would cause a failure to comply, and such provision shall otherwise remain in full force and effect.

Section 19. Miscellaneous.

(a) Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the State of California, without reference to its principles of conflict of laws. The captions of this Agreement are not part of the provisions hereof and shall have no force or effect. Except as provided herein, the Agreement may not be amended, modified, repealed, waived, extended or discharged except by an agreement in writing signed by the parties hereto. No person, other than pursuant to a resolution of the Board or a committee thereof, shall have authority on behalf of Sempra Energy to agree to amend, modify, repeal, waive, extend or discharge any provision of this Agreement or anything in reference thereto.

(b) Notices. All notices and other communications hereunder shall be in writing and shall be given by hand delivery to the other party, by a reputable overnight carrier or by registered or certified mail, return receipt requested, postage prepaid, addressed, in either case, to the Company's headquarters or to such other address as either party shall have furnished to the other in writing in accordance herewith. Notices and communications shall be effective when actually received by the addressee.

(c) Severability. The invalidity or unenforceability of any provision of this Agreement shall not affect the validity or enforceability of any other provision of this Agreement.

(d) Taxes. The Company may withhold from any amounts payable under this Agreement such federal, state or local taxes as shall be required to be withheld pursuant to any applicable law or regulation.

(e) No Waiver. The Executive's or the Company's failure to insist upon strict compliance with any provision hereof or any other provision of this Agreement or the failure to assert any right the Executive or the Company may have hereunder, including, without limitation, the right of the Executive to terminate employment for Good Reason pursuant to Section 1 hereof, or the right of the Company to terminate the Executive's employment for Cause pursuant to Section 1 hereof shall not be deemed to be a waiver of such provision or right or any other provision or right of this Agreement.

(f) Entire Agreement; Exclusive Benefit; Supersession of Prior Agreement. This instrument contains the entire agreement of the Executive, the Company or any predecessor or subsidiary thereof with respect to any severance or termination pay. The Pre-Change in Control Severance Payment, the Post-Change in Control Severance Payment and all other benefits provided hereunder shall be in lieu of any other severance payments to which the Executive is entitled under any other severance plan or program or arrangement sponsored by the Company, as well as pursuant to any individual employment or severance agreement that was entered into by the Executive and the Company, and, upon the Effective Date of this Agreement, all such plans, programs, arrangements and agreements are hereby automatically superseded and terminated.

(g) No Right of Employment. Nothing in this Agreement shall be construed as giving the Executive any right to be retained in the employ of the Company or shall interfere in any way with the right of the Company to terminate the Executive's employment at any time, with or without Cause.

(h) Unfunded Obligation. The obligations under this Agreement shall be unfunded. Benefits payable under this Agreement shall be paid from the general assets of the Company. The Company shall have no obligation to establish any fund or to set aside any assets to provide benefits under this Agreement.

(i) Termination upon Sale of Assets of Subsidiary. Notwithstanding anything contained herein, this Agreement shall automatically terminate and be of no further force and effect and no benefits shall be payable hereunder in the event that (i) the Executive is employed by a direct or indirect subsidiary of Sempra Energy, and (ii) an Asset Sale (as defined in Section 16(e)) occurs (other than such a sale or disposition which is part of a transaction or series of transactions which would result in a Change in Control), and (iii) as a result of such Asset Sale, the Executive is offered employment by the Asset Purchaser in an executive position with reasonably comparable status, compensation, benefits and severance agreement (including the assumption of this Agreement in accordance with Section 16(e)) and which is consistent with the Executive's experience and education, but the Executive declines to accept such offer and the Executive fails to become employed by the Asset Purchaser on the date of the Asset Sale.

(j) Term. The term of this Agreement shall commence on the Effective Date and shall continue until the third (3rd) anniversary of the Effective Date; provided, however, that commencing on the second (2nd) anniversary of the Effective Date (and each anniversary of the Effective Date thereafter), the term of this Agreement shall automatically be extended for one (1) additional year, unless at least ninety (90) days prior to such date, the Company or the Executive shall give written notice to the other party that it or he, as the case may be, does not wish to so extend this Agreement. Notwithstanding the foregoing, if the Company gives such written notice to the Executive (i) at a time when Sempra Energy is a party to an agreement that, if consummated, would constitute a Change in Control or (ii) less than two (2) years after a Change in Control, the term of this Agreement shall be automatically extended until the later of (A) the date that is one (1) year after the anniversary of the Effective Date that follows such written notice or (B) the second (2nd) anniversary of the Change in Control Date.

(k) Counterparts. This Agreement may be executed in several counterparts, each of which shall be deemed to be an original but all of which together shall constitute one and the same instrument.

[*remainder of page intentionally left blank*]

IN WITNESS WHEREOF, the Executive and, pursuant to due authorization from its Board of Directors, the Company have caused this Agreement to be executed as of the day and year first above written.

SEMPRA ENERGY

_____

G. Joyce Rowland
Senior Vice President, Chief Human Resources and Administrative Officer

_____

Date

EXECUTIVE

_____

Steven D. Davis
Corporate Group President - Utilities

_____

Date

EXHIBIT A

GENERAL RELEASE

This GENERAL RELEASE (the "Agreement"), dated _____, is made by and between _____, a California corporation (the "Company") and _____ ("you" or "your").

WHEREAS, you and the Company have previously entered into that certain Severance Pay Agreement dated _____, 20___ (the "Severance Pay Agreement"); and

WHEREAS, your right to receive certain severance pay and benefits pursuant to the terms of Section 4 or Section 5 of the Severance Pay Agreement, as applicable, are subject to and conditioned upon your execution and non-revocation of a general release of claims by you against the Company and its subsidiaries and affiliates.

WHEREAS, your right to receive the Consulting Payment provided pursuant to Section 14(e) of the Severance Pay Agreement is subject to and conditioned upon your execution and non-revocation of a general release of claims by you against the Company and its subsidiaries and affiliates; and your adherence to the covenants described under Section 14 of the Severance Pay Agreement.

NOW, THEREFORE, in consideration of the premises and the mutual covenants herein contained, you and the Company hereby agree as follows:

ONE: Your signing of this Agreement confirms that your employment with the Company shall terminate at the close of business on _____, or earlier upon our mutual agreement.

TWO: As a material inducement for the payment of the severance and benefits of the Severance Pay Agreement, and except as otherwise provided in this Agreement, you and the Company hereby irrevocably and unconditionally release, acquit and forever discharge the other from any and all Claims either may have against the other. For purposes of this Agreement and the preceding sentence, the words "Releasee" or "Releasees" and "Claim" or "Claims" shall have the meanings set forth below:

(a) The words "Releasee" or "Releasees" shall refer to you and to the Company and each of the Company's owners, stockholders, predecessors, successors, assigns, agents, directors, officers, employees, representatives, attorneys, advisors, parent companies, divisions, subsidiaries, affiliates (and agents, directors, officers, employees, representatives, attorneys and advisors of such parent companies, divisions, subsidiaries and affiliates) and all persons acting by, through, under or in concert with any of them.

(b) The words "Claim" or "Claims" shall refer to any charges, complaints, claims, liabilities, obligations, promises, agreements, controversies, damages, actions, causes of action, suits, rights, demands, costs, losses, debts and expenses (including attorneys' fees and costs actually incurred) of any nature whatsoever, known or unknown, suspected or unsuspected, which you or the Company now, in the past or, in the future may have, own or hold against any of the Releasees; *provided, however*, that the word "Claim" or "Claims" shall not refer to any charges, complaints, claims, liabilities, obligations, promises, agreements, controversies, damages, actions, causes of action, suits, rights, demands, costs, losses, debts and expenses (including attorneys' fees and costs actually incurred) arising under [*identify severance, employee benefits, stock option, indemnification and D&O and other agreements containing*

duties, rights obligations etc. of either party that are to remain operative]. Claims released pursuant to this Agreement by you and the Company include, but are not limited to, rights arising out of alleged violations of any contracts, express or implied, any tort, claim, any claim that you failed to perform or negligently performed or breached your duties during employment at the Company, any legal restrictions on the Company's right to terminate employment relationships; and any federal, state or other governmental statute, regulation, or ordinance, governing the employment relationship including, without limitation, all state and federal laws and regulations prohibiting discrimination based on protected categories, and all state and federal laws and regulations prohibiting retaliation against employees for engaging in protected activity or legal off-duty conduct. This release does not extend to claims for workers' compensation or other claims which by law may not be waived or released by this Agreement.

THREE: You and the Company expressly waive and relinquish all rights and benefits afforded by any statute (including but not limited to Section 1542 of the Civil Code of the State of California and analogous laws of other states) which limits the effect of a release with respect to unknown claims. You and the Company do so understanding and acknowledging the significance of the release of unknown claims and the waiver of statutory protection against a release of unknown claims (including but not limited to Section 1542). Section 1542 of the Civil Code of the State of California states as follows:

> "A GENERAL RELEASE DOES NOT EXTEND TO CLAIMS WHICH THE CREDITOR DOES NOT KNOW OR SUSPECT TO EXIST IN HIS OR HER FAVOR AT THE TIME OF EXECUTING THE RELEASE, WHICH IF KNOWN BY HIM OR HER MUST HAVE MATERIALLY AFFECTED HIS OR HER SETTLEMENT WITH THE DEBTOR."

Thus, notwithstanding the provisions of Section 1542 or of any similar statute, and for the purpose of implementing a full and complete release and discharge of the Releasees, you and the Company expressly acknowledge that this Agreement is intended to include in its effect, without limitation, all Claims which are known and all Claims which you or the Company do not know or suspect to exist in your or the Company's favor at the time of execution of this Agreement and that this Agreement contemplates the extinguishment of all such Claims.

FOUR: The parties acknowledge that they might hereafter discover facts different from, or in addition to, those they now know or believe to be true with respect to a Claim or Claims released herein, and they expressly agree to assume the risk of possible discovery of additional or different facts, and agree that this Agreement shall be and remain effective, in all respects, regardless of such additional or different discovered facts.

FIVE: As a further material inducement to the Company to enter into this Agreement, you hereby agree to indemnify and hold each of the Releasees harmless from all loss, costs, damages, or expenses, including without limitation, attorneys' fees incurred by the Releasees, arising out of any breach of this Agreement by you or the fact that any representation made in this Agreement by you was false when made.

As a further material inducement to you to enter into this Agreement, the Company hereby agrees to indemnify and hold each of the Releasees harmless from all loss, costs, damages, or expenses, including without limitation, attorneys' fees incurred by the Releasees, arising out of any breach of this Agreement by it or the fact that any representation made in this Agreement by it was knowingly false when made.

SIX: You and the Company represent and acknowledge that in executing this Agreement, neither is relying upon any representation or statement not set forth in this Agreement or the Severance Agreement.

SEVEN: (a) This Agreement shall not in any way be construed as an admission by the Company that it has acted wrongfully with respect to you or any other person, or that you have any rights whatsoever against the Company, and the Company specifically disclaims any liability to or wrongful acts against you or any other person, on the part of itself, its employees or its agents. This Agreement shall not in any way be construed as an admission by you that you have acted wrongfully with respect to the Company, or that you failed to perform your duties or negligently performed or breached your duties, or that the Company had good cause to terminate your employment.

(b) If you are a party or are threatened to be made a party to any proceeding by reason of the fact that you were an officer or director of the Company, the Company shall indemnify you against any expenses (including reasonable attorneys' fees; *provided*, that counsel has been approved by the Company prior to retention, which approval shall not be unreasonably withheld), judgments, fines, settlements and other amounts actually or reasonably incurred by you in connection with that proceeding; *provided*, that you acted in good faith and in a manner you reasonably believed to be in the best interest of the Company. The limitations of California Corporations Code Section 317 shall apply to this assurance of indemnification.

(c) You agree to cooperate with the Company and its designated attorneys, representatives and agents in connection with any actual or threatened judicial, administrative or other legal or equitable proceeding in which the Company is or may become involved. Upon reasonable notice, you agree to meet with and provide to the Company or its designated attorneys, representatives or agents all information and knowledge you have relating to the subject matter of any such proceeding. The Company agrees to reimburse you for any reasonable costs you incur in providing such cooperation.

EIGHT: This Agreement is entered into in California and shall be governed by substantive California law, except as provided in this section. If any dispute arises between you and the Company, including but not limited to, disputes relating to this Agreement, or if you prosecute a claim you purported to release by means of this Agreement ("Arbitrable Dispute"), you and the Company agree to resolve that Arbitrable Dispute through final and binding arbitration under this section. You also agree to arbitrate any Arbitrable Dispute which also involves any other released party who offers or agrees to arbitrate the dispute under this section. Your agreement to arbitrate applies, for example, to disputes about the validity, interpretation, or effect of this Agreement or alleged violations of it, claims of discrimination under federal or state law, or other statutory violation claims.

As to any Arbitrable Dispute, you and the Company waive any right to a jury trial or a court bench trial. You and the Company also waive the right to bring, maintain, or participate in any class, collective, or representative proceeding, whether in arbitration or otherwise. Further, Arbitrable Disputes must be brought in the individual capacity of the party asserting the claim, and cannot be maintained on a class, collective, or representative basis.

Arbitration shall take place in San Diego, California under the employment dispute resolution rules of the Judicial Arbitration and Mediation Service ("JAMS"), (or, if you are employed outside of California at the time of the termination of your employment, at the nearest location of the American Arbitration Association and in accordance with the AAA rules), before an experienced employment arbitrator selected in accordance with those rules. The arbitrator may not modify or change this Agreement in any way. The Company will be responsible for paying any filing fee and the fees and costs of the Arbitrator; provided, however, that if you are the party initiating the claim, you will contribute an amount equal to the filing fee

to initiate a claim in the court of general jurisdiction in the state in which you are employed by the Company. Each party shall pay for its own costs and attorneys' fees, if any. However if any party prevails on a statutory claim which affords the prevailing party attorneys' fees and costs, or if there is a written agreement providing for attorneys' fees and/or costs, the Arbitrator may award reasonable attorney's fees and/or costs to the prevailing party, applying the same standards a court would apply under the law applicable to the claim. The Arbitrator shall apply the Federal Rules of Evidence and shall have the authority to entertain a motion to dismiss or a motion for summary judgment by any party and shall apply the standards governing such motions under the Federal Rules of Civil Procedure. The Federal Arbitration Act shall govern the arbitration and shall govern the interpretation or enforcement of this section or any arbitration award. The arbitrator will not have the authority to consider, certify, or hear an arbitration as a class action, collective action, or any other type of representative action.

To the extent that the Federal Arbitration Act is inapplicable, California law pertaining to arbitration agreements shall apply. Arbitration in this manner shall be the exclusive remedy for any Arbitrable Dispute. Except as prohibited by the ADEA, should you or the Company attempt to resolve an Arbitrable Dispute by any method other than arbitration pursuant to this section, the responding party will be entitled to recover from the initiating party all damages, expenses, and attorneys' fees incurred as a result of this breach. This Section TEN supersedes any existing arbitration agreement between the Company and me as to any Arbitrable Dispute. Notwithstanding anything in this Section TEN to the contrary, a claim for benefits under an ERISA-covered plan shall not be an Arbitrable Dispute.

NINE: Both you and the Company understand that this Agreement is final and binding eight (8) days after its execution and return. Should you nevertheless attempt to challenge the enforceability of this Agreement as provided in Paragraph EIGHT or, in violation of that Paragraph, through litigation, as a further limitation on any right to make such a challenge, you shall initially tender to the Company, by certified check delivered to the Company, all monies received pursuant to Sections 4 or 5 of the Severance Pay Agreement, as applicable, plus interest, and invite the Company to retain such monies and agree with you to cancel this Agreement and void the Company's obligations under the Severance Pay Agreement. In the event the Company accepts this offer, the Company shall retain such monies and this Agreement shall be canceled and the Company shall have no obligation under Section 14(e) of the Severance Pay Agreement. In the event the Company does not accept such offer, the Company shall so notify you and shall place such monies in an interest-bearing escrow account pending resolution of the dispute between you and the Company as to whether or not this Agreement and the Company's obligations under the Severance Pay Agreement shall be set aside and/or otherwise rendered voidable or unenforceable. Additionally, any consulting agreement then in effect between you and the Company shall be immediately rescinded with no requirement of notice.

TEN: Any notices required to be given under this Agreement shall be delivered either personally or by first class United States mail, postage prepaid, addressed to the respective parties as follows:

To Company: [TO COME]

Attn: [TO COME]

To You:_____

_____

_____

ELEVEN: You understand and acknowledge that you have been given a period of forty-five (45) days to review and consider this Agreement (as well as certain data on other persons eligible for similar benefits, if any) before signing it and may use as much of this forty-five (45) day period as you wish prior to signing. You are encouraged, at your personal expense, to consult with an attorney before signing this Agreement. You understand and acknowledge that whether or not you do so is your decision. You may revoke this Agreement within seven (7) days of signing it. If you wish to revoke, the Company's Vice President, Human Resources must receive written notice from you no later than the close of business on the seventh (7th) day after you have signed the Agreement. If revoked, this Agreement shall not be effective and enforceable, and you will not receive payments or benefits under Sections 4 or 5 of the Severance Pay Agreement, as applicable

TWELVE: This Agreement constitutes the entire agreement of the parties hereto and supersedes any and all other agreements (except the Severance Pay Agreement) with respect to the subject matter of this Agreement, whether written or oral, between you and the Company. All modifications and amendments to this Agreement must be in writing and signed by the parties.

THIRTEEN: Each party agrees, without further consideration, to sign or cause to be signed, and to deliver to the other party, any other documents and to take any other action as may be necessary to fulfill the obligations under this Agreement.

FOURTEEN: If any provision of this Agreement or the application thereof is held invalid, the invalidity shall not affect other provisions or applications of the Agreement which can be given effect without the invalid provisions or application; and to this end the provisions of this Agreement are declared to be severable.

FIFTEEN: This Agreement may be executed in counterparts.

I have read the foregoing General Release, and I accept and agree to the provisions it contains and hereby execute it voluntarily and with full understanding of its consequences. I am aware it includes a release of all known or unknown claims.

DATED: _____

_____

DATED: _____

_____

You acknowledge that you first received this Agreement on [date].

_____

SEMPRA ENERGY

SEVERANCE PAY AGREEMENT

THIS AGREEMENT (this "Agreement"), dated as of January 1, 2017 (the "Effective Date"), is made by and between SEMPRA ENERGY, a California corporation ("Sempra Energy"), and Trevor I. Mihalik (the "Executive").

WHEREAS, the Executive is currently employed by Sempra Energy or another corporation or trade or business which is a member of a controlled group of corporations (within the meaning of Section 414(b) or (c) of the Code) of which Sempra Energy is a component member, determined by applying an ownership threshold of 50% rather than 80% (Sempra Energy and such other controlled group members, collectively, "Company");

WHEREAS, Sempra Energy and the Executive desire to enter into this Agreement; and

WHEREAS, the Board of Directors of Sempra Energy (the "Board") or an authorized committee thereof has authorized this Agreement.

NOW, THEREFORE, in consideration of the premises and mutual covenants herein contained, Sempra Energy and the Executive hereby agree as follows:

Section 1. Definitions. For purposes of this Agreement, the following capitalized terms have the meanings set forth below:

"Accounting Firm" has the meaning assigned thereto in Section 8(d) hereof.

"Accrued Obligations" means the sum of (A) the Executive's Annual Base Salary through the Date of Termination to the extent not theretofore paid, (B) an amount equal to any annual Incentive Compensation Awards earned with respect to fiscal years ended prior to the year that includes the Date of Termination to the extent not theretofore paid, (C) any accrued and unpaid vacation, and (D) reimbursement for unreimbursed business expenses, if any, properly incurred by the Executive in the performance of his duties in accordance with Company policies applicable to the Executive from time to time, in each case to the extent not theretofore paid.

"Affiliate" has the meaning set forth in Rule 12b-2 promulgated under the Exchange Act.

"Annual Base Salary" means the Executive's annual base salary from the Company.

"Asset Purchaser" has the meaning assigned thereto in Section 16(e).

"Asset Sale" has the meaning assigned thereto in Section 16(e).

"Average Annual Bonus" means the average of the annual bonuses from the Company earned by the Executive with respect to the three (3) fiscal years of Sempra Energy ending immediately preceding the Date of Termination (the "Bonus Fiscal Years"); *provided*, *however*, that, if the Executive was employed by the Company for less than three (3) Bonus Fiscal Years, "Average Annual Bonus" means the average of the annual bonuses (if any) from the Company earned by the Executive with respect

to the Bonus Fiscal Years during which the Executive was employed by the Company; and, *provided*, *further*, that, if the Executive was not employed by the Company during any of the Bonus Fiscal Years, "Average Annual Bonus" means zero.

"Cause" means:

(a) Prior to a Change in Control, (i) the willful failure by the Executive to substantially perform the Executive's duties with the Company (other than any such failure resulting from the Executive's incapacity due to physical or mental illness), (ii) the grossly negligent performance of such obligations referenced in clause (i) of this definition, (iii) the Executive's gross insubordination; and/or (iv) the Executive's commission of one or more acts of moral turpitude that constitute a violation of applicable law (including but not limited to a felony involving one or more acts of moral turpitude) which have or result in an adverse effect on the Company, monetarily or otherwise, or one or more significant acts of dishonesty. For purposes of clause (i) of this subsection (a), no act, or failure to act, on the Executive's part shall be deemed "willful" unless done, or omitted to be done, by the Executive not in good faith and without reasonable belief that the Executive's act, or failure to act, was in the best interests of the Company.

(b) From and after a Change in Control (or in connection with a termination occurring pursuant to subsection 5(h)), (i) the willful and continued failure by the Executive to substantially perform the Executive's duties with the Company (other than any such failure resulting from the Executive's incapacity due to physical or mental illness or other than any such actual or anticipated failure after the issuance of a Notice of Termination for Good Reason by the Executive pursuant to Section 2 hereof and after the Company's cure period relating to the event on which Good Reason is based, if any and if applicable, has expired) and/or (ii) the Executive's commission of one or more acts of moral turpitude that constitute a violation of applicable law (including but not limited to a felony involving one or more acts of moral turpitude) which have or result in an adverse effect on the Company, monetarily or otherwise, or one or more significant acts of dishonesty. For purposes of clause (i) of this subsection (b), no act, or failure to act, on the Executive's part shall be deemed "willful" unless done, or omitted to be done, by the Executive not in good faith and without reasonable belief that the Executive's act, or failure to act, was in the best interests of the Company. Notwithstanding the foregoing, the Executive shall not be deemed terminated for Cause pursuant to clause (i) of this subsection (b) unless and until the Executive shall have been provided with reasonable notice of and, if possible, a reasonable opportunity to cure the facts and circumstances claimed to provide a basis for termination of the Executive's employment for Cause.

"Change in Control" shall be deemed to have occurred on the date that a change in the ownership of Sempra Energy, a change in the effective control of Sempra Energy, or a change in the ownership of a substantial portion of assets of Sempra Energy occurs (each, as defined in subsection (a) below), except as otherwise provided in subsections (b), (c) and (d) below:

(a) (i) a "change in the ownership of Sempra Energy" occurs on the date that any one person, or more than one person acting as a group, acquires ownership of stock of Sempra Energy that, together with stock held by such person or group, constitutes more than fifty percent (50%) of the total fair market value or total voting power of the stock of Sempra Energy,

(ii) a "change in the effective control of Sempra Energy" occurs only on either of the following dates:

(A) the date any one person, or more than one person acting as a group, acquires (or has acquired during the twelve (12) month period ending on the date of the most recent acquisition by such person or persons) ownership of stock of Sempra Energy possessing thirty percent (30%) or more of the total voting power of the stock of Sempra Energy, or

(B) the date a majority of the members of the Board is replaced during any twelve (12) month period by directors whose appointment or election is not endorsed by a majority of the members of the Board before the date of appointment or election, and

(iii) a "change in the ownership of a substantial portion of assets of Sempra Energy" occurs on the date any one person, or more than one person acting as a group, acquires (or has acquired during the twelve (12) month period ending on the date of the most recent acquisition by such person or persons) assets from Sempra Energy that have a total gross fair market value equal to or more than eighty-five percent (85%) of the total gross fair market value of all of the assets of Sempra Energy immediately before such acquisition or acquisitions.

(b) A "change in the ownership of Sempra Energy" or "a change in the effective control of Sempra Energy" shall not occur under clause (a)(i) or (a)(ii) by reason of any of the following:

(i) an acquisition of ownership of stock of Sempra Energy directly from Sempra Energy or its Affiliates other than in connection with the acquisition by Sempra Energy or its Affiliates of a business,

(ii) a merger or consolidation which would result in the voting securities of Sempra Energy outstanding immediately prior to such merger or consolidation continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity or any parent thereof), in combination with the ownership of any trustee or other fiduciary holding securities under an employee benefit plan of the Company, at least sixty percent (60%) of the combined voting power of the securities of Sempra Energy or such surviving entity or any parent thereof outstanding immediately after such merger or consolidation, or

(iii) a merger or consolidation effected to implement a recapitalization of Sempra Energy (or similar transaction) in which no Person is or becomes the Beneficial Owner (within the meaning of Rule 13d-3 promulgated under the Exchange Act), directly or indirectly, of securities of Sempra Energy (not including the securities beneficially owned by such Person any securities acquired directly from Sempra Energy or its Affiliates other than in connection with the acquisition by Sempra Energy or its Affiliates of a business) representing twenty percent (20%) or more of the combined voting power of Sempra Energy's then outstanding securities.

(c) A "change in the ownership of a substantial portion of assets of Sempra Energy" shall not occur under clause (a)(iii) by reason of a sale or disposition by Sempra Energy of the assets of Sempra Energy to an entity, at least sixty percent (60%) of the combined voting power of the voting securities of which are owned by shareholders of Sempra Energy in substantially the same proportions as their ownership of Sempra Energy immediately prior to such sale.

(d) This definition of "Change in Control" shall be limited to the definition of a "change in control event" with respect to the Executive and relating to Sempra Energy under Treasury Regulation Section 1.409A-3(i)(5).

"Change in Control Date" means the date on which a Change in Control occurs.

"Code" means the Internal Revenue Code of 1986, as amended.

"Compensation Committee" means the compensation committee of the Board.

"Consulting Payment" has the meaning assigned thereto in Section 14(e) hereof.

"Consulting Period" has the meaning assigned thereto in Section 14(f) hereof.

"Date of Termination" has the meaning assigned thereto in Section 2(b) hereof.

"Disability" has the meaning set forth in the long-term disability plan or its successor maintained by the Company entity that is the employer of the Executive; *provided*, *however*, that the Executive's employment hereunder may not be terminated by reason of Disability unless (i) at the time of such termination there is no reasonable expectation that the Executive will return to work within the next ninety (90) day period and (ii) such termination is permitted by all applicable disability laws.

"Exchange Act" means the Securities Exchange Act of 1934, as amended, and the applicable rulings and regulations thereunder.

"Excise Tax" has the meaning assigned thereto in Section 8(a) hereof.

"Good Reason" means:

(a) Prior to a Change in Control, the occurrence of any of the following without the prior written consent of the Executive, unless such act or failure to act is corrected by the Company prior to the Date of Termination specified in the Notice of Termination (as required under Section 2 hereof):

(i) the assignment to the Executive of any duties materially inconsistent with the range of duties and responsibilities appropriate to a senior executive within the Company (such range determined by reference to past, current and reasonable practices within the Company);

(ii) a material reduction in the Executive's overall standing and responsibilities within the Company, but not including (A) a mere change in title or (B) a transfer within the Company, which, in the case of both (A) and (B), does not adversely affect the Executive's overall status within the Company;

(iii) a material reduction by the Company in the Executive's aggregate annualized compensation and benefits opportunities, except for across-the-board reductions (or modifications of benefit plans) similarly affecting all similarly situated executives of the Company of comparable rank with the Executive;

(iv) the failure by the Company to pay to the Executive any portion of the Executive's current compensation and benefits or any portion of an installment of deferred compensation under any deferred compensation program of the Company within thirty (30) days of the date such compensation is due;

(v) any purported termination of the Executive's employment that is not effected pursuant to a Notice of Termination satisfying the requirements of Section 2 hereof;

(vi) the failure by Sempra Energy to perform its obligations under Section 16(c) or (d) hereof;

(vii) the failure by the Company to provide the indemnification and D&O insurance protection Section 10 of this Agreement requires it to provide; or

(viii) the failure by Sempra Energy (or any of the entities comprising the Company, as applicable) to comply with any material provision of this Agreement.

(b) From and after a Change in Control (or in connection with a termination occurring pursuant to subsection 5(h)), the occurrence of any of the following without the prior written consent of the Executive, unless such act or failure to act is corrected by the Company prior to the Date of Termination specified in the Notice of Termination (as required under Section 2 hereof):

(i) an adverse change in the Executive's title, authority, duties, responsibilities or reporting lines as in effect immediately prior to the Change in Control;

(ii) a reduction by the Company in the Executive's aggregate annualized compensation opportunities, except for across-the-board reductions in base salaries, annual bonus opportunities or long-term incentive compensation opportunities of less than ten percent (10%) similarly affecting all similarly situated executives (including, if applicable, of the Person then in control of Sempra Energy) of comparable rank with the Executive; or the failure by the Company to continue in effect any material benefit plan in which the Executive participates immediately prior to the Change in Control, unless an equitable arrangement (embodied in an ongoing substitute or alternative plan) has been made with respect to such plan, or the failure by the Company to continue the Executive's participation therein (or in such substitute or alternative plan) on a basis not materially less favorable, both in terms of the amount of benefits provided and the level of the Executive's participation relative to other participants, as existed at the time of the Change in Control;

(iii) the relocation of the Executive's principal place of employment immediately prior to the Change in Control Date (the "Principal Location") to a location which is both further away from the Executive's residence and more than thirty (30) miles from such Principal Location, or the Company's requiring the Executive to be based anywhere other than such Principal Location (or permitted relocation thereof), or a substantial increase in the Executive's business travel obligations outside of the Southern California area as of immediately prior to the Change in Control (without regard to any changes therein in anticipation of the Change in Control) other than any such increase that (A) arises in connection with extraordinary business activities of the Company of limited duration and (B) is understood not to be part of the Executive's regular duties with the Company;

(iv) the failure by the Company to pay to the Executive any portion of the Executive's current compensation and benefits or any portion of an installment of deferred compensation under any deferred compensation program of the Company within thirty (30) days of the date such compensation is due;

(v) any purported termination of the Executive's employment that is not effected pursuant to a Notice of Termination satisfying the requirements of Section 2 hereof; for purposes of this Agreement;

(vi) the failure by Sempra Energy to perform its obligations under Section 16(c) or (d) hereof;

(vii) the failure by the Company to provide the indemnification and D&O insurance protection Section 10 of this Agreement requires it to provide; or

(viii) the failure by Sempra Energy (or any of the entities comprising the Company, as applicable) to comply with any material provision of this Agreement.

Following a Change in Control, the Executive's determination that an act or failure to act constitutes Good Reason shall be presumed to be valid unless such determination is deemed to be unreasonable by an arbitrator pursuant to the procedure described in Section 13 hereof. The Executive's right to terminate the Executive's employment for Good Reason shall not be affected by the Executive's incapacity due to physical or mental illness. The Executive's continued employment shall not constitute consent to, or a waiver of rights with respect to, any act or failure to act constituting Good Reason hereunder.

"Incentive Compensation Awards" means awards granted under Incentive Compensation Plans providing the Executive with the opportunity to earn, on a year-by-year basis, annual and long-term incentive compensation.

"Incentive Compensation Plans" means annual incentive compensation plans and long-term incentive compensation plans of the Company, which long-term incentive compensation plans may include plans offering stock options, restricted stock and other long-term incentive compensation.

"Involuntary Termination" means (a) the Executive's Separation from Service by reason other than for Cause, death, Disability, or Mandatory Retirement, or (b) the Executive's Separation from Service by reason of resignation of employment for Good Reason.

"JAMS Rules" has the meaning assigned thereto in Section 13 hereof.

"Mandatory Retirement" means termination of employment pursuant to the Company's mandatory retirement policy.

"Medical Continuation Benefits" has the meaning assigned thereto in Section 4(c) hereof.

"Notice of Termination" has the meaning assigned thereto in Section 2(a) hereof.

"Payment" has the meaning assigned thereto in Section 8(a) hereof.

"Payment in Lieu of Notice" has the meaning assigned thereto in Section 2(b) hereof.

"Person" means any person, entity or "group" within the meaning of Section 13(d)(3) or Section 14(d)(2) of the Exchange Act, except that such term shall not include (1) Sempra Energy or any of its Affiliates, (2) a trustee or other fiduciary holding securities under an employee benefit plan of Sempra Energy or any of its Affiliates, (3) an underwriter temporarily holding securities pursuant to an offering of such securities, (4) a corporation owned, directly or indirectly, by the shareholders of Sempra Energy in substantially the same proportions as their ownership of stock of Sempra Energy, or (5) a person or group as used in Rule 13d-1(b) under the Exchange Act.

"Post-Change in Control Severance Payment" has the meaning assigned thereto in Section 5 hereof.

"Pre-Change in Control Severance Payment" has the meaning assigned thereto in Section 4 hereof.

"Principal Location" has the meaning assigned thereto in clause (b)(iii) of the definition of Good Reason, above.

"Proprietary Information" has the meaning assigned thereto in Section 14(a) hereof.

"Pro Rata Bonus" has the meaning assigned thereto in Section 5(b) hereof.

"Release" has the meaning assigned thereto in Section 4 hereof.

"Section 409A Payments" means any payments under this Agreement which are subject to Section 409A of the Code.

"Sempra Energy Control Group" means Sempra Energy and all persons with whom Sempra Energy would be considered a single employer under Section 414(b) or 414(c) of the Code, as determined from time to time.

"Separation from Service" has the meaning set forth in Treasury Regulation Section 1.409A-1(h).

"SERP" has the meaning assigned thereto in Section 5(c) hereof.

"Specified Employee" shall be determined in accordance with Section 409A(a)(2)(B)(i) of the Code and Treasury Regulation Section 1.409A-1(i).

For purposes of this Agreement, references to any "Treasury Regulation" shall mean such Treasury Regulation as in effect on the date hereof.

Section 2. Notice and Date of Termination.

(a) Any termination of the Executive's employment by the Company or by the Executive shall be communicated by a written notice of termination to the other party (the "Notice of Termination"). Where applicable, the Notice of Termination shall indicate the specific termination provision in this Agreement relied upon and shall set forth in reasonable detail the facts and circumstances claimed to provide a basis for termination of the Executive's employment under the provision so indicated. Unless the Board or a committee thereof, in writing, provides a longer notice period, a Notice of Termination by the Executive alleging a termination for Good Reason must be made within 180 days of the act or failure to act that the Executive alleges to constitute Good Reason.

(b) The date of the Executive's termination of employment with the Company (the "Date of Termination") shall be determined as follows: (i) if the Executive's Separation from Service is at the volition of the Company, then the Date of Termination shall be the date specified in the Notice of Termination (which, in the case of a termination by the Company other than for Cause, shall not be less than two (2) weeks from the date such Notice of Termination is given unless the Company elects to pay the Executive, in addition to any other amounts payable hereunder, an amount (the "Payment in Lieu of Notice") equal to two (2) weeks of the Executive's Annual Base Salary in effect on the Date of Termination), and (ii) if the Executive's Separation from Service is by the Executive for Good Reason, the Date of Termination shall be determined by the Executive and specified in the Notice of Termination, but in no event be less than fifteen (15) days nor more than sixty (60) days after the date such Notice of Termination is given. The Payment in Lieu of Notice shall be paid on such date as is required by law, but no later than thirty (30) days after the date of the Executive's Separation from Service.

Section 3. Termination from the Board. Upon the termination of the Executive's employment for any reason, the Executive's membership on the Board, the board of directors of any Affiliates of Sempra Energy, any committees of the Board and any committees of the board of directors of any of the Affiliates of Sempra Energy, if applicable, shall be automatically terminated and the Executive agrees to take any and all actions (including resigning) required by Sempra Energy or any of its Affiliates to evidence and effect such termination of membership.

Section 4. Severance Benefits upon Involuntary Termination Prior to Change in Control. Except as provided in Section 5(h) and Section 19(i) hereof, in the event of the Involuntary Termination of the Executive prior to a Change in Control, Sempra Energy shall, or shall cause one of its Affiliates that is the employer of the Executive to, pay the Executive, in one lump sum cash payment, an amount (the "Pre-Change in Control Severance Payment") equal to one-half (0.5) times the greater of: (X) 160% of the Executive's Annual Base Salary as in effect on the Date of Termination, and (Y) the sum of (I) the Executive's Annual Base Salary as in effect on the Date of Termination, plus (II) the Executive's Average Annual Bonus. In addition to the Pre-Change in Control Severance Payment, the Executive shall be entitled to the following additional benefits specified in subsections (a) through (e). The Company's obligation to pay the Pre-Change in Control Severance Payment or provide the benefits set forth in subsections (c), (d) and (e) are subject to and conditioned upon the Executive executing a release of all claims substantially in the form attached hereto as Exhibit A (the "Release") within fifty (50) days after the date of Involuntary Termination and the Executive not revoking such Release in accordance with the terms thereof. Except as provided in Section 4(f), the Pre-Change in Control Severance Payment shall be paid within sixty (60) days after the date of the Involuntary Termination on such date as is determined by Sempra Energy, but not before the Release becomes effective and irrevocable. If the fifty (50) day period in which the Release could become effective spans more than one taxable year, then the Pre-Change in Control Severance Payment shall not be made until the later taxable year.

(a) Accrued Obligations. The Company shall pay the Executive a lump sum amount in cash equal to Accrued Obligations within the time prescribed by law.

(b) Equity Based Compensation. The Executive shall retain all rights to any equity-based compensation awards to the extent set forth in the applicable plan and/or award agreement.

(c) Welfare Benefits. Subject to the terms and conditions of this Agreement, for a period of six (6) months following the date of the Involuntary Termination (and an additional twelve (12) months if the Executive provides consulting services under Section 14(f) hereof), the Executive and his dependents shall be provided with group medical benefits which are substantially similar to those provided from time to time to similarly situated active employees of the Company (and their eligible dependents) ("Medical Continuation Benefits"). Without limiting the generality of the foregoing, such Medical Continuation Benefits shall be provided on substantially the same terms and conditions and at the same cost to the Executive as apply to similarly situated active employees of the Company. Such benefits shall be provided in a manner that complies with Treasury Regulation Section 1.409A-1(a)(5). Notwithstanding the foregoing, if Sempra Energy determines in its sole discretion that the Medical Continuation Benefits cannot be provided without potentially violating applicable law (including, without limitation, Section 2716 of the Public Health Service Act) or that the provision of Medical Continuation Benefits under this Agreement would subject Sempra Energy or any of its Affiliates to a material tax or penalty, (i) the Executive shall be provided, in lieu thereof, with a taxable monthly payment in an amount equal to the monthly premium that the Executive would be required to pay to continue the Executive's and his covered dependents' group medical benefit coverages under COBRA as then in effect (which amount shall be based on the premiums for the first month of COBRA coverage) or (ii) Sempra Energy shall have the authority to amend the Agreement to the limited extent reasonably necessary to avoid such violation of

law or tax or penalty and shall use all reasonable efforts to provide the Executive with a comparable benefit that does not violate applicable law or subject Sempra Energy or any of its Affiliates to such tax or penalty.

(d) Outplacement Services. The Executive shall receive reasonable outplacement services, on an in-kind basis, suitable to his position and directly related to the Executive's Involuntary Termination, for a period of eighteen (18) months following the date of the Involuntary Termination, in an aggregate amount of cost to the Company not to exceed $50,000. Notwithstanding the foregoing, the Executive shall cease to receive outplacement services on the date the Executive accepts employment with a subsequent employer. Such outplacement services shall be provided in a manner that complies with Treasury Regulation Section 1.409A-1(b)(9)(v)(A).

(e) Financial Planning Services. The Executive shall receive financial planning services, on an in-kind basis, for a period of eighteen (18) months following the Date of Termination. Such financial planning services shall include expert financial and legal resources to assist the Executive with financial planning needs and shall be limited to (i) current investment portfolio management, (ii) tax planning, (iii) tax return preparation, and (iv) estate planning advice and document preparation (including wills and trusts); provided, however, that the Company shall provide such financial planning services during any taxable year of the Executive only to the extent the cost to the Company for such taxable year does not exceed $25,000. The Company shall provide such financial planning services through a financial planner selected by the Company, and shall pay the fees for such financial planning services. The financial planning services provided during any taxable year of the Executive shall not affect the financial planning services provided in any other taxable year of the Executive. The Executive's right to financial planning services shall not be subject to liquidation or exchange for any other benefit. Such financial planning services shall be provided in a manner that complies with Treasury Regulation Section 1.409A-3(i)(1)(iv).

Section 5. Severance Benefits upon Involuntary Termination in Connection with and after Change in Control. Notwithstanding the provisions of Section 4 above, and except as provided in Section 19(i) hereof, in the event of the Involuntary Termination of the Executive on or within two (2) years following a Change in Control, in lieu of the payments described in Section 4 above, Sempra Energy shall, or shall cause one of its Affiliates that is the employer of the Executive to, pay the Executive, in one lump sum cash payment, an amount (the "Post-Change in Control Severance Payment") equal to the greater of: (X) 160 % of the Executive's Annual Base Salary as in effect immediately prior to the Change in Control or the Date of Termination, whichever is greater, and (Y) the sum of (I) the Executive's Annual Base Salary as in effect immediately prior to the Change in Control or on the Date of Termination, whichever is greater, plus (II) the Executive's Average Annual Bonus. In addition to the Post-Change in Control Severance Payment, the Executive shall be entitled to the following additional benefits specified in subsections (a) through (g). The Company's obligation to pay the Post-Change in Control Severance Payment or provide the benefits set forth in subsections (b),(c), (d), (e), and (f) are subject to and conditioned upon the Executive executing the Release within fifty (50) days after the date of Involuntary Termination and the Executive not revoking such Release in accordance with the terms thereof. Except as provided in Section 5(h), the Post-Change in Control Severance Payment, the Pro Rata Bonus, and the payments under Section 5(c) shall be paid within sixty (60) days after the date of Involuntary Termination on such date as is determined by Sempra Energy (or its successor) but not before the Release becomes effective and irrevocable. If the fifty (50) day period in which the Release could become effective spans more than one taxable year, then the Post-Change in Control Severance Payment, the Pro Rata Bonus and the payments under Section 5(c) shall not be made until the later taxable year.

(a) Accrued Obligations. The Company shall pay the Executive a lump sum amount in cash equal to the Accrued Obligations within the time required by law and, to the extent applicable, in accordance with the applicable plan, policy or arrangement pursuant to which such payments are to be made.

(b) Pro Rata Bonus. The Company shall pay the Executive a lump sum amount in cash equal to: (i) the greater of: (X) 60% of the Executive's Annual Base Salary as in effect immediately prior to the Change in Control or on the Date of Termination, whichever is greater, or (Y) the Executive's Average Annual Bonus, multiplied by (ii) a fraction, the numerator of which shall be the number of days from the beginning of such fiscal year to and including the Date of Termination and the denominator of which shall be 365 equal to (the "Pro Rata Bonus").

(c) Pension Supplement. The Executive shall be entitled to receive a Supplemental Retirement Benefit under the Sempra Energy Supplemental Executive Retirement Plan, as in effect from time to time ("SERP"), determined in accordance with this Section 5(c), in the event that the Executive is a "Participant" (as defined in the SERP) as of the Date of Termination. Such Supplemental Retirement Benefit shall be determined by crediting the Executive with additional months of Service (if any) equal to the number of full calendar months from the Date of Termination to the date on which the Executive would have attained age 62. The Executive shall be entitled to receive such Supplemental Retirement Benefit without regard to whether the Executive has attained age 55 or completed five years of "Service" (as defined in the SERP) as of the Date of Termination. The Executive shall be treated as qualified for "Retirement" (as defined in the SERP) as of the Date of Termination, and the Executive's Vesting Factor with respect to the Supplemental Retirement Benefit shall be 100%. The Executive's Supplemental Retirement Benefit shall be calculated based on the Executive's actual age as of the date of commencement of payment of such Supplemental Retirement Benefit (the "SERP Distribution Date"), and by applying the applicable early retirement factors under the SERP, if the Executive has not attained age 62 but has attained age 55 as of the SERP Distribution Date. If the Executive has not attained age 55 as of the SERP Distribution Date, the Executive's Supplemental Retirement Benefit shall be calculated by applying the applicable early retirement factor under the SERP for age 55, and the Supplemental Retirement Benefit otherwise payable at age 55 shall be actuarially adjusted to the Executive's actual age as of the SERP Distribution Date using the following actuarial assumptions: (i) the applicable mortality table promulgated by the Internal Revenue Service under Section 417(e)(3) of the Code, as in effect on the first day of the calendar year in which the SERP Distribution Date occurs, and (ii) the applicable interest rate promulgated by the Internal Revenue Service under Section 417(a)(3) of the Code for the November next preceding the first day of the calendar year in which the SERP Distribution Date occurs. The Executive's Supplemental Retirement Benefit shall be determined in accordance with this Section 5(c), notwithstanding any contrary provisions of the SERP and, to the extent subject to Section 409A of the Code, shall be paid in accordance with Treasury Regulation Section 1.409A-3(c)(1). The Supplemental Retirement Benefit paid to or on behalf of the Executive in accordance with this Section 5(c) shall be in full satisfaction of any and all of the benefits payable to or on behalf of the Executive under the SERP.

(d) Equity-Based Compensation. Notwithstanding the provisions of any applicable equity-compensation plan or award agreement to the contrary, all equity-based Incentive Compensation Awards (including, without limitation, stock options, stock appreciation rights, restricted stock awards, restricted stock units, performance share awards, awards covered under Section 162(m) of the Code, and dividend equivalents) held by the Executive shall immediately vest and become exercisable or payable, as the case may be, as of the Date of Termination, to be exercised or paid, as the case may be, in accordance with the terms of the applicable Incentive Compensation Plan and Incentive Compensation Award agreement, and any restrictions on any such Incentive Compensation Awards shall automatically lapse;

provided, however, that, in the case of any stock option or stock appreciation rights awards granted on or after June 26, 1998 that remain outstanding on the Date of Termination, such stock options or stock appreciation rights shall remain exercisable until the earlier of (A) the later of eighteen (18) months following the Date of Termination or the period specified in the applicable Incentive Compensation Award agreements or (B) the expiration of the original term of such Incentive Compensation Award (or, if earlier, the tenth anniversary of the original date of grant) (it being understood that all Incentive Compensation Awards granted prior to, on or after June 26, 1998 shall remain outstanding and exercisable for a period that is no less than that provided for in the applicable agreement in effect as of the date of grant).

(e) Welfare Benefits. Subject to the terms and conditions of this Agreement, for a period of twelve (12) months following the date of Involuntary Termination (and an additional twelve (12) months if the Executive provides consulting services under Section 14(f) hereof), the Executive and his dependents shall be provided with life, disability, accident and group medical benefits which are substantially similar to those provided to the Executive and his dependents immediately prior to the date of Involuntary Termination or the Change in Control Date, whichever is more favorable to the Executive. Without limiting the generality of the foregoing, the continuing benefits described in the preceding sentence shall be provided on substantially the same terms and conditions and at the same cost to the Executive as in effect immediately prior to the date of Involuntary Termination or the Change in Control Date, whichever is more favorable to the Executive. Such benefits shall be provided in a manner that complies with Treasury Regulation Section 1.409A-1(a)(5). Notwithstanding the foregoing, if Sempra Energy determines in its sole discretion that the portion of the foregoing continuing benefits that constitute group medical benefits cannot be provided without potentially violating applicable law (including, without limitation, Section 2716 of the Public Health Service Act) or that the provision of such group medical benefits under this Agreement would subject Sempra Energy or any of its Affiliates to a material tax or penalty, (i) the Executive shall be provided, in lieu thereof, with a taxable monthly payment in an amount equal to the monthly premium that the Executive would be required to pay to continue the Executive's and his covered dependents' group medical benefit coverages under COBRA as then in effect (which amount shall be based on the premiums for the first month of COBRA coverage) or (ii) Sempra Energy shall have the authority to amend the Agreement to the limited extent reasonably necessary to avoid such violation of law or tax or penalty and shall use all reasonable efforts to provide the Executive with a comparable benefit that does not violate applicable law or subject Sempra Energy or any of its Affiliates to such tax or penalty.

(f) Outplacement Services. The Executive shall receive reasonable outplacement services, on an in-kind basis, suitable to his position and directly related to the Executive's Involuntary Termination, for a period of twenty-four (24) months following the date of Involuntary Termination (but in no event beyond the last day of the Executive's second taxable year following the Executive's taxable year in which the Involuntary Termination occurs), in the aggregate amount of cost to the Company not to exceed $50,000. Notwithstanding the foregoing, the Executive shall cease to receive outplacement services on the date the Executive accepts employment with a subsequent employer. Such outplacement services shall be provided in a manner that complies with Treasury Regulation Section 1.409A-1(b)(9)(v)(A).

(g) Financial Planning Services. The Executive shall receive financial planning services, on an in-kind basis, for a period of twenty-four (24) months following the date of Involuntary Termination. Such financial planning services shall include expert financial and legal resources to assist the Executive with financial planning needs and shall be limited to (i) current investment portfolio management, (ii) tax planning, (iii) tax return preparation, and (iv) estate planning advice and document preparation (including wills and trusts); provided, however, that the Company shall provide such financial

services during any taxable year of the Executive only to the extent the cost to the Company for such taxable year does not exceed $25,000. The Company shall provide such financial planning services through a financial planner selected by the Company, and shall pay the fees for such financial planning services. The financial planning services provided during any taxable year of the Executive shall not affect the financial planning services provided in any other taxable year of the Executive. The Executive's right to financial planning services shall not be subject to liquidation or exchange for any other benefit. Such financial planning services shall be provided in a manner that complies with Section 1.409A-3(i)(1)(iv).

(h) Involuntary Termination in Connection with a Change in Control. Notwithstanding anything contained herein, in the event of an Involuntary Termination prior to a Change in Control, if the Involuntary Termination (1) was at the request of a third party who has taken steps reasonably calculated to effect such Change in Control or (2) otherwise arose in connection with or in anticipation of such Change in Control, then the Executive shall, in lieu of the payments described in Section 4 hereof, be entitled to the Post-Change in Control Severance Payment and the additional benefits described in this Section 5 as if such Involuntary Termination had occurred within two (2) years following the Change in Control. The amounts specified in Section 5 that are to be paid under this Section 5(h) shall be reduced by any amount previously paid under Section 4. The amounts to be paid under this Section 5(h) shall be paid within sixty (60) days after the Change in Control Date of such Change in Control.

Section 6. Severance Benefits upon Termination by the Company for Cause or by the Executive Other than for Good Reason. If the Executive's employment shall be terminated for Cause, or if the Executive terminates employment other than for Good Reason, the Company shall have no further obligations to the Executive under this Agreement other than the Pre-Change in Control Accrued Obligations and any amounts or benefits described in Section 10 hereof.

Section 7. Severance Benefits upon Termination due to Death or Disability. If the Executive has a Separation from Service by reason of death or Disability, the Company shall pay the Executive or his estate, as the case may be, the Accrued Obligations and the Pro Rata Bonus (without regard to whether a Change in Control has occurred) and any amounts or benefits described in Section 10 hereof. Such payments shall be in addition to those rights and benefits to which the Executive or his estate may be entitled under the relevant Company plans or programs. The Company's obligation to pay the Pro Rata Bonus is conditioned upon the Executive, the Executive's representative or the Executive's estate, as the case may be executing the Release within fifty (50) days after the date of the Executive's Separation from Service and not revoking such Release in accordance with the terms thereof. The Accrued Obligations shall be paid within the time required by law and the Pro Rata Bonus shall be paid within sixty (60) days after the date of the Separation from Service on such date determined by Sempra Energy but not before the Release becomes effective and irrevocable. If the fifty (50) day period in which the Release could become effective spans more than one taxable year, then the Pro Rata Bonus shall not be made until the later taxable year.

Section 8. Limitation on Payments by the Company.

(a) Anything in this Agreement to the contrary notwithstanding and except as set forth in this Section 8 below, in the event it shall be determined that any payment or distribution in the nature of compensation (within the meaning of Section 280G(b)(2) of the Code) to or for the benefit of the Executive, whether paid or payable pursuant to this Agreement or otherwise (the "Payment") would be subject (in whole or in part) to the excise tax imposed by Section 4999 of the Code, (the "Excise Tax"), then, subject to subsection (b), the Pre-Change in Control Severance Benefit or the Post-Change in Control Severance Payment (whichever is applicable) payable under this Agreement shall be reduced

under this subsection (a) to the amount equal to the Reduced Payment. For such Payment payable under this Agreement, the "Reduced Payment" shall be the amount equal to the greatest portion of the Payment (which may be zero) that, if paid, would result in no portion of any Payment being subject to the Excise Tax.

(b) The Pre-Change in Control Severance Benefit or the Post-Change in Control Severance Payment (whichever is applicable) payable under this Agreement shall not be reduced under subsection (a) if:

(i) such reduction in such Payment is not sufficient to cause no portion of any Payment to be subject to the Excise Tax, or

(ii) the Net After-Tax Unreduced Payments (as defined below) would equal or exceed one hundred and five percent (105%) of the Net After-Tax Reduced Payments (as defined below).

For purposes of determining the amount of any Reduced Payment under subsection (a), and the Net-After Tax Reduced Payments and the Net After-Tax Unreduced Payments, the Executive shall be considered to pay federal, state and local income and employment taxes at the Executive's applicable marginal rates taking into consideration any reduction in federal income taxes which could be obtained from the deduction of state and local income taxes, and any reduction or disallowance of itemized deductions and personal exemptions under applicable tax law). The applicable federal, state and local income and employment taxes and the Excise Tax (to the extent applicable) are collectively referred to as the "Taxes".

(c) For purposes of determining the amount of any Reduced Payment under this Section 8, the amount of any Payment shall be reduced in the following order:

(i) first, by reducing the amounts of parachute payments that would not constitute deferred compensation subject to Section 409A of the Code;

(ii) next, if after the reduction described in subparagraph (i), additional reductions are required, then by reducing the cash portion of the Payment that constitutes deferred compensation (within the meaning of Section 409A) subject to Section 409A, with the reductions to be applied first to the portion of the Payment scheduled for the latest distribution date, and then applied to distributions scheduled for progressively earlier distribution dates, to the extent necessary to decrease the Payment as required under this Section 8; and

(iii) next, if after the reduction described in subparagraph (ii), additional reductions are required, then, by reducing the non-cash portion of the Payment that constitutes deferred compensation (within the meaning of subject to 409A), with the reductions to be applied first to the portion of the Payment scheduled for the latest distribution date, and then applied to distributions scheduled for progressively earlier distribution dates, to the extent necessary to decrease the Payment as required under this Section 8.

(d) The following definitions shall apply for purposes of this Section 8:

(i) "Net After-Tax Reduced Payments" shall mean the total amount of all Payments that the Executive would retain, on a Net After-Tax Basis, in the event that the Payments payable under this Agreement are reduced pursuant to subsection (a).

(ii) "Net After-Tax Unreduced Payments" shall mean the total amount of all Payments that the Executive would retain, on a Net After-Tax Basis, in the event that the Payments payable under this Agreement are not reduced pursuant to subsection (a).

(iii) "Net After-Tax Basis" shall mean, with respect to the Payments, either with or without reduction under subsection (a) (as applicable), the amount that would be retained by the Executive from such Payments after the payment of all Taxes.

(e) All determinations required to be made under this Section 8 and the assumptions to be utilized in arriving at such determinations, shall be made by a nationally recognized accounting firm as may be agreed by the Company and the Executive (the "Accounting Firm"); provided, that the Accounting Firm's determination shall be made based upon "substantial authority" within the meaning of Section 6662 of the Code. The Accounting Firm shall provide detailed supporting calculations to both the Company and the Executive within fifteen (15) business days of the receipt of notice from the Executive that there has been a Payment or such earlier time as is requested by the Company. All fees and expenses of the Accounting Firm shall be borne solely by the Company. Any determination by the Accounting Firm shall be binding upon the Company and the Executive. For purposes of determining whether and the extent to which the Payments will be subject to the Excise Tax, (i) no portion of the Payments the receipt or enjoyment of which the Executive shall have waived at such time and in such manner as not to constitute a "payment" within the meaning of Section 280G(b) of the Code shall be taken into account, (ii) no portion of the Payments shall be taken into account which, in the written opinion of the Accounting Firm, does not constitute a "parachute payment" within the meaning of Section 280G(b)(2) of the Code (including by reason of Section 280G(b)(4)(A) of the Code) and, in calculating the Excise Tax, no portion of such Payments shall be taken into account which, in the opinion of the Accounting Firm, constitutes reasonable compensation for services actually rendered, within the meaning of Section 280G(b)(4)(B) of the Code, in excess of the base amount (as defined in Section 280G(b)(3) of the Code) allocable to such reasonable compensation, and (iii) the value of any non-cash benefit or any deferred payment or benefit included in the Payments shall be determined by the Accounting Firm in accordance with the principles of Sections 280G(d)(3) and (4) of the Code.

Section 9. Delayed Distribution under Section 409A of the Code. Notwithstanding any other provision of this Agreement to the contrary, if the Executive is a Specified Employee on the date of the Executive's Involuntary Termination (or on the date of the Executive's Separation from Service by reason of Disability), the Section 409A Payments which are payable upon Separation from Service shall be delayed to the extent necessary in order to avoid a prohibited distribution under Section 409A(a)(2)(B)(i) of the Code, and such delayed payments or benefits shall be paid or distributed to the Executive during the thirty (30) day period commencing on the earlier of (a) the expiration of the six (6) month period measured from the date of the Executive's Separation from Service or (b) the date of the Executive's death. Upon the expiration of the applicable six (6) month period, all payments deferred pursuant to this Section 9 (excluding in-kind benefits) shall be paid in a lump sum payment to the Executive, plus interest thereon from the date of the Executive's Involuntary Termination through the payment date at an annual rate equal to Moody's Rate. The "Moody's Rate" shall mean the average of the daily Moody's Corporate Bond Yield Average - Monthly Average Corporates as published by Moody's Investors Service, Inc. (or any successor) for the month next preceding the Date of Termination. Any remaining payments due under the Agreement shall be paid as otherwise provided herein.

Section 10. Nonexclusivity of Rights. Nothing in this Agreement shall prevent or limit the Executive's continuing or future participation in any benefit, plan, program, policy or practice provided by the Company and for which the Executive may qualify (except with respect to any benefit to which the Executive has waived his rights in writing), including, without limitation, any and all indemnification arrangements in favor of the Executive (whether under agreements or under the Company's charter documents or otherwise), and insurance policies covering the Executive, nor shall anything herein limit or otherwise affect such rights as the Executive may have under any other contract or agreement entered into after the Effective Date with the Company. Amounts which are vested benefits or which the Executive is otherwise entitled to receive under any benefit, plan, policy, practice or program of, or any contract or agreement entered into with, the Company shall be payable in accordance with such benefit, plan, policy, practice or program or contract or agreement except as explicitly modified by this Agreement. At all times during the Executive's employment with the Company and thereafter, the Company shall provide (to the extent permissible under applicable law) the Executive with indemnification and D&O insurance insuring the Executive against insurable events which occur or have occurred while the Executive was a director or executive officer of the Company, that with respect to such insurance is on terms and conditions that, to the extent reasonably practical, are at least as generous as that then currently provided to any other current or former director or executive officer of the Company or any Affiliate. Such indemnification and D&O insurance shall be provided in a manner that complies with Treasury Regulation Section 1.409A-1(b)(10).

Section 11. Clawbacks. Notwithstanding anything herein to the contrary, if Sempra Energy determines, in its good faith judgment, that if the Executive is required to forfeit or to make any repayment of any compensation or benefit(s) to the Company under the Sarbanes-Oxley Act of 2002 or pursuant to the Dodd-Frank Wall Street Reform and Consumer Protection Act or any other law or pursuant to any formal policy of Sempra Energy, such forfeiture or repayment shall not constitute Good Reason.

Section 12. Full Settlement; Mitigation. The Company's obligation to make the payments provided for in this Agreement and otherwise to perform its obligations hereunder shall not be affected by any set-off, counterclaim, recoupment, defense or other claim, right or action which the Company may have against the Executive or others, provided that nothing herein shall preclude the Company from separately pursuing recovery from the Executive based on any such claim. In no event shall the Executive be obligated to seek other employment or take any other action by way of mitigation of the amounts (including amounts for damages for breach) payable to the Executive under any of the provisions of this Agreement, and such amounts shall not be reduced whether or not the Executive obtains other employment.

Section 13. Dispute Resolution.

(a) If any dispute arises between the Executive and Sempra Energy or any of its Affiliates, including, but not limited to, disputes relating to or arising out of this Agreement, any action relating to or arising out of the Executive's employment or its termination, and/or any disputes regarding the interpretation, enforceability, or validity of this Agreement ("Arbitrable Dispute"), the Executive and Sempra Energy waive the right to resolve the dispute through litigation in a judicial forum and agree to resolve the Arbitrable Dispute through final and binding arbitration, except as prohibited by law. Arbitration shall be the exclusive remedy for any Arbitrable Dispute.

(b) As to any Arbitrable Dispute, Sempra Energy and the Executive waive any right to a jury trial or a court bench trial. The Company and the Executive also waive the right to bring, maintain, or participate in any class, collective, or representative proceeding, whether in arbitration or otherwise.

Further, Arbitrable Disputes must be brought in the individual capacity of the party asserting the claim, and cannot be maintained on a class, collective, or representative basis.

(c) Arbitration shall take place at the office of the Judicial Arbitration and Mediation Service ("JAMS") (or, if the Executive is employed outside of California, the American Arbitration Association ("AAA")) nearest to the location where the Executive last worked for the Company. Except to the extent it conflicts with the rules and procedures set forth in this Arbitration Agreement, arbitration shall be conducted in accordance with the JAMs Employment Arbitration Rules & Procedures (if the Executive is employed outside of California, the AAA Employment Arbitration Rules & Mediation Procedures), copies of which are attached for my reference and available at www.jamsadr.com; tel: 800.352.5267 and www.adr.org; tel: 800.778.7879, before a single experienced, neutral employment arbitrator selected in accordance with those rules.

(d) Sempra Energy will be responsible for paying any filing fee and the fees and costs of the arbitrator. Each party shall pay its own attorneys' fees. However, if any party prevails on a statutory claim that authorizes an award of attorneys' fees to the prevailing party, or if there is a written agreement providing for attorneys' fees, the arbitrator may award reasonable attorneys' fees to the prevailing party, applying the same standards a court would apply under the law applicable to the claim.

(e) The arbitrator shall apply the Federal Rules of Evidence, shall have the authority to entertain a motion to dismiss or a motion for summary judgment by any party, and shall apply the standards governing such motions under the Federal Rules of Civil Procedure. The arbitrator does not have the authority to consider, certify, or hear an arbitration as a class action, collective action, or any other type of representative action. Sempra Energy and the Executive recognize that this Agreement arises out of or concerns interstate commerce and that the Federal Arbitration Act shall govern the arbitration and shall govern the interpretation or enforcement of this Arbitration Agreement or any arbitration award.

(f) EXECUTIVE ACKNOWLEDGES THAT BY ENTERING INTO THIS AGREEMENT, EXECUTIVE IS WAIVING ANY RIGHT HE OR SHE MAY HAVE TO A TRIAL BY JURY.

Section 14. Executive's Covenants.

(a) Confidentiality. The Executive acknowledges that in the course of his employment with the Company, he has acquired non-public privileged or confidential information and trade secrets concerning the operations, future plans and methods of doing business ("Proprietary Information") of Sempra Energy and its Affiliates; and the Executive agrees that it would be extremely damaging to Sempra Energy and its Affiliates if such Proprietary Information were disclosed to a competitor of Sempra Energy and its Affiliates or to any other person or corporation. The Executive understands and agrees that all Proprietary Information has been divulged to the Executive in confidence and further understands and agrees to keep all Proprietary Information secret and confidential (except for such information which is or becomes publicly available other than as a result of a breach by the Executive of this provision or information the Executive is required by any governmental, administrative or court order to disclose) without limitation in time. In view of the nature of the Executive's employment and the Proprietary Information the Executive has acquired during the course of such employment, the Executive likewise agrees that Sempra Energy and its Affiliates would be irreparably harmed by any disclosure of Proprietary Information in violation of the terms of this paragraph and that Sempra Energy and its Affiliates shall therefore be entitled to preliminary and/or permanent injunctive relief prohibiting the Executive from engaging in any activity or threatened activity in violation of the terms of this paragraph and to any other

relief available to them. Inquiries regarding whether specific information constitutes Proprietary Information shall be directed to the Company's Senior Vice President, Public Policy (or, if such position is vacant, the Company's then Chief Executive Officer); provided, that the Company shall not unreasonably classify information as Proprietary Information.

(b) Governmental Reporting. Nothing in this Agreement is intended to interfere with or discourage the Executive's good faith disclosure related to a suspected violation of federal or state law or regulation to any governmental agency or entity or making other disclosures that are protected under the whistleblower provisions of federal or state law or regulation. The Executive cannot and will not be held criminally or civilly liable under any federal or state trade secret law for disclosing otherwise protected trade secrets and/or confidential or proprietary information so long as the disclosure is made in (1) confidence to a federal, state, or local government official, directly or indirectly, or to an attorney and solely for the purpose of reporting or investigating a suspected violation of law; or (2) a complaint or other document filed in a lawsuit or other proceeding, so long as such filing is made under seal. Company will not retaliate against the Executive in any way for a disclosure made pursuant to this Section. Further, in the event the Executive makes such a disclosure, and files a lawsuit against the Company alleging that the Company retaliated against the Executive because of the disclosure, the Executive may disclose the relevant trade secret or confidential information to the Executive's attorney, and may use the same in the court proceeding only if (1) the Executive ensures that any court filing that includes the trade secret or confidential information at issue is made under seal; and (2) the Executive does not otherwise disclose the trade secret or confidential information except as required by court order.

(c) Non-Solicitation of Employees. The Executive recognizes that he possesses and will possess confidential information about other employees of Sempra Energy and its Affiliates relating to their education, experience, skills, abilities, compensation and benefits, and inter-personal relationships with customers of Sempra Energy and its Affiliates. The Executive recognizes that the information he possesses and will possess about these other employees is not generally known, is of substantial value to Sempra Energy and its Affiliates in developing their business and in securing and retaining customers, and has been and will be acquired by him because of his business position with Sempra Energy and its Affiliates. The Executive agrees that at all times during the Executive's employment with the Company and for a period of one (1) year thereafter, he will not, directly or indirectly, solicit or recruit any employee of the Company or its Affiliates for the purpose of being employed by him or by any competitor of the Company or its Affiliates on whose behalf he is acting as an agent, representative or employee and that he will not convey any such confidential information or trade secrets about other employees of Sempra Energy and its Affiliates to any other person; provided, however, that it shall not constitute a solicitation or recruitment of employment in violation of this paragraph to discuss employment opportunities with any employee of the Company or its Affiliates who has either first contacted the Executive or regarding whose employment the Executive has discussed with and received the written approval of the Company's most senior Vice President, Human Resources (or, if such position is vacant, the Company's then Chief Executive Officer), prior to making such solicitation or recruitment. In view of the nature of the Executive's employment with the Company, the Executive likewise agrees that Sempra Energy and its Affiliates would be irreparably harmed by any solicitation or recruitment in violation of the terms of this paragraph and that Sempra Energy and its Affiliates shall therefore be entitled to preliminary and/or permanent injunctive relief prohibiting the Executive from engaging in any activity or threatened activity in violation of the terms of this paragraph and to any other relief available to them.

(d) Survival of Provisions. The obligations contained in Sections 14(a), (b) and (c) above shall survive the termination of the Executive's employment within the Company and shall be fully enforceable thereafter. If it is determined by a court of competent jurisdiction in any state that any

restriction in Section 14(a) or Section 14(c) above is excessive in duration or scope or is unreasonable or unenforceable under the laws of that state, it is the intention of the parties that such restriction may be modified or amended by the court to render it enforceable to the maximum extent permitted by the law of that state.

(e) Release; Consulting Payment. In the event of the Executive's Involuntary Termination, if the Executive (i) reconfirms and agrees to abide by the covenants described in Section 14(a) and Section 14(c) above, (ii) executes the Release within fifty (50) days after the date of Involuntary Termination and does not revoke such Release in accordance with the terms thereof, and (iii) agrees to provide the consulting services described in Section 14(f) below, then in consideration for such covenants and consulting services, the Company shall pay the Executive, in one cash lump sum, an amount (the "Consulting Payment") in cash equal to the greater of: (X) 160% of the Executive's Annual Base Salary as in effect on the Date of Termination, and (Y) the Executive's Annual Base Salary as in effect on the Date of Termination, plus the Executive's Average Annual Bonus. Except as provided in this subsection, the Consulting Payment shall be paid on such date as is determined by the Company within the ten (10) day period commencing on the 60th day after the date of the Executive's Involuntary Termination; provided, however, that if the Executive is a Specified Employee on the date of the Executive's Involuntary Termination, the Consulting Payment shall be paid as provided in Section 9 hereof to the extent required.

(f) Consulting. If the Executive agrees to the provisions of Section 14(e) above, then the Executive shall have the obligation to provide consulting services to the Company as an independent contractor, commencing on the Date of Termination and ending on the second anniversary of the Date of Termination (the "Consulting Period"). The Executive shall hold himself available at reasonable times and on reasonable notice to render such consulting services as may be so assigned to him by the Board or the Company's then Chief Executive Officer; provided, however, that unless the parties otherwise agree, the consulting services rendered by the Executive during the Consulting Period shall not exceed twenty (20) hours each month; and, provided, further, that the consulting services rendered by the Executive during the Consulting Period shall in no event exceed twenty percent (20%) of the average level of services performed by the Executive for the Company over the thirty-six (36) month period immediately preceding the Executive's Separation from Service (or the full period of services to the Company, if the Executive has been providing services to the Company for less than thirty-six (36) months). The Company agrees to use its best efforts during the Consulting Period to secure the benefit of the Executive's consulting services so as to minimize the interference with the Executive's other activities, including requiring the performance of consulting services at the Company's offices only when such services may not be reasonably performed off-site by the Executive.

Section 15. Legal Fees.

(a) Reimbursement of Legal Fees. Subject to subsection (b), in the event of the Executive's Separation from Service either (1) prior to a Change in Control, or (2) on or within two (2) years following a Change in Control, the Company shall reimburse the Executive for all legal fees and expenses (including but not limited to fees and expenses in connection with any arbitration) incurred by the Executive in disputing any issue arising under this Agreement relating to the Executive's Separation from Service or in seeking to obtain or enforce any benefit or right provided by this Agreement.

(b) Requirements for Reimbursement. The Company shall reimburse the Executive's legal fees and expenses pursuant to subsection (a) above only to the extent the arbitrator or court determines the following: (i) the Executive disputed such issue, or sought to obtain or enforce such benefit or right, in good faith, (ii) the Executive had a reasonable basis for such claim, and (iii) in the case

of subsection (a)(1) above, the Executive is the prevailing party. In addition, the Company shall reimburse such legal fees and expenses, only if such legal fees and expenses are incurred during the twenty (20) year period beginning on the date of the Executive's Separation from Service. The legal fees and expenses paid to the Executive for any taxable year of the Executive shall not affect the legal fees and expenses paid to the Executive for any other taxable year of the Executive. The legal fees and expenses shall be paid to the Executive on or before the last day of the Executive's taxable year following the taxable year in which the fees or expenses are determined to be payable pursuant to this Agreement. The Executive's right to reimbursement of legal fees and expenses shall not be subject to liquidation or exchange for any other benefit. Such right to reimbursement of legal fees and expenses shall be provided in a manner that complies with Treasury Regulation Section 1.409A-3(i)(1)(iv).

Section 16. Successors.

(a) Assignment by the Executive. This Agreement is personal to the Executive and without the prior written consent of Sempra Energy shall not be assignable by the Executive otherwise than by will or the laws of descent and distribution. This Agreement shall inure to the benefit of and be enforceable by the Executive's legal representatives.

(b) Successors and Assigns of Sempra Energy. This Agreement shall inure to the benefit of and be binding upon Sempra Energy and its successors and assigns. Sempra Energy may not assign this Agreement to any person or entity (except for a successor described in Section 16(c), (d) or (e) below) without the Executive's written consent.

(c) Assumption. Sempra Energy shall require any successor (whether direct or indirect, by purchase, merger, consolidation or otherwise) to all or substantially all of the business and/or assets of Sempra Energy to assume expressly and agree to perform the obligations and satisfy and discharge the liabilities of this Agreement in the same manner and to the same extent that Sempra Energy would have been required to perform the obligations and satisfy and discharge the liabilities under this Agreement if no such succession had taken place, and Sempra Energy shall have no further obligations and liabilities under this Agreement. Upon such assumption, references to Sempra Energy in this Agreement shall be replaced with references to such successor.

(d) Sale of Subsidiary. In the event that (i) the Executive is employed by a direct or indirect subsidiary of Sempra Energy that is a member of the Sempra Energy Control Group, (ii) Sempra Energy, directly or indirectly through one or more intermediaries, sells or otherwise disposes of such subsidiary, and (iii) such subsidiary ceases to be a member of the Sempra Energy Control Group, then if, on the date such subsidiary ceases to be a member of the Sempra Energy Control Group, the Executive continues in employment with such subsidiary and the Executive does not have a Separation from Service, Sempra Energy shall require such subsidiary or any successor (whether direct or indirect, by purchase merger, consolidation or otherwise) to such subsidiary, or the parent thereof, to assume expressly and agree to perform the obligations and satisfy and discharge the liabilities under this Agreement in the same manner and to the same extent that Sempra Energy would have been required to perform the obligations and satisfy and discharge the liabilities under this Agreement, if such subsidiary had not ceased to be part of the Sempra Energy Control Group, and, upon such assumption, Sempra Energy shall have no further obligations and liabilities under the Agreement. Upon such assumption, (i) references to Sempra Energy in this Agreement shall be replaced with references to such subsidiary, or such successor or parent thereof, assuming this Agreement, and (ii) subsection (b) of the definition of "Cause" and subsection (b) of the definition of "Good Reason" shall apply thereafter, as if a Change in Control had occurred on the date of such cessation.

(e) Sale of Assets of Subsidiary. In the event that (i) the Executive is employed by a direct or indirect subsidiary of Sempra Energy, and (ii) such subsidiary sells or otherwise disposes of substantial assets of such subsidiary to an unrelated service recipient, as determined under Treasury Regulation Section 1.409A-1(f)(2)(ii) (the "Asset Purchaser"), in a transaction described in Treasury Regulation Section 1.409A-1(h)(4) (an "Asset Sale"), then if, on the date of such Asset Sale, the Executive becomes employed by the Asset Purchaser, Sempra Energy and the Asset Purchaser may specify, in accordance with Treasury Regulation Section 1.409A-1(h)(4), that the Executive shall not be treated as having a Separation from Service, and in such event, Sempra Energy may require such Asset Purchaser, or the parent thereof, to assume expressly and agree to perform the obligations and satisfy and discharge the liabilities under this Agreement in the same manner and to the same extent that the Company would have been required to perform the obligations and satisfy and discharge the liabilities under this Agreement, if the Asset Sale had not taken place, and, upon such assumption, Sempra Energy shall have no further obligations and liabilities under the Agreement. Upon such assumption, (i) references to Sempra Energy in this Agreement shall be replaced with references to the Asset Purchaser or the parent thereof, as applicable, and (ii) subsection (b) of the definition of "Cause" and subsection (b) of the definition of "Good Reason" shall apply thereafter, as if a Change in Control had occurred on the date of the Asset Sale.

Section 17. Administration Prior to Change in Control. Prior to a Change in Control, the Compensation Committee shall have full and complete authority to construe and interpret the provisions of this Agreement, to determine an individual's entitlement to benefits under this Agreement, to make in its sole and absolute discretion all determinations contemplated under this Agreement, to investigate and make factual determinations necessary or advisable to administer or implement this Agreement, and to adopt such rules and procedures as it deems necessary or advisable for the administration or implementation of this Agreement. All determinations made under this Agreement by the Compensation Committee shall be final, conclusive and binding on all interested persons. Prior to a Change in Control, the Compensation Committee may delegate responsibilities for the operation and administration of this Agreement to one or more officers or employees of the Company. The provisions of this Section 17 shall terminate and be of no further force and effect upon the occurrence of a Change in Control.

Section 18. Compliance with Section 409A of the Code. All payments and benefits payable under this Agreement (including, without limitation, the Section 409A Payments) are intended to comply with the requirements of Section 409A of the Code. Certain payments and benefits payable under this Agreement are intended to be exempt from the requirements of Section 409A of the Code. This Agreement shall be interpreted in accordance with the applicable requirements of, and exemptions from, Section 409A of the Code and the Treasury Regulations thereunder. To the extent the payments and benefits under this Agreement are subject to Section 409A of the Code, this Agreement shall be interpreted, construed and administered in a manner that satisfies the requirements of Sections 409A(a)(2), (3) and (4) of the Code and the Treasury Regulations thereunder If the Company and the Executive determine that any compensation, benefits or other payments that are payable under this Agreement and intended to comply with Sections 409A(a)(2), (3) and (4) of the Code do not comply with Section 409A of the Code, the Treasury Regulations thereunder and other applicable authority issued by the Internal Revenue Service, to the extent permitted under Section 409A of the Code, the Treasury Regulations thereunder and any applicable authority issued by the Internal Revenue Service, the Company and the Executive agree to amend this Agreement, or take such other actions as the Company and the Executive deem reasonably necessary or appropriate, to cause such compensation, benefits and other payments to comply with the requirements of Section 409A of the Code, the Treasury Regulations thereunder and other applicable authority issued by the Internal Revenue Service, while providing compensation, benefits and

other payments that are, in the aggregate, no less favorable than the compensation, benefits and other payments provided under this Agreement. In the case of any compensation, benefits or other payments that are payable under this Agreement and intended to comply with Sections 409A(a)(2), (3) and (4) of the Code, if any provision of the Agreement would cause such compensation, benefits or other payments to fail to so comply, such provision shall not be effective and shall be null and void with respect to such compensation, benefits or other payments to the extent such provision would cause a failure to comply, and such provision shall otherwise remain in full force and effect.

Section 19. Miscellaneous.

(a) Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the State of California, without reference to its principles of conflict of laws. The captions of this Agreement are not part of the provisions hereof and shall have no force or effect. Except as provided herein, the Agreement may not be amended, modified, repealed, waived, extended or discharged except by an agreement in writing signed by the parties hereto. No person, other than pursuant to a resolution of the Board or a committee thereof, shall have authority on behalf of Sempra Energy to agree to amend, modify, repeal, waive, extend or discharge any provision of this Agreement or anything in reference thereto.

(b) Notices. All notices and other communications hereunder shall be in writing and shall be given by hand delivery to the other party, by a reputable overnight carrier or by registered or certified mail, return receipt requested, postage prepaid, addressed, in either case, to the Company's headquarters or to such other address as either party shall have furnished to the other in writing in accordance herewith. Notices and communications shall be effective when actually received by the addressee.

(c) Severability. The invalidity or unenforceability of any provision of this Agreement shall not affect the validity or enforceability of any other provision of this Agreement.

(d) Taxes. The Company may withhold from any amounts payable under this Agreement such federal, state or local taxes as shall be required to be withheld pursuant to any applicable law or regulation.

(e) No Waiver. The Executive's or the Company's failure to insist upon strict compliance with any provision hereof or any other provision of this Agreement or the failure to assert any right the Executive or the Company may have hereunder, including, without limitation, the right of the Executive to terminate employment for Good Reason pursuant to Section 1 hereof, or the right of the Company to terminate the Executive's employment for Cause pursuant to Section 1 hereof shall not be deemed to be a waiver of such provision or right or any other provision or right of this Agreement.

(f) Entire Agreement; Exclusive Benefit; Supersession of Prior Agreement. This instrument contains the entire agreement of the Executive, the Company or any predecessor or subsidiary thereof with respect to any severance or termination pay. The Pre-Change in Control Severance Payment, the Post-Change in Control Severance Payment and all other benefits provided hereunder shall be in lieu of any other severance payments to which the Executive is entitled under any other severance plan or program or arrangement sponsored by the Company, as well as pursuant to any individual employment or severance agreement that was entered into by the Executive and the Company, and, upon the Effective Date of this Agreement, all such plans, programs, arrangements and agreements are hereby automatically superseded and terminated.

(g) No Right of Employment. Nothing in this Agreement shall be construed as giving the Executive any right to be retained in the employ of the Company or shall interfere in any way with the right of the Company to terminate the Executive's employment at any time, with or without Cause.

(h) Unfunded Obligation. The obligations under this Agreement shall be unfunded. Benefits payable under this Agreement shall be paid from the general assets of the Company. The Company shall have no obligation to establish any fund or to set aside any assets to provide benefits under this Agreement.

(i) Termination upon Sale of Assets of Subsidiary. Notwithstanding anything contained herein, this Agreement shall automatically terminate and be of no further force and effect and no benefits shall be payable hereunder in the event that (i) the Executive is employed by a direct or indirect subsidiary of Sempra Energy, and (ii) an Asset Sale (as defined in Section 16(e)) occurs (other than such a sale or disposition which is part of a transaction or series of transactions which would result in a Change in Control), and (iii) as a result of such Asset Sale, the Executive is offered employment by the Asset Purchaser in an executive position with reasonably comparable status, compensation, benefits and severance agreement (including the assumption of this Agreement in accordance with Section 16(e)) and which is consistent with the Executive's experience and education, but the Executive declines to accept such offer and the Executive fails to become employed by the Asset Purchaser on the date of the Asset Sale.

(j) Term. The term of this Agreement shall commence on the Effective Date and shall continue until the third (3rd) anniversary of the Effective Date; provided, however, that commencing on the second (2nd) anniversary of the Effective Date (and each anniversary of the Effective Date thereafter), the term of this Agreement shall automatically be extended for one (1) additional year, unless at least ninety (90) days prior to such date, the Company or the Executive shall give written notice to the other party that it or he, as the case may be, does not wish to so extend this Agreement. Notwithstanding the foregoing, if the Company gives such written notice to the Executive (i) at a time when Sempra Energy is a party to an agreement that, if consummated, would constitute a Change in Control or (ii) less than two (2) years after a Change in Control, the term of this Agreement shall be automatically extended until the later of (A) the date that is one (1) year after the anniversary of the Effective Date that follows such written notice or (B) the second (2nd) anniversary of the Change in Control Date.

(k) Counterparts. This Agreement may be executed in several counterparts, each of which shall be deemed to be an original but all of which together shall constitute one and the same instrument.

[*remainder of page intentionally left blank*]

IN WITNESS WHEREOF, the Executive and, pursuant to due authorization from its Board of Directors, the Company have caused this Agreement to be executed as of the day and year first above written.

SEMPRA ENERGY

_____

G. Joyce Rowland
Senior Vice President, Chief Human Resources and Administrative Officer

_____

Date

EXECUTIVE

_____

Trevor I. Mihalik
Senior Vice President - Controller & CAO

_____

Date

EXHIBIT A

GENERAL RELEASE

This GENERAL RELEASE (the "Agreement"), dated _____, is made by and between _____, a California corporation (the "Company") and _____ ("you" or "your").

WHEREAS, you and the Company have previously entered into that certain Severance Pay Agreement dated _____, 20___ (the "Severance Pay Agreement"); and

WHEREAS, your right to receive certain severance pay and benefits pursuant to the terms of Section 4 or Section 5 of the Severance Pay Agreement, as applicable, are subject to and conditioned upon your execution and non-revocation of a general release of claims by you against the Company and its subsidiaries and affiliates.

WHEREAS, your right to receive the Consulting Payment provided pursuant to Section 14(e) of the Severance Pay Agreement is subject to and conditioned upon your execution and non-revocation of a general release of claims by you against the Company and its subsidiaries and affiliates; and your adherence to the covenants described under Section 14 of the Severance Pay Agreement.

NOW, THEREFORE, in consideration of the premises and the mutual covenants herein contained, you and the Company hereby agree as follows:

ONE: Your signing of this Agreement confirms that your employment with the Company shall terminate at the close of business on _____, or earlier upon our mutual agreement.

TWO: As a material inducement for the payment of the severance and benefits of the Severance Pay Agreement, and except as otherwise provided in this Agreement, you and the Company hereby irrevocably and unconditionally release, acquit and forever discharge the other from any and all Claims either may have against the other. For purposes of this Agreement and the preceding sentence, the words "Releasee" or "Releasees" and "Claim" or "Claims" shall have the meanings set forth below:

(a) The words "Releasee" or "Releasees" shall refer to you and to the Company and each of the Company's owners, stockholders, predecessors, successors, assigns, agents, directors, officers, employees, representatives, attorneys, advisors, parent companies, divisions, subsidiaries, affiliates (and agents, directors, officers, employees, representatives, attorneys and advisors of such parent companies, divisions, subsidiaries and affiliates) and all persons acting by, through, under or in concert with any of them.

(b) The words "Claim" or "Claims" shall refer to any charges, complaints, claims, liabilities, obligations, promises, agreements, controversies, damages, actions, causes of action, suits, rights, demands, costs, losses, debts and expenses (including attorneys' fees and costs actually incurred) of any nature whatsoever, known or unknown, suspected or unsuspected, which you or the Company now, in the past or, in the future may have, own or hold against any of the Releasees; *provided, however*, that the word "Claim" or "Claims" shall not refer to any charges, complaints, claims, liabilities, obligations, promises, agreements, controversies, damages, actions, causes of action, suits, rights, demands, costs, losses, debts and expenses (including attorneys' fees and costs actually incurred) arising under [*identify severance, employee benefits, stock option, indemnification and D&O and other agreements containing*

duties, rights obligations etc. of either party that are to remain operative]. Claims released pursuant to this Agreement by you and the Company include, but are not limited to, rights arising out of alleged violations of any contracts, express or implied, any tort, claim, any claim that you failed to perform or negligently performed or breached your duties during employment at the Company, any legal restrictions on the Company's right to terminate employment relationships; and any federal, state or other governmental statute, regulation, or ordinance, governing the employment relationship including, without limitation, all state and federal laws and regulations prohibiting discrimination based on protected categories, and all state and federal laws and regulations prohibiting retaliation against employees for engaging in protected activity or legal off-duty conduct. This release does not extend to claims for workers' compensation or other claims which by law may not be waived or released by this Agreement.

THREE: You and the Company expressly waive and relinquish all rights and benefits afforded by any statute (including but not limited to Section 1542 of the Civil Code of the State of California and analogous laws of other states) which limits the effect of a release with respect to unknown claims. You and the Company do so understanding and acknowledging the significance of the release of unknown claims and the waiver of statutory protection against a release of unknown claims (including but not limited to Section 1542). Section 1542 of the Civil Code of the State of California states as follows:

> "A GENERAL RELEASE DOES NOT EXTEND TO CLAIMS WHICH THE CREDITOR DOES NOT KNOW OR SUSPECT TO EXIST IN HIS OR HER FAVOR AT THE TIME OF EXECUTING THE RELEASE, WHICH IF KNOWN BY HIM OR HER MUST HAVE MATERIALLY AFFECTED HIS OR HER SETTLEMENT WITH THE DEBTOR."

Thus, notwithstanding the provisions of Section 1542 or of any similar statute, and for the purpose of implementing a full and complete release and discharge of the Releasees, you and the Company expressly acknowledge that this Agreement is intended to include in its effect, without limitation, all Claims which are known and all Claims which you or the Company do not know or suspect to exist in your or the Company's favor at the time of execution of this Agreement and that this Agreement contemplates the extinguishment of all such Claims.

FOUR: The parties acknowledge that they might hereafter discover facts different from, or in addition to, those they now know or believe to be true with respect to a Claim or Claims released herein, and they expressly agree to assume the risk of possible discovery of additional or different facts, and agree that this Agreement shall be and remain effective, in all respects, regardless of such additional or different discovered facts.

FIVE: As a further material inducement to the Company to enter into this Agreement, you hereby agree to indemnify and hold each of the Releasees harmless from all loss, costs, damages, or expenses, including without limitation, attorneys' fees incurred by the Releasees, arising out of any breach of this Agreement by you or the fact that any representation made in this Agreement by you was false when made.

As a further material inducement to you to enter into this Agreement, the Company hereby agrees to indemnify and hold each of the Releasees harmless from all loss, costs, damages, or expenses, including without limitation, attorneys' fees incurred by the Releasees, arising out of any breach of this Agreement by it or the fact that any representation made in this Agreement by it was knowingly false when made.

SIX: You and the Company represent and acknowledge that in executing this Agreement, neither is relying upon any representation or statement not set forth in this Agreement or the Severance Agreement.

SEVEN: (a) This Agreement shall not in any way be construed as an admission by the Company that it has acted wrongfully with respect to you or any other person, or that you have any rights whatsoever against the Company, and the Company specifically disclaims any liability to or wrongful acts against you or any other person, on the part of itself, its employees or its agents. This Agreement shall not in any way be construed as an admission by you that you have acted wrongfully with respect to the Company, or that you failed to perform your duties or negligently performed or breached your duties, or that the Company had good cause to terminate your employment.

(b) If you are a party or are threatened to be made a party to any proceeding by reason of the fact that you were an officer or director of the Company, the Company shall indemnify you against any expenses (including reasonable attorneys' fees; *provided*, that counsel has been approved by the Company prior to retention, which approval shall not be unreasonably withheld), judgments, fines, settlements and other amounts actually or reasonably incurred by you in connection with that proceeding; *provided*, that you acted in good faith and in a manner you reasonably believed to be in the best interest of the Company. The limitations of California Corporations Code Section 317 shall apply to this assurance of indemnification.

(c) You agree to cooperate with the Company and its designated attorneys, representatives and agents in connection with any actual or threatened judicial, administrative or other legal or equitable proceeding in which the Company is or may become involved. Upon reasonable notice, you agree to meet with and provide to the Company or its designated attorneys, representatives or agents all information and knowledge you have relating to the subject matter of any such proceeding. The Company agrees to reimburse you for any reasonable costs you incur in providing such cooperation.

EIGHT: This Agreement is entered into in California and shall be governed by substantive California law, except as provided in this section. If any dispute arises between you and the Company, including but not limited to, disputes relating to this Agreement, or if you prosecute a claim you purported to release by means of this Agreement ("Arbitrable Dispute"), you and the Company agree to resolve that Arbitrable Dispute through final and binding arbitration under this section. You also agree to arbitrate any Arbitrable Dispute which also involves any other released party who offers or agrees to arbitrate the dispute under this section. Your agreement to arbitrate applies, for example, to disputes about the validity, interpretation, or effect of this Agreement or alleged violations of it, claims of discrimination under federal or state law, or other statutory violation claims.

As to any Arbitrable Dispute, you and the Company waive any right to a jury trial or a court bench trial. You and the Company also waive the right to bring, maintain, or participate in any class, collective, or representative proceeding, whether in arbitration or otherwise. Further, Arbitrable Disputes must be brought in the individual capacity of the party asserting the claim, and cannot be maintained on a class, collective, or representative basis.

Arbitration shall take place in San Diego, California under the employment dispute resolution rules of the Judicial Arbitration and Mediation Service ("JAMS"), (or, if you are employed outside of California at the time of the termination of your employment, at the nearest location of the American Arbitration Association and in accordance with the AAA rules), before an experienced employment arbitrator selected in accordance with those rules. The arbitrator may not modify or change this Agreement in any way. The Company will be responsible for paying any filing fee and the fees and costs of the Arbitrator; provided, however, that if you are the party initiating the claim, you will contribute an amount equal to the filing fee

to initiate a claim in the court of general jurisdiction in the state in which you are employed by the Company. Each party shall pay for its own costs and attorneys' fees, if any. However if any party prevails on a statutory claim which affords the prevailing party attorneys' fees and costs, or if there is a written agreement providing for attorneys' fees and/or costs, the Arbitrator may award reasonable attorney's fees and/or costs to the prevailing party, applying the same standards a court would apply under the law applicable to the claim. The Arbitrator shall apply the Federal Rules of Evidence and shall have the authority to entertain a motion to dismiss or a motion for summary judgment by any party and shall apply the standards governing such motions under the Federal Rules of Civil Procedure. The Federal Arbitration Act shall govern the arbitration and shall govern the interpretation or enforcement of this section or any arbitration award. The arbitrator will not have the authority to consider, certify, or hear an arbitration as a class action, collective action, or any other type of representative action.

To the extent that the Federal Arbitration Act is inapplicable, California law pertaining to arbitration agreements shall apply. Arbitration in this manner shall be the exclusive remedy for any Arbitrable Dispute. Except as prohibited by the ADEA, should you or the Company attempt to resolve an Arbitrable Dispute by any method other than arbitration pursuant to this section, the responding party will be entitled to recover from the initiating party all damages, expenses, and attorneys' fees incurred as a result of this breach. This Section TEN supersedes any existing arbitration agreement between the Company and me as to any Arbitrable Dispute. Notwithstanding anything in this Section TEN to the contrary, a claim for benefits under an ERISA-covered plan shall not be an Arbitrable Dispute.

NINE: Both you and the Company understand that this Agreement is final and binding eight (8) days after its execution and return. Should you nevertheless attempt to challenge the enforceability of this Agreement as provided in Paragraph EIGHT or, in violation of that Paragraph, through litigation, as a further limitation on any right to make such a challenge, you shall initially tender to the Company, by certified check delivered to the Company, all monies received pursuant to Sections 4 or 5 of the Severance Pay Agreement, as applicable, plus interest, and invite the Company to retain such monies and agree with you to cancel this Agreement and void the Company's obligations under the Severance Pay Agreement. In the event the Company accepts this offer, the Company shall retain such monies and this Agreement shall be canceled and the Company shall have no obligation under Section 14(e) of the Severance Pay Agreement. In the event the Company does not accept such offer, the Company shall so notify you and shall place such monies in an interest-bearing escrow account pending resolution of the dispute between you and the Company as to whether or not this Agreement and the Company's obligations under the Severance Pay Agreement shall be set aside and/or otherwise rendered voidable or unenforceable. Additionally, any consulting agreement then in effect between you and the Company shall be immediately rescinded with no requirement of notice.

TEN: Any notices required to be given under this Agreement shall be delivered either personally or by first class United States mail, postage prepaid, addressed to the respective parties as follows:

To Company: [TO COME]

Attn: [TO COME]

To You:_____

_____

_____

ELEVEN: You understand and acknowledge that you have been given a period of forty-five (45) days to review and consider this Agreement (as well as certain data on other persons eligible for similar benefits, if any) before signing it and may use as much of this forty-five (45) day period as you wish prior to signing. You are encouraged, at your personal expense, to consult with an attorney before signing this Agreement. You understand and acknowledge that whether or not you do so is your decision. You may revoke this Agreement within seven (7) days of signing it. If you wish to revoke, the Company's Vice President, Human Resources must receive written notice from you no later than the close of business on the seventh (7th) day after you have signed the Agreement. If revoked, this Agreement shall not be effective and enforceable, and you will not receive payments or benefits under Sections 4 or 5 of the Severance Pay Agreement, as applicable

TWELVE: This Agreement constitutes the entire agreement of the parties hereto and supersedes any and all other agreements (except the Severance Pay Agreement) with respect to the subject matter of this Agreement, whether written or oral, between you and the Company. All modifications and amendments to this Agreement must be in writing and signed by the parties.

THIRTEEN: Each party agrees, without further consideration, to sign or cause to be signed, and to deliver to the other party, any other documents and to take any other action as may be necessary to fulfill the obligations under this Agreement.

FOURTEEN: If any provision of this Agreement or the application thereof is held invalid, the invalidity shall not affect other provisions or applications of the Agreement which can be given effect without the invalid provisions or application; and to this end the provisions of this Agreement are declared to be severable.

FIFTEEN: This Agreement may be executed in counterparts.

I have read the foregoing General Release, and I accept and agree to the provisions it contains and hereby execute it voluntarily and with full understanding of its consequences. I am aware it includes a release of all known or unknown claims.

DATED: _____

_____

DATED: _____

_____

You acknowledge that you first received this Agreement on [date].

_____

SEMPRA ENERGY

SEVERANCE PAY AGREEMENT

THIS AGREEMENT (this "Agreement"), dated as of January 1, 2017 (the "Effective Date"), is made by and between SEMPRA ENERGY, a California corporation ("Sempra Energy"), and Jeffrey W. Martin (the "Executive").

WHEREAS, the Executive is currently employed by Sempra Energy or another corporation or trade or business which is a member of a controlled group of corporations (within the meaning of Section 414(b) or (c) of the Code) of which Sempra Energy is a component member, determined by applying an ownership threshold of 50% rather than 80% (Sempra Energy and such other controlled group members, collectively, "Company");

WHEREAS, Sempra Energy and the Executive desire to enter into this Agreement; and

WHEREAS, the Board of Directors of Sempra Energy (the "Board") or an authorized committee thereof has authorized this Agreement.

NOW, THEREFORE, in consideration of the premises and mutual covenants herein contained, Sempra Energy and the Executive hereby agree as follows:

Section 1. Definitions. For purposes of this Agreement, the following capitalized terms have the meanings set forth below:

"Accounting Firm" has the meaning assigned thereto in Section 8(d) hereof.

"Accrued Obligations" means the sum of (A) the Executive's Annual Base Salary through the Date of Termination to the extent not theretofore paid, (B) an amount equal to any annual Incentive Compensation Awards earned with respect to fiscal years ended prior to the year that includes the Date of Termination to the extent not theretofore paid, (C) any accrued and unpaid vacation, and (D) reimbursement for unreimbursed business expenses, if any, properly incurred by the Executive in the performance of his duties in accordance with Company policies applicable to the Executive from time to time, in each case to the extent not theretofore paid.

"Affiliate" has the meaning set forth in Rule 12b-2 promulgated under the Exchange Act.

"Annual Base Salary" means the Executive's annual base salary from the Company.

"Asset Purchaser" has the meaning assigned thereto in Section 16(e).

"Asset Sale" has the meaning assigned thereto in Section 16(e).

"Average Annual Bonus" means the average of the annual bonuses from the Company earned by the Executive with respect to the three (3) fiscal years of Sempra Energy ending immediately preceding the Date of Termination (the "Bonus Fiscal Years"); *provided*, *however*, that, if the Executive was employed by the Company for less than three (3) Bonus Fiscal Years, "Average Annual Bonus" means the average of the annual bonuses (if any) from the Company earned by the Executive with respect

to the Bonus Fiscal Years during which the Executive was employed by the Company; and, *provided*, *further*, that, if the Executive was not employed by the Company during any of the Bonus Fiscal Years, "Average Annual Bonus" means zero.

"Cause" means:

(a) Prior to a Change in Control, (i) the willful failure by the Executive to substantially perform the Executive's duties with the Company (other than any such failure resulting from the Executive's incapacity due to physical or mental illness), (ii) the grossly negligent performance of such obligations referenced in clause (i) of this definition, (iii) the Executive's gross insubordination; and/or (iv) the Executive's commission of one or more acts of moral turpitude that constitute a violation of applicable law (including but not limited to a felony involving one or more acts of moral turpitude) which have or result in an adverse effect on the Company, monetarily or otherwise, or one or more significant acts of dishonesty. For purposes of clause (i) of this subsection (a), no act, or failure to act, on the Executive's part shall be deemed "willful" unless done, or omitted to be done, by the Executive not in good faith and without reasonable belief that the Executive's act, or failure to act, was in the best interests of the Company.

(b) From and after a Change in Control (or in connection with a termination occurring pursuant to subsection 5(h)), (i) the willful and continued failure by the Executive to substantially perform the Executive's duties with the Company (other than any such failure resulting from the Executive's incapacity due to physical or mental illness or other than any such actual or anticipated failure after the issuance of a Notice of Termination for Good Reason by the Executive pursuant to Section 2 hereof and after the Company's cure period relating to the event on which Good Reason is based, if any and if applicable, has expired) and/or (ii) the Executive's commission of one or more acts of moral turpitude that constitute a violation of applicable law (including but not limited to a felony involving one or more acts of moral turpitude) which have or result in an adverse effect on the Company, monetarily or otherwise, or one or more significant acts of dishonesty. For purposes of clause (i) of this subsection (b), no act, or failure to act, on the Executive's part shall be deemed "willful" unless done, or omitted to be done, by the Executive not in good faith and without reasonable belief that the Executive's act, or failure to act, was in the best interests of the Company. Notwithstanding the foregoing, the Executive shall not be deemed terminated for Cause pursuant to clause (i) of this subsection (b) unless and until the Executive shall have been provided with reasonable notice of and, if possible, a reasonable opportunity to cure the facts and circumstances claimed to provide a basis for termination of the Executive's employment for Cause.

"Change in Control" shall be deemed to have occurred on the date that a change in the ownership of Sempra Energy, a change in the effective control of Sempra Energy, or a change in the ownership of a substantial portion of assets of Sempra Energy occurs (each, as defined in subsection (a) below), except as otherwise provided in subsections (b), (c) and (d) below:

(a) (i) a "change in the ownership of Sempra Energy" occurs on the date that any one person, or more than one person acting as a group, acquires ownership of stock of Sempra Energy that, together with stock held by such person or group, constitutes more than fifty percent (50%) of the total fair market value or total voting power of the stock of Sempra Energy,

(ii) a "change in the effective control of Sempra Energy" occurs only on either of the following dates:

(A) the date any one person, or more than one person acting as a group, acquires (or has acquired during the twelve (12) month period ending on the date of the most recent acquisition by such person or persons) ownership of stock of Sempra Energy possessing thirty percent (30%) or more of the total voting power of the stock of Sempra Energy, or

(B) the date a majority of the members of the Board is replaced during any twelve (12) month period by directors whose appointment or election is not endorsed by a majority of the members of the Board before the date of appointment or election, and

(iii) a "change in the ownership of a substantial portion of assets of Sempra Energy" occurs on the date any one person, or more than one person acting as a group, acquires (or has acquired during the twelve (12) month period ending on the date of the most recent acquisition by such person or persons) assets from Sempra Energy that have a total gross fair market value equal to or more than eighty-five percent (85%) of the total gross fair market value of all of the assets of Sempra Energy immediately before such acquisition or acquisitions.

(b) A "change in the ownership of Sempra Energy" or "a change in the effective control of Sempra Energy" shall not occur under clause (a)(i) or (a)(ii) by reason of any of the following:

(i) an acquisition of ownership of stock of Sempra Energy directly from Sempra Energy or its Affiliates other than in connection with the acquisition by Sempra Energy or its Affiliates of a business,

(ii) a merger or consolidation which would result in the voting securities of Sempra Energy outstanding immediately prior to such merger or consolidation continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity or any parent thereof), in combination with the ownership of any trustee or other fiduciary holding securities under an employee benefit plan of the Company, at least sixty percent (60%) of the combined voting power of the securities of Sempra Energy or such surviving entity or any parent thereof outstanding immediately after such merger or consolidation, or

(iii) a merger or consolidation effected to implement a recapitalization of Sempra Energy (or similar transaction) in which no Person is or becomes the Beneficial Owner (within the meaning of Rule 13d-3 promulgated under the Exchange Act), directly or indirectly, of securities of Sempra Energy (not including the securities beneficially owned by such Person any securities acquired directly from Sempra Energy or its Affiliates other than in connection with the acquisition by Sempra Energy or its Affiliates of a business) representing twenty percent (20%) or more of the combined voting power of Sempra Energy's then outstanding securities.

(c) A "change in the ownership of a substantial portion of assets of Sempra Energy" shall not occur under clause (a)(iii) by reason of a sale or disposition by Sempra Energy of the assets of Sempra Energy to an entity, at least sixty percent (60%) of the combined voting power of the voting securities of which are owned by shareholders of Sempra Energy in substantially the same proportions as their ownership of Sempra Energy immediately prior to such sale.

(d) This definition of "Change in Control" shall be limited to the definition of a "change in control event" with respect to the Executive and relating to Sempra Energy under Treasury Regulation Section 1.409A-3(i)(5).

"Change in Control Date" means the date on which a Change in Control occurs.

"Code" means the Internal Revenue Code of 1986, as amended.

"Compensation Committee" means the compensation committee of the Board.

"Consulting Payment" has the meaning assigned thereto in Section 14(e) hereof.

"Consulting Period" has the meaning assigned thereto in Section 14(f) hereof.

"Date of Termination" has the meaning assigned thereto in Section 2(b) hereof.

"Disability" has the meaning set forth in the long-term disability plan or its successor maintained by the Company entity that is the employer of the Executive; *provided*, *however*, that the Executive's employment hereunder may not be terminated by reason of Disability unless (i) at the time of such termination there is no reasonable expectation that the Executive will return to work within the next ninety (90) day period and (ii) such termination is permitted by all applicable disability laws.

"Exchange Act" means the Securities Exchange Act of 1934, as amended, and the applicable rulings and regulations thereunder.

"Excise Tax" has the meaning assigned thereto in Section 8(a) hereof.

"Good Reason" means:

(a) Prior to a Change in Control, the occurrence of any of the following without the prior written consent of the Executive, unless such act or failure to act is corrected by the Company prior to the Date of Termination specified in the Notice of Termination (as required under Section 2 hereof):

(i) the assignment to the Executive of any duties materially inconsistent with the range of duties and responsibilities appropriate to a senior executive within the Company (such range determined by reference to past, current and reasonable practices within the Company);

(ii) a material reduction in the Executive's overall standing and responsibilities within the Company, but not including (A) a mere change in title or (B) a transfer within the Company, which, in the case of both (A) and (B), does not adversely affect the Executive's overall status within the Company;

(iii) a material reduction by the Company in the Executive's aggregate annualized compensation and benefits opportunities, except for across-the-board reductions (or modifications of benefit plans) similarly affecting all similarly situated executives of the Company of comparable rank with the Executive;

(iv) the failure by the Company to pay to the Executive any portion of the Executive's current compensation and benefits or any portion of an installment of deferred compensation under any deferred compensation program of the Company within thirty (30) days of the date such compensation is due;

(v) any purported termination of the Executive's employment that is not effected pursuant to a Notice of Termination satisfying the requirements of Section 2 hereof;

(vi) the failure by Sempra Energy to perform its obligations under Section 16(c) or (d) hereof;

(vii) the failure by the Company to provide the indemnification and D&O insurance protection Section 10 of this Agreement requires it to provide; or

(viii) the failure by Sempra Energy (or any of the entities comprising the Company, as applicable) to comply with any material provision of this Agreement.

(b) From and after a Change in Control (or in connection with a termination occurring pursuant to subsection 5(h)), the occurrence of any of the following without the prior written consent of the Executive, unless such act or failure to act is corrected by the Company prior to the Date of Termination specified in the Notice of Termination (as required under Section 2 hereof):

(i) an adverse change in the Executive's title, authority, duties, responsibilities or reporting lines as in effect immediately prior to the Change in Control;

(ii) a reduction by the Company in the Executive's aggregate annualized compensation opportunities, except for across-the-board reductions in base salaries, annual bonus opportunities or long-term incentive compensation opportunities of less than ten percent (10%) similarly affecting all similarly situated executives (including, if applicable, of the Person then in control of Sempra Energy) of comparable rank with the Executive; or the failure by the Company to continue in effect any material benefit plan in which the Executive participates immediately prior to the Change in Control, unless an equitable arrangement (embodied in an ongoing substitute or alternative plan) has been made with respect to such plan, or the failure by the Company to continue the Executive's participation therein (or in such substitute or alternative plan) on a basis not materially less favorable, both in terms of the amount of benefits provided and the level of the Executive's participation relative to other participants, as existed at the time of the Change in Control;

(iii) the relocation of the Executive's principal place of employment immediately prior to the Change in Control Date (the "Principal Location") to a location which is both further away from the Executive's residence and more than thirty (30) miles from such Principal Location, or the Company's requiring the Executive to be based anywhere other than such Principal Location (or permitted relocation thereof), or a substantial increase in the Executive's business travel obligations outside of the Southern California area as of immediately prior to the Change in Control (without regard to any changes therein in anticipation of the Change in Control) other than any such increase that (A) arises in connection with extraordinary business activities of the Company of limited duration and (B) is understood not to be part of the Executive's regular duties with the Company;

(iv) the failure by the Company to pay to the Executive any portion of the Executive's current compensation and benefits or any portion of an installment of deferred compensation under any deferred compensation program of the Company within thirty (30) days of the date such compensation is due;

(v) any purported termination of the Executive's employment that is not effected pursuant to a Notice of Termination satisfying the requirements of Section 2 hereof; for purposes of this Agreement;

(vi) the failure by Sempra Energy to perform its obligations under Section 16(c) or (d) hereof;

(vii) the failure by the Company to provide the indemnification and D&O insurance protection Section 10 of this Agreement requires it to provide; or

(viii) the failure by Sempra Energy (or any of the entities comprising the Company, as applicable) to comply with any material provision of this Agreement.

Following a Change in Control, the Executive's determination that an act or failure to act constitutes Good Reason shall be presumed to be valid unless such determination is deemed to be unreasonable by an arbitrator pursuant to the procedure described in Section 13 hereof. The Executive's right to terminate the Executive's employment for Good Reason shall not be affected by the Executive's incapacity due to physical or mental illness. The Executive's continued employment shall not constitute consent to, or a waiver of rights with respect to, any act or failure to act constituting Good Reason hereunder.

"Incentive Compensation Awards" means awards granted under Incentive Compensation Plans providing the Executive with the opportunity to earn, on a year-by-year basis, annual and long-term incentive compensation.

"Incentive Compensation Plans" means annual incentive compensation plans and long-term incentive compensation plans of the Company, which long-term incentive compensation plans may include plans offering stock options, restricted stock and other long-term incentive compensation.

"Involuntary Termination" means (a) the Executive's Separation from Service by reason other than for Cause, death, Disability, or Mandatory Retirement, or (b) the Executive's Separation from Service by reason of resignation of employment for Good Reason.

"JAMS Rules" has the meaning assigned thereto in Section 13 hereof.

"Mandatory Retirement" means termination of employment pursuant to the Company's mandatory retirement policy.

"Medical Continuation Benefits" has the meaning assigned thereto in Section 4(c) hereof.

"Notice of Termination" has the meaning assigned thereto in Section 2(a) hereof.

"Payment" has the meaning assigned thereto in Section 8(a) hereof.

"Payment in Lieu of Notice" has the meaning assigned thereto in Section 2(b) hereof.

"Person" means any person, entity or "group" within the meaning of Section 13(d)(3) or Section 14(d)(2) of the Exchange Act, except that such term shall not include (1) Sempra Energy or any of its Affiliates, (2) a trustee or other fiduciary holding securities under an employee benefit plan of Sempra Energy or any of its Affiliates, (3) an underwriter temporarily holding securities pursuant to an offering of such securities, (4) a corporation owned, directly or indirectly, by the shareholders of Sempra Energy in substantially the same proportions as their ownership of stock of Sempra Energy, or (5) a person or group as used in Rule 13d-1(b) under the Exchange Act.

"Post-Change in Control Severance Payment" has the meaning assigned thereto in Section 5 hereof.

"Pre-Change in Control Severance Payment" has the meaning assigned thereto in Section 4 hereof.

"Principal Location" has the meaning assigned thereto in clause (b)(iii) of the definition of Good Reason, above.

"Proprietary Information" has the meaning assigned thereto in Section 14(a) hereof.

"Pro Rata Bonus" has the meaning assigned thereto in Section 5(b) hereof.

"Release" has the meaning assigned thereto in Section 4 hereof.

"Section 409A Payments" means any payments under this Agreement which are subject to Section 409A of the Code.

"Sempra Energy Control Group" means Sempra Energy and all persons with whom Sempra Energy would be considered a single employer under Section 414(b) or 414(c) of the Code, as determined from time to time.

"Separation from Service" has the meaning set forth in Treasury Regulation Section 1.409A-1(h).

"SERP" has the meaning assigned thereto in Section 5(c) hereof.

"Specified Employee" shall be determined in accordance with Section 409A(a)(2)(B)(i) of the Code and Treasury Regulation Section 1.409A-1(i).

For purposes of this Agreement, references to any "Treasury Regulation" shall mean such Treasury Regulation as in effect on the date hereof.

Section 2. Notice and Date of Termination.

(a) Any termination of the Executive's employment by the Company or by the Executive shall be communicated by a written notice of termination to the other party (the "Notice of Termination"). Where applicable, the Notice of Termination shall indicate the specific termination provision in this Agreement relied upon and shall set forth in reasonable detail the facts and circumstances claimed to provide a basis for termination of the Executive's employment under the provision so indicated. Unless the Board or a committee thereof, in writing, provides a longer notice period, a Notice of Termination by the Executive alleging a termination for Good Reason must be made within 180 days of the act or failure to act that the Executive alleges to constitute Good Reason.

(b) The date of the Executive's termination of employment with the Company (the "Date of Termination") shall be determined as follows: (i) if the Executive's Separation from Service is at the volition of the Company, then the Date of Termination shall be the date specified in the Notice of Termination (which, in the case of a termination by the Company other than for Cause, shall not be less than two (2) weeks from the date such Notice of Termination is given unless the Company elects to pay the Executive, in addition to any other amounts payable hereunder, an amount (the "Payment in Lieu of Notice") equal to two (2) weeks of the Executive's Annual Base Salary in effect on the Date of Termination), and (ii) if the Executive's Separation from Service is by the Executive for Good Reason, the Date of Termination shall be determined by the Executive and specified in the Notice of Termination, but in no event be less than fifteen (15) days nor more than sixty (60) days after the date such Notice of Termination is given. The Payment in Lieu of Notice shall be paid on such date as is required by law, but no later than thirty (30) days after the date of the Executive's Separation from Service.

Section 3. Termination from the Board. Upon the termination of the Executive's employment for any reason, the Executive's membership on the Board, the board of directors of any Affiliates of Sempra Energy, any committees of the Board and any committees of the board of directors of any of the Affiliates of Sempra Energy, if applicable, shall be automatically terminated and the Executive agrees to take any and all actions (including resigning) required by Sempra Energy or any of its Affiliates to evidence and effect such termination of membership.

Section 4. Severance Benefits upon Involuntary Termination Prior to Change in Control. Except as provided in Section 5(h) and Section 19(i) hereof, in the event of the Involuntary Termination of the Executive prior to a Change in Control, Sempra Energy shall, or shall cause one of its Affiliates that is the employer of the Executive to, pay the Executive, in one lump sum cash payment, an amount (the "Pre-Change in Control Severance Payment") equal to the greater of: (X) 180% of the Executive's Annual Base Salary as in effect on the Date of Termination, and (Y) the sum of (I) the Executive's Annual Base Salary as in effect on the Date of Termination, plus (II) the Executive's Average Annual Bonus. In addition to the Pre-Change in Control Severance Payment, the Executive shall be entitled to the following additional benefits specified in subsections (a) through (e). The Company's obligation to pay the Pre-Change in Control Severance Payment or provide the benefits set forth in subsections (c), (d) and (e) are subject to and conditioned upon the Executive executing a release of all claims substantially in the form attached hereto as Exhibit A (the "Release") within fifty (50) days after the date of Involuntary Termination and the Executive not revoking such Release in accordance with the terms thereof. Except as provided in Section 4(f), the Pre-Change in Control Severance Payment shall be paid within sixty (60) days after the date of the Involuntary Termination on such date as is determined by Sempra Energy, but not before the Release becomes effective and irrevocable. If the fifty (50) day period in which the Release could become effective spans more than one taxable year, then the Pre-Change in Control Severance Payment shall not be made until the later taxable year.

(a) Accrued Obligations. The Company shall pay the Executive a lump sum amount in cash equal to Accrued Obligations within the time prescribed by law.

(b) Equity Based Compensation. The Executive shall retain all rights to any equity-based compensation awards to the extent set forth in the applicable plan and/or award agreement.

(c) Welfare Benefits. Subject to the terms and conditions of this Agreement, for a period of twelve (12) months following the date of the Involuntary Termination (and an additional twelve (12) months if the Executive provides consulting services under Section 14(f) hereof), the Executive and his dependents shall be provided with group medical benefits which are substantially similar to those provided from time to time to similarly situated active employees of the Company (and their eligible dependents) ("Medical Continuation Benefits"). Without limiting the generality of the foregoing, such Medical Continuation Benefits shall be provided on substantially the same terms and conditions and at the same cost to the Executive as apply to similarly situated active employees of the Company. Such benefits shall be provided in a manner that complies with Treasury Regulation Section 1.409A-1(a)(5). Notwithstanding the foregoing, if Sempra Energy determines in its sole discretion that the Medical Continuation Benefits cannot be provided without potentially violating applicable law (including, without limitation, Section 2716 of the Public Health Service Act) or that the provision of Medical Continuation Benefits under this Agreement would subject Sempra Energy or any of its Affiliates to a material tax or penalty, (i) the Executive shall be provided, in lieu thereof, with a taxable monthly payment in an amount equal to the monthly premium that the Executive would be required to pay to continue the Executive's and his covered dependents' group medical benefit coverages under COBRA as then in effect (which amount shall be based on the premiums for the first month of COBRA coverage) or (ii) Sempra Energy shall have the authority to amend the Agreement to the limited extent reasonably necessary to avoid such violation of

law or tax or penalty and shall use all reasonable efforts to provide the Executive with a comparable benefit that does not violate applicable law or subject Sempra Energy or any of its Affiliates to such tax or penalty.

(d) Outplacement Services. The Executive shall receive reasonable outplacement services, on an in-kind basis, suitable to his position and directly related to the Executive's Involuntary Termination, for a period of twenty-four (24) months following the date of the Involuntary Termination, in an aggregate amount of cost to the Company not to exceed $50,000. Notwithstanding the foregoing, the Executive shall cease to receive outplacement services on the date the Executive accepts employment with a subsequent employer. Such outplacement services shall be provided in a manner that complies with Treasury Regulation Section 1.409A-1(b)(9)(v)(A).

(e) Financial Planning Services. The Executive shall receive financial planning services, on an in-kind basis, for a period of twenty-four (24) months following the Date of Termination. Such financial planning services shall include expert financial and legal resources to assist the Executive with financial planning needs and shall be limited to (i) current investment portfolio management, (ii) tax planning, (iii) tax return preparation, and (iv) estate planning advice and document preparation (including wills and trusts); provided, however, that the Company shall provide such financial planning services during any taxable year of the Executive only to the extent the cost to the Company for such taxable year does not exceed $25,000. The Company shall provide such financial planning services through a financial planner selected by the Company, and shall pay the fees for such financial planning services. The financial planning services provided during any taxable year of the Executive shall not affect the financial planning services provided in any other taxable year of the Executive. The Executive's right to financial planning services shall not be subject to liquidation or exchange for any other benefit. Such financial planning services shall be provided in a manner that complies with Treasury Regulation Section 1.409A-3(i)(1)(iv).

Section 5. Severance Benefits upon Involuntary Termination in Connection with and after Change in Control. Notwithstanding the provisions of Section 4 above, and except as provided in Section 19(i) hereof, in the event of the Involuntary Termination of the Executive on or within two (2) years following a Change in Control, in lieu of the payments described in Section 4 above, Sempra Energy shall, or shall cause one of its Affiliates that is the employer of the Executive to, pay the Executive, in one lump sum cash payment, an amount (the "Post-Change in Control Severance Payment") equal to two times the greater of: (X) 180 % of the Executive's Annual Base Salary as in effect immediately prior to the Change in Control or the Date of Termination, whichever is greater, and (Y) the sum of (I) the Executive's Annual Base Salary as in effect immediately prior to the Change in Control or on the Date of Termination, whichever is greater, plus (II) the Executive's Average Annual Bonus. In addition to the Post-Change in Control Severance Payment, the Executive shall be entitled to the following additional benefits specified in subsections (a) through (g). The Company's obligation to pay the Post-Change in Control Severance Payment or provide the benefits set forth in subsections (b),(c), (d), (e), and (f) are subject to and conditioned upon the Executive executing the Release within fifty (50) days after the date of Involuntary Termination and the Executive not revoking such Release in accordance with the terms thereof. Except as provided in Section 5(h), the Post-Change in Control Severance Payment, the Pro Rata Bonus, and the payments under Section 5(c) shall be paid within sixty (60) days after the date of Involuntary Termination on such date as is determined by Sempra Energy (or its successor) but not before the Release becomes effective and irrevocable. If the fifty (50) day period in which the Release could become effective spans more than one taxable year, then the Post-Change in Control Severance Payment, the Pro Rata Bonus and the payments under Section 5(c) shall not be made until the later taxable year.

(a) Accrued Obligations. The Company shall pay the Executive a lump sum amount in cash equal to the Accrued Obligations within the time required by law and, to the extent applicable, in accordance with the applicable plan, policy or arrangement pursuant to which such payments are to be made.

(b) Pro Rata Bonus. The Company shall pay the Executive a lump sum amount in cash equal to: (i) the greater of: (X) 80% of the Executive's Annual Base Salary as in effect immediately prior to the Change in Control or on the Date of Termination, whichever is greater, or (Y) the Executive's Average Annual Bonus, multiplied by (ii) a fraction, the numerator of which shall be the number of days from the beginning of such fiscal year to and including the Date of Termination and the denominator of which shall be 365 equal to (the "Pro Rata Bonus").

(c) Pension Supplement. The Executive shall be entitled to receive a Supplemental Retirement Benefit under the Sempra Energy Supplemental Executive Retirement Plan, as in effect from time to time ("SERP"), determined in accordance with this Section 5(c), in the event that the Executive is a "Participant" (as defined in the SERP) as of the Date of Termination. Such Supplemental Retirement Benefit shall be determined by crediting the Executive with additional months of Service (if any) equal to the number of full calendar months from the Date of Termination to the date on which the Executive would have attained age 62. The Executive shall be entitled to receive such Supplemental Retirement Benefit without regard to whether the Executive has attained age 55 or completed five years of "Service" (as defined in the SERP) as of the Date of Termination. The Executive shall be treated as qualified for "Retirement" (as defined in the SERP) as of the Date of Termination, and the Executive's Vesting Factor with respect to the Supplemental Retirement Benefit shall be 100%. The Executive's Supplemental Retirement Benefit shall be calculated based on the Executive's actual age as of the date of commencement of payment of such Supplemental Retirement Benefit (the "SERP Distribution Date"), and by applying the applicable early retirement factors under the SERP, if the Executive has not attained age 62 but has attained age 55 as of the SERP Distribution Date. If the Executive has not attained age 55 as of the SERP Distribution Date, the Executive's Supplemental Retirement Benefit shall be calculated by applying the applicable early retirement factor under the SERP for age 55, and the Supplemental Retirement Benefit otherwise payable at age 55 shall be actuarially adjusted to the Executive's actual age as of the SERP Distribution Date using the following actuarial assumptions: (i) the applicable mortality table promulgated by the Internal Revenue Service under Section 417(e)(3) of the Code, as in effect on the first day of the calendar year in which the SERP Distribution Date occurs, and (ii) the applicable interest rate promulgated by the Internal Revenue Service under Section 417(a)(3) of the Code for the November next preceding the first day of the calendar year in which the SERP Distribution Date occurs. The Executive's Supplemental Retirement Benefit shall be determined in accordance with this Section 5(c), notwithstanding any contrary provisions of the SERP and, to the extent subject to Section 409A of the Code, shall be paid in accordance with Treasury Regulation Section 1.409A-3(c)(1). The Supplemental Retirement Benefit paid to or on behalf of the Executive in accordance with this Section 5(c) shall be in full satisfaction of any and all of the benefits payable to or on behalf of the Executive under the SERP.

(d) Equity-Based Compensation. Notwithstanding the provisions of any applicable equity-compensation plan or award agreement to the contrary, all equity-based Incentive Compensation Awards (including, without limitation, stock options, stock appreciation rights, restricted stock awards, restricted stock units, performance share awards, awards covered under Section 162(m) of the Code, and dividend equivalents) held by the Executive shall immediately vest and become exercisable or payable, as the case may be, as of the Date of Termination, to be exercised or paid, as the case may be, in accordance with the terms of the applicable Incentive Compensation Plan and Incentive Compensation Award agreement, and any restrictions on any such Incentive Compensation Awards shall automatically lapse;

provided, however, that, in the case of any stock option or stock appreciation rights awards granted on or after June 26, 1998 that remain outstanding on the Date of Termination, such stock options or stock appreciation rights shall remain exercisable until the earlier of (A) the later of eighteen (18) months following the Date of Termination or the period specified in the applicable Incentive Compensation Award agreements or (B) the expiration of the original term of such Incentive Compensation Award (or, if earlier, the tenth anniversary of the original date of grant) (it being understood that all Incentive Compensation Awards granted prior to, on or after June 26, 1998 shall remain outstanding and exercisable for a period that is no less than that provided for in the applicable agreement in effect as of the date of grant).

(e) Welfare Benefits. Subject to the terms and conditions of this Agreement, for a period of twenty four (24) months following the date of Involuntary Termination (and an additional twelve (12) months if the Executive provides consulting services under Section 14(f) hereof), the Executive and his dependents shall be provided with life, disability, accident and group medical benefits which are substantially similar to those provided to the Executive and his dependents immediately prior to the date of Involuntary Termination or the Change in Control Date, whichever is more favorable to the Executive. Without limiting the generality of the foregoing, the continuing benefits described in the preceding sentence shall be provided on substantially the same terms and conditions and at the same cost to the Executive as in effect immediately prior to the date of Involuntary Termination or the Change in Control Date, whichever is more favorable to the Executive. Such benefits shall be provided in a manner that complies with Treasury Regulation Section 1.409A-1(a)(5). Notwithstanding the foregoing, if Sempra Energy determines in its sole discretion that the portion of the foregoing continuing benefits that constitute group medical benefits cannot be provided without potentially violating applicable law (including, without limitation, Section 2716 of the Public Health Service Act) or that the provision of such group medical benefits under this Agreement would subject Sempra Energy or any of its Affiliates to a material tax or penalty, (i) the Executive shall be provided, in lieu thereof, with a taxable monthly payment in an amount equal to the monthly premium that the Executive would be required to pay to continue the Executive's and his covered dependents' group medical benefit coverages under COBRA as then in effect (which amount shall be based on the premiums for the first month of COBRA coverage) or (ii) Sempra Energy shall have the authority to amend the Agreement to the limited extent reasonably necessary to avoid such violation of law or tax or penalty and shall use all reasonable efforts to provide the Executive with a comparable benefit that does not violate applicable law or subject Sempra Energy or any of its Affiliates to such tax or penalty.

(f) Outplacement Services. The Executive shall receive reasonable outplacement services, on an in-kind basis, suitable to his position and directly related to the Executive's Involuntary Termination, for a period of thirty-six (36) months following the date of Involuntary Termination (but in no event beyond the last day of the Executive's second taxable year following the Executive's taxable year in which the Involuntary Termination occurs), in the aggregate amount of cost to the Company not to exceed $50,000. Notwithstanding the foregoing, the Executive shall cease to receive outplacement services on the date the Executive accepts employment with a subsequent employer. Such outplacement services shall be provided in a manner that complies with Treasury Regulation Section 1.409A-1(b)(9)(v)(A).

(g) Financial Planning Services. The Executive shall receive financial planning services, on an in-kind basis, for a period of thirty-six (36) months following the date of Involuntary Termination. Such financial planning services shall include expert financial and legal resources to assist the Executive with financial planning needs and shall be limited to (i) current investment portfolio management, (ii) tax planning, (iii) tax return preparation, and (iv) estate planning advice and document preparation (including wills and trusts); provided, however, that the Company shall provide such financial

services during any taxable year of the Executive only to the extent the cost to the Company for such taxable year does not exceed $25,000. The Company shall provide such financial planning services through a financial planner selected by the Company, and shall pay the fees for such financial planning services. The financial planning services provided during any taxable year of the Executive shall not affect the financial planning services provided in any other taxable year of the Executive. The Executive's right to financial planning services shall not be subject to liquidation or exchange for any other benefit. Such financial planning services shall be provided in a manner that complies with Section 1.409A-3(i)(1)(iv).

(h) Involuntary Termination in Connection with a Change in Control. Notwithstanding anything contained herein, in the event of an Involuntary Termination prior to a Change in Control, if the Involuntary Termination (1) was at the request of a third party who has taken steps reasonably calculated to effect such Change in Control or (2) otherwise arose in connection with or in anticipation of such Change in Control, then the Executive shall, in lieu of the payments described in Section 4 hereof, be entitled to the Post-Change in Control Severance Payment and the additional benefits described in this Section 5 as if such Involuntary Termination had occurred within two (2) years following the Change in Control. The amounts specified in Section 5 that are to be paid under this Section 5(h) shall be reduced by any amount previously paid under Section 4. The amounts to be paid under this Section 5(h) shall be paid within sixty (60) days after the Change in Control Date of such Change in Control.

Section 6. Severance Benefits upon Termination by the Company for Cause or by the Executive Other than for Good Reason. If the Executive's employment shall be terminated for Cause, or if the Executive terminates employment other than for Good Reason, the Company shall have no further obligations to the Executive under this Agreement other than the Pre-Change in Control Accrued Obligations and any amounts or benefits described in Section 10 hereof.

Section 7. Severance Benefits upon Termination due to Death or Disability. If the Executive has a Separation from Service by reason of death or Disability, the Company shall pay the Executive or his estate, as the case may be, the Accrued Obligations and the Pro Rata Bonus (without regard to whether a Change in Control has occurred) and any amounts or benefits described in Section 10 hereof. Such payments shall be in addition to those rights and benefits to which the Executive or his estate may be entitled under the relevant Company plans or programs. The Company's obligation to pay the Pro Rata Bonus is conditioned upon the Executive, the Executive's representative or the Executive's estate, as the case may be executing the Release within fifty (50) days after the date of the Executive's Separation from Service and not revoking such Release in accordance with the terms thereof. The Accrued Obligations shall be paid within the time required by law and the Pro Rata Bonus shall be paid within sixty (60) days after the date of the Separation from Service on such date determined by Sempra Energy but not before the Release becomes effective and irrevocable. If the fifty (50) day period in which the Release could become effective spans more than one taxable year, then the Pro Rata Bonus shall not be made until the later taxable year.

Section 8. Limitation on Payments by the Company.

(a) Anything in this Agreement to the contrary notwithstanding and except as set forth in this Section 8 below, in the event it shall be determined that any payment or distribution in the nature of compensation (within the meaning of Section 280G(b)(2) of the Code) to or for the benefit of the Executive, whether paid or payable pursuant to this Agreement or otherwise (the "Payment") would be subject (in whole or in part) to the excise tax imposed by Section 4999 of the Code, (the "Excise Tax"), then, subject to subsection (b), the Pre-Change in Control Severance Benefit or the Post-Change in Control Severance Payment (whichever is applicable) payable under this Agreement shall be reduced

under this subsection (a) to the amount equal to the Reduced Payment. For such Payment payable under this Agreement, the "Reduced Payment" shall be the amount equal to the greatest portion of the Payment (which may be zero) that, if paid, would result in no portion of any Payment being subject to the Excise Tax.

(b) The Pre-Change in Control Severance Benefit or the Post-Change in Control Severance Payment (whichever is applicable) payable under this Agreement shall not be reduced under subsection (a) if:

(i) such reduction in such Payment is not sufficient to cause no portion of any Payment to be subject to the Excise Tax, or

(ii) the Net After-Tax Unreduced Payments (as defined below) would equal or exceed one hundred and five percent (105%) of the Net After-Tax Reduced Payments (as defined below).

For purposes of determining the amount of any Reduced Payment under subsection (a), and the Net-After Tax Reduced Payments and the Net After-Tax Unreduced Payments, the Executive shall be considered to pay federal, state and local income and employment taxes at the Executive's applicable marginal rates taking into consideration any reduction in federal income taxes which could be obtained from the deduction of state and local income taxes, and any reduction or disallowance of itemized deductions and personal exemptions under applicable tax law). The applicable federal, state and local income and employment taxes and the Excise Tax (to the extent applicable) are collectively referred to as the "Taxes".

(c) For purposes of determining the amount of any Reduced Payment under this Section 8, the amount of any Payment shall be reduced in the following order:

(i) first, by reducing the amounts of parachute payments that would not constitute deferred compensation subject to Section 409A of the Code;

(ii) next, if after the reduction described in subparagraph (i), additional reductions are required, then by reducing the cash portion of the Payment that constitutes deferred compensation (within the meaning of Section 409A) subject to Section 409A, with the reductions to be applied first to the portion of the Payment scheduled for the latest distribution date, and then applied to distributions scheduled for progressively earlier distribution dates, to the extent necessary to decrease the Payment as required under this Section 8; and

(iii) next, if after the reduction described in subparagraph (ii), additional reductions are required, then, by reducing the non-cash portion of the Payment that constitutes deferred compensation (within the meaning of subject to 409A), with the reductions to be applied first to the portion of the Payment scheduled for the latest distribution date, and then applied to distributions scheduled for progressively earlier distribution dates, to the extent necessary to decrease the Payment as required under this Section 8.

(d) The following definitions shall apply for purposes of this Section 8:

(i) "Net After-Tax Reduced Payments" shall mean the total amount of all Payments that the Executive would retain, on a Net After-Tax Basis, in the event that the Payments payable under this Agreement are reduced pursuant to subsection (a).

(ii) "Net After-Tax Unreduced Payments" shall mean the total amount of all Payments that the Executive would retain, on a Net After-Tax Basis, in the event that the Payments payable under this Agreement are not reduced pursuant to subsection (a).

(iii) "Net After-Tax Basis" shall mean, with respect to the Payments, either with or without reduction under subsection (a) (as applicable), the amount that would be retained by the Executive from such Payments after the payment of all Taxes.

(e) All determinations required to be made under this Section 8 and the assumptions to be utilized in arriving at such determinations, shall be made by a nationally recognized accounting firm as may be agreed by the Company and the Executive (the "Accounting Firm"); provided, that the Accounting Firm's determination shall be made based upon "substantial authority" within the meaning of Section 6662 of the Code. The Accounting Firm shall provide detailed supporting calculations to both the Company and the Executive within fifteen (15) business days of the receipt of notice from the Executive that there has been a Payment or such earlier time as is requested by the Company. All fees and expenses of the Accounting Firm shall be borne solely by the Company. Any determination by the Accounting Firm shall be binding upon the Company and the Executive. For purposes of determining whether and the extent to which the Payments will be subject to the Excise Tax, (i) no portion of the Payments the receipt or enjoyment of which the Executive shall have waived at such time and in such manner as not to constitute a "payment" within the meaning of Section 280G(b) of the Code shall be taken into account, (ii) no portion of the Payments shall be taken into account which, in the written opinion of the Accounting Firm, does not constitute a "parachute payment" within the meaning of Section 280G(b)(2) of the Code (including by reason of Section 280G(b)(4)(A) of the Code) and, in calculating the Excise Tax, no portion of such Payments shall be taken into account which, in the opinion of the Accounting Firm, constitutes reasonable compensation for services actually rendered, within the meaning of Section 280G(b)(4)(B) of the Code, in excess of the base amount (as defined in Section 280G(b)(3) of the Code) allocable to such reasonable compensation, and (iii) the value of any non-cash benefit or any deferred payment or benefit included in the Payments shall be determined by the Accounting Firm in accordance with the principles of Sections 280G(d)(3) and (4) of the Code.

Section 9. Delayed Distribution under Section 409A of the Code. Notwithstanding any other provision of this Agreement to the contrary, if the Executive is a Specified Employee on the date of the Executive's Involuntary Termination (or on the date of the Executive's Separation from Service by reason of Disability), the Section 409A Payments which are payable upon Separation from Service shall be delayed to the extent necessary in order to avoid a prohibited distribution under Section 409A(a)(2)(B)(i) of the Code, and such delayed payments or benefits shall be paid or distributed to the Executive during the thirty (30) day period commencing on the earlier of (a) the expiration of the six (6) month period measured from the date of the Executive's Separation from Service or (b) the date of the Executive's death. Upon the expiration of the applicable six (6) month period, all payments deferred pursuant to this Section 9 (excluding in-kind benefits) shall be paid in a lump sum payment to the Executive, plus interest thereon from the date of the Executive's Involuntary Termination through the payment date at an annual rate equal to Moody's Rate. The "Moody's Rate" shall mean the average of the daily Moody's Corporate Bond Yield Average - Monthly Average Corporates as published by Moody's Investors Service, Inc. (or any successor) for the month next preceding the Date of Termination. Any remaining payments due under the Agreement shall be paid as otherwise provided herein.

Section 10. Nonexclusivity of Rights. Nothing in this Agreement shall prevent or limit the Executive's continuing or future participation in any benefit, plan, program, policy or practice provided by the Company and for which the Executive may qualify (except with respect to any benefit to which the Executive has waived his rights in writing), including, without limitation, any and all indemnification arrangements in favor of the Executive (whether under agreements or under the Company's charter documents or otherwise), and insurance policies covering the Executive, nor shall anything herein limit or otherwise affect such rights as the Executive may have under any other contract or agreement entered into after the Effective Date with the Company. Amounts which are vested benefits or which the Executive is otherwise entitled to receive under any benefit, plan, policy, practice or program of, or any contract or agreement entered into with, the Company shall be payable in accordance with such benefit, plan, policy, practice or program or contract or agreement except as explicitly modified by this Agreement. At all times during the Executive's employment with the Company and thereafter, the Company shall provide (to the extent permissible under applicable law) the Executive with indemnification and D&O insurance insuring the Executive against insurable events which occur or have occurred while the Executive was a director or executive officer of the Company, that with respect to such insurance is on terms and conditions that, to the extent reasonably practical, are at least as generous as that then currently provided to any other current or former director or executive officer of the Company or any Affiliate. Such indemnification and D&O insurance shall be provided in a manner that complies with Treasury Regulation Section 1.409A-1(b)(10).

Section 11. Clawbacks. Notwithstanding anything herein to the contrary, if Sempra Energy determines, in its good faith judgment, that if the Executive is required to forfeit or to make any repayment of any compensation or benefit(s) to the Company under the Sarbanes-Oxley Act of 2002 or pursuant to the Dodd-Frank Wall Street Reform and Consumer Protection Act or any other law or pursuant to any formal policy of Sempra Energy, such forfeiture or repayment shall not constitute Good Reason.

Section 12. Full Settlement; Mitigation. The Company's obligation to make the payments provided for in this Agreement and otherwise to perform its obligations hereunder shall not be affected by any set-off, counterclaim, recoupment, defense or other claim, right or action which the Company may have against the Executive or others, provided that nothing herein shall preclude the Company from separately pursuing recovery from the Executive based on any such claim. In no event shall the Executive be obligated to seek other employment or take any other action by way of mitigation of the amounts (including amounts for damages for breach) payable to the Executive under any of the provisions of this Agreement, and such amounts shall not be reduced whether or not the Executive obtains other employment.

Section 13. Dispute Resolution.

(a) If any dispute arises between the Executive and Sempra Energy or any of its Affiliates, including, but not limited to, disputes relating to or arising out of this Agreement, any action relating to or arising out of the Executive's employment or its termination, and/or any disputes regarding the interpretation, enforceability, or validity of this Agreement ("Arbitrable Dispute"), the Executive and Sempra Energy waive the right to resolve the dispute through litigation in a judicial forum and agree to resolve the Arbitrable Dispute through final and binding arbitration, except as prohibited by law. Arbitration shall be the exclusive remedy for any Arbitrable Dispute.

(b) As to any Arbitrable Dispute, Sempra Energy and the Executive waive any right to a jury trial or a court bench trial. The Company and the Executive also waive the right to bring, maintain, or participate in any class, collective, or representative proceeding, whether in arbitration or otherwise.

Further, Arbitrable Disputes must be brought in the individual capacity of the party asserting the claim, and cannot be maintained on a class, collective, or representative basis.

(c) Arbitration shall take place at the office of the Judicial Arbitration and Mediation Service ("JAMS") (or, if the Executive is employed outside of California, the American Arbitration Association ("AAA")) nearest to the location where the Executive last worked for the Company. Except to the extent it conflicts with the rules and procedures set forth in this Arbitration Agreement, arbitration shall be conducted in accordance with the JAMs Employment Arbitration Rules & Procedures (if the Executive is employed outside of California, the AAA Employment Arbitration Rules & Mediation Procedures), copies of which are attached for my reference and available at www.jamsadr.com; tel: 800.352.5267 and www.adr.org; tel: 800.778.7879, before a single experienced, neutral employment arbitrator selected in accordance with those rules.

(d) Sempra Energy will be responsible for paying any filing fee and the fees and costs of the arbitrator. Each party shall pay its own attorneys' fees. However, if any party prevails on a statutory claim that authorizes an award of attorneys' fees to the prevailing party, or if there is a written agreement providing for attorneys' fees, the arbitrator may award reasonable attorneys' fees to the prevailing party, applying the same standards a court would apply under the law applicable to the claim.

(e) The arbitrator shall apply the Federal Rules of Evidence, shall have the authority to entertain a motion to dismiss or a motion for summary judgment by any party, and shall apply the standards governing such motions under the Federal Rules of Civil Procedure. The arbitrator does not have the authority to consider, certify, or hear an arbitration as a class action, collective action, or any other type of representative action. Sempra Energy and the Executive recognize that this Agreement arises out of or concerns interstate commerce and that the Federal Arbitration Act shall govern the arbitration and shall govern the interpretation or enforcement of this Arbitration Agreement or any arbitration award.

(f) EXECUTIVE ACKNOWLEDGES THAT BY ENTERING INTO THIS AGREEMENT, EXECUTIVE IS WAIVING ANY RIGHT HE OR SHE MAY HAVE TO A TRIAL BY JURY.

Section 14. Executive's Covenants.

(a) Confidentiality. The Executive acknowledges that in the course of his employment with the Company, he has acquired non-public privileged or confidential information and trade secrets concerning the operations, future plans and methods of doing business ("Proprietary Information") of Sempra Energy and its Affiliates; and the Executive agrees that it would be extremely damaging to Sempra Energy and its Affiliates if such Proprietary Information were disclosed to a competitor of Sempra Energy and its Affiliates or to any other person or corporation. The Executive understands and agrees that all Proprietary Information has been divulged to the Executive in confidence and further understands and agrees to keep all Proprietary Information secret and confidential (except for such information which is or becomes publicly available other than as a result of a breach by the Executive of this provision or information the Executive is required by any governmental, administrative or court order to disclose) without limitation in time. In view of the nature of the Executive's employment and the Proprietary Information the Executive has acquired during the course of such employment, the Executive likewise agrees that Sempra Energy and its Affiliates would be irreparably harmed by any disclosure of Proprietary Information in violation of the terms of this paragraph and that Sempra Energy and its Affiliates shall therefore be entitled to preliminary and/or permanent injunctive relief prohibiting the Executive from engaging in any activity or threatened activity in violation of the terms of this paragraph and to any other

relief available to them. Inquiries regarding whether specific information constitutes Proprietary Information shall be directed to the Company's Senior Vice President, Public Policy (or, if such position is vacant, the Company's then Chief Executive Officer); provided, that the Company shall not unreasonably classify information as Proprietary Information.

(b) Governmental Reporting. Nothing in this Agreement is intended to interfere with or discourage the Executive's good faith disclosure related to a suspected violation of federal or state law or regulation to any governmental agency or entity or making other disclosures that are protected under the whistleblower provisions of federal or state law or regulation. The Executive cannot and will not be held criminally or civilly liable under any federal or state trade secret law for disclosing otherwise protected trade secrets and/or confidential or proprietary information so long as the disclosure is made in (1) confidence to a federal, state, or local government official, directly or indirectly, or to an attorney and solely for the purpose of reporting or investigating a suspected violation of law; or (2) a complaint or other document filed in a lawsuit or other proceeding, so long as such filing is made under seal. Company will not retaliate against the Executive in any way for a disclosure made pursuant to this Section. Further, in the event the Executive makes such a disclosure, and files a lawsuit against the Company alleging that the Company retaliated against the Executive because of the disclosure, the Executive may disclose the relevant trade secret or confidential information to the Executive's attorney, and may use the same in the court proceeding only if (1) the Executive ensures that any court filing that includes the trade secret or confidential information at issue is made under seal; and (2) the Executive does not otherwise disclose the trade secret or confidential information except as required by court order.

(c) Non-Solicitation of Employees. The Executive recognizes that he possesses and will possess confidential information about other employees of Sempra Energy and its Affiliates relating to their education, experience, skills, abilities, compensation and benefits, and inter-personal relationships with customers of Sempra Energy and its Affiliates. The Executive recognizes that the information he possesses and will possess about these other employees is not generally known, is of substantial value to Sempra Energy and its Affiliates in developing their business and in securing and retaining customers, and has been and will be acquired by him because of his business position with Sempra Energy and its Affiliates. The Executive agrees that at all times during the Executive's employment with the Company and for a period of one (1) year thereafter, he will not, directly or indirectly, solicit or recruit any employee of the Company or its Affiliates for the purpose of being employed by him or by any competitor of the Company or its Affiliates on whose behalf he is acting as an agent, representative or employee and that he will not convey any such confidential information or trade secrets about other employees of Sempra Energy and its Affiliates to any other person; provided, however, that it shall not constitute a solicitation or recruitment of employment in violation of this paragraph to discuss employment opportunities with any employee of the Company or its Affiliates who has either first contacted the Executive or regarding whose employment the Executive has discussed with and received the written approval of the Company's most senior Vice President, Human Resources (or, if such position is vacant, the Company's then Chief Executive Officer), prior to making such solicitation or recruitment. In view of the nature of the Executive's employment with the Company, the Executive likewise agrees that Sempra Energy and its Affiliates would be irreparably harmed by any solicitation or recruitment in violation of the terms of this paragraph and that Sempra Energy and its Affiliates shall therefore be entitled to preliminary and/or permanent injunctive relief prohibiting the Executive from engaging in any activity or threatened activity in violation of the terms of this paragraph and to any other relief available to them.

(d) Survival of Provisions. The obligations contained in Sections 14(a), (b) and (c) above shall survive the termination of the Executive's employment within the Company and shall be fully enforceable thereafter. If it is determined by a court of competent jurisdiction in any state that any

restriction in Section 14(a) or Section 14(c) above is excessive in duration or scope or is unreasonable or unenforceable under the laws of that state, it is the intention of the parties that such restriction may be modified or amended by the court to render it enforceable to the maximum extent permitted by the law of that state.

(e) Release; Consulting Payment. In the event of the Executive's Involuntary Termination, if the Executive (i) reconfirms and agrees to abide by the covenants described in Section 14(a) and Section 14(c) above, (ii) executes the Release within fifty (50) days after the date of Involuntary Termination and does not revoke such Release in accordance with the terms thereof, and (iii) agrees to provide the consulting services described in Section 14(f) below, then in consideration for such covenants and consulting services, the Company shall pay the Executive, in one cash lump sum, an amount (the "Consulting Payment") in cash equal to the greater of: (X) 180% of the Executive's Annual Base Salary as in effect on the Date of Termination, and (Y) the Executive's Annual Base Salary as in effect on the Date of Termination, plus the Executive's Average Annual Bonus. Except as provided in this subsection, the Consulting Payment shall be paid on such date as is determined by the Company within the ten (10) day period commencing on the 60th day after the date of the Executive's Involuntary Termination; provided, however, that if the Executive is a Specified Employee on the date of the Executive's Involuntary Termination, the Consulting Payment shall be paid as provided in Section 9 hereof to the extent required.

(f) Consulting. If the Executive agrees to the provisions of Section 14(e) above, then the Executive shall have the obligation to provide consulting services to the Company as an independent contractor, commencing on the Date of Termination and ending on the second anniversary of the Date of Termination (the "Consulting Period"). The Executive shall hold himself available at reasonable times and on reasonable notice to render such consulting services as may be so assigned to him by the Board or the Company's then Chief Executive Officer; provided, however, that unless the parties otherwise agree, the consulting services rendered by the Executive during the Consulting Period shall not exceed twenty (20) hours each month; and, provided, further, that the consulting services rendered by the Executive during the Consulting Period shall in no event exceed twenty percent (20%) of the average level of services performed by the Executive for the Company over the thirty-six (36) month period immediately preceding the Executive's Separation from Service (or the full period of services to the Company, if the Executive has been providing services to the Company for less than thirty-six (36) months). The Company agrees to use its best efforts during the Consulting Period to secure the benefit of the Executive's consulting services so as to minimize the interference with the Executive's other activities, including requiring the performance of consulting services at the Company's offices only when such services may not be reasonably performed off-site by the Executive.

Section 15. Legal Fees.

(a) Reimbursement of Legal Fees. Subject to subsection (b), in the event of the Executive's Separation from Service either (1) prior to a Change in Control, or (2) on or within two (2) years following a Change in Control, the Company shall reimburse the Executive for all legal fees and expenses (including but not limited to fees and expenses in connection with any arbitration) incurred by the Executive in disputing any issue arising under this Agreement relating to the Executive's Separation from Service or in seeking to obtain or enforce any benefit or right provided by this Agreement.

(b) Requirements for Reimbursement. The Company shall reimburse the Executive's legal fees and expenses pursuant to subsection (a) above only to the extent the arbitrator or court determines the following: (i) the Executive disputed such issue, or sought to obtain or enforce such benefit or right, in good faith, (ii) the Executive had a reasonable basis for such claim, and (iii) in the case

of subsection (a)(1) above, the Executive is the prevailing party. In addition, the Company shall reimburse such legal fees and expenses, only if such legal fees and expenses are incurred during the twenty (20) year period beginning on the date of the Executive's Separation from Service. The legal fees and expenses paid to the Executive for any taxable year of the Executive shall not affect the legal fees and expenses paid to the Executive for any other taxable year of the Executive. The legal fees and expenses shall be paid to the Executive on or before the last day of the Executive's taxable year following the taxable year in which the fees or expenses are determined to be payable pursuant to this Agreement. The Executive's right to reimbursement of legal fees and expenses shall not be subject to liquidation or exchange for any other benefit. Such right to reimbursement of legal fees and expenses shall be provided in a manner that complies with Treasury Regulation Section 1.409A-3(i)(1)(iv).

Section 16. Successors.

(a) Assignment by the Executive. This Agreement is personal to the Executive and without the prior written consent of Sempra Energy shall not be assignable by the Executive otherwise than by will or the laws of descent and distribution. This Agreement shall inure to the benefit of and be enforceable by the Executive's legal representatives.

(b) Successors and Assigns of Sempra Energy. This Agreement shall inure to the benefit of and be binding upon Sempra Energy and its successors and assigns. Sempra Energy may not assign this Agreement to any person or entity (except for a successor described in Section 16(c), (d) or (e) below) without the Executive's written consent.

(c) Assumption. Sempra Energy shall require any successor (whether direct or indirect, by purchase, merger, consolidation or otherwise) to all or substantially all of the business and/or assets of Sempra Energy to assume expressly and agree to perform the obligations and satisfy and discharge the liabilities of this Agreement in the same manner and to the same extent that Sempra Energy would have been required to perform the obligations and satisfy and discharge the liabilities under this Agreement if no such succession had taken place, and Sempra Energy shall have no further obligations and liabilities under this Agreement. Upon such assumption, references to Sempra Energy in this Agreement shall be replaced with references to such successor.

(d) Sale of Subsidiary. In the event that (i) the Executive is employed by a direct or indirect subsidiary of Sempra Energy that is a member of the Sempra Energy Control Group, (ii) Sempra Energy, directly or indirectly through one or more intermediaries, sells or otherwise disposes of such subsidiary, and (iii) such subsidiary ceases to be a member of the Sempra Energy Control Group, then if, on the date such subsidiary ceases to be a member of the Sempra Energy Control Group, the Executive continues in employment with such subsidiary and the Executive does not have a Separation from Service, Sempra Energy shall require such subsidiary or any successor (whether direct or indirect, by purchase merger, consolidation or otherwise) to such subsidiary, or the parent thereof, to assume expressly and agree to perform the obligations and satisfy and discharge the liabilities under this Agreement in the same manner and to the same extent that Sempra Energy would have been required to perform the obligations and satisfy and discharge the liabilities under this Agreement, if such subsidiary had not ceased to be part of the Sempra Energy Control Group, and, upon such assumption, Sempra Energy shall have no further obligations and liabilities under the Agreement. Upon such assumption, (i) references to Sempra Energy in this Agreement shall be replaced with references to such subsidiary, or such successor or parent thereof, assuming this Agreement, and (ii) subsection (b) of the definition of "Cause" and subsection (b) of the definition of "Good Reason" shall apply thereafter, as if a Change in Control had occurred on the date of such cessation.

(e) Sale of Assets of Subsidiary. In the event that (i) the Executive is employed by a direct or indirect subsidiary of Sempra Energy, and (ii) such subsidiary sells or otherwise disposes of substantial assets of such subsidiary to an unrelated service recipient, as determined under Treasury Regulation Section 1.409A-1(f)(2)(ii) (the "Asset Purchaser"), in a transaction described in Treasury Regulation Section 1.409A-1(h)(4) (an "Asset Sale"), then if, on the date of such Asset Sale, the Executive becomes employed by the Asset Purchaser, Sempra Energy and the Asset Purchaser may specify, in accordance with Treasury Regulation Section 1.409A-1(h)(4), that the Executive shall not be treated as having a Separation from Service, and in such event, Sempra Energy may require such Asset Purchaser, or the parent thereof, to assume expressly and agree to perform the obligations and satisfy and discharge the liabilities under this Agreement in the same manner and to the same extent that the Company would have been required to perform the obligations and satisfy and discharge the liabilities under this Agreement, if the Asset Sale had not taken place, and, upon such assumption, Sempra Energy shall have no further obligations and liabilities under the Agreement. Upon such assumption, (i) references to Sempra Energy in this Agreement shall be replaced with references to the Asset Purchaser or the parent thereof, as applicable, and (ii) subsection (b) of the definition of "Cause" and subsection (b) of the definition of "Good Reason" shall apply thereafter, as if a Change in Control had occurred on the date of the Asset Sale.

Section 17. Administration Prior to Change in Control. Prior to a Change in Control, the Compensation Committee shall have full and complete authority to construe and interpret the provisions of this Agreement, to determine an individual's entitlement to benefits under this Agreement, to make in its sole and absolute discretion all determinations contemplated under this Agreement, to investigate and make factual determinations necessary or advisable to administer or implement this Agreement, and to adopt such rules and procedures as it deems necessary or advisable for the administration or implementation of this Agreement. All determinations made under this Agreement by the Compensation Committee shall be final, conclusive and binding on all interested persons. Prior to a Change in Control, the Compensation Committee may delegate responsibilities for the operation and administration of this Agreement to one or more officers or employees of the Company. The provisions of this Section 17 shall terminate and be of no further force and effect upon the occurrence of a Change in Control.

Section 18. Compliance with Section 409A of the Code. All payments and benefits payable under this Agreement (including, without limitation, the Section 409A Payments) are intended to comply with the requirements of Section 409A of the Code. Certain payments and benefits payable under this Agreement are intended to be exempt from the requirements of Section 409A of the Code. This Agreement shall be interpreted in accordance with the applicable requirements of, and exemptions from, Section 409A of the Code and the Treasury Regulations thereunder. To the extent the payments and benefits under this Agreement are subject to Section 409A of the Code, this Agreement shall be interpreted, construed and administered in a manner that satisfies the requirements of Sections 409A(a)(2), (3) and (4) of the Code and the Treasury Regulations thereunder If the Company and the Executive determine that any compensation, benefits or other payments that are payable under this Agreement and intended to comply with Sections 409A(a)(2), (3) and (4) of the Code do not comply with Section 409A of the Code, the Treasury Regulations thereunder and other applicable authority issued by the Internal Revenue Service, to the extent permitted under Section 409A of the Code, the Treasury Regulations thereunder and any applicable authority issued by the Internal Revenue Service, the Company and the Executive agree to amend this Agreement, or take such other actions as the Company and the Executive deem reasonably necessary or appropriate, to cause such compensation, benefits and other payments to comply with the requirements of Section 409A of the Code, the Treasury Regulations thereunder and other applicable authority issued by the Internal Revenue Service, while providing compensation, benefits and

other payments that are, in the aggregate, no less favorable than the compensation, benefits and other payments provided under this Agreement. In the case of any compensation, benefits or other payments that are payable under this Agreement and intended to comply with Sections 409A(a)(2), (3) and (4) of the Code, if any provision of the Agreement would cause such compensation, benefits or other payments to fail to so comply, such provision shall not be effective and shall be null and void with respect to such compensation, benefits or other payments to the extent such provision would cause a failure to comply, and such provision shall otherwise remain in full force and effect.

Section 19. Miscellaneous.

(a) Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the State of California, without reference to its principles of conflict of laws. The captions of this Agreement are not part of the provisions hereof and shall have no force or effect. Except as provided herein, the Agreement may not be amended, modified, repealed, waived, extended or discharged except by an agreement in writing signed by the parties hereto. No person, other than pursuant to a resolution of the Board or a committee thereof, shall have authority on behalf of Sempra Energy to agree to amend, modify, repeal, waive, extend or discharge any provision of this Agreement or anything in reference thereto.

(b) Notices. All notices and other communications hereunder shall be in writing and shall be given by hand delivery to the other party, by a reputable overnight carrier or by registered or certified mail, return receipt requested, postage prepaid, addressed, in either case, to the Company's headquarters or to such other address as either party shall have furnished to the other in writing in accordance herewith. Notices and communications shall be effective when actually received by the addressee.

(c) Severability. The invalidity or unenforceability of any provision of this Agreement shall not affect the validity or enforceability of any other provision of this Agreement.

(d) Taxes. The Company may withhold from any amounts payable under this Agreement such federal, state or local taxes as shall be required to be withheld pursuant to any applicable law or regulation.

(e) No Waiver. The Executive's or the Company's failure to insist upon strict compliance with any provision hereof or any other provision of this Agreement or the failure to assert any right the Executive or the Company may have hereunder, including, without limitation, the right of the Executive to terminate employment for Good Reason pursuant to Section 1 hereof, or the right of the Company to terminate the Executive's employment for Cause pursuant to Section 1 hereof shall not be deemed to be a waiver of such provision or right or any other provision or right of this Agreement.

(f) Entire Agreement; Exclusive Benefit; Supersession of Prior Agreement. This instrument contains the entire agreement of the Executive, the Company or any predecessor or subsidiary thereof with respect to any severance or termination pay. The Pre-Change in Control Severance Payment, the Post-Change in Control Severance Payment and all other benefits provided hereunder shall be in lieu of any other severance payments to which the Executive is entitled under any other severance plan or program or arrangement sponsored by the Company, as well as pursuant to any individual employment or severance agreement that was entered into by the Executive and the Company, and, upon the Effective Date of this Agreement, all such plans, programs, arrangements and agreements are hereby automatically superseded and terminated.

(g) No Right of Employment. Nothing in this Agreement shall be construed as giving the Executive any right to be retained in the employ of the Company or shall interfere in any way with the right of the Company to terminate the Executive's employment at any time, with or without Cause.

(h) Unfunded Obligation. The obligations under this Agreement shall be unfunded. Benefits payable under this Agreement shall be paid from the general assets of the Company. The Company shall have no obligation to establish any fund or to set aside any assets to provide benefits under this Agreement.

(i) Termination upon Sale of Assets of Subsidiary. Notwithstanding anything contained herein, this Agreement shall automatically terminate and be of no further force and effect and no benefits shall be payable hereunder in the event that (i) the Executive is employed by a direct or indirect subsidiary of Sempra Energy, and (ii) an Asset Sale (as defined in Section 16(e)) occurs (other than such a sale or disposition which is part of a transaction or series of transactions which would result in a Change in Control), and (iii) as a result of such Asset Sale, the Executive is offered employment by the Asset Purchaser in an executive position with reasonably comparable status, compensation, benefits and severance agreement (including the assumption of this Agreement in accordance with Section 16(e)) and which is consistent with the Executive's experience and education, but the Executive declines to accept such offer and the Executive fails to become employed by the Asset Purchaser on the date of the Asset Sale.

(j) Term. The term of this Agreement shall commence on the Effective Date and shall continue until the third (3rd) anniversary of the Effective Date; provided, however, that commencing on the second (2nd) anniversary of the Effective Date (and each anniversary of the Effective Date thereafter), the term of this Agreement shall automatically be extended for one (1) additional year, unless at least ninety (90) days prior to such date, the Company or the Executive shall give written notice to the other party that it or he, as the case may be, does not wish to so extend this Agreement. Notwithstanding the foregoing, if the Company gives such written notice to the Executive (i) at a time when Sempra Energy is a party to an agreement that, if consummated, would constitute a Change in Control or (ii) less than two (2) years after a Change in Control, the term of this Agreement shall be automatically extended until the later of (A) the date that is one (1) year after the anniversary of the Effective Date that follows such written notice or (B) the second (2nd) anniversary of the Change in Control Date.

(k) Counterparts. This Agreement may be executed in several counterparts, each of which shall be deemed to be an original but all of which together shall constitute one and the same instrument.

[*remainder of page intentionally left blank*]

IN WITNESS WHEREOF, the Executive and, pursuant to due authorization from its Board of Directors, the Company have caused this Agreement to be executed as of the day and year first above written.

SEMPRA ENERGY

_____

G. Joyce Rowland
Senior Vice President, Chief Human Resources and Administrative Officer

_____

Date

EXECUTIVE

_____

Jeffrey W. Martin
Executive Vice President and Chief Financial Officer

_____

Date

EXHIBIT A

GENERAL RELEASE

This GENERAL RELEASE (the "Agreement"), dated _____, is made by and between _____, a California corporation (the "Company") and _____ ("you" or "your").

WHEREAS, you and the Company have previously entered into that certain Severance Pay Agreement dated _____, 20___ (the "Severance Pay Agreement"); and

WHEREAS, your right to receive certain severance pay and benefits pursuant to the terms of Section 4 or Section 5 of the Severance Pay Agreement, as applicable, are subject to and conditioned upon your execution and non-revocation of a general release of claims by you against the Company and its subsidiaries and affiliates.

WHEREAS, your right to receive the Consulting Payment provided pursuant to Section 14(e) of the Severance Pay Agreement is subject to and conditioned upon your execution and non-revocation of a general release of claims by you against the Company and its subsidiaries and affiliates; and your adherence to the covenants described under Section 14 of the Severance Pay Agreement.

NOW, THEREFORE, in consideration of the premises and the mutual covenants herein contained, you and the Company hereby agree as follows:

ONE: Your signing of this Agreement confirms that your employment with the Company shall terminate at the close of business on _____, or earlier upon our mutual agreement.

TWO: As a material inducement for the payment of the severance and benefits of the Severance Pay Agreement, and except as otherwise provided in this Agreement, you and the Company hereby irrevocably and unconditionally release, acquit and forever discharge the other from any and all Claims either may have against the other. For purposes of this Agreement and the preceding sentence, the words "Releasee" or "Releasees" and "Claim" or "Claims" shall have the meanings set forth below:

(a) The words "Releasee" or "Releasees" shall refer to you and to the Company and each of the Company's owners, stockholders, predecessors, successors, assigns, agents, directors, officers, employees, representatives, attorneys, advisors, parent companies, divisions, subsidiaries, affiliates (and agents, directors, officers, employees, representatives, attorneys and advisors of such parent companies, divisions, subsidiaries and affiliates) and all persons acting by, through, under or in concert with any of them.

(b) The words "Claim" or "Claims" shall refer to any charges, complaints, claims, liabilities, obligations, promises, agreements, controversies, damages, actions, causes of action, suits, rights, demands, costs, losses, debts and expenses (including attorneys' fees and costs actually incurred) of any nature whatsoever, known or unknown, suspected or unsuspected, which you or the Company now, in the past or, in the future may have, own or hold against any of the Releasees; *provided, however*, that the word "Claim" or "Claims" shall not refer to any charges, complaints, claims, liabilities, obligations, promises, agreements, controversies, damages, actions, causes of action, suits, rights, demands, costs, losses, debts and expenses (including attorneys' fees and costs actually incurred) arising under [*identify severance, employee benefits, stock option, indemnification and D&O and other agreements containing*

duties, rights obligations etc. of either party that are to remain operative]. Claims released pursuant to this Agreement by you and the Company include, but are not limited to, rights arising out of alleged violations of any contracts, express or implied, any tort, claim, any claim that you failed to perform or negligently performed or breached your duties during employment at the Company, any legal restrictions on the Company's right to terminate employment relationships; and any federal, state or other governmental statute, regulation, or ordinance, governing the employment relationship including, without limitation, all state and federal laws and regulations prohibiting discrimination based on protected categories, and all state and federal laws and regulations prohibiting retaliation against employees for engaging in protected activity or legal off-duty conduct. This release does not extend to claims for workers' compensation or other claims which by law may not be waived or released by this Agreement.

THREE: You and the Company expressly waive and relinquish all rights and benefits afforded by any statute (including but not limited to Section 1542 of the Civil Code of the State of California and analogous laws of other states) which limits the effect of a release with respect to unknown claims. You and the Company do so understanding and acknowledging the significance of the release of unknown claims and the waiver of statutory protection against a release of unknown claims (including but not limited to Section 1542). Section 1542 of the Civil Code of the State of California states as follows:

> "A GENERAL RELEASE DOES NOT EXTEND TO CLAIMS WHICH THE CREDITOR DOES NOT KNOW OR SUSPECT TO EXIST IN HIS OR HER FAVOR AT THE TIME OF EXECUTING THE RELEASE, WHICH IF KNOWN BY HIM OR HER MUST HAVE MATERIALLY AFFECTED HIS OR HER SETTLEMENT WITH THE DEBTOR."

Thus, notwithstanding the provisions of Section 1542 or of any similar statute, and for the purpose of implementing a full and complete release and discharge of the Releasees, you and the Company expressly acknowledge that this Agreement is intended to include in its effect, without limitation, all Claims which are known and all Claims which you or the Company do not know or suspect to exist in your or the Company's favor at the time of execution of this Agreement and that this Agreement contemplates the extinguishment of all such Claims.

FOUR: The parties acknowledge that they might hereafter discover facts different from, or in addition to, those they now know or believe to be true with respect to a Claim or Claims released herein, and they expressly agree to assume the risk of possible discovery of additional or different facts, and agree that this Agreement shall be and remain effective, in all respects, regardless of such additional or different discovered facts.

FIVE: As a further material inducement to the Company to enter into this Agreement, you hereby agree to indemnify and hold each of the Releasees harmless from all loss, costs, damages, or expenses, including without limitation, attorneys' fees incurred by the Releasees, arising out of any breach of this Agreement by you or the fact that any representation made in this Agreement by you was false when made.

As a further material inducement to you to enter into this Agreement, the Company hereby agrees to indemnify and hold each of the Releasees harmless from all loss, costs, damages, or expenses, including without limitation, attorneys' fees incurred by the Releasees, arising out of any breach of this Agreement by it or the fact that any representation made in this Agreement by it was knowingly false when made.

SIX: You and the Company represent and acknowledge that in executing this Agreement, neither is relying upon any representation or statement not set forth in this Agreement or the Severance Agreement.

SEVEN: (a) This Agreement shall not in any way be construed as an admission by the Company that it has acted wrongfully with respect to you or any other person, or that you have any rights whatsoever against the Company, and the Company specifically disclaims any liability to or wrongful acts against you or any other person, on the part of itself, its employees or its agents. This Agreement shall not in any way be construed as an admission by you that you have acted wrongfully with respect to the Company, or that you failed to perform your duties or negligently performed or breached your duties, or that the Company had good cause to terminate your employment.

(b) If you are a party or are threatened to be made a party to any proceeding by reason of the fact that you were an officer or director of the Company, the Company shall indemnify you against any expenses (including reasonable attorneys' fees; *provided*, that counsel has been approved by the Company prior to retention, which approval shall not be unreasonably withheld), judgments, fines, settlements and other amounts actually or reasonably incurred by you in connection with that proceeding; *provided*, that you acted in good faith and in a manner you reasonably believed to be in the best interest of the Company. The limitations of California Corporations Code Section 317 shall apply to this assurance of indemnification.

(c) You agree to cooperate with the Company and its designated attorneys, representatives and agents in connection with any actual or threatened judicial, administrative or other legal or equitable proceeding in which the Company is or may become involved. Upon reasonable notice, you agree to meet with and provide to the Company or its designated attorneys, representatives or agents all information and knowledge you have relating to the subject matter of any such proceeding. The Company agrees to reimburse you for any reasonable costs you incur in providing such cooperation.

EIGHT: This Agreement is entered into in California and shall be governed by substantive California law, except as provided in this section. If any dispute arises between you and the Company, including but not limited to, disputes relating to this Agreement, or if you prosecute a claim you purported to release by means of this Agreement ("Arbitrable Dispute"), you and the Company agree to resolve that Arbitrable Dispute through final and binding arbitration under this section. You also agree to arbitrate any Arbitrable Dispute which also involves any other released party who offers or agrees to arbitrate the dispute under this section. Your agreement to arbitrate applies, for example, to disputes about the validity, interpretation, or effect of this Agreement or alleged violations of it, claims of discrimination under federal or state law, or other statutory violation claims.

As to any Arbitrable Dispute, you and the Company waive any right to a jury trial or a court bench trial. You and the Company also waive the right to bring, maintain, or participate in any class, collective, or representative proceeding, whether in arbitration or otherwise. Further, Arbitrable Disputes must be brought in the individual capacity of the party asserting the claim, and cannot be maintained on a class, collective, or representative basis.

Arbitration shall take place in San Diego, California under the employment dispute resolution rules of the Judicial Arbitration and Mediation Service ("JAMS"), (or, if you are employed outside of California at the time of the termination of your employment, at the nearest location of the American Arbitration Association and in accordance with the AAA rules), before an experienced employment arbitrator selected in accordance with those rules. The arbitrator may not modify or change this Agreement in any way. The Company will be responsible for paying any filing fee and the fees and costs of the Arbitrator; provided, however, that if you are the party initiating the claim, you will contribute an amount equal to the filing fee

to initiate a claim in the court of general jurisdiction in the state in which you are employed by the Company. Each party shall pay for its own costs and attorneys' fees, if any. However if any party prevails on a statutory claim which affords the prevailing party attorneys' fees and costs, or if there is a written agreement providing for attorneys' fees and/or costs, the Arbitrator may award reasonable attorney's fees and/or costs to the prevailing party, applying the same standards a court would apply under the law applicable to the claim. The Arbitrator shall apply the Federal Rules of Evidence and shall have the authority to entertain a motion to dismiss or a motion for summary judgment by any party and shall apply the standards governing such motions under the Federal Rules of Civil Procedure. The Federal Arbitration Act shall govern the arbitration and shall govern the interpretation or enforcement of this section or any arbitration award. The arbitrator will not have the authority to consider, certify, or hear an arbitration as a class action, collective action, or any other type of representative action.

To the extent that the Federal Arbitration Act is inapplicable, California law pertaining to arbitration agreements shall apply. Arbitration in this manner shall be the exclusive remedy for any Arbitrable Dispute. Except as prohibited by the ADEA, should you or the Company attempt to resolve an Arbitrable Dispute by any method other than arbitration pursuant to this section, the responding party will be entitled to recover from the initiating party all damages, expenses, and attorneys' fees incurred as a result of this breach. This Section TEN supersedes any existing arbitration agreement between the Company and me as to any Arbitrable Dispute. Notwithstanding anything in this Section TEN to the contrary, a claim for benefits under an ERISA-covered plan shall not be an Arbitrable Dispute.

NINE: Both you and the Company understand that this Agreement is final and binding eight (8) days after its execution and return. Should you nevertheless attempt to challenge the enforceability of this Agreement as provided in Paragraph EIGHT or, in violation of that Paragraph, through litigation, as a further limitation on any right to make such a challenge, you shall initially tender to the Company, by certified check delivered to the Company, all monies received pursuant to Sections 4 or 5 of the Severance Pay Agreement, as applicable, plus interest, and invite the Company to retain such monies and agree with you to cancel this Agreement and void the Company's obligations under the Severance Pay Agreement. In the event the Company accepts this offer, the Company shall retain such monies and this Agreement shall be canceled and the Company shall have no obligation under Section 14(e) of the Severance Pay Agreement. In the event the Company does not accept such offer, the Company shall so notify you and shall place such monies in an interest-bearing escrow account pending resolution of the dispute between you and the Company as to whether or not this Agreement and the Company's obligations under the Severance Pay Agreement shall be set aside and/or otherwise rendered voidable or unenforceable. Additionally, any consulting agreement then in effect between you and the Company shall be immediately rescinded with no requirement of notice.

TEN: Any notices required to be given under this Agreement shall be delivered either personally or by first class United States mail, postage prepaid, addressed to the respective parties as follows:

To Company: [TO COME]

Attn: [TO COME]

To You:_____

_____

_____

ELEVEN: You understand and acknowledge that you have been given a period of forty-five (45) days to review and consider this Agreement (as well as certain data on other persons eligible for similar benefits, if any) before signing it and may use as much of this forty-five (45) day period as you wish prior to signing. You are encouraged, at your personal expense, to consult with an attorney before signing this Agreement. You understand and acknowledge that whether or not you do so is your decision. You may revoke this Agreement within seven (7) days of signing it. If you wish to revoke, the Company's Vice President, Human Resources must receive written notice from you no later than the close of business on the seventh (7th) day after you have signed the Agreement. If revoked, this Agreement shall not be effective and enforceable, and you will not receive payments or benefits under Sections 4 or 5 of the Severance Pay Agreement, as applicable

TWELVE: This Agreement constitutes the entire agreement of the parties hereto and supersedes any and all other agreements (except the Severance Pay Agreement) with respect to the subject matter of this Agreement, whether written or oral, between you and the Company. All modifications and amendments to this Agreement must be in writing and signed by the parties.

THIRTEEN: Each party agrees, without further consideration, to sign or cause to be signed, and to deliver to the other party, any other documents and to take any other action as may be necessary to fulfill the obligations under this Agreement.

FOURTEEN: If any provision of this Agreement or the application thereof is held invalid, the invalidity shall not affect other provisions or applications of the Agreement which can be given effect without the invalid provisions or application; and to this end the provisions of this Agreement are declared to be severable.

FIFTEEN: This Agreement may be executed in counterparts.

I have read the foregoing General Release, and I accept and agree to the provisions it contains and hereby execute it voluntarily and with full understanding of its consequences. I am aware it includes a release of all known or unknown claims.

DATED: _____

_____

DATED: _____

_____

You acknowledge that you first received this Agreement on [date].

_____

SEMPRA ENERGY

SEVERANCE PAY AGREEMENT

THIS AGREEMENT (this "Agreement"), dated as of January 1, 2017 (the "Effective Date"), is made by and between SEMPRA ENERGY, a California corporation ("Sempra Energy"), and Dennis V. Arriola (the "Executive").

WHEREAS, the Executive is currently employed by Sempra Energy or another corporation or trade or business which is a member of a controlled group of corporations (within the meaning of Section 414(b) or (c) of the Code) of which Sempra Energy is a component member, determined by applying an ownership threshold of 50% rather than 80% (Sempra Energy and such other controlled group members, collectively, "Company");

WHEREAS, Sempra Energy and the Executive desire to enter into this Agreement; and

WHEREAS, the Board of Directors of Sempra Energy (the "Board") or an authorized committee thereof has authorized this Agreement.

NOW, THEREFORE, in consideration of the premises and mutual covenants herein contained, Sempra Energy and the Executive hereby agree as follows:

Section 1. Definitions. For purposes of this Agreement, the following capitalized terms have the meanings set forth below:

"Accounting Firm" has the meaning assigned thereto in Section 8(d) hereof.

"Accrued Obligations" means the sum of (A) the Executive's Annual Base Salary through the Date of Termination to the extent not theretofore paid, (B) an amount equal to any annual Incentive Compensation Awards earned with respect to fiscal years ended prior to the year that includes the Date of Termination to the extent not theretofore paid, (C) any accrued and unpaid vacation, and (D) reimbursement for unreimbursed business expenses, if any, properly incurred by the Executive in the performance of his duties in accordance with Company policies applicable to the Executive from time to time, in each case to the extent not theretofore paid.

"Affiliate" has the meaning set forth in Rule 12b-2 promulgated under the Exchange Act.

"Annual Base Salary" means the Executive's annual base salary from the Company.

"Asset Purchaser" has the meaning assigned thereto in Section 16(e).

"Asset Sale" has the meaning assigned thereto in Section 16(e).

"Average Annual Bonus" means the average of the annual bonuses from the Company earned by the Executive with respect to the three (3) fiscal years of Sempra Energy ending immediately preceding the Date of Termination (the "Bonus Fiscal Years"); *provided*, *however*, that, if the Executive was employed by the Company for less than three (3) Bonus Fiscal Years, "Average Annual Bonus" means the average of the annual bonuses (if any) from the Company earned by the Executive with respect to the Bonus Fiscal Years during which the Executive was employed by the Company; and, *provided,*

further, that, if the Executive was not employed by the Company during any of the Bonus Fiscal Years, "Average Annual Bonus" means zero.

"Cause" means:

(a) Prior to a Change in Control, (i) the willful failure by the Executive to substantially perform the Executive's duties with the Company (other than any such failure resulting from the Executive's incapacity due to physical or mental illness), (ii) the grossly negligent performance of such obligations referenced in clause (i) of this definition, (iii) the Executive's gross insubordination; and/or (iv) the Executive's commission of one or more acts of moral turpitude that constitute a violation of applicable law (including but not limited to a felony involving one or more acts of moral turpitude) which have or result in an adverse effect on the Company, monetarily or otherwise, or one or more significant acts of dishonesty. For purposes of clause (i) of this subsection (a), no act, or failure to act, on the Executive's part shall be deemed "willful" unless done, or omitted to be done, by the Executive not in good faith and without reasonable belief that the Executive's act, or failure to act, was in the best interests of the Company.

(b) From and after a Change in Control (or in connection with a termination occurring pursuant to subsection 5(h)), (i) the willful and continued failure by the Executive to substantially perform the Executive's duties with the Company (other than any such failure resulting from the Executive's incapacity due to physical or mental illness or other than any such actual or anticipated failure after the issuance of a Notice of Termination for Good Reason by the Executive pursuant to Section 2 hereof and after the Company's cure period relating to the event on which Good Reason is based, if any and if applicable, has expired) and/or (ii) the Executive's commission of one or more acts of moral turpitude that constitute a violation of applicable law (including but not limited to a felony involving one or more acts of moral turpitude) which have or result in an adverse effect on the Company, monetarily or otherwise, or one or more significant acts of dishonesty. For purposes of clause (i) of this subsection (b), no act, or failure to act, on the Executive's part shall be deemed "willful" unless done, or omitted to be done, by the Executive not in good faith and without reasonable belief that the Executive's act, or failure to act, was in the best interests of the Company. Notwithstanding the foregoing, the Executive shall not be deemed terminated for Cause pursuant to clause (i) of this subsection (b) unless and until the Executive shall have been provided with reasonable notice of and, if possible, a reasonable opportunity to cure the facts and circumstances claimed to provide a basis for termination of the Executive's employment for Cause.

"Change in Control" shall be deemed to have occurred on the date that a change in the ownership of Sempra Energy, a change in the effective control of Sempra Energy, or a change in the ownership of a substantial portion of assets of Sempra Energy occurs (each, as defined in subsection (a) below), except as otherwise provided in subsections (b), (c) and (d) below:

(a) (i) a "change in the ownership of Sempra Energy" occurs on the date that any one person, or more than one person acting as a group, acquires ownership of stock of Sempra Energy that, together with stock held by such person or group, constitutes more than fifty percent (50%) of the total fair market value or total voting power of the stock of Sempra Energy,

(ii) a "change in the effective control of Sempra Energy" occurs only on either of the following dates:

(A) the date any one person, or more than one person acting as a group, acquires (or has acquired during the twelve (12) month period ending on the date of the most recent acquisition by such person or persons) ownership of stock of Sempra Energy possessing thirty percent (30%) or more of the total voting power of the stock of Sempra Energy, or

(B) the date a majority of the members of the Board is replaced during any twelve (12) month period by directors whose appointment or election is not endorsed by a majority of the members of the Board before the date of appointment or election, and

(iii) a "change in the ownership of a substantial portion of assets of Sempra Energy" occurs on the date any one person, or more than one person acting as a group, acquires (or has acquired during the twelve (12) month period ending on the date of the most recent acquisition by such person or persons) assets from Sempra Energy that have a total gross fair market value equal to or more than eighty-five percent (85%) of the total gross fair market value of all of the assets of Sempra Energy immediately before such acquisition or acquisitions.

(b) A "change in the ownership of Sempra Energy" or "a change in the effective control of Sempra Energy" shall not occur under clause (a)(i) or (a)(ii) by reason of any of the following:

(i) an acquisition of ownership of stock of Sempra Energy directly from Sempra Energy or its Affiliates other than in connection with the acquisition by Sempra Energy or its Affiliates of a business,

(ii) a merger or consolidation which would result in the voting securities of Sempra Energy outstanding immediately prior to such merger or consolidation continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity or any parent thereof), in combination with the ownership of any trustee or other fiduciary holding securities under an employee benefit plan of the Company, at least sixty percent (60%) of the combined voting power of the securities of Sempra Energy or such surviving entity or any parent thereof outstanding immediately after such merger or consolidation, or

(iii) a merger or consolidation effected to implement a recapitalization of Sempra Energy (or similar transaction) in which no Person is or becomes the Beneficial Owner (within the meaning of Rule 13d-3 promulgated under the Exchange Act), directly or indirectly, of securities of Sempra Energy (not including the securities beneficially owned by such Person any securities acquired directly from Sempra Energy or its Affiliates other than in connection with the acquisition by Sempra Energy or its Affiliates of a business) representing twenty percent (20%) or more of the combined voting power of Sempra Energy's then outstanding securities.

(c) A "change in the ownership of a substantial portion of assets of Sempra Energy" shall not occur under clause (a)(iii) by reason of a sale or disposition by Sempra Energy of the assets of Sempra Energy to an entity, at least sixty percent (60%) of the combined voting power of the voting securities of which are owned by shareholders of Sempra Energy in substantially the same proportions as their ownership of Sempra Energy immediately prior to such sale.

(d) This definition of "Change in Control" shall be limited to the definition of a "change in control event" with respect to the Executive and relating to Sempra Energy under Treasury Regulation Section 1.409A-3(i)(5).

"Change in Control Date" means the date on which a Change in Control occurs.

"Code" means the Internal Revenue Code of 1986, as amended.

"Compensation Committee" means the compensation committee of the Board.

"Consulting Payment" has the meaning assigned thereto in Section 14(e) hereof.

"Consulting Period" has the meaning assigned thereto in Section 14(f) hereof.

"Date of Termination" has the meaning assigned thereto in Section 2(b) hereof.

"Disability" has the meaning set forth in the long-term disability plan or its successor maintained by the Company entity that is the employer of the Executive; *provided*, *however*, that the Executive's employment hereunder may not be terminated by reason of Disability unless (i) at the time of such termination there is no reasonable expectation that the Executive will return to work within the next ninety (90) day period and (ii) such termination is permitted by all applicable disability laws.

"Exchange Act" means the Securities Exchange Act of 1934, as amended, and the applicable rulings and regulations thereunder.

"Excise Tax" has the meaning assigned thereto in Section 8(a) hereof.

"Good Reason" means:

(a) Prior to a Change in Control, the occurrence of any of the following without the prior written consent of the Executive, unless such act or failure to act is corrected by the Company prior to the Date of Termination specified in the Notice of Termination (as required under Section 2 hereof):

(i) the assignment to the Executive of any duties materially inconsistent with the range of duties and responsibilities appropriate to a senior executive within the Company (such range determined by reference to past, current and reasonable practices within the Company);

(ii) a material reduction in the Executive's overall standing and responsibilities within the Company, but not including (A) a mere change in title or (B) a transfer within the Company, which, in the case of both (A) and (B), does not adversely affect the Executive's overall status within the Company;

(iii) a material reduction by the Company in the Executive's aggregate annualized compensation and benefits opportunities, except for across-the-board reductions (or modifications of benefit plans) similarly affecting all similarly situated executives of the Company of comparable rank with the Executive;

(iv) the failure by the Company to pay to the Executive any portion of the Executive's current compensation and benefits or any portion of an installment of deferred compensation under any deferred compensation program of the Company within thirty (30) days of the date such compensation is due;

(v) any purported termination of the Executive's employment that is not effected pursuant to a Notice of Termination satisfying the requirements of Section 2 hereof;

(vi) the failure by Sempra Energy to perform its obligations under Section 16(c) or (d) hereof;

(vii) the failure by the Company to provide the indemnification and D&O insurance protection Section 10 of this Agreement requires it to provide; or

(viii) the failure by Sempra Energy (or any of the entities comprising the Company, as applicable) to comply with any material provision of this Agreement.

(b) From and after a Change in Control (or in connection with a termination occurring pursuant to subsection 5(h)), the occurrence of any of the following without the prior written consent of the Executive, unless such act or failure to act is corrected by the Company prior to the Date of Termination specified in the Notice of Termination (as required under Section 2 hereof):

(i) an adverse change in the Executive's title, authority, duties, responsibilities or reporting lines as in effect immediately prior to the Change in Control;

(ii) a reduction by the Company in the Executive's aggregate annualized compensation opportunities, except for across-the-board reductions in base salaries, annual bonus opportunities or long-term incentive compensation opportunities of less than ten percent (10%) similarly affecting all similarly situated executives (including, if applicable, of the Person then in control of Sempra Energy) of comparable rank with the Executive; or the failure by the Company to continue in effect any material benefit plan in which the Executive participates immediately prior to the Change in Control, unless an equitable arrangement (embodied in an ongoing substitute or alternative plan) has been made with respect to such plan, or the failure by the Company to continue the Executive's participation therein (or in such substitute or alternative plan) on a basis not materially less favorable, both in terms of the amount of benefits provided and the level of the Executive's participation relative to other participants, as existed at the time of the Change in Control;

(iii) the relocation of the Executive's principal place of employment immediately prior to the Change in Control Date (the "Principal Location") to a location which is both further away from the Executive's residence and more than thirty (30) miles from such Principal Location, or the Company's requiring the Executive to be based anywhere other than such Principal Location (or permitted relocation thereof), or a substantial increase in the Executive's business travel obligations outside of the Southern California area as of immediately prior to the Change in Control (without regard to any changes therein in anticipation of the Change in Control) other than any such increase that (A) arises in connection with extraordinary business activities of the Company of limited duration and (B) is understood not to be part of the Executive's regular duties with the Company;

(iv) the failure by the Company to pay to the Executive any portion of the Executive's current compensation and benefits or any portion of an installment of deferred compensation under any deferred compensation program of the Company within thirty (30) days of the date such compensation is due;

(v) any purported termination of the Executive's employment that is not effected pursuant to a Notice of Termination satisfying the requirements of Section 2 hereof; for purposes of this Agreement;

(vi) the failure by Sempra Energy to perform its obligations under Section 16(c) or (d) hereof;

(vii) the failure by the Company to provide the indemnification and D&O insurance protection Section 10 of this Agreement requires it to provide; or

(viii) the failure by Sempra Energy (or any of the entities comprising the Company, as applicable) to comply with any material provision of this Agreement.

Following a Change in Control, the Executive's determination that an act or failure to act constitutes Good Reason shall be presumed to be valid unless such determination is deemed to be unreasonable by an arbitrator pursuant to the procedure described in Section 13 hereof. The Executive's right to terminate the Executive's employment for Good Reason shall not be affected by the Executive's incapacity due to physical or mental illness. The Executive's continued employment shall not constitute consent to, or a waiver of rights with respect to, any act or failure to act constituting Good Reason hereunder.

"Incentive Compensation Awards" means awards granted under Incentive Compensation Plans providing the Executive with the opportunity to earn, on a year-by-year basis, annual and long-term incentive compensation.

"Incentive Compensation Plans" means annual incentive compensation plans and long-term incentive compensation plans of the Company, which long-term incentive compensation plans may include plans offering stock options, restricted stock and other long-term incentive compensation.

"Involuntary Termination" means (a) the Executive's Separation from Service by reason other than for Cause, death, Disability, or Mandatory Retirement, or (b) the Executive's Separation from Service by reason of resignation of employment for Good Reason.

"JAMS Rules" has the meaning assigned thereto in Section 13 hereof.

"Mandatory Retirement" means termination of employment pursuant to the Company's mandatory retirement policy.

"Medical Continuation Benefits" has the meaning assigned thereto in Section 4(c) hereof.

"Notice of Termination" has the meaning assigned thereto in Section 2(a) hereof.

"Payment" has the meaning assigned thereto in Section 8(a) hereof.

"Payment in Lieu of Notice" has the meaning assigned thereto in Section 2(b) hereof.

"Person" means any person, entity or "group" within the meaning of Section 13(d)(3) or Section 14(d)(2) of the Exchange Act, except that such term shall not include (1) Sempra Energy or any of its Affiliates, (2) a trustee or other fiduciary holding securities under an employee benefit plan of Sempra Energy or any of its Affiliates, (3) an underwriter temporarily holding securities pursuant to an offering of such securities, (4) a corporation owned, directly or indirectly, by the shareholders of Sempra Energy in substantially the same proportions as their ownership of stock of Sempra Energy, or (5) a person or group as used in Rule 13d-1(b) under the Exchange Act.

"Post-Change in Control Severance Payment" has the meaning assigned thereto in Section 5 hereof.

"Pre-Change in Control Severance Payment" has the meaning assigned thereto in Section 4 hereof.

"Principal Location" has the meaning assigned thereto in clause (b)(iii) of the definition of Good Reason, above.

"Proprietary Information" has the meaning assigned thereto in Section 14(a) hereof.

"Pro Rata Bonus" has the meaning assigned thereto in Section 5(b) hereof.

"Release" has the meaning assigned thereto in Section 4 hereof.

"Section 409A Payments" means any payments under this Agreement which are subject to Section 409A of the Code.

"Sempra Energy Control Group" means Sempra Energy and all persons with whom Sempra Energy would be considered a single employer under Section 414(b) or 414(c) of the Code, as determined from time to time.

"Separation from Service" has the meaning set forth in Treasury Regulation Section 1.409A-1(h).

"SERP" has the meaning assigned thereto in Section 5(c) hereof.

"Specified Employee" shall be determined in accordance with Section 409A(a)(2)(B)(i) of the Code and Treasury Regulation Section 1.409A-1(i).

For purposes of this Agreement, references to any "Treasury Regulation" shall mean such Treasury Regulation as in effect on the date hereof.

Section 2. Notice and Date of Termination.

(a) Any termination of the Executive's employment by the Company or by the Executive shall be communicated by a written notice of termination to the other party (the "Notice of Termination"). Where applicable, the Notice of Termination shall indicate the specific termination provision in this Agreement relied upon and shall set forth in reasonable detail the facts and circumstances claimed to provide a basis for termination of the Executive's employment under the provision so indicated. Unless the Board or a committee thereof, in writing, provides a longer notice period, a Notice of Termination by the Executive alleging a termination for Good Reason must be made within 180 days of the act or failure to act that the Executive alleges to constitute Good Reason.

(b) The date of the Executive's termination of employment with the Company (the "Date of Termination") shall be determined as follows: (i) if the Executive's Separation from Service is at the volition of the Company, then the Date of Termination shall be the date specified in the Notice of Termination (which, in the case of a termination by the Company other than for Cause, shall not be less than two (2) weeks from the date such Notice of Termination is given unless the Company elects to pay the Executive, in addition to any other amounts payable hereunder, an amount (the "Payment in Lieu of Notice") equal to two (2) weeks of the Executive's Annual Base Salary in effect on the Date of Termination), and (ii) if the Executive's Separation from Service is by the Executive for Good Reason, the Date of Termination shall be determined by the Executive and specified in the Notice of Termination, but in no event be less than fifteen (15) days nor more than sixty (60) days after the date such Notice of Termination is given. The Payment in Lieu of Notice shall be paid on such date as is required by law, but no later than thirty (30) days after the date of the Executive's Separation from Service.

Section 3. Termination from the Board. Upon the termination of the Executive's employment for any reason, the Executive's membership on the Board, the board of directors of any Affiliates of Sempra Energy, any committees of the Board and any committees of the board of directors of any of the Affiliates of Sempra Energy, if applicable, shall be automatically terminated and the Executive agrees to take any and all actions (including resigning) required by Sempra Energy or any of its Affiliates to evidence and effect such termination of membership.

Section 4. Severance Benefits upon Involuntary Termination Prior to Change in Control. Except as provided in Section 5(h) and Section 19(i) hereof, in the event of the Involuntary Termination of the Executive prior to a Change in Control, Sempra Energy shall, or shall cause one of its Affiliates that is the employer of the Executive to, pay the Executive, in one lump sum cash payment, an amount (the "Pre-Change in Control Severance Payment") equal to the greater of: (X) 170% of the Executive's Annual Base Salary as in effect on the Date of Termination, and (Y) the sum of (I) the Executive's Annual Base Salary as in effect on the Date of Termination, plus (II) the Executive's Average Annual Bonus. In addition to the Pre-Change in Control Severance Payment, the Executive shall be entitled to the following additional benefits specified in subsections (a) through (e). The Company's obligation to pay the Pre-Change in Control Severance Payment or provide the benefits set forth in subsections (c), (d) and (e) are subject to and conditioned upon the Executive executing a release of all claims substantially in the form attached hereto as Exhibit A (the "Release") within fifty (50) days after the date of Involuntary Termination and the Executive not revoking such Release in accordance with the terms thereof. Except as provided in Section 4(f), the Pre-Change in Control Severance Payment shall be paid within sixty (60) days after the date of the Involuntary Termination on such date as is determined by Sempra Energy, but not before the Release becomes effective and irrevocable. If the fifty (50) day period in which the Release could become effective spans more than one taxable year, then the Pre-Change in Control Severance Payment shall not be made until the later taxable year.

(a) Accrued Obligations. The Company shall pay the Executive a lump sum amount in cash equal to Accrued Obligations within the time prescribed by law.

(b) Equity Based Compensation. The Executive shall retain all rights to any equity-based compensation awards to the extent set forth in the applicable plan and/or award agreement.

(c) Welfare Benefits. Subject to the terms and conditions of this Agreement, for a period of twelve (12) months following the date of the Involuntary Termination (and an additional twelve (12) months if the Executive provides consulting services under Section 14(f) hereof), the Executive and his dependents shall be provided with group medical benefits which are substantially similar to those provided from time to time to similarly situated active employees of the Company (and their eligible dependents) ("Medical Continuation Benefits"). Without limiting the generality of the foregoing, such Medical Continuation Benefits shall be provided on substantially the same terms and conditions and at the same cost to the Executive as apply to similarly situated active employees of the Company. Such benefits shall be provided in a manner that complies with Treasury Regulation Section 1.409A-1(a)(5). Notwithstanding the foregoing, if Sempra Energy determines in its sole discretion that the Medical Continuation Benefits cannot be provided without potentially violating applicable law (including, without limitation, Section 2716 of the Public Health Service Act) or that the provision of Medical Continuation Benefits under this Agreement would subject Sempra Energy or any of its Affiliates to a material tax or penalty, (i) the Executive shall be provided, in lieu thereof, with a taxable monthly payment in an amount equal to the monthly premium that the Executive would be required to pay to continue the Executive's and his covered dependents' group medical benefit coverages under COBRA as then in effect (which amount shall be based on the premiums for the first month of COBRA coverage) or (ii) Sempra Energy shall have the authority to amend the Agreement to the limited extent reasonably necessary to avoid such violation of

law or tax or penalty and shall use all reasonable efforts to provide the Executive with a comparable benefit that does not violate applicable law or subject Sempra Energy or any of its Affiliates to such tax or penalty.

(d) Outplacement Services. The Executive shall receive reasonable outplacement services, on an in-kind basis, suitable to his position and directly related to the Executive's Involuntary Termination, for a period of twenty-four (24) months following the date of the Involuntary Termination, in an aggregate amount of cost to the Company not to exceed $50,000. Notwithstanding the foregoing, the Executive shall cease to receive outplacement services on the date the Executive accepts employment with a subsequent employer. Such outplacement services shall be provided in a manner that complies with Treasury Regulation Section 1.409A-1(b)(9)(v)(A).

(e) Financial Planning Services. The Executive shall receive financial planning services, on an in-kind basis, for a period of twenty-four (24) months following the Date of Termination. Such financial planning services shall include expert financial and legal resources to assist the Executive with financial planning needs and shall be limited to (i) current investment portfolio management, (ii) tax planning, (iii) tax return preparation, and (iv) estate planning advice and document preparation (including wills and trusts); provided, however, that the Company shall provide such financial planning services during any taxable year of the Executive only to the extent the cost to the Company for such taxable year does not exceed $25,000. The Company shall provide such financial planning services through a financial planner selected by the Company, and shall pay the fees for such financial planning services. The financial planning services provided during any taxable year of the Executive shall not affect the financial planning services provided in any other taxable year of the Executive. The Executive's right to financial planning services shall not be subject to liquidation or exchange for any other benefit. Such financial planning services shall be provided in a manner that complies with Treasury Regulation Section 1.409A-3(i)(1)(iv).

Section 5. Severance Benefits upon Involuntary Termination in Connection with and after Change in Control. Notwithstanding the provisions of Section 4 above, and except as provided in Section 19(i) hereof, in the event of the Involuntary Termination of the Executive on or within two (2) years following a Change in Control, in lieu of the payments described in Section 4 above, Sempra Energy shall, or shall cause one of its Affiliates that is the employer of the Executive to, pay the Executive, in one lump sum cash payment, an amount (the "Post-Change in Control Severance Payment") equal to two times the greater of: (X) 170 % of the Executive's Annual Base Salary as in effect immediately prior to the Change in Control or the Date of Termination, whichever is greater, and (Y) the sum of (I) the Executive's Annual Base Salary as in effect immediately prior to the Change in Control or on the Date of Termination, whichever is greater, plus (II) the Executive's Average Annual Bonus. In addition to the Post-Change in Control Severance Payment, the Executive shall be entitled to the following additional benefits specified in subsections (a) through (g). The Company's obligation to pay the Post-Change in Control Severance Payment or provide the benefits set forth in subsections (b),(c), (d), (e), and (f) are subject to and conditioned upon the Executive executing the Release within fifty (50) days after the date of Involuntary Termination and the Executive not revoking such Release in accordance with the terms thereof. Except as provided in Section 5(h), the Post-Change in Control Severance Payment, the Pro Rata Bonus, and the payments under Section 5(c) shall be paid within sixty (60) days after the date of Involuntary Termination on such date as is determined by Sempra Energy (or its successor) but not before the Release becomes effective and irrevocable. If the fifty (50) day period in which the Release could become effective spans more than one taxable year, then the Post-Change in Control Severance Payment, the Pro Rata Bonus and the payments under Section 5(c) shall not be made until the later taxable year.

(a) Accrued Obligations. The Company shall pay the Executive a lump sum amount in cash equal to the Accrued Obligations within the time required by law and, to the extent applicable, in accordance with the applicable plan, policy or arrangement pursuant to which such payments are to be made.

(b) Pro Rata Bonus. The Company shall pay the Executive a lump sum amount in cash equal to: (i) the greater of: (X) 70% of the Executive's Annual Base Salary as in effect immediately prior to the Change in Control or on the Date of Termination, whichever is greater, or (Y) the Executive's Average Annual Bonus, multiplied by (ii) a fraction, the numerator of which shall be the number of days from the beginning of such fiscal year to and including the Date of Termination and the denominator of which shall be 365 equal to (the "Pro Rata Bonus").

(c) Pension Supplement. The Executive shall be entitled to receive a Supplemental Retirement Benefit under the Sempra Energy Supplemental Executive Retirement Plan, as in effect from time to time ("SERP"), determined in accordance with this Section 5(c), in the event that the Executive is a "Participant" (as defined in the SERP) as of the Date of Termination. Such Supplemental Retirement Benefit shall be determined by crediting the Executive with additional months of Service (if any) equal to the number of full calendar months from the Date of Termination to the date on which the Executive would have attained age 62. The Executive shall be entitled to receive such Supplemental Retirement Benefit without regard to whether the Executive has attained age 55 or completed five years of "Service" (as defined in the SERP) as of the Date of Termination. The Executive shall be treated as qualified for "Retirement" (as defined in the SERP) as of the Date of Termination, and the Executive's Vesting Factor with respect to the Supplemental Retirement Benefit shall be 100%. The Executive's Supplemental Retirement Benefit shall be calculated based on the Executive's actual age as of the date of commencement of payment of such Supplemental Retirement Benefit (the "SERP Distribution Date"), and by applying the applicable early retirement factors under the SERP, if the Executive has not attained age 62 but has attained age 55 as of the SERP Distribution Date. If the Executive has not attained age 55 as of the SERP Distribution Date, the Executive's Supplemental Retirement Benefit shall be calculated by applying the applicable early retirement factor under the SERP for age 55, and the Supplemental Retirement Benefit otherwise payable at age 55 shall be actuarially adjusted to the Executive's actual age as of the SERP Distribution Date using the following actuarial assumptions: (i) the applicable mortality table promulgated by the Internal Revenue Service under Section 417(e)(3) of the Code, as in effect on the first day of the calendar year in which the SERP Distribution Date occurs, and (ii) the applicable interest rate promulgated by the Internal Revenue Service under Section 417(a)(3) of the Code for the November next preceding the first day of the calendar year in which the SERP Distribution Date occurs. The Executive's Supplemental Retirement Benefit shall be determined in accordance with this Section 5(c), notwithstanding any contrary provisions of the SERP and, to the extent subject to Section 409A of the Code, shall be paid in accordance with Treasury Regulation Section 1.409A-3(c)(1). The Supplemental Retirement Benefit paid to or on behalf of the Executive in accordance with this Section 5(c) shall be in full satisfaction of any and all of the benefits payable to or on behalf of the Executive under the SERP.

(d) Equity-Based Compensation. Notwithstanding the provisions of any applicable equity-compensation plan or award agreement to the contrary, all equity-based Incentive Compensation Awards (including, without limitation, stock options, stock appreciation rights, restricted stock awards, restricted stock units, performance share awards, awards covered under Section 162(m) of the Code, and dividend equivalents) held by the Executive shall immediately vest and become exercisable or payable, as the case may be, as of the Date of Termination, to be exercised or paid, as the case may be, in accordance with the terms of the applicable Incentive Compensation Plan and Incentive Compensation Award agreement, and any restrictions on any such Incentive Compensation Awards shall automatically lapse;

provided, however, that, in the case of any stock option or stock appreciation rights awards granted on or after June 26, 1998 that remain outstanding on the Date of Termination, such stock options or stock appreciation rights shall remain exercisable until the earlier of (A) the later of eighteen (18) months following the Date of Termination or the period specified in the applicable Incentive Compensation Award agreements or (B) the expiration of the original term of such Incentive Compensation Award (or, if earlier, the tenth anniversary of the original date of grant) (it being understood that all Incentive Compensation Awards granted prior to, on or after June 26, 1998 shall remain outstanding and exercisable for a period that is no less than that provided for in the applicable agreement in effect as of the date of grant).

(e) Welfare Benefits. Subject to the terms and conditions of this Agreement, for a period of twenty four (24) months following the date of Involuntary Termination (and an additional twelve (12) months if the Executive provides consulting services under Section 14(f) hereof), the Executive and his dependents shall be provided with life, disability, accident and group medical benefits which are substantially similar to those provided to the Executive and his dependents immediately prior to the date of Involuntary Termination or the Change in Control Date, whichever is more favorable to the Executive. Without limiting the generality of the foregoing, the continuing benefits described in the preceding sentence shall be provided on substantially the same terms and conditions and at the same cost to the Executive as in effect immediately prior to the date of Involuntary Termination or the Change in Control Date, whichever is more favorable to the Executive. Such benefits shall be provided in a manner that complies with Treasury Regulation Section 1.409A-1(a)(5). Notwithstanding the foregoing, if Sempra Energy determines in its sole discretion that the portion of the foregoing continuing benefits that constitute group medical benefits cannot be provided without potentially violating applicable law (including, without limitation, Section 2716 of the Public Health Service Act) or that the provision of such group medical benefits under this Agreement would subject Sempra Energy or any of its Affiliates to a material tax or penalty, (i) the Executive shall be provided, in lieu thereof, with a taxable monthly payment in an amount equal to the monthly premium that the Executive would be required to pay to continue the Executive's and his covered dependents' group medical benefit coverages under COBRA as then in effect (which amount shall be based on the premiums for the first month of COBRA coverage) or (ii) Sempra Energy shall have the authority to amend the Agreement to the limited extent reasonably necessary to avoid such violation of law or tax or penalty and shall use all reasonable efforts to provide the Executive with a comparable benefit that does not violate applicable law or subject Sempra Energy or any of its Affiliates to such tax or penalty.

(f) Outplacement Services. The Executive shall receive reasonable outplacement services, on an in-kind basis, suitable to his position and directly related to the Executive's Involuntary Termination, for a period of thirty-six (36) months following the date of Involuntary Termination (but in no event beyond the last day of the Executive's second taxable year following the Executive's taxable year in which the Involuntary Termination occurs), in the aggregate amount of cost to the Company not to exceed $50,000. Notwithstanding the foregoing, the Executive shall cease to receive outplacement services on the date the Executive accepts employment with a subsequent employer. Such outplacement services shall be provided in a manner that complies with Treasury Regulation Section 1.409A-1(b)(9)(v)(A).

(g) Financial Planning Services. The Executive shall receive financial planning services, on an in-kind basis, for a period of thirty-six (36) months following the date of Involuntary Termination. Such financial planning services shall include expert financial and legal resources to assist the Executive with financial planning needs and shall be limited to (i) current investment portfolio management, (ii) tax planning, (iii) tax return preparation, and (iv) estate planning advice and document preparation (including wills and trusts); provided, however, that the Company shall provide such financial

services during any taxable year of the Executive only to the extent the cost to the Company for such taxable year does not exceed $25,000. The Company shall provide such financial planning services through a financial planner selected by the Company, and shall pay the fees for such financial planning services. The financial planning services provided during any taxable year of the Executive shall not affect the financial planning services provided in any other taxable year of the Executive. The Executive's right to financial planning services shall not be subject to liquidation or exchange for any other benefit. Such financial planning services shall be provided in a manner that complies with Section 1.409A-3(i)(1)(iv).

(h) Involuntary Termination in Connection with a Change in Control. Notwithstanding anything contained herein, in the event of an Involuntary Termination prior to a Change in Control, if the Involuntary Termination (1) was at the request of a third party who has taken steps reasonably calculated to effect such Change in Control or (2) otherwise arose in connection with or in anticipation of such Change in Control, then the Executive shall, in lieu of the payments described in Section 4 hereof, be entitled to the Post-Change in Control Severance Payment and the additional benefits described in this Section 5 as if such Involuntary Termination had occurred within two (2) years following the Change in Control. The amounts specified in Section 5 that are to be paid under this Section 5(h) shall be reduced by any amount previously paid under Section 4. The amounts to be paid under this Section 5(h) shall be paid within sixty (60) days after the Change in Control Date of such Change in Control.

Section 6. Severance Benefits upon Termination by the Company for Cause or by the Executive Other than for Good Reason. If the Executive's employment shall be terminated for Cause, or if the Executive terminates employment other than for Good Reason, the Company shall have no further obligations to the Executive under this Agreement other than the Pre-Change in Control Accrued Obligations and any amounts or benefits described in Section 10 hereof.

Section 7. Severance Benefits upon Termination due to Death or Disability. If the Executive has a Separation from Service by reason of death or Disability, the Company shall pay the Executive or his estate, as the case may be, the Accrued Obligations and the Pro Rata Bonus (without regard to whether a Change in Control has occurred) and any amounts or benefits described in Section 10 hereof. Such payments shall be in addition to those rights and benefits to which the Executive or his estate may be entitled under the relevant Company plans or programs. The Company's obligation to pay the Pro Rata Bonus is conditioned upon the Executive, the Executive's representative or the Executive's estate, as the case may be executing the Release within fifty (50) days after the date of the Executive's Separation from Service and not revoking such Release in accordance with the terms thereof. The Accrued Obligations shall be paid within the time required by law and the Pro Rata Bonus shall be paid within sixty (60) days after the date of the Separation from Service on such date determined by Sempra Energy but not before the Release becomes effective and irrevocable. If the fifty (50) day period in which the Release could become effective spans more than one taxable year, then the Pro Rata Bonus shall not be made until the later taxable year.

Section 8. Limitation on Payments by the Company.

(a) Anything in this Agreement to the contrary notwithstanding and except as set forth in this Section 8 below, in the event it shall be determined that any payment or distribution in the nature of compensation (within the meaning of Section 280G(b)(2) of the Code) to or for the benefit of the Executive, whether paid or payable pursuant to this Agreement or otherwise (the "Payment") would be subject (in whole or in part) to the excise tax imposed by Section 4999 of the Code, (the "Excise Tax"), then, subject to subsection (b), the Pre-Change in Control Severance Benefit or the Post-Change in Control Severance Payment (whichever is applicable) payable under this Agreement shall be reduced

under this subsection (a) to the amount equal to the Reduced Payment. For such Payment payable under this Agreement, the "Reduced Payment" shall be the amount equal to the greatest portion of the Payment (which may be zero) that, if paid, would result in no portion of any Payment being subject to the Excise Tax.

(b) The Pre-Change in Control Severance Benefit or the Post-Change in Control Severance Payment (whichever is applicable) payable under this Agreement shall not be reduced under subsection (a) if:

(i) such reduction in such Payment is not sufficient to cause no portion of any Payment to be subject to the Excise Tax, or

(ii) the Net After-Tax Unreduced Payments (as defined below) would equal or exceed one hundred and five percent (105%) of the Net After-Tax Reduced Payments (as defined below).

For purposes of determining the amount of any Reduced Payment under subsection (a), and the Net-After Tax Reduced Payments and the Net After-Tax Unreduced Payments, the Executive shall be considered to pay federal, state and local income and employment taxes at the Executive's applicable marginal rates taking into consideration any reduction in federal income taxes which could be obtained from the deduction of state and local income taxes, and any reduction or disallowance of itemized deductions and personal exemptions under applicable tax law). The applicable federal, state and local income and employment taxes and the Excise Tax (to the extent applicable) are collectively referred to as the "Taxes".

(c) For purposes of determining the amount of any Reduced Payment under this Section 8, the amount of any Payment shall be reduced in the following order:

(i) first, by reducing the amounts of parachute payments that would not constitute deferred compensation subject to Section 409A of the Code;

(ii) next, if after the reduction described in subparagraph (i), additional reductions are required, then by reducing the cash portion of the Payment that constitutes deferred compensation (within the meaning of Section 409A) subject to Section 409A, with the reductions to be applied first to the portion of the Payment scheduled for the latest distribution date, and then applied to distributions scheduled for progressively earlier distribution dates, to the extent necessary to decrease the Payment as required under this Section 8; and

(iii) next, if after the reduction described in subparagraph (ii), additional reductions are required, then, by reducing the non-cash portion of the Payment that constitutes deferred compensation (within the meaning of subject to 409A), with the reductions to be applied first to the portion of the Payment scheduled for the latest distribution date, and then applied to distributions scheduled for progressively earlier distribution dates, to the extent necessary to decrease the Payment as required under this Section 8.

(d) The following definitions shall apply for purposes of this Section 8:

(i) "Net After-Tax Reduced Payments" shall mean the total amount of all Payments that the Executive would retain, on a Net After-Tax Basis, in the event that the Payments payable under this Agreement are reduced pursuant to subsection (a).

(ii) "Net After-Tax Unreduced Payments" shall mean the total amount of all Payments that the Executive would retain, on a Net After-Tax Basis, in the event that the Payments payable under this Agreement are not reduced pursuant to subsection (a).

(iii) "Net After-Tax Basis" shall mean, with respect to the Payments, either with or without reduction under subsection (a) (as applicable), the amount that would be retained by the Executive from such Payments after the payment of all Taxes.

(e) All determinations required to be made under this Section 8 and the assumptions to be utilized in arriving at such determinations, shall be made by a nationally recognized accounting firm as may be agreed by the Company and the Executive (the "Accounting Firm"); provided, that the Accounting Firm's determination shall be made based upon "substantial authority" within the meaning of Section 6662 of the Code. The Accounting Firm shall provide detailed supporting calculations to both the Company and the Executive within fifteen (15) business days of the receipt of notice from the Executive that there has been a Payment or such earlier time as is requested by the Company. All fees and expenses of the Accounting Firm shall be borne solely by the Company. Any determination by the Accounting Firm shall be binding upon the Company and the Executive. For purposes of determining whether and the extent to which the Payments will be subject to the Excise Tax, (i) no portion of the Payments the receipt or enjoyment of which the Executive shall have waived at such time and in such manner as not to constitute a "payment" within the meaning of Section 280G(b) of the Code shall be taken into account, (ii) no portion of the Payments shall be taken into account which, in the written opinion of the Accounting Firm, does not constitute a "parachute payment" within the meaning of Section 280G(b)(2) of the Code (including by reason of Section 280G(b)(4)(A) of the Code) and, in calculating the Excise Tax, no portion of such Payments shall be taken into account which, in the opinion of the Accounting Firm, constitutes reasonable compensation for services actually rendered, within the meaning of Section 280G(b)(4)(B) of the Code, in excess of the base amount (as defined in Section 280G(b)(3) of the Code) allocable to such reasonable compensation, and (iii) the value of any non-cash benefit or any deferred payment or benefit included in the Payments shall be determined by the Accounting Firm in accordance with the principles of Sections 280G(d)(3) and (4) of the Code.

Section 9. Delayed Distribution under Section 409A of the Code. Notwithstanding any other provision of this Agreement to the contrary, if the Executive is a Specified Employee on the date of the Executive's Involuntary Termination (or on the date of the Executive's Separation from Service by reason of Disability), the Section 409A Payments which are payable upon Separation from Service shall be delayed to the extent necessary in order to avoid a prohibited distribution under Section 409A(a)(2)(B)(i) of the Code, and such delayed payments or benefits shall be paid or distributed to the Executive during the thirty (30) day period commencing on the earlier of (a) the expiration of the six (6) month period measured from the date of the Executive's Separation from Service or (b) the date of the Executive's death. Upon the expiration of the applicable six (6) month period, all payments deferred pursuant to this Section 9 (excluding in-kind benefits) shall be paid in a lump sum payment to the Executive, plus interest thereon from the date of the Executive's Involuntary Termination through the payment date at an annual rate equal to Moody's Rate. The "Moody's Rate" shall mean the average of the daily Moody's Corporate Bond Yield Average - Monthly Average Corporates as published by Moody's Investors Service, Inc. (or any successor) for the month next preceding the Date of Termination. Any remaining payments due under the Agreement shall be paid as otherwise provided herein.

Section 10. Nonexclusivity of Rights. Nothing in this Agreement shall prevent or limit the Executive's continuing or future participation in any benefit, plan, program, policy or practice provided by the Company and for which the Executive may qualify (except with respect to any benefit to which the Executive has waived his rights in writing), including, without limitation, any and all indemnification arrangements in favor of the Executive (whether under agreements or under the Company's charter documents or otherwise), and insurance policies covering the Executive, nor shall anything herein limit or otherwise affect such rights as the Executive may have under any other contract or agreement entered into after the Effective Date with the Company. Amounts which are vested benefits or which the Executive is otherwise entitled to receive under any benefit, plan, policy, practice or program of, or any contract or agreement entered into with, the Company shall be payable in accordance with such benefit, plan, policy, practice or program or contract or agreement except as explicitly modified by this Agreement. At all times during the Executive's employment with the Company and thereafter, the Company shall provide (to the extent permissible under applicable law) the Executive with indemnification and D&O insurance insuring the Executive against insurable events which occur or have occurred while the Executive was a director or executive officer of the Company, that with respect to such insurance is on terms and conditions that, to the extent reasonably practical, are at least as generous as that then currently provided to any other current or former director or executive officer of the Company or any Affiliate. Such indemnification and D&O insurance shall be provided in a manner that complies with Treasury Regulation Section 1.409A-1(b)(10).

Section 11. Clawbacks. Notwithstanding anything herein to the contrary, if Sempra Energy determines, in its good faith judgment, that if the Executive is required to forfeit or to make any repayment of any compensation or benefit(s) to the Company under the Sarbanes-Oxley Act of 2002 or pursuant to the Dodd-Frank Wall Street Reform and Consumer Protection Act or any other law or pursuant to any formal policy of Sempra Energy, such forfeiture or repayment shall not constitute Good Reason.

Section 12. Full Settlement; Mitigation. The Company's obligation to make the payments provided for in this Agreement and otherwise to perform its obligations hereunder shall not be affected by any set-off, counterclaim, recoupment, defense or other claim, right or action which the Company may have against the Executive or others, provided that nothing herein shall preclude the Company from separately pursuing recovery from the Executive based on any such claim. In no event shall the Executive be obligated to seek other employment or take any other action by way of mitigation of the amounts (including amounts for damages for breach) payable to the Executive under any of the provisions of this Agreement, and such amounts shall not be reduced whether or not the Executive obtains other employment.

Section 13. Dispute Resolution.

(a) If any dispute arises between the Executive and Sempra Energy or any of its Affiliates, including, but not limited to, disputes relating to or arising out of this Agreement, any action relating to or arising out of the Executive's employment or its termination, and/or any disputes regarding the interpretation, enforceability, or validity of this Agreement ("Arbitrable Dispute"), the Executive and Sempra Energy waive the right to resolve the dispute through litigation in a judicial forum and agree to resolve the Arbitrable Dispute through final and binding arbitration, except as prohibited by law. Arbitration shall be the exclusive remedy for any Arbitrable Dispute.

(b) As to any Arbitrable Dispute, Sempra Energy and the Executive waive any right to a jury trial or a court bench trial. The Company and the Executive also waive the right to bring, maintain, or participate in any class, collective, or representative proceeding, whether in arbitration or otherwise.

Further, Arbitrable Disputes must be brought in the individual capacity of the party asserting the claim, and cannot be maintained on a class, collective, or representative basis.

(c) Arbitration shall take place at the office of the Judicial Arbitration and Mediation Service ("JAMS") (or, if the Executive is employed outside of California, the American Arbitration Association ("AAA")) nearest to the location where the Executive last worked for the Company. Except to the extent it conflicts with the rules and procedures set forth in this Arbitration Agreement, arbitration shall be conducted in accordance with the JAMs Employment Arbitration Rules & Procedures (if the Executive is employed outside of California, the AAA Employment Arbitration Rules & Mediation Procedures), copies of which are attached for my reference and available at www.jamsadr.com; tel: 800.352.5267 and www.adr.org; tel: 800.778.7879, before a single experienced, neutral employment arbitrator selected in accordance with those rules.

(d) Sempra Energy will be responsible for paying any filing fee and the fees and costs of the arbitrator. Each party shall pay its own attorneys' fees. However, if any party prevails on a statutory claim that authorizes an award of attorneys' fees to the prevailing party, or if there is a written agreement providing for attorneys' fees, the arbitrator may award reasonable attorneys' fees to the prevailing party, applying the same standards a court would apply under the law applicable to the claim.

(e) The arbitrator shall apply the Federal Rules of Evidence, shall have the authority to entertain a motion to dismiss or a motion for summary judgment by any party, and shall apply the standards governing such motions under the Federal Rules of Civil Procedure. The arbitrator does not have the authority to consider, certify, or hear an arbitration as a class action, collective action, or any other type of representative action. Sempra Energy and the Executive recognize that this Agreement arises out of or concerns interstate commerce and that the Federal Arbitration Act shall govern the arbitration and shall govern the interpretation or enforcement of this Arbitration Agreement or any arbitration award.

(f) EXECUTIVE ACKNOWLEDGES THAT BY ENTERING INTO THIS AGREEMENT, EXECUTIVE IS WAIVING ANY RIGHT HE OR SHE MAY HAVE TO A TRIAL BY JURY.

Section 14. Executive's Covenants.

(a) Confidentiality. The Executive acknowledges that in the course of his employment with the Company, he has acquired non-public privileged or confidential information and trade secrets concerning the operations, future plans and methods of doing business ("Proprietary Information") of Sempra Energy and its Affiliates; and the Executive agrees that it would be extremely damaging to Sempra Energy and its Affiliates if such Proprietary Information were disclosed to a competitor of Sempra Energy and its Affiliates or to any other person or corporation. The Executive understands and agrees that all Proprietary Information has been divulged to the Executive in confidence and further understands and agrees to keep all Proprietary Information secret and confidential (except for such information which is or becomes publicly available other than as a result of a breach by the Executive of this provision or information the Executive is required by any governmental, administrative or court order to disclose) without limitation in time. In view of the nature of the Executive's employment and the Proprietary Information the Executive has acquired during the course of such employment, the Executive likewise agrees that Sempra Energy and its Affiliates would be irreparably harmed by any disclosure of Proprietary Information in violation of the terms of this paragraph and that Sempra Energy and its Affiliates shall therefore be entitled to preliminary and/or permanent injunctive relief prohibiting the Executive from engaging in any activity or threatened activity in violation of the terms of this paragraph and to any other

relief available to them. Inquiries regarding whether specific information constitutes Proprietary Information shall be directed to the Company's Senior Vice President, Public Policy (or, if such position is vacant, the Company's then Chief Executive Officer); provided, that the Company shall not unreasonably classify information as Proprietary Information.

(b) Governmental Reporting. Nothing in this Agreement is intended to interfere with or discourage the Executive's good faith disclosure related to a suspected violation of federal or state law or regulation to any governmental agency or entity or making other disclosures that are protected under the whistleblower provisions of federal or state law or regulation. The Executive cannot and will not be held criminally or civilly liable under any federal or state trade secret law for disclosing otherwise protected trade secrets and/or confidential or proprietary information so long as the disclosure is made in (1) confidence to a federal, state, or local government official, directly or indirectly, or to an attorney and solely for the purpose of reporting or investigating a suspected violation of law; or (2) a complaint or other document filed in a lawsuit or other proceeding, so long as such filing is made under seal. Company will not retaliate against the Executive in any way for a disclosure made pursuant to this Section. Further, in the event the Executive makes such a disclosure, and files a lawsuit against the Company alleging that the Company retaliated against the Executive because of the disclosure, the Executive may disclose the relevant trade secret or confidential information to the Executive's attorney, and may use the same in the court proceeding only if (1) the Executive ensures that any court filing that includes the trade secret or confidential information at issue is made under seal; and (2) the Executive does not otherwise disclose the trade secret or confidential information except as required by court order.

(c) Non-Solicitation of Employees. The Executive recognizes that he possesses and will possess confidential information about other employees of Sempra Energy and its Affiliates relating to their education, experience, skills, abilities, compensation and benefits, and inter-personal relationships with customers of Sempra Energy and its Affiliates. The Executive recognizes that the information he possesses and will possess about these other employees is not generally known, is of substantial value to Sempra Energy and its Affiliates in developing their business and in securing and retaining customers, and has been and will be acquired by him because of his business position with Sempra Energy and its Affiliates. The Executive agrees that at all times during the Executive's employment with the Company and for a period of one (1) year thereafter, he will not, directly or indirectly, solicit or recruit any employee of the Company or its Affiliates for the purpose of being employed by him or by any competitor of the Company or its Affiliates on whose behalf he is acting as an agent, representative or employee and that he will not convey any such confidential information or trade secrets about other employees of Sempra Energy and its Affiliates to any other person; provided, however, that it shall not constitute a solicitation or recruitment of employment in violation of this paragraph to discuss employment opportunities with any employee of the Company or its Affiliates who has either first contacted the Executive or regarding whose employment the Executive has discussed with and received the written approval of the Company's most senior Vice President, Human Resources (or, if such position is vacant, the Company's then Chief Executive Officer), prior to making such solicitation or recruitment. In view of the nature of the Executive's employment with the Company, the Executive likewise agrees that Sempra Energy and its Affiliates would be irreparably harmed by any solicitation or recruitment in violation of the terms of this paragraph and that Sempra Energy and its Affiliates shall therefore be entitled to preliminary and/or permanent injunctive relief prohibiting the Executive from engaging in any activity or threatened activity in violation of the terms of this paragraph and to any other relief available to them.

(d) Survival of Provisions. The obligations contained in Sections 14(a), (b) and (c) above shall survive the termination of the Executive's employment within the Company and shall be fully enforceable thereafter. If it is determined by a court of competent jurisdiction in any state that any

restriction in Section 14(a) or Section 14(c) above is excessive in duration or scope or is unreasonable or unenforceable under the laws of that state, it is the intention of the parties that such restriction may be modified or amended by the court to render it enforceable to the maximum extent permitted by the law of that state.

(e) Release; Consulting Payment. In the event of the Executive's Involuntary Termination, if the Executive (i) reconfirms and agrees to abide by the covenants described in Section 14(a) and Section 14(c) above, (ii) executes the Release within fifty (50) days after the date of Involuntary Termination and does not revoke such Release in accordance with the terms thereof, and (iii) agrees to provide the consulting services described in Section 14(f) below, then in consideration for such covenants and consulting services, the Company shall pay the Executive, in one cash lump sum, an amount (the "Consulting Payment") in cash equal to the greater of: (X) 170% of the Executive's Annual Base Salary as in effect on the Date of Termination, and (Y) the Executive's Annual Base Salary as in effect on the Date of Termination, plus the Executive's Average Annual Bonus. Except as provided in this subsection, the Consulting Payment shall be paid on such date as is determined by the Company within the ten (10) day period commencing on the 60th day after the date of the Executive's Involuntary Termination; provided, however, that if the Executive is a Specified Employee on the date of the Executive's Involuntary Termination, the Consulting Payment shall be paid as provided in Section 9 hereof to the extent required.

(f) Consulting. If the Executive agrees to the provisions of Section 14(e) above, then the Executive shall have the obligation to provide consulting services to the Company as an independent contractor, commencing on the Date of Termination and ending on the second anniversary of the Date of Termination (the "Consulting Period"). The Executive shall hold himself available at reasonable times and on reasonable notice to render such consulting services as may be so assigned to him by the Board or the Company's then Chief Executive Officer; provided, however, that unless the parties otherwise agree, the consulting services rendered by the Executive during the Consulting Period shall not exceed twenty (20) hours each month; and, provided, further, that the consulting services rendered by the Executive during the Consulting Period shall in no event exceed twenty percent (20%) of the average level of services performed by the Executive for the Company over the thirty-six (36) month period immediately preceding the Executive's Separation from Service (or the full period of services to the Company, if the Executive has been providing services to the Company for less than thirty-six (36) months). The Company agrees to use its best efforts during the Consulting Period to secure the benefit of the Executive's consulting services so as to minimize the interference with the Executive's other activities, including requiring the performance of consulting services at the Company's offices only when such services may not be reasonably performed off-site by the Executive.

Section 15. Legal Fees.

(a) Reimbursement of Legal Fees. Subject to subsection (b), in the event of the Executive's Separation from Service either (1) prior to a Change in Control, or (2) on or within two (2) years following a Change in Control, the Company shall reimburse the Executive for all legal fees and expenses (including but not limited to fees and expenses in connection with any arbitration) incurred by the Executive in disputing any issue arising under this Agreement relating to the Executive's Separation from Service or in seeking to obtain or enforce any benefit or right provided by this Agreement.

(b) Requirements for Reimbursement. The Company shall reimburse the Executive's legal fees and expenses pursuant to subsection (a) above only to the extent the arbitrator or court determines the following: (i) the Executive disputed such issue, or sought to obtain or enforce such benefit or right, in good faith, (ii) the Executive had a reasonable basis for such claim, and (iii) in the case

of subsection (a)(1) above, the Executive is the prevailing party. In addition, the Company shall reimburse such legal fees and expenses, only if such legal fees and expenses are incurred during the twenty (20) year period beginning on the date of the Executive's Separation from Service. The legal fees and expenses paid to the Executive for any taxable year of the Executive shall not affect the legal fees and expenses paid to the Executive for any other taxable year of the Executive. The legal fees and expenses shall be paid to the Executive on or before the last day of the Executive's taxable year following the taxable year in which the fees or expenses are determined to be payable pursuant to this Agreement. The Executive's right to reimbursement of legal fees and expenses shall not be subject to liquidation or exchange for any other benefit. Such right to reimbursement of legal fees and expenses shall be provided in a manner that complies with Treasury Regulation Section 1.409A-3(i)(1)(iv).

Section 16. Successors.

(a) Assignment by the Executive. This Agreement is personal to the Executive and without the prior written consent of Sempra Energy shall not be assignable by the Executive otherwise than by will or the laws of descent and distribution. This Agreement shall inure to the benefit of and be enforceable by the Executive's legal representatives.

(b) Successors and Assigns of Sempra Energy. This Agreement shall inure to the benefit of and be binding upon Sempra Energy and its successors and assigns. Sempra Energy may not assign this Agreement to any person or entity (except for a successor described in Section 16(c), (d) or (e) below) without the Executive's written consent.

(c) Assumption. Sempra Energy shall require any successor (whether direct or indirect, by purchase, merger, consolidation or otherwise) to all or substantially all of the business and/or assets of Sempra Energy to assume expressly and agree to perform the obligations and satisfy and discharge the liabilities of this Agreement in the same manner and to the same extent that Sempra Energy would have been required to perform the obligations and satisfy and discharge the liabilities under this Agreement if no such succession had taken place, and Sempra Energy shall have no further obligations and liabilities under this Agreement. Upon such assumption, references to Sempra Energy in this Agreement shall be replaced with references to such successor.

(d) Sale of Subsidiary. In the event that (i) the Executive is employed by a direct or indirect subsidiary of Sempra Energy that is a member of the Sempra Energy Control Group, (ii) Sempra Energy, directly or indirectly through one or more intermediaries, sells or otherwise disposes of such subsidiary, and (iii) such subsidiary ceases to be a member of the Sempra Energy Control Group, then if, on the date such subsidiary ceases to be a member of the Sempra Energy Control Group, the Executive continues in employment with such subsidiary and the Executive does not have a Separation from Service, Sempra Energy shall require such subsidiary or any successor (whether direct or indirect, by purchase merger, consolidation or otherwise) to such subsidiary, or the parent thereof, to assume expressly and agree to perform the obligations and satisfy and discharge the liabilities under this Agreement in the same manner and to the same extent that Sempra Energy would have been required to perform the obligations and satisfy and discharge the liabilities under this Agreement, if such subsidiary had not ceased to be part of the Sempra Energy Control Group, and, upon such assumption, Sempra Energy shall have no further obligations and liabilities under the Agreement. Upon such assumption, (i) references to Sempra Energy in this Agreement shall be replaced with references to such subsidiary, or such successor or parent thereof, assuming this Agreement, and (ii) subsection (b) of the definition of "Cause" and subsection (b) of the definition of "Good Reason" shall apply thereafter, as if a Change in Control had occurred on the date of such cessation.

(e) Sale of Assets of Subsidiary. In the event that (i) the Executive is employed by a direct or indirect subsidiary of Sempra Energy, and (ii) such subsidiary sells or otherwise disposes of substantial assets of such subsidiary to an unrelated service recipient, as determined under Treasury Regulation Section 1.409A-1(f)(2)(ii) (the "Asset Purchaser"), in a transaction described in Treasury Regulation Section 1.409A-1(h)(4) (an "Asset Sale"), then if, on the date of such Asset Sale, the Executive becomes employed by the Asset Purchaser, Sempra Energy and the Asset Purchaser may specify, in accordance with Treasury Regulation Section 1.409A-1(h)(4), that the Executive shall not be treated as having a Separation from Service, and in such event, Sempra Energy may require such Asset Purchaser, or the parent thereof, to assume expressly and agree to perform the obligations and satisfy and discharge the liabilities under this Agreement in the same manner and to the same extent that the Company would have been required to perform the obligations and satisfy and discharge the liabilities under this Agreement, if the Asset Sale had not taken place, and, upon such assumption, Sempra Energy shall have no further obligations and liabilities under the Agreement. Upon such assumption, (i) references to Sempra Energy in this Agreement shall be replaced with references to the Asset Purchaser or the parent thereof, as applicable, and (ii) subsection (b) of the definition of "Cause" and subsection (b) of the definition of "Good Reason" shall apply thereafter, as if a Change in Control had occurred on the date of the Asset Sale.

Section 17. Administration Prior to Change in Control. Prior to a Change in Control, the Compensation Committee shall have full and complete authority to construe and interpret the provisions of this Agreement, to determine an individual's entitlement to benefits under this Agreement, to make in its sole and absolute discretion all determinations contemplated under this Agreement, to investigate and make factual determinations necessary or advisable to administer or implement this Agreement, and to adopt such rules and procedures as it deems necessary or advisable for the administration or implementation of this Agreement. All determinations made under this Agreement by the Compensation Committee shall be final, conclusive and binding on all interested persons. Prior to a Change in Control, the Compensation Committee may delegate responsibilities for the operation and administration of this Agreement to one or more officers or employees of the Company. The provisions of this Section 17 shall terminate and be of no further force and effect upon the occurrence of a Change in Control.

Section 18. Compliance with Section 409A of the Code. All payments and benefits payable under this Agreement (including, without limitation, the Section 409A Payments) are intended to comply with the requirements of Section 409A of the Code. Certain payments and benefits payable under this Agreement are intended to be exempt from the requirements of Section 409A of the Code. This Agreement shall be interpreted in accordance with the applicable requirements of, and exemptions from, Section 409A of the Code and the Treasury Regulations thereunder. To the extent the payments and benefits under this Agreement are subject to Section 409A of the Code, this Agreement shall be interpreted, construed and administered in a manner that satisfies the requirements of Sections 409A(a)(2), (3) and (4) of the Code and the Treasury Regulations thereunder If the Company and the Executive determine that any compensation, benefits or other payments that are payable under this Agreement and intended to comply with Sections 409A(a)(2), (3) and (4) of the Code do not comply with Section 409A of the Code, the Treasury Regulations thereunder and other applicable authority issued by the Internal Revenue Service, to the extent permitted under Section 409A of the Code, the Treasury Regulations thereunder and any applicable authority issued by the Internal Revenue Service, the Company and the Executive agree to amend this Agreement, or take such other actions as the Company and the Executive deem reasonably necessary or appropriate, to cause such compensation, benefits and other payments to comply with the requirements of Section 409A of the Code, the Treasury Regulations thereunder and other applicable authority issued by the Internal Revenue Service, while providing compensation, benefits and

other payments that are, in the aggregate, no less favorable than the compensation, benefits and other payments provided under this Agreement. In the case of any compensation, benefits or other payments that are payable under this Agreement and intended to comply with Sections 409A(a)(2), (3) and (4) of the Code, if any provision of the Agreement would cause such compensation, benefits or other payments to fail to so comply, such provision shall not be effective and shall be null and void with respect to such compensation, benefits or other payments to the extent such provision would cause a failure to comply, and such provision shall otherwise remain in full force and effect.

Section 19. Miscellaneous.

(a) Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the State of California, without reference to its principles of conflict of laws. The captions of this Agreement are not part of the provisions hereof and shall have no force or effect. Except as provided herein, the Agreement may not be amended, modified, repealed, waived, extended or discharged except by an agreement in writing signed by the parties hereto. No person, other than pursuant to a resolution of the Board or a committee thereof, shall have authority on behalf of Sempra Energy to agree to amend, modify, repeal, waive, extend or discharge any provision of this Agreement or anything in reference thereto.

(b) Notices. All notices and other communications hereunder shall be in writing and shall be given by hand delivery to the other party, by a reputable overnight carrier or by registered or certified mail, return receipt requested, postage prepaid, addressed, in either case, to the Company's headquarters or to such other address as either party shall have furnished to the other in writing in accordance herewith. Notices and communications shall be effective when actually received by the addressee.

(c) Severability. The invalidity or unenforceability of any provision of this Agreement shall not affect the validity or enforceability of any other provision of this Agreement.

(d) Taxes. The Company may withhold from any amounts payable under this Agreement such federal, state or local taxes as shall be required to be withheld pursuant to any applicable law or regulation.

(e) No Waiver. The Executive's or the Company's failure to insist upon strict compliance with any provision hereof or any other provision of this Agreement or the failure to assert any right the Executive or the Company may have hereunder, including, without limitation, the right of the Executive to terminate employment for Good Reason pursuant to Section 1 hereof, or the right of the Company to terminate the Executive's employment for Cause pursuant to Section 1 hereof shall not be deemed to be a waiver of such provision or right or any other provision or right of this Agreement.

(f) Entire Agreement; Exclusive Benefit; Supersession of Prior Agreement. This instrument contains the entire agreement of the Executive, the Company or any predecessor or subsidiary thereof with respect to any severance or termination pay. The Pre-Change in Control Severance Payment, the Post-Change in Control Severance Payment and all other benefits provided hereunder shall be in lieu of any other severance payments to which the Executive is entitled under any other severance plan or program or arrangement sponsored by the Company, as well as pursuant to any individual employment or severance agreement that was entered into by the Executive and the Company, and, upon the Effective Date of this Agreement, all such plans, programs, arrangements and agreements are hereby automatically superseded and terminated.

(g) No Right of Employment. Nothing in this Agreement shall be construed as giving the Executive any right to be retained in the employ of the Company or shall interfere in any way with the right of the Company to terminate the Executive's employment at any time, with or without Cause.

(h) Unfunded Obligation. The obligations under this Agreement shall be unfunded. Benefits payable under this Agreement shall be paid from the general assets of the Company. The Company shall have no obligation to establish any fund or to set aside any assets to provide benefits under this Agreement.

(i) Termination upon Sale of Assets of Subsidiary. Notwithstanding anything contained herein, this Agreement shall automatically terminate and be of no further force and effect and no benefits shall be payable hereunder in the event that (i) the Executive is employed by a direct or indirect subsidiary of Sempra Energy, and (ii) an Asset Sale (as defined in Section 16(e)) occurs (other than such a sale or disposition which is part of a transaction or series of transactions which would result in a Change in Control), and (iii) as a result of such Asset Sale, the Executive is offered employment by the Asset Purchaser in an executive position with reasonably comparable status, compensation, benefits and severance agreement (including the assumption of this Agreement in accordance with Section 16(e)) and which is consistent with the Executive's experience and education, but the Executive declines to accept such offer and the Executive fails to become employed by the Asset Purchaser on the date of the Asset Sale.

(j) Term. The term of this Agreement shall commence on the Effective Date and shall continue until the third (3rd) anniversary of the Effective Date; provided, however, that commencing on the second (2nd) anniversary of the Effective Date (and each anniversary of the Effective Date thereafter), the term of this Agreement shall automatically be extended for one (1) additional year, unless at least ninety (90) days prior to such date, the Company or the Executive shall give written notice to the other party that it or he, as the case may be, does not wish to so extend this Agreement. Notwithstanding the foregoing, if the Company gives such written notice to the Executive (i) at a time when Sempra Energy is a party to an agreement that, if consummated, would constitute a Change in Control or (ii) less than two (2) years after a Change in Control, the term of this Agreement shall be automatically extended until the later of (A) the date that is one (1) year after the anniversary of the Effective Date that follows such written notice or (B) the second (2nd) anniversary of the Change in Control Date.

(k) Counterparts. This Agreement may be executed in several counterparts, each of which shall be deemed to be an original but all of which together shall constitute one and the same instrument.

[*remainder of page intentionally left blank*]

IN WITNESS WHEREOF, the Executive and, pursuant to due authorization from its Board of Directors, the Company have caused this Agreement to be executed as of the day and year first above written.

SEMPRA ENERGY

_____

G. Joyce Rowland
Senior Vice President, Chief Human Resources and Administrative Officer

_____

Date

EXECUTIVE

_____

Dennis V. Arriola
Executive Vice President - Corporate Strategy & External Affairs

_____

Date

EXHIBIT A

GENERAL RELEASE

This GENERAL RELEASE (the "Agreement"), dated _____, is made by and between _____, a California corporation (the "Company") and _____ ("you" or "your").

WHEREAS, you and the Company have previously entered into that certain Severance Pay Agreement dated _____, 20___ (the "Severance Pay Agreement"); and

WHEREAS, your right to receive certain severance pay and benefits pursuant to the terms of Section 4 or Section 5 of the Severance Pay Agreement, as applicable, are subject to and conditioned upon your execution and non-revocation of a general release of claims by you against the Company and its subsidiaries and affiliates.

WHEREAS, your right to receive the Consulting Payment provided pursuant to Section 14(e) of the Severance Pay Agreement is subject to and conditioned upon your execution and non-revocation of a general release of claims by you against the Company and its subsidiaries and affiliates; and your adherence to the covenants described under Section 14 of the Severance Pay Agreement.

NOW, THEREFORE, in consideration of the premises and the mutual covenants herein contained, you and the Company hereby agree as follows:

ONE: Your signing of this Agreement confirms that your employment with the Company shall terminate at the close of business on _____, or earlier upon our mutual agreement.

TWO: As a material inducement for the payment of the severance and benefits of the Severance Pay Agreement, and except as otherwise provided in this Agreement, you and the Company hereby irrevocably and unconditionally release, acquit and forever discharge the other from any and all Claims either may have against the other. For purposes of this Agreement and the preceding sentence, the words "Releasee" or "Releasees" and "Claim" or "Claims" shall have the meanings set forth below:

(a) The words "Releasee" or "Releasees" shall refer to you and to the Company and each of the Company's owners, stockholders, predecessors, successors, assigns, agents, directors, officers, employees, representatives, attorneys, advisors, parent companies, divisions, subsidiaries, affiliates (and agents, directors, officers, employees, representatives, attorneys and advisors of such parent companies, divisions, subsidiaries and affiliates) and all persons acting by, through, under or in concert with any of them.

(b) The words "Claim" or "Claims" shall refer to any charges, complaints, claims, liabilities, obligations, promises, agreements, controversies, damages, actions, causes of action, suits, rights, demands, costs, losses, debts and expenses (including attorneys' fees and costs actually incurred) of any nature whatsoever, known or unknown, suspected or unsuspected, which you or the Company now, in the past or, in the future may have, own or hold against any of the Releasees; *provided, however*, that the word "Claim" or "Claims" shall not refer to any charges, complaints, claims, liabilities, obligations, promises, agreements, controversies, damages, actions, causes of action, suits, rights, demands, costs, losses, debts and expenses (including attorneys' fees and costs actually incurred) arising under [*identify severance, employee benefits, stock option, indemnification and D&O and other agreements containing*

duties, rights obligations etc. of either party that are to remain operative]. Claims released pursuant to this Agreement by you and the Company include, but are not limited to, rights arising out of alleged violations of any contracts, express or implied, any tort, claim, any claim that you failed to perform or negligently performed or breached your duties during employment at the Company, any legal restrictions on the Company's right to terminate employment relationships; and any federal, state or other governmental statute, regulation, or ordinance, governing the employment relationship including, without limitation, all state and federal laws and regulations prohibiting discrimination based on protected categories, and all state and federal laws and regulations prohibiting retaliation against employees for engaging in protected activity or legal off-duty conduct. This release does not extend to claims for workers' compensation or other claims which by law may not be waived or released by this Agreement.

THREE: You and the Company expressly waive and relinquish all rights and benefits afforded by any statute (including but not limited to Section 1542 of the Civil Code of the State of California and analogous laws of other states) which limits the effect of a release with respect to unknown claims. You and the Company do so understanding and acknowledging the significance of the release of unknown claims and the waiver of statutory protection against a release of unknown claims (including but not limited to Section 1542). Section 1542 of the Civil Code of the State of California states as follows:

> "A GENERAL RELEASE DOES NOT EXTEND TO CLAIMS WHICH THE CREDITOR DOES NOT KNOW OR SUSPECT TO EXIST IN HIS OR HER FAVOR AT THE TIME OF EXECUTING THE RELEASE, WHICH IF KNOWN BY HIM OR HER MUST HAVE MATERIALLY AFFECTED HIS OR HER SETTLEMENT WITH THE DEBTOR."

Thus, notwithstanding the provisions of Section 1542 or of any similar statute, and for the purpose of implementing a full and complete release and discharge of the Releasees, you and the Company expressly acknowledge that this Agreement is intended to include in its effect, without limitation, all Claims which are known and all Claims which you or the Company do not know or suspect to exist in your or the Company's favor at the time of execution of this Agreement and that this Agreement contemplates the extinguishment of all such Claims.

FOUR: The parties acknowledge that they might hereafter discover facts different from, or in addition to, those they now know or believe to be true with respect to a Claim or Claims released herein, and they expressly agree to assume the risk of possible discovery of additional or different facts, and agree that this Agreement shall be and remain effective, in all respects, regardless of such additional or different discovered facts.

FIVE: As a further material inducement to the Company to enter into this Agreement, you hereby agree to indemnify and hold each of the Releasees harmless from all loss, costs, damages, or expenses, including without limitation, attorneys' fees incurred by the Releasees, arising out of any breach of this Agreement by you or the fact that any representation made in this Agreement by you was false when made.

As a further material inducement to you to enter into this Agreement, the Company hereby agrees to indemnify and hold each of the Releasees harmless from all loss, costs, damages, or expenses, including without limitation, attorneys' fees incurred by the Releasees, arising out of any breach of this Agreement by it or the fact that any representation made in this Agreement by it was knowingly false when made.

SIX: You and the Company represent and acknowledge that in executing this Agreement, neither is relying upon any representation or statement not set forth in this Agreement or the Severance Agreement.

SEVEN: (a) This Agreement shall not in any way be construed as an admission by the Company that it has acted wrongfully with respect to you or any other person, or that you have any rights whatsoever against the Company, and the Company specifically disclaims any liability to or wrongful acts against you or any other person, on the part of itself, its employees or its agents. This Agreement shall not in any way be construed as an admission by you that you have acted wrongfully with respect to the Company, or that you failed to perform your duties or negligently performed or breached your duties, or that the Company had good cause to terminate your employment.

(b) If you are a party or are threatened to be made a party to any proceeding by reason of the fact that you were an officer or director of the Company, the Company shall indemnify you against any expenses (including reasonable attorneys' fees; *provided*, that counsel has been approved by the Company prior to retention, which approval shall not be unreasonably withheld), judgments, fines, settlements and other amounts actually or reasonably incurred by you in connection with that proceeding; *provided*, that you acted in good faith and in a manner you reasonably believed to be in the best interest of the Company. The limitations of California Corporations Code Section 317 shall apply to this assurance of indemnification.

(c) You agree to cooperate with the Company and its designated attorneys, representatives and agents in connection with any actual or threatened judicial, administrative or other legal or equitable proceeding in which the Company is or may become involved. Upon reasonable notice, you agree to meet with and provide to the Company or its designated attorneys, representatives or agents all information and knowledge you have relating to the subject matter of any such proceeding. The Company agrees to reimburse you for any reasonable costs you incur in providing such cooperation.

EIGHT: This Agreement is entered into in California and shall be governed by substantive California law, except as provided in this section. If any dispute arises between you and the Company, including but not limited to, disputes relating to this Agreement, or if you prosecute a claim you purported to release by means of this Agreement ("Arbitrable Dispute"), you and the Company agree to resolve that Arbitrable Dispute through final and binding arbitration under this section. You also agree to arbitrate any Arbitrable Dispute which also involves any other released party who offers or agrees to arbitrate the dispute under this section. Your agreement to arbitrate applies, for example, to disputes about the validity, interpretation, or effect of this Agreement or alleged violations of it, claims of discrimination under federal or state law, or other statutory violation claims.

As to any Arbitrable Dispute, you and the Company waive any right to a jury trial or a court bench trial. You and the Company also waive the right to bring, maintain, or participate in any class, collective, or representative proceeding, whether in arbitration or otherwise. Further, Arbitrable Disputes must be brought in the individual capacity of the party asserting the claim, and cannot be maintained on a class, collective, or representative basis.

Arbitration shall take place in San Diego, California under the employment dispute resolution rules of the Judicial Arbitration and Mediation Service ("JAMS"), (or, if you are employed outside of California at the time of the termination of your employment, at the nearest location of the American Arbitration Association and in accordance with the AAA rules), before an experienced employment arbitrator selected in accordance with those rules. The arbitrator may not modify or change this Agreement in any way. The Company will be responsible for paying any filing fee and the fees and costs of the Arbitrator; provided, however, that if you are the party initiating the claim, you will contribute an amount equal to the filing fee

to initiate a claim in the court of general jurisdiction in the state in which you are employed by the Company. Each party shall pay for its own costs and attorneys' fees, if any. However if any party prevails on a statutory claim which affords the prevailing party attorneys' fees and costs, or if there is a written agreement providing for attorneys' fees and/or costs, the Arbitrator may award reasonable attorney's fees and/or costs to the prevailing party, applying the same standards a court would apply under the law applicable to the claim. The Arbitrator shall apply the Federal Rules of Evidence and shall have the authority to entertain a motion to dismiss or a motion for summary judgment by any party and shall apply the standards governing such motions under the Federal Rules of Civil Procedure. The Federal Arbitration Act shall govern the arbitration and shall govern the interpretation or enforcement of this section or any arbitration award. The arbitrator will not have the authority to consider, certify, or hear an arbitration as a class action, collective action, or any other type of representative action.

To the extent that the Federal Arbitration Act is inapplicable, California law pertaining to arbitration agreements shall apply. Arbitration in this manner shall be the exclusive remedy for any Arbitrable Dispute. Except as prohibited by the ADEA, should you or the Company attempt to resolve an Arbitrable Dispute by any method other than arbitration pursuant to this section, the responding party will be entitled to recover from the initiating party all damages, expenses, and attorneys' fees incurred as a result of this breach. This Section TEN supersedes any existing arbitration agreement between the Company and me as to any Arbitrable Dispute. Notwithstanding anything in this Section TEN to the contrary, a claim for benefits under an ERISA-covered plan shall not be an Arbitrable Dispute.

NINE: Both you and the Company understand that this Agreement is final and binding eight (8) days after its execution and return. Should you nevertheless attempt to challenge the enforceability of this Agreement as provided in Paragraph EIGHT or, in violation of that Paragraph, through litigation, as a further limitation on any right to make such a challenge, you shall initially tender to the Company, by certified check delivered to the Company, all monies received pursuant to Sections 4 or 5 of the Severance Pay Agreement, as applicable, plus interest, and invite the Company to retain such monies and agree with you to cancel this Agreement and void the Company's obligations under the Severance Pay Agreement. In the event the Company accepts this offer, the Company shall retain such monies and this Agreement shall be canceled and the Company shall have no obligation under Section 14(e) of the Severance Pay Agreement. In the event the Company does not accept such offer, the Company shall so notify you and shall place such monies in an interest-bearing escrow account pending resolution of the dispute between you and the Company as to whether or not this Agreement and the Company's obligations under the Severance Pay Agreement shall be set aside and/or otherwise rendered voidable or unenforceable. Additionally, any consulting agreement then in effect between you and the Company shall be immediately rescinded with no requirement of notice.

TEN: Any notices required to be given under this Agreement shall be delivered either personally or by first class United States mail, postage prepaid, addressed to the respective parties as follows:

To Company: [TO COME]

Attn: [TO COME]

To You:_____

_____

_____

ELEVEN: You understand and acknowledge that you have been given a period of forty-five (45) days to review and consider this Agreement (as well as certain data on other persons eligible for similar benefits, if any) before signing it and may use as much of this forty-five (45) day period as you wish prior to signing. You are encouraged, at your personal expense, to consult with an attorney before signing this Agreement. You understand and acknowledge that whether or not you do so is your decision. You may revoke this Agreement within seven (7) days of signing it. If you wish to revoke, the Company's Vice President, Human Resources must receive written notice from you no later than the close of business on the seventh (7th) day after you have signed the Agreement. If revoked, this Agreement shall not be effective and enforceable, and you will not receive payments or benefits under Sections 4 or 5 of the Severance Pay Agreement, as applicable

TWELVE: This Agreement constitutes the entire agreement of the parties hereto and supersedes any and all other agreements (except the Severance Pay Agreement) with respect to the subject matter of this Agreement, whether written or oral, between you and the Company. All modifications and amendments to this Agreement must be in writing and signed by the parties.

THIRTEEN: Each party agrees, without further consideration, to sign or cause to be signed, and to deliver to the other party, any other documents and to take any other action as may be necessary to fulfill the obligations under this Agreement.

FOURTEEN: If any provision of this Agreement or the application thereof is held invalid, the invalidity shall not affect other provisions or applications of the Agreement which can be given effect without the invalid provisions or application; and to this end the provisions of this Agreement are declared to be severable.

FIFTEEN: This Agreement may be executed in counterparts.

I have read the foregoing General Release, and I accept and agree to the provisions it contains and hereby execute it voluntarily and with full understanding of its consequences. I am aware it includes a release of all known or unknown claims.

DATED: _____

_____

DATED: _____

_____

You acknowledge that you first received this Agreement on [date].

_____

SEMPRA ENERGY

SEVERANCE PAY AGREEMENT

THIS AGREEMENT (this "Agreement"), dated as of March 5, 2011, (the "Effective Date") is made by and between SEMPRA ENERGY, a California corporation ("Sempra Energy"), and Scott Drury (the "Executive").

WHEREAS, the Executive is currently employed by Sempra Energy or a direct or indirect subsidiary of Sempra Energy (Sempra Energy and its subsidiaries are hereinafter collectively referred to as the "Company") as Vice President - Human Resources, Diversity & Inclusion; and

WHEREAS, Sempra Energy and the Executive desire to enter into this Agreement; and

WHEREAS, the Board of Directors of Sempra Energy (the "Board") has authorized this Agreement.

NOW, THEREFORE, in consideration of the premises and mutual covenants herein contained, the Company and the Executive hereby agree as follows:

Section 1. Definitions. For purposes of this Agreement, the following capitalized terms have the meanings set forth below:

"Accounting Firm" has the meaning assigned thereto in Section 9(b) hereof.

"Act" has the meaning assigned thereto in Section 2 hereof.

"Additional Post-Change in Control Severance Payment" has the meaning assigned thereto in Section 6(a) hereof.

"Affiliate" has the meaning set forth in Rule 12b-2 promulgated under the Exchange Act.

"Annual Base Salary" means the Executive's annual base salary from the Company.

"Asset Purchaser" has the meaning assigned thereto in Section 16(e).

"Asset Sale" has the meaning assigned thereto in Section 16(e).

"Average Annual Bonus" means the average of the annual bonuses from the Company earned by the Executive with respect to the three (3) fiscal years of the Company immediately preceding the Date of Termination (the "Bonus Fiscal Years"); *provided*, *however*, that, if the Executive was employed by the Company during all or any portion of one or two of the Bonus Fiscal Years (but not three of the Bonus Fiscal Years), "Average Annual Bonus" means the average of the annual bonuses (if any) from the Company earned by the Executive with respect to the Bonus Fiscal Years during all or any portion of which the Executive was employed by the Company; and, *provided*, *further*, that, if the Executive was not employed by the Company during all or any portion of any of the Bonus Fiscal Years, "Average Annual Bonus" means zero.

"Beneficial Owner" has the meaning set forth in Rule 13d-3 promulgated under the Exchange Act.

"Cause" means:

(a) Prior to a Change in Control, (i) the willful failure by the Executive to substantially perform the Executive's duties with the Company (other than any such failure resulting from the Executive's incapacity due to physical or mental illness, (ii) the grossly negligent performance of such obligations referenced in clause (i) of this definition, (iii) the Executive's gross insubordination; and/or (iv) the Executive's commission of one or more acts of moral turpitude that constitute a violation of applicable law (including but not limited to a felony) which have or result in an adverse effect on the Company, monetarily or otherwise, or one or more significant acts of dishonesty. For purposes of clause (i) of this subsection (a), no act, or failure to act, on the Executive's part shall be deemed "willful" unless done, or omitted to be done, by the Executive not in good faith and without reasonable belief that the Executive's act, or failure to act, was in the best interests of the Company.

(b) From and after a Change in Control, (i) the willful and continued failure by the Executive to substantially perform the Executive's duties with the Company (other than any such failure resulting from the Executive's incapacity due to physical or mental illness or any such actual or anticipated failure after the issuance of a Notice of Termination for Good Reason by the Executive pursuant to Section 3 hereof) and/or (ii) the Executive's commission of one or more acts of moral turpitude that constitute a violation of applicable law (including but not limited to a felony) which have or result in an adverse effect on the Company, monetarily or otherwise, or one or more significant acts of dishonesty. For purposes of clause (i) of this subsection (b), no act, or failure to act, on the Executive's part shall be deemed "willful" unless done, or omitted to be done, by the Executive not in good faith and without reasonable belief that the Executive's act, or failure to act, was in the best interests of the Company. Notwithstanding the foregoing, the Executive shall not be deemed terminated for Cause pursuant to clause (i) of this subsection (b) unless and until the Executive shall have been provided with reasonable notice of and, if possible, a reasonable opportunity to cure the facts and circumstances claimed to provide a basis for termination of the Executive's employment for Cause.

"Change in Control" shall be deemed to have occurred on the date that a change in the ownership of Sempra Energy, a change in the effective control of Sempra Energy, or a change in the ownership of a substantial portion of assets of Sempra Energy occurs (each, as defined in subsection (a) below), except as otherwise provided in subsections (b), (c) and (d) below:

(a) (i) a "change in the ownership of Sempra Energy" occurs on the date that any one person, or more than one person acting as a group, acquires ownership of stock of Sempra Energy that, together with stock held by such person or group, constitutes more than fifty percent (50%) of the total fair market value or total voting power of the stock of Sempra Energy,

(ii) a "change in the effective control of Sempra Energy" occurs only on either of the following dates:

(A) the date any one person, or more than one person acting as a group, acquires (or has acquired during the twelve (12) month period ending on the date of the most recent acquisition by such person or persons) ownership of stock of Sempra Energy possessing thirty percent (30%) or more of the total voting power of the stock of Sempra Energy, or

(B) the date a majority of the members of the Board is replaced during any twelve (12) month period by directors whose appointment or election is not endorsed by a majority of the members of the Board before the date of appointment or election, and

(iii) a "change in the ownership of a substantial portion of assets of Sempra Energy" occurs on the date any one person, or more than one person acting as a group, acquires (or has acquired during the twelve (12) month period ending on the date of the most recent acquisition by such person or persons) assets from Sempra Energy that have a total gross fair market value equal to or more than eighty-five percent (85%) of the total gross fair market value of all of the assets of Sempra Energy immediately before such acquisition or acquisitions.

(b) A "change in the ownership of Sempra Energy" or "a change in the effective control of Sempra Energy" shall not occur under clause (a)(i) or (a)(ii) by reason of any of the following:

(i) an acquisition of ownership of stock of Sempra Energy directly from Sempra Energy or its Affiliates other than in connection with the acquisition by Sempra Energy or its Affiliates of a business,

(ii) a merger or consolidation which would result in the voting securities of Sempra Energy outstanding immediately prior to such merger or consolidation continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity or any parent thereof), in combination with the ownership of any trustee or other fiduciary holding securities under an employee benefit plan of the Company, at least sixty percent (60%) of the combined voting power of the securities of Sempra Energy or such surviving entity or any parent thereof outstanding immediately after such merger or consolidation, or

(iii) a merger or consolidation effected to implement a recapitalization of Sempra Energy (or similar transaction) in which no Person is or becomes the Beneficial Owner, directly or indirectly, of securities of Sempra Energy (not including the securities beneficially owned by such Person any securities acquired directly from Sempra Energy or its Affiliates other than in connection with the acquisition by Sempra Energy or its Affiliates of a business) representing twenty percent (20%) or more of the combined voting power of Sempra Energy's then outstanding securities.

(c) A "change in the ownership of a substantial portion of assets of Sempra Energy" shall not occur under clause (a)(iii) by reason of a sale or disposition by Sempra Energy of the assets of Sempra Energy to an entity, at least sixty percent (60%) of the combined voting power of the voting securities of which are owned by shareholders of Sempra Energy in substantially the same proportions as their ownership of Sempra Energy immediately prior to such sale.

(d) This definition of "Change in Control" shall be limited to the definition of a "change in control event" relating to Sempra Energy under Treasury Regulation Section 1.409A-3(i)(5). A "Change in Control" shall only occur if there is a "change in control event" relating to Sempra Energy under Treasury Regulation Section 1.409A-3(i)(5) with respect to the Executive.

"Change in Control Date" means the date on which a Change in Control occurs.

"Code" means the Internal Revenue Code of 1986, as amended.

"Compensation Committee" means the compensation committee of the Board.

"Consulting Period" has the meaning assigned thereto in Section 14(e) hereof.

"Date of Termination" has the meaning assigned thereto in Section 3(b) hereof.

"Deferred Compensation Plan" has the meaning assigned thereto in Section 5(f) hereof.

"Disability" has the meaning set forth in the Company's long-term disability plan or its successor; *provided*, *however*, that the Board may not terminate the Executive's employment hereunder by reason of Disability unless (i) at the time of such termination there is no reasonable expectation that the Executive will return to work within the next ninety (90) day period and (ii) such termination is permitted by all applicable disability laws.

"Exchange Act" means the Securities Exchange Act of 1934, as amended, and the applicable rulings and regulations thereunder.

"Excise Tax" has the meaning assigned thereto in Section 9(a) hereof.

"Good Reason" means:

a. Prior to a Change in Control, the occurrence of any of the following without the prior written consent of the Executive, unless such act or failure to act is corrected by the Company prior to the Date of Termination specified in the Notice of Termination (as required under Section 3 hereof):

i. the assignment to the Executive of any duties materially inconsistent with the range of duties and responsibilities appropriate to a senior Executive within the Company (such range determined by reference to past, current and reasonable practices within the Company);

ii. a material reduction in the Executive's overall standing and responsibilities within the Company, but not including (A) a mere change in title or (B) a transfer within the Company, which, in the case of both (A) and (B), does not adversely affect the Executive's overall status within the Company;

iii. a material reduction by the Company in the Executive's aggregate annualized compensation and benefits opportunities, except for across-the-board reductions (or modifications of benefit plans) similarly affecting all similarly situated executives (both of the Company and of any Person then in control of the Company) of comparable rank with the Executive;

iv. the failure by the Company to pay to the Executive any portion of the Executive's current compensation and benefits or any portion of an installment of deferred compensation under any deferred compensation program of the Company within thirty (30) days of the date such compensation is due;

v. any purported termination of the Executive's employment that is not effected pursuant to a Notice of Termination satisfying the requirements of Section 3 hereof; for purposes of this Agreement, no such purported termination shall be effective;

vi. the failure by Sempra Energy to perform its obligations under Section 16(c), (d) or (e) hereof;

vii. the failure by the Company to provide the indemnification and D&O insurance protection Section 11 of this Agreement requires it to provide; or

viii. the failure by Sempra Energy to comply with any material provision of this Agreement.

b. From and after a Change in Control, the occurrence of any of the following without the prior written consent of the Executive, unless such act or failure to act is corrected by the Company prior to the Date of Termination specified in the Notice of Termination (as required under Section 3 hereof):

i. an adverse change in the Executive's title, authority, duties, responsibilities or reporting lines as in effect immediately prior to the Change in Control;

ii. a reduction by the Company in the Executive's aggregate annualized compensation opportunities, except for across-the-board reductions in base salaries, annual bonus opportunities or long-term incentive compensation opportunities of less than ten percent (10%) similarly affecting all similarly situated executives (both of the Company and of any Person then in control of the Company) of comparable rank with the Executive; or the failure by the Company to continue in effect any material benefit plan in which the Executive participates immediately prior to the Change in Control, unless an equitable arrangement (embodied in an ongoing substitute or alternative plan) has been made with respect to such plan, or the failure by the Company to continue the Executive's participation therein (or in such substitute or alternative plan) on a basis not materially less favorable, both in terms of the amount of benefits provided and the level of the Executive's participation relative to other participants, as existed at the time of the Change in Control;

iii. the relocation of the Executive's principal place of employment immediately prior to the Change in Control Date (the "Principal Location") to a location which is both further away from the Executive's residence and more than thirty (30) miles from such Principal Location, or the Company's requiring the Executive to be based anywhere other than such Principal Location (or permitted relocation thereof), or a substantial increase in the Executive's business travel obligations outside of the Southern California area as of the Effective Date other than any such increase that (A) arises in connection with extraordinary business activities of the Company of limited duration and (B) is understood not to be part of the Executive's regular duties with the Company;

iv. the failure by the Company to pay to the Executive any portion of the Executive's current compensation and benefits or any portion of an installment of deferred compensation under any deferred compensation program of the Company within thirty (30) days of the date such compensation is due;

v. any purported termination of the Executive's employment that is not effected pursuant to a Notice of Termination satisfying the requirements of Section 3 hereof; for purposes of this Agreement, no such purported termination shall be effective;

vi. the failure by Sempra Energy to perform its obligations under Section 16(c), (d) or (e) hereof;

vii. the failure by the Company to provide the indemnification and D&O insurance protection Section 11 of this Agreement requires it to provide; or

viii. the failure by Sempra Energy to comply with any material provision of this Agreement.

Following a Change in Control, the Executive's determination that an act or failure to act constitutes Good Reason shall be presumed to be valid unless such determination is deemed to be unreasonable by an arbitrator pursuant to the procedure described in Section 13 hereof. The Executive's right to terminate the Executive's employment for Good Reason shall not be affected by the Executive's incapacity due to physical or mental illness. The Executive's continued employment shall not constitute consent to, or a waiver of rights with respect to, any act or failure to act constituting Good Reason hereunder.

"Incentive Compensation Awards" means awards granted under Incentive Compensation Plans providing the Executive with the opportunity to earn, on a year-by-year basis, annual and long-term incentive compensation.

"Incentive Compensation Plans" means annual incentive compensation plans and long-term incentive compensation plans of the Company, which long-term incentive compensation plans may include plans offering stock options, restricted stock and other long-term incentive compensation.

"Involuntary Termination" means (a) the Executive's Separation from Service by reason of a termination of employment by the Company other than for Cause, death, or Disability, or (b) the Executive's Separation from Service by reason of resignation of employment with the Company for Good Reason.

"JAMS Rules" has the meaning assigned thereto in Section 13 hereof.

"Notice of Termination" has the meaning assigned thereto in Section 3(a) hereof.

"Payment" has the meaning assigned thereto in Section 9(a) hereof.

"Payment in Lieu of Notice" has the meaning assigned thereto in Section 3(b) hereof.

"Person" has the meaning set forth in section 3(a)(9) of the Exchange Act, as modified and used in sections 13(d) and 14(d) thereof, except that such term shall not include (i) the Company or any of its Affiliates, (ii) a trustee or other fiduciary holding securities under an employee benefit plan of the Company or any of its Affiliates, (iii) an underwriter temporarily holding securities pursuant to an offering of such securities, (iv) a corporation owned, directly or indirectly, by the shareholders of the Company in substantially the same proportions as their ownership of stock of the Company, or (v) a person or group as used in Rule 13d-1(b) promulgated under the Exchange Act.

"Post-Change in Control Accrued Obligations" has the meaning assigned thereto in Section 6(a) hereof.

"Post-Change in Control Severance Payment" has the meaning assigned thereto in Section 6 hereof.

"Pre-Change in Control Accrued Obligations" has the meaning assigned thereto in Section 5(a) hereof.

"Pre-Change in Control Severance Payment" has the meaning assigned thereto in Section 5 hereof.

"Principal Location" has the meaning assigned thereto in clause (b)(iii) of the definition of Good Reason, above.

"Proprietary Information" has the meaning assigned thereto in Section 14(a) hereof.

"Release" has the meaning assigned thereto in Section 14(d) hereof.

"Section 409A Payments" means any of the following: (a) the Payment in Lieu of Notice; (b) the Pre-Change in Control Severance Payment; (c) the Post-Change in Control Severance Payment; (d) the Additional Post-Change in Control Severance Payment; (e) the Consulting Payment; (f) the financial planning services and the related payments provided under Sections 5(e) and 6(e); and (g) the legal fees and expenses reimbursed under Section 15.

"Sempra Energy Control Group" means Sempra Energy and all persons with whom Sempra Energy would be considered a single employer under Section 414(b) or 414(c) of the Code, as determined from time to time.

"Separation from Service", with respect to the Executive (or another Service Provider), means the Executive's (or such Service Provider's) (a) termination of employment or (b) other termination or reduction in services, provided that such termination or reduction in clause (a) or (b) constitutes a "separation from service," as defined in Treasury Regulation Section 1.409A-1(h), with respect to the Service Recipient.

"Service Provider" means the Executive or any other "service provider," as defined in Treasury Regulation Section 1.409A-1(f).

"Service Recipient," with respect to the Executive, means Sempra Energy (if the Executive is employed by Sempra Energy), or the subsidiary of Sempra Energy employing the Executive, whichever is applicable, and all persons considered part of the "service recipient," as defined in Treasury Regulation Section 1.409A-1(g), as determined from time to time. As provided in Treasury Regulation Section 1.409A-1(g), the "Service Recipient" shall mean the person for whom the services are performed and with respect to whom the legally binding right to compensation arises, and all persons with whom such person would be considered a single employer under Section 414(b) or 414(c) of the Code.

"Specified Employee" means a Service Provider who, as of the date of the Service Provider's Separation from Service is a "Key Employee" of the Service Recipient any stock of which is publicly traded on an established securities market or otherwise. For purposes of this definition, a Service Provider is a "Key Employee" if the Service Provider meets the requirements of Section 416(i)(1)(A)(i), (ii) or (iii) of the Code (applied in accordance with the Treasury Regulations thereunder and disregarding Section 416(i)(5) of the Code) at any time during the Testing Year. If a Service Provider is a "Key Employee" (as defined above) as of a Specified Employee Identification Date, the Service Provider shall be treated as "Key Employee" for the entire twelve (12) month period beginning on the Specified Employee Effective Date. For purposes of this definition, a Service Provider's compensation for a Testing Year shall mean such Service Provider's compensation, as determined under Treasury Regulation Section 1.415(c)-2(a) (and applied as if the Service Recipient were not using any safe harbor provided in Treasury Regulation Section 1.415(c)-2(d), were not using any of the elective special timing rules provided in Treasury Regulation Section 1.415(c)-2(e), and were not using any of the elective special rules provided in Treasury Regulation Section 1.415(c)-2(g)), from the Service Recipient for such Testing Year. The "Specified Employees" shall be determined in accordance with Section 409A(a)(2)(B)(i) of the Code and Treasury Regulation Section 1.409A-1(i).

"Specified Employee Effective Date" means the first day of the fourth month following the Specified Employee Identification Date. The Specified Employee Effective Date may be changed by Sempra Energy, in its discretion, in accordance with Treasury Regulation Section 1.409A-1(i)(4).

"Specified Employee Identification Date", for purposes of Treasury Regulation Section 1.409A-1(i)(3), shall mean December 31. The "Specified Employee Identification Date" shall apply to all "nonqualified deferred compensation plans" (as defined in Treasury Regulation Section 1.409A-1(a)) of the Service Recipient and all affected Service Providers. The "Specified Employee Identification Date" may be changed by Sempra Energy, in its discretion, in accordance with Treasury Regulation Section 1.409A-1(i)(3).

"Testing Year" shall mean the twelve (12) month period ending on the Specified Employee Identification Date, as determined from time to time.

"Underpayment" has the meaning assigned thereto in Section 9(b) hereof.

For purposes of this Agreement, references to any "Treasury Regulation" shall mean such Treasury Regulation as in effect on the date hereof.

Section 2. Sarbanes-Oxley Act of 2002. Notwithstanding anything herein to the contrary, if the Company determines, in its good faith judgment, that any provision of this Agreement is likely to be interpreted as a personal loan prohibited by the Sarbanes-Oxley Act of 2002 and the rules and regulations promulgated thereunder (the "Act"), then such provision shall be modified as necessary or appropriate so as to not violate the Act; and if this cannot be accomplished, then the Company shall use its reasonable efforts to provide the Executive with similar, but lawful, substitute benefit(s) at a cost to the Company not to significantly exceed the amount the Company would have otherwise paid to provide such benefit(s) to the Executive. In addition, if the Executive is required to forfeit or to make any repayment of any compensation or benefit(s) to the Company under the Act or any other law, such forfeiture or repayment shall not constitute Good Reason.

Section 3. Notice and Date of Termination

(a) Any termination of the Executive's employment by the Company or by the Executive shall be communicated by a written notice of termination to the other party (the "Notice of Termination"). Where applicable, the Notice of Termination shall indicate the specific termination provision in this Agreement relied upon and shall set forth in reasonable detail the facts and circumstances claimed to provide a basis for termination of the Executive's employment under the provision so indicated. Unless the Board determines otherwise, a Notice of Termination by the Executive alleging a termination for Good Reason must be made within 180 days of the act or failure to act that the Executive alleges to constitute Good Reason.

(b) The date of the Executive's termination of employment with the Company (the "Date of Termination") shall be determined as follows: (i) if the Executive has a Separation from Service by reason of the Company terminating his or her employment, either with or without Cause, the Date of Termination shall be the date specified in the Notice of Termination (which, in the case of a termination by the Company other than for Cause, shall not be less than two (2) weeks from the date such Notice of Termination is given unless the Company elects to pay the Executive, in addition to any other amounts payable hereunder, an amount (the "Payment in Lieu of Notice") equal to two (2) weeks of the Executive's Annual Base Salary in effect on the Date of Termination), and (ii) if the basis for the

Executive's Involuntary Termination is his resignation for Good Reason, the Date of Termination shall be determined by the Executive and specified in the Notice of Termination, but shall not in any event be less than fifteen (15) days nor more than sixty (60) days after the date such Notice of Termination is given. The Payment in Lieu of Notice shall be paid on such date as is determined by the Company within thirty (30) days after the date of the Executive's Separation from Service; *provided, however*, that if the Executive is a Specified Employee on the date of his or her Separation from Service, such Payment in Lieu of Notice shall be paid as provided in Section 10 hereof.

Section 4. Termination from the Board. Upon the termination of the Executive's employment for any reason, the Executive's membership on the Board, the board of directors of any of the Company's Affiliates, any committees of the Board and any committees of the board of directors of any of the Company's Affiliates, if applicable, shall be automatically terminated.

Section 5. Severance Benefits upon Involuntary Termination Prior to Change in Control

. Except as provided in Section 6 and Section 19(i) hereof, in the event of the Involuntary Termination of the Executive prior to a Change in Control, the Company shall pay the Executive, in one lump sum cash payment, an amount (the "Pre-Change in Control Severance Payment") equal to one-half (0.5) times the greater of: (X) 145% of the Executive's Annual Base Salary as in effect on the Date of Termination, and (Y) the Executive's Annual Base Salary as in effect on the Date of Termination, plus the Executive's Average Annual Bonus. In addition to the Pre-Change in Control Severance Payment, the Executive shall be entitled to the following additional benefits specified in subsections (a) through (e). Except as provided in Section 5(f), the Pre-Change in Control Severance Payment and the payment under Section 5(a) shall be paid on such date as is determined by the Company within thirty (30) days after the date of the Involuntary Termination; *provided, however*, that, if the Executive is a Specified Employee on the date of the Executive's Involuntary Termination, the Pre-Change in Control Severance Payment and the financial planning services and the related payments provided under Section 5(e) shall be paid as provided in Section 10 hereof.

(a) Accrued Obligations. The Company shall pay the Executive a lump sum amount in cash equal to the sum of (A) the Executive's Annual Base Salary through the Date of Termination to the extent not theretofore paid, (B) an amount equal to any annual Incentive Compensation Awards earned with respect to fiscal years ended prior to the year that includes the Date of Termination to the extent not theretofore paid, (C) any accrued and unpaid vacation, if any, and (D) reimbursement for unreimbursed business expenses, if any, properly incurred by the Executive in the performance of his duties in accordance with policies established from time to time by the Board, in each case to the extent not theretofore paid. (The amounts specified in clauses (A), (B), (C) and (D) shall be hereinafter referred to as the "Pre-Change in Control Accrued Obligations").

(b) Equity Based Compensation. The Executive shall retain all rights to any equity-based compensation awards to the extent set forth in the applicable plan and/or award agreement.

(c) Welfare Benefits. Subject to Section 12 below, for a period of six (6) months following the date of the Involuntary Termination (and an additional six (6) months if the Executive provides consulting services under Section 14(e) hereof), the Executive and his dependents shall be provided with health insurance benefits substantially similar to those provided to the Executive and his dependents immediately prior to the date of the Involuntary Termination; *provided, however*, that such benefits shall be provided on substantially the same terms and conditions and at the same cost to the Executive as in effect immediately prior to the date of the Involuntary Termination. Such benefits shall be

provided through insurance maintained by the Company under the Company's benefit plans. Such benefits shall be provided in a manner that complies with Treasury Regulation Section 1.409A-1(a)(5).

(d) Outplacement Services. The Executive shall receive reasonable outplacement services, on an in-kind basis, suitable to his position and directly related to the Executive's Involuntary Termination, for a period of twelve (12) months following the date of the Involuntary Termination, in an aggregate amount of cost to the Company not to exceed $50,000. Notwithstanding the foregoing, the Executive shall cease to receive outplacement services on the date the Executive accepts employment with a subsequent employer. Such outplacement services shall be provided in a manner that complies with Treasury Regulation Section 1.409A-1(b)(9)(v)(A).

(e) Financial Planning Services. The Executive shall receive financial planning services, on an in-kind basis, for a period of twelve (12) months following the Date of Termination. Such financial planning services shall include expert financial and legal resources to assist the Executive with financial planning needs and shall be limited to (i) current investment portfolio management, (ii) tax planning, (iii) tax return preparation, and (iv) estate planning advice and document preparation (including wills and trusts); *provided*, *however*, that the Company shall provide such financial planning services during any taxable year of the Executive only to the extent the cost to the Company for such taxable year does not exceed $25,000. The Company shall provide such financial planning services through a financial planner selected by the Company, and shall pay the fees for such financial planning services. The financial planning services provided during any taxable year of the Executive shall not affect the financial planning services provided in any other taxable year of the Executive. The Executive's right to financial planning services shall not be subject to liquidation or exchange for any other benefit. Such financial planning services shall be provided in a manner that complies with Treasury Regulation Section 1.409A-3(i)(1)(iv).

(f) Deferral of Payments. The Executive shall have the right to elect to defer the Pre-Change in Control Severance Payment to be received by the Executive pursuant to this Section 5 under the terms and conditions of the Sempra Energy 2005 Deferred Compensation Plan (the "Deferred Compensation Plan"). Any such deferral election shall be made in accordance with Section 18(b) hereof.

Section 6. Severance Benefits upon Involuntary Termination in Connection with and after Change in Control

. Notwithstanding the provisions of Section 5 above, and except as provided in Section 19(i) hereof, in the event of the Involuntary Termination of the Executive on or within two (2) years following a Change in Control, in lieu of the payments described in Section 5 above, the Company shall pay the Executive, in one lump sum cash payment, an amount (the "Post-Change in Control Severance Payment") equal to the greater of: (X) 145% of the Executive's Annual Base Salary as in effect immediately prior to the Change in Control or the Date of Termination, whichever is greater, and (Y) the Executive's Annual Base Salary as in effect immediately prior to the Change in Control or on the Date of Termination, whichever is greater, plus the Executive's Average Annual Bonus; *provided, however,* that, in the event that the Involuntary Termination occurs prior to the fifth anniversary of the Effective Date, the Post-Change in Control Severance Payment shall be increased by twenty-five percent (25%). In addition to the Post-Change in Control Severance Payment, the Executive shall be entitled to the following additional benefits specified in subsections (a) through (e). Except as provided in Sections 6(f) and 6(g), the Post-Change in Control Severance Payment and the payments under Section 6(a) shall be paid on such date as is determined by the Company within thirty (30) days after the date of the Involuntary Termination; *provided*, *however*, that, if the Executive is a Specified Employee on the date of the Executive's Involuntary Termination, the Post-Change in Control Severance Payment, the Additional

Post-Change in Control Severance Payment under Section 6(a)(E), and the financial planning services and the related payments provided under Section 6(e) shall be paid as provided in Section 10 hereof.

(a) Accrued Obligations. The Company shall pay the Executive a lump sum amount in cash equal to the sum of (A) the Executive's Annual Base Salary through the Date of Termination to the extent not theretofore paid, (B) an amount equal to any annual Incentive Compensation Awards earned with respect to fiscal years ended prior to the year that includes the Date of Termination to the extent not theretofore paid, (C) any accrued and unpaid vacation, if any, (D) reimbursement for unreimbursed business expenses, if any, properly incurred by the Executive in the performance of his duties in accordance with policies established from time to time by the Board, and (E) an amount (the "Additional Post-Change in Control Severance Payment") equal to: (i) the greater of: (X) 45% of the Executive's Annual Base Salary as in effect immediately prior to the Change in Control or on the Date of Termination, whichever is greater, or (Y) the Executive's Average Annual Bonus, multiplied by (ii) a fraction, the numerator of which shall be the number of days from the beginning of such fiscal year to and including the Date of Termination and the denominator of which shall be 365, in the case of each amount described in clause (A), (B), (C) or (D) to the extent not theretofore paid. (The amounts specified in clauses (A), (B), (C), (D) and (E) shall be hereinafter referred to as the "Post-Change in Control Accrued Obligations").

(b) Equity-Based Compensation. Notwithstanding the provisions of any applicable equity-compensation plan or award agreement to the contrary, all equity-based Incentive Compensation Awards (including, without limitation, stock options, stock appreciation rights, restricted stock awards, restricted stock units, performance share awards, awards covered under Section 162(m) of the Code, and dividend equivalents) held by the Executive shall immediately vest and become exercisable or payable, as the case may be, as of the Date of Termination, to be exercised or paid, as the case may be, in accordance with the terms of the applicable Incentive Compensation Plan and Incentive Compensation Award agreement, and any restrictions on any such Incentive Compensation Awards shall automatically lapse; *provided, however*, that any such stock option or stock appreciation rights awards granted on or after June 26, 1998 shall remain outstanding and exercisable until the earlier of (A) the later of eighteen (18) months following the Date of Termination or the period specified in the applicable Incentive Compensation Award agreements or (B) the expiration of the original term of such Incentive Compensation Award (or, if earlier, the tenth anniversary of the original date of grant) (it being understood that all Incentive Compensation Awards granted prior to or after June 26, 1998 shall remain outstanding and exercisable for a period that is no less than that provided for in the applicable agreement in effect as of the date of grant).

(c) Welfare Benefits. Subject to Section 12 below, for a period of six (6) months following the date of Involuntary Termination (and an additional twelve (12) months if the Executive provides consulting services under Section 14(e) hereof), the Executive and his dependents shall be provided with life, disability, accident and health insurance benefits substantially similar to those provided to the Executive and his dependents immediately prior to the date of Involuntary Termination or the Change in Control Date, whichever is more favorable to the Executive; *provided, however*, that such benefits shall be provided on substantially the same terms and conditions and at the same cost to the Executive as in effect immediately prior to the date of Involuntary Termination or the Change in Control Date, whichever is more favorable to the Executive. Such benefits shall be provided through insurance maintained by the Company under the Company benefit plans. Such benefits shall be provided in a manner that complies with Treasury Regulation Section 1.409A-1(a)(5).

(d) Outplacement Services. The Executive shall receive reasonable outplacement services, on an in-kind basis, suitable to his position and directly related to the Executive's Involuntary Termination, for a period of eighteen (18) months following the date of Involuntary Termination (but in no

event beyond the last day of the Executive's second taxable year following the Executive's taxable year in which the Involuntary Termination occurs), in the aggregate amount of cost to the Company not to exceed $50,000. Notwithstanding the foregoing, the Executive shall cease to receive outplacement services on the date the Executive accepts employment with a subsequent employer. Such outplacement services shall be provided in a manner that complies with Treasury Regulation Section 1.409A-1(b)(9)(v)(A).

(e) Financial Planning Services. The Executive shall receive financial planning services, on an in-kind basis, for a period of eighteen (18) months following the date of Involuntary Termination. Such financial planning services shall include expert financial and legal resources to assist the Executive with financial planning needs and shall be limited to (i) current investment portfolio management, (ii) tax planning, (iii) tax return preparation, and (iv) estate planning advice and document preparation (including wills and trusts); *provided*, *however*, that the Company shall provide such financial services during any taxable year of the Executive only to the extent the cost to the Company for such taxable year does not exceed $25,000. The Company shall provide such financial planning services through a financial planner selected by the Company, and shall pay the fees for such financial planning services. The financial planning services provided during any taxable year of the Executive shall not affect the financial planning services provided in any other taxable year of the Executive. The Executive's right to financial planning services shall not be subject to liquidation or exchange for any other benefit. Such financial planning services shall be provided in a manner that complies with Section 1.409A-3(i)(1)(iv).

(f) Involuntary Termination in Connection with a Change in Control. Notwithstanding anything contained herein, in the event of an Involuntary Termination prior to a Change in Control, if the Involuntary Termination (1) was at the request of a third party who has taken steps reasonably calculated to effect such Change in Control or (2) otherwise arose in connection with or in anticipation of such Change in Control, then the Executive shall, in lieu of the payments described in Section 5 hereof, be entitled to the Post-Change in Control Severance Payment and the additional benefits described in this Section 6 as if such Involuntary Termination had occurred within two (2) years following the Change in Control. The amounts specified in Section 6 that are to be paid under this Section 6(f) shall be reduced by any amount previously paid under Section 5. The amounts to be paid under this Section 6(f) shall be paid within thirty (30) days after the Change in Control Date of such Change in Control.

(g) Deferral of Payments. The Executive shall have the right to elect to defer the Post-Change in Control Severance Payment to be received by the Executive pursuant to this Section 6 under the terms and conditions of the Deferred Compensation Plan. Any such deferral election shall be made in accordance with Section 18(b) hereof.

Section 7. Severance Benefits upon Termination by the Company for Cause or by the Executive Other than for Good Reason. If the Executive's employment shall be terminated for Cause, or if the Executive terminates employment other than for Good Reason, the Company shall have no further obligations to the Executive under this Agreement other than the Pre-Change in Control Accrued Obligations and any amounts or benefits described in Section 11 hereof.

Section 8. Severance Benefits upon Termination due to Death or Disability. If the Executive has a Separation from Service by reason of death or Disability, the Company shall pay the Executive or his estate, as the case may be, the Post-Change in Control Accrued Obligations (without regard to whether a Change in Control has occurred) and any amounts or benefits described in Section 11 hereof. Such payments shall be in addition to those rights and benefits to which the Executive or his estate may be entitled under the relevant Company plans or programs. Such payments shall be paid on such date as determined by the Company within thirty (30) days after the date of the Separation from

Service; *provided*, *however*, that if the Executive is a Specified Employee on the date of the Executive's Separation from Service by reason of Disability, the Additional Post-Change in Control Severance Payment under Section 6(a)(E) shall be paid as provided in Section 10 hereof.

Section 9. Limitation on Payments by the Company.

(a) Anything in this Agreement to the contrary notwithstanding and except as set forth in this Section 9 below, in the event it shall be determined that any payment or distribution in the nature of compensation (within the meaning of Section 280G(b)(2) of the Code) to or for the benefit of the Executive, whether paid or payable pursuant to this Agreement or otherwise (the "Payment") would be subject (in whole or in part) to the excise tax imposed by Section 4999 of the Code, (the "Excise Tax"), then, subject to subsection (b), the Pre-Change in Control Severance Benefit or the Post-Change in Control Severance Payment (whichever is applicable) payable under this Agreement shall be reduced under this subsection (a) to the amount equal to the Reduced Payment. For such Payment payable under this Agreement, the "Reduced Payment" shall be the amount equal to the greatest portion of the Payment (which may be zero) that, if paid, would result in no portion of any Payment being subject to the Excise Tax.

(b) The Pre-Change in Control Severance Benefit or the Post-Change in Control Severance Payment (whichever is applicable) payable under this Agreement shall not be reduced under subsection (a) if:

(i) such reduction in such Payment is not sufficient to cause no portion of any Payment to be subject to the Excise Tax, or

(ii) the Net After-Tax Unreduced Payments (as defined below) would equal or exceed one hundred and five percent (105%) of the Net After-Tax Reduced Payments (as defined below).

For purposes of determining the amount of any Reduced Payment under subsection (a), and the Net-After Tax Reduced Payments and the Net After-Tax Unreduced Payments, the Executive shall be considered to pay federal, state and local income and employment taxes at the Executive's applicable marginal rates taking into consideration any reduction in federal income taxes which could be obtained from the deduction of state and local income taxes, and any reduction or disallowance of itemized deductions and personal exemptions under applicable tax law). The applicable federal, state and local income and employment taxes and the Excise Tax (to the extent applicable) are collectively referred to as the "Taxes".

(c) The following definitions shall apply for purposes of this Section 9:

(i) "Net After-Tax Reduced Payments" shall mean the total amount of all Payments that the Executive would retain, on a Net After-Tax Basis, in the event that the Payments payable under this Agreement are reduced pursuant to subsection (a).

(ii) "Net After-Tax Unreduced Payments" shall mean the total amount of all Payments that the Executive would retain, on a Net After-Tax Basis, in the event that the Payments payable under this Agreement are not reduced pursuant to subsection (a).

(iii) "Net After-Tax Basis" shall mean, with respect to the Payments, either with or without reduction under subsection (a) (as applicable), the amount that would be retained by the Executive from such Payments after the payment of all Taxes.

(d) All determinations required to be made under this Section 9 and the assumptions to be utilized in arriving at such determinations, shall be made by a nationally recognized accounting firm as may be agreed by the Company and the Executive (the "Accounting Firm"); *provided*, that the Accounting Firm's determination shall be made based upon "substantial authority" within the meaning of Section 6662 of the Code. The Accounting Firm shall provide detailed supporting calculations to both the Company and the Executive within fifteen (15) business days of the receipt of notice from the Executive that there has been a Payment or such earlier time as is requested by the Company. All fees and expenses of the Accounting Firm shall be borne solely by the Company. Any determination by the Accounting Firm shall be binding upon the Company and the Executive. For purposes of determining whether and the extent to which the Payments will be subject to the Excise Tax, (i) no portion of the Payments the receipt or enjoyment of which the Executive shall have waived at such time and in such manner as not to constitute a "payment" within the meaning of Section 280G(b) of the Code shall be taken into account, (ii) no portion of the Payments shall be taken into account which, in the written opinion of the Accounting Firm, does not constitute a "parachute payment" within the meaning of Section 280G(b)(2) of the Code (including by reason of Section 280G(b)(4)(A) of the Code) and, in calculating the Excise Tax, no portion of such Payments shall be taken into account which, in the opinion of the Accounting Firm, constitutes reasonable compensation for services actually rendered, within the meaning of Section 280G(b)(4)(B) of the Code, in excess of the base amount (as defined in Section 280G(b)(3) of the Code) allocable to such reasonable compensation, and (iii) the value of any non-cash benefit or any deferred payment or benefit included in the Payments shall be determined by the Accounting Firm in accordance with the principles of Sections 280G(d)(3) and (4) of the Code.

Section 10. Delayed Distribution under Section 409A of the Code. If the Executive is a Specified Employee on the date of the Executive's Involuntary Termination (or on the date of the Executive's Separation from Service by reason of Disability), the Section 409A Payments, and any other payments or benefits under this Agreement subject to Section 409A of the Code, shall be delayed in order to avoid a prohibited distribution under Section 409A(a)(2)(B)(i) of the Code, and such payments or benefits shall be paid or distributed to the Executive during the thirty (30) day period commencing on the earlier of (a) the expiration of the six-month period measured from the date of the Executive's Separation from Service or (b) the date of the Executive's death. Upon the expiration of the applicable six-month period under Section 409A(a)(2)(B)(i) of the Code, all payments deferred pursuant to this Section 10 (excluding in-kind benefits) shall be paid in a lump sum payment to the Executive, plus interest thereon from the date of the Executive's Involuntary Termination through the payment date at an annual rate equal to Moody's Rate. The "Moody's Rate" shall mean the average of the daily Moody's Corporate Bond Yield Average - Monthly Average Corporates as published by Moody's Investors Service, Inc. (or any successor) for the month next preceding the Date of Termination. Any remaining payments due under the Agreement shall be paid as otherwise provided herein.

Section 11. Nonexclusivity of Rights. Nothing in this Agreement shall prevent or limit the Executive's continuing or future participation in any benefit, plan, program, policy or practice provided by the Company and for which the Executive may qualify (except with respect to any benefit to which the Executive has waived his rights in writing), including, without limitation, any and all indemnification arrangements in favor of the Executive (whether under agreements or under the Company's charter documents or otherwise), and insurance policies covering the Executive, nor shall anything herein limit or otherwise affect such rights as the Executive may have under any other contract or agreement entered into after the Effective Date with the Company. Amounts which are vested benefits or which the Executive is otherwise entitled to receive under any benefit, plan, policy, practice or program of, or any contract or agreement entered into with, the Company shall be payable in accordance with such benefit, plan, policy, practice or program or contract or agreement except as explicitly modified by this

Agreement. At all times during the Executive's employment with the Company and thereafter, the Company shall provide (to the extent permissible under applicable law) the Executive with indemnification and D&O insurance insuring the Executive against insurable events which occur or have occurred while the Executive was a director or the Executive officer of the Company, on terms and conditions that are at least as generous as that then provided to any other current or former director or the Executive officer of the Company or any Affiliate. Such indemnification and D&O insurance shall be provided in a manner that complies with Treasury Regulation Section 1.409A-1(b)(10).

Section 12. Full Settlement; Mitigation. The Company's obligation to make the payments provided for in this Agreement and otherwise to perform its obligations hereunder shall not be affected by any set-off, counterclaim, recoupment, defense or other claim, right or action which the Company may have against the Executive or others, provided that nothing herein shall preclude the Company from separately pursuing recovery from the Executive based on any such claim. In no event shall the Executive be obligated to seek other employment or take any other action by way of mitigation of the amounts (including amounts for damages for breach) payable to the Executive under any of the provisions of this Agreement, and such amounts shall not be reduced whether or not the Executive obtains other employment.

Section 13. Dispute Resolution.

Any disagreement, dispute, controversy or claim arising out of or relating to this Agreement or the interpretation of this Agreement or any arrangements relating to this Agreement or contemplated in this Agreement or the breach, termination or invalidity thereof shall be settled by final and binding arbitration administered by JAMS in San Diego, California in accordance with the then existing JAMS arbitration rules applicable to employment disputes (the "JAMS Rules"); *provided that*, notwithstanding any provision in such rules to the contrary, in all cases the parties shall be entitled to reasonable discovery. In the event of such an arbitration proceeding, the Executive and the Company shall select a mutually acceptable neutral arbitrator from among the JAMS panel of arbitrators. In the event the Executive and the Company cannot agree on an arbitrator, the arbitrator shall be selected in accordance with the then existing JAMS Rules. Neither the Executive nor the Company nor the arbitrator shall disclose the existence, content or results of any arbitration hereunder without the prior written consent of all parties, except to the extent necessary to enforce any arbitration award in a court of competent jurisdiction. Except as provided herein, the Federal Arbitration Act shall govern the interpretation of, enforcement of and all proceedings under this agreement to arbitrate. The arbitrator shall apply the substantive law (and the law of remedies, if applicable) of the state of California, or federal law, or both, as applicable, and the arbitrator is without jurisdiction to apply any different substantive law. The arbitrator shall have the authority to entertain a motion to dismiss and/or a motion for summary judgment by any party and shall apply the standards governing such motions under the Federal Rules of Civil Procedure. The arbitrator shall render an award and a written, reasoned opinion in support thereof. Judgment upon the award may be entered in any court having jurisdiction thereof. The Executive shall not be required to pay any arbitration fee or cost that is unique to arbitration or greater than any amount he would be required to pay to pursue his claims in a court of competent jurisdiction.

Section 14. Executive's Covenants.

(a) Confidentiality. The Executive acknowledges that in the course of his employment with the Company, he has acquired non-public privileged or confidential information and trade secrets concerning the operations, future plans and methods of doing business ("Proprietary Information") of the Company and its Affiliates; and the Executive agrees that it would be extremely damaging to the Company and its Affiliates if such Proprietary Information were disclosed to a competitor of the Company and its Affiliates or to any other person or corporation. The Executive understands and agrees that all

Proprietary Information has been divulged to the Executive in confidence and further understands and agrees to keep all Proprietary Information secret and confidential (except for such information which is or becomes publicly available other than as a result of a breach by the Executive of this provision or information the Executive is required by any governmental, administrative or court order to disclose) without limitation in time. In view of the nature of the Executive's employment and the Proprietary Information the Executive has acquired during the course of such employment, the Executive likewise agrees that the Company and its Affiliates would be irreparably harmed by any disclosure of Proprietary Information in violation of the terms of this paragraph and that the Company and its Affiliates shall therefore be entitled to preliminary and/or permanent injunctive relief prohibiting the Executive from engaging in any activity or threatened activity in violation of the terms of this paragraph and to any other relief available to them. Inquiries regarding whether specific information constitutes Proprietary Information shall be directed to the Company's Senior Vice President, Public Policy (or, if such position is vacant, the Company's then Chief Executive Officer); *provided*, that the Company shall not unreasonably classify information as Proprietary Information.

(b) Non-Solicitation of Employees. The Executive recognizes that he possesses and will possess confidential information about other employees of the Company and its Affiliates relating to their education, experience, skills, abilities, compensation and benefits, and inter-personal relationships with customers of the Company and its Affiliates. The Executive recognizes that the information he possesses and will possess about these other employees is not generally known, is of substantial value to the Company and its Affiliates in developing their business and in securing and retaining customers, and has been and will be acquired by him because of his business position with the Company and its Affiliates. The Executive agrees that at all times during the Executive's employment with the Company and for a period of one (1) year thereafter, he will not, directly or indirectly, solicit or recruit any employee of the Company or its Affiliates for the purpose of being employed by him or by any competitor of the Company or its Affiliates on whose behalf he is acting as an agent, representative or employee and that he will not convey any such confidential information or trade secrets about other employees of the Company and its Affiliates to any other person; *provided, however*, that it shall not constitute a solicitation or recruitment of employment in violation of this paragraph to discuss employment opportunities with any employee of the Company or its Affiliates who has either first contacted the Executive or regarding whose employment the Executive has discussed with and received the written approval of the Company's Vice President, Human Resources (or, if such position is vacant, the Company's then Chief Executive Officer), prior to making such solicitation or recruitment. In view of the nature of the Executive's employment with the Company, the Executive likewise agrees that the Company and its Affiliates would be irreparably harmed by any solicitation or recruitment in violation of the terms of this paragraph and that the Company and its Affiliates shall therefore be entitled to preliminary and/or permanent injunctive relief prohibiting the Executive from engaging in any activity or threatened activity in violation of the terms of this paragraph and to any other relief available to them.

(c) Survival of Provisions. The obligations contained in Section 14(a) and Section 14(b) above shall survive the termination of the Executive's employment within the Company and shall be fully enforceable thereafter. If it is determined by a court of competent jurisdiction in any state that any restriction in Section 14(a) or Section 14(b) above is excessive in duration or scope or is unreasonable or unenforceable under the laws of that state, it is the intention of the parties that such restriction may be modified or amended by the court to render it enforceable to the maximum extent permitted by the law of that state.

(d) Release; Lump Sum Payment. In the event of the Executive's Involuntary Termination, if the Executive (i) agrees to the covenants described in Section 14(a) and Section 14(b) above, (ii) executes a release (the "Release") of all claims substantially in the form attached hereto as Exhibit A within fifty (50) days after the date of Involuntary Termination and does not revoke such Release in accordance with the terms thereof, and (iii) agrees to provide the consulting services described

in Section 14(e) below, then in consideration for such covenants, the Company shall pay the Executive, in one cash lump sum, an amount (the "Consulting Payment") in cash equal to one-half (0.5) times the greater of: (X) 145% of the Executive's Annual Base Salary as in effect on the Date of Termination, and (Y) the Executive's Annual Base Salary as in effect on the Date of Termination, plus the Executive's Average Annual Bonus. Except as provided in this subsection, the Consulting Payment shall be paid on such date as is determined by the Company within the ten (10) day period commencing on the 60th day after the date of the Executive's Involuntary Termination; *provided, however*, that if the Executive is a Specified Employee on the date of the Executive's Involuntary Termination, the Consulting Payment shall be paid as provided in Section 10 hereof. The Executive shall have the right to elect to defer the Consulting Payment under the terms and conditions of the Company's Deferred Compensation Plan. Any such deferral election shall be made in accordance with Section 18(b) hereof.

(e) Consulting. If the Executive agrees to the covenants described in Section 14(d) above, then the Executive shall have the obligation to provide consulting services to the Company as an independent contractor, commencing on the Date of Termination and ending on the first anniversary of the Date of Termination (the "Consulting Period"). The Executive shall hold himself available at reasonable times and on reasonable notice to render such consulting services as may be so assigned to him by the Board or the Company's then Chief Executive Officer; *provided, however*, that unless the parties otherwise agree, the consulting services rendered by the Executive during the Consulting Period shall not exceed twenty (20) hours each month; and, *provided, further*, that the consulting services rendered by the Executive during the Consulting Period shall in no event exceed twenty percent (20%) of the average level of services performed by the Executive for the Company over the thirty-six (36) month period immediately preceding the Executive's Separation from Service (or the full period of services to the Company, if the Executive has been providing services to the Company for less than thirty-six (36) months). The Company agrees to use its best efforts during the Consulting Period to secure the benefit of the Executive's consulting services so as to minimize the interference with the Executive's other activities, including requiring the performance of consulting services at the Company's offices only when such services may not be reasonably performed off-site by the Executive.

Section 15. Legal Fees.

(a) Reimbursement of Legal Fees. Subject to subsection (b), in the event of the Executive's Separation from Service either (1) prior to a Change in Control, or (2) on or within two (2) years following a Change in Control, the Company shall reimburse the Executive for all legal fees and expenses (including but not limited to fees and expenses in connection with any arbitration) incurred by the Executive in disputing any issue arising under this Agreement relating to the Executive's Separation from Service or in seeking to obtain or enforce any benefit or right provided by this Agreement.

(b) Requirements for Reimbursement. The Company shall reimburse the Executive's legal fees and expenses pursuant to subsection (a) above only to the extent the arbitrator or court determines the following: (i) the Executive disputed such issue, or sought to obtain or enforce such benefit or right, in good faith, (ii) the Executive had a reasonable basis for such claim, and (iii) in the case of subsection (a)(1) above, the Executive is the prevailing party. In addition, the Company shall reimburse such legal fees and expenses, only if such legal fees and expenses are incurred during the twenty (20) year period beginning on the date of the Executive's Separation from Service. The legal fees and expenses paid to the Executive for any taxable year of the Executive shall not affect the legal fees and expenses paid to the Executive for any other taxable year of the Executive. The legal fees and expenses shall be paid to the Executive on or before the last day of the Executive's taxable year following the taxable year in which the fees or expenses are incurred. The Executive's right to reimbursement of legal fees and expenses shall not be subject to liquidation or exchange for any other benefit. Such right to reimbursement of legal fees and expenses shall be provided in a manner that complies with Treasury Regulation Section 1.409A-3(i)(1)(iv). If the Executive is a Specified Employee on the date of the

Executive's Separation from Service, such right to reimbursement of legal fees and expenses shall be paid as provided in Section 10 hereof.

Section 16. Successors.

(a) Assignment by the Executive. This Agreement is personal to the Executive and without the prior written consent of Sempra Energy shall not be assignable by the Executive otherwise than by will or the laws of descent and distribution. This Agreement shall inure to the benefit of and be enforceable by the Executive's legal representatives.

(b) Successors and Assigns of Sempra Energy. This Agreement shall inure to the benefit of and be binding upon Sempra Energy, its successors and assigns. Sempra Energy may not assign this Agreement to any person or entity (except for a successor described in Section 16(c), (d) or (e) below) without the Executive's written consent.

(c) Assumption. Sempra Energy shall require any successor (whether direct or indirect, by purchase, merger, consolidation or otherwise) to all or substantially all of the business and/or assets of Sempra Energy to assume expressly and agree to perform the obligations and satisfy and discharge the liabilities of this Agreement in the same manner and to the same extent that Sempra Energy would have been required to perform the obligations and satisfy and discharge the liabilities under this Agreement if no such succession had taken place, and Sempra Energy shall have no further obligations and liabilities under this Agreement. Upon such assumption, references to Sempra Energy in this Agreement shall be replaced with references to such successor.

(d) Sale of Subsidiary. In the event that (i) the Executive is employed by a direct or indirect subsidiary of Sempra Energy that is a member of the Sempra Energy Control Group, (ii) Sempra Energy, directly or indirectly through one or more intermediaries, sells or otherwise disposes of such subsidiary, and (iii) such subsidiary ceases to be a member of the Sempra Energy Control Group, then if, on the date such subsidiary ceases to be a member of the Sempra Energy Control Group, the Executive continues in employment with such subsidiary and the Executive does not have a Separation from Service, Sempra Energy shall require such subsidiary or any successor (whether direct or indirect, by purchase merger, consolidation or otherwise) to such subsidiary, or the parent thereof, to assume expressly and agree to perform the obligations and satisfy and discharge the liabilities under this Agreement in the same manner and to the same extent that Sempra Energy would have been required to perform the obligations and satisfy and discharge the liabilities under this Agreement, if such subsidiary had not ceased to be part of the Sempra Energy Control Group, and, upon such assumption, Sempra Energy shall have no further obligations and liabilities under the Agreement. Upon such assumption, (i) references to Sempra Energy in this Agreement shall be replaced with references to such subsidiary, or such successor or parent thereof, assuming this Agreement, and (ii) subsection (b) of the definition of "Cause" and subsection (b) of the definition of "Good Reason" shall apply thereafter, as if a Change in Control had occurred on the date of such cessation.

(e) Sale of Assets of Subsidiary. In the event that (i) the Executive is employed by a direct or indirect subsidiary of Sempra Energy, and (ii) such subsidiary sells or otherwise disposes of substantial assets of such subsidiary to an unrelated service recipient, as determined under Treasury Regulation Section 1.409A-1(f)(2)(ii) (the "Asset Purchaser"), in a transaction described in Treasury Regulation Section 1.409A-1(h)(4) (an "Asset Sale"), then if, on the date of such Asset Sale, the Executive becomes employed by the Asset Purchaser, Sempra Energy and the Asset Purchaser shall specify, in accordance with Treasury Regulation Section 1.409A-1(h)(4), that the Executive shall not be treated as having a Separation from Service, and Sempra Energy shall require such Asset Purchaser, or the parent thereof, to assume expressly and agree to perform the obligations and satisfy and discharge the liabilities under this Agreement in the same manner and to the same extent that Sempra Energy would have been required to perform the obligations and satisfy and discharge the liabilities under this Agreement, if the Asset Sale had not taken place, and, upon such assumption, Sempra Energy shall have no further obligations and liabilities under the Agreement. Upon such assumption, (i) references to

Sempra Energy in this Agreement shall be replaced with references to the Asset Purchaser or the parent thereof, as applicable, and (ii) subsection (b) of the definition of "Cause" and subsection (b) of the definition of "Good Reason" shall apply thereafter, as if a Change in Control had occurred on the date of the Asset Sale.

Section 17. Administration Prior to Change in Control. Prior to a Change in Control, the Compensation Committee shall have full and complete authority to construe and interpret the provisions of this Agreement, to determine an individual's entitlement to benefits under this Agreement, to make in its sole and absolute discretion all determinations contemplated under this Agreement, to investigate and make factual determinations necessary or advisable to administer or implement this Agreement, and to adopt such rules and procedures as it deems necessary or advisable for the administration or implementation of this Agreement. All determinations made under this Agreement by the Compensation Committee shall be final and binding on all interested persons. Prior to a Change in Control, the Compensation Committee may delegate responsibilities for the operation and administration of this Agreement to one or more officers or employees of the Company. The provisions of this Section 17 shall terminate and be of no further force and effect upon the occurrence of a Change in Control.

Section 18. Section 409A of the Code.

(a) Compliance with and Exemption from Section 409A of the Code. Certain payments and benefits payable under this Agreement (including, without limitation, the Section 409A Payments) are intended to comply with the requirements of Section 409A of the Code. Certain payments and benefits payable under this Agreement are intended to be exempt from the requirements of Section 409A of the Code. This Agreement shall be interpreted in accordance with the applicable requirements of, and exemptions from, Section 409A of the Code and the Treasury Regulations thereunder. To the extent the payments and benefits under this Agreement are subject to Section 409A of the Code, this Agreement shall be interpreted, construed and administered in a manner that satisfies the requirements of Sections 409A(a)(2), (3) and (4) of the Code and the Treasury Regulations thereunder (subject to the transitional relief under Internal Revenue Service Notice 2005-1, the Proposed Regulations under Section 409A of the Code, Internal Revenue Service Notice 2006-79, Internal Revenue Service Notice 2007-78, Internal Revenue Service Notice 2007-86 and other applicable authority issued by the Internal Revenue Service). As provided in Internal Revenue Notice 2007-86, notwithstanding any other provision of this Agreement, with respect to an election or amendment to change a time or form of payment under this Agreement made on or after January 1, 2008 and on or before December 31, 2008, the election or amendment shall apply only with respect to payments that would not otherwise be payable in 2008, and shall not cause payments to be made in 2008 that would not otherwise be payable in 2008. If the Company and the Executive determine that any compensation, benefits or other payments that are payable under this Agreement and intended to comply with Sections 409A(a)(2), (3) and (4) of the Code do not comply with Section 409A of the Code, the Treasury Regulations thereunder and other applicable authority issued by the Internal Revenue Service, to the extent permitted under Section 409A of the Code, the Treasury Regulations thereunder and any applicable authority issued by the Internal Revenue Service, the Company and the Executive agree to amend this Agreement, or take such other actions as the Company and the Executive deem reasonably necessary or appropriate, to cause such compensation, benefits and other payments to comply with the requirements of Section 409A of the Code, the Treasury Regulations thereunder and other applicable authority issued by the Internal Revenue Service, while providing compensation, benefits and other payments that are, in the aggregate, no less favorable than the compensation, benefits and other payments provided under this Agreement. In the case of any compensation, benefits or other payments that are payable under this Agreement and intended to comply with Sections 409A(a)(2), (3) and (4) of the Code, if any provision of the Agreement would cause such compensation, benefits or other payments to fail to so comply, such provision shall not be effective and shall be null and void with respect to such compensation, benefits or other payments to the extent such provision would cause a failure to comply, and such provision shall otherwise remain in full force and effect.

(b) Deferral Elections. As provided in Sections 5(f), 6(g) and 14(d), the Executive may elect to defer the Pre-Change in Control Severance Payment, the Post-Change in Control Severance Payment and the Consulting Payment as follows. The Executive's deferral election shall satisfy the requirements of Treasury Regulation Section 1.409A-2(b) and the terms and conditions of the Deferred Compensation Plan. Such deferral election shall designate the whole percentage (up to a maximum of 100%) of the Pre-Change in Control Severance Payment, the Post-Change in Control Severance Payment and the Consulting Payment to be deferred, shall be irrevocable when made, and shall not take effect until at least twelve (12) months after the date on which the election is made. Such deferral election shall provide that the amount deferred shall be deferred for a period of not less than five (5) years from the date the payment of the amount deferred would otherwise have been made, in accordance with Treasury Regulation Section 1.409A-2(b)(1)(ii).

Section 19. Miscellaneous.

(a) Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the State of California, without reference to its principles of conflict of laws. The captions of this Agreement are not part of the provisions hereof and shall have no force or effect. This Agreement may not be amended, modified, repealed, waived, extended or discharged except by an agreement in writing signed by the party against whom enforcement of such amendment, modification, repeal, waiver, extension or discharge is sought. No person, other than pursuant to a resolution of the Board or a committee thereof, shall have authority on behalf of the Company to agree to amend, modify, repeal, waive, extend or discharge any provision of this Agreement or anything in reference thereto.

(b) Notices. All notices and other communications hereunder shall be in writing and shall be given by hand delivery to the other party or by registered or certified mail, return receipt requested, postage prepaid, addressed, in either case, to the Company's headquarters or to such other address as either party shall have furnished to the other in writing in accordance herewith. Notices and communications shall be effective when actually received by the addressee.

(c) Severability. The invalidity or unenforceability of any provision of this Agreement shall not affect the validity or enforceability of any other provision of this Agreement.

(d) Taxes. The Company may withhold from any amounts payable under this Agreement such federal, state or local taxes as shall be required to be withheld pursuant to any applicable law or regulation.

(e) No Waiver. The Executive's or the Company's failure to insist upon strict compliance with any provision hereof or any other provision of this Agreement or the failure to assert any right the Executive or the Company may have hereunder, including, without limitation, the right of the Executive to terminate employment for Good Reason pursuant to Section 1 hereof, or the right of the Company to terminate the Executive's employment for Cause pursuant to Section 1 hereof shall not be deemed to be a waiver of such provision or right or any other provision or right of this Agreement.

(f) Entire Agreement; Exclusive Benefit; Supersession of Prior Agreement. This instrument contains the entire agreement of the Executive, the Company or any predecessor or subsidiary thereof with respect to any severance or termination pay. The Pre-Change in Control Severance Payment, the Post-Change in Control Severance Payment and all other benefits provided hereunder shall be in lieu of any other severance payments to which the Executive is entitled under any other severance plan or program or arrangement sponsored by the Company, as well as pursuant to any individual employment or severance agreement that was entered into by the Executive and the Company, and, upon the Effective Date of this Agreement, all such plans, programs, arrangements and agreements are hereby automatically superseded and terminated.

(g) No Right of Employment. Nothing in this Agreement shall be construed as giving the Executive any right to be retained in the employ of the Company or shall interfere in any way with the right of the Company to terminate the Executive's employment at any time, with or without Cause.

(h) Unfunded Obligation. The obligations under this Agreement shall be unfunded. Benefits payable under this Agreement shall be paid from the general assets of the Company. The Company shall have no obligation to establish any fund or to set aside any assets to provide benefits under this Agreement.

(i) Termination upon Sale of Assets of Subsidiary. Notwithstanding anything contained herein, this Agreement shall automatically terminate and be of no further force and effect and no benefits shall be payable hereunder in the event that (i) the Executive is employed by a direct or indirect subsidiary of Sempra Energy, and (ii) an Asset Sale (as defined in Section 16(e)) occurs (other than such a sale or disposition which is part of a transaction or series of transactions which would result in a Change in Control), and (iii) as a result of such Asset Sale, the Executive is offered employment by the Asset Purchaser in an executive position with reasonably comparable status, compensation, benefits and severance agreement (including the assumption of this Agreement in accordance with Section 16(e)) and which is consistent with the Executive's experience and education, but the Executive declines to accept such offer and the Executive fails to become employed by the Asset Purchaser on the date of the Asset Sale.

(j) Term. The term of this Agreement shall commence on the Effective Date and shall continue until the third (3rd) anniversary of the Effective Date; *provided*, *however*, that commencing on the second (2nd) anniversary of the Effective Date (and each anniversary of the Effective Date thereafter), the term of this Agreement shall automatically be extended for one (1) additional year, unless at least ninety (90) days prior to such date, the Company or the Executive shall give written notice to the other party that it or he, as the case may be, does not wish to so extend this Agreement. Notwithstanding the foregoing, if the Company gives such written notice to the Executive less than two (2) years after a Change in Control, the term of this Agreement shall be automatically extended until the later of (A) the date that is one (1) year after the anniversary of the Effective Date that follows such written notice or (B) the second (2nd) anniversary of the Change in Control Date.

(k) Counterparts. This Agreement may be executed in several counterparts, each of which shall be deemed to be an original but all of which together shall constitute one and the same instrument.

IN WITNESS WHEREOF, the Executive and, pursuant to due authorization from its Board of Directors, the Company have caused this Agreement to be executed as of the day and year first above written.

SEMPRA ENERGY

_____

G. Joyce Rowland
Senior Vice President, Human Resources, Diversity and Inclusion

_____

Date

EXECUTIVE

_____

Scott Drury
Vice President, Human Resources, Diversity and Inclusion

_____

Date

EXHIBIT A

GENERAL RELEASE

This GENERAL RELEASE (the "Agreement"), dated _____, is made by and between _____, a California corporation (the "Company") and _____ ("you" or "your").

WHEREAS, you and the Company have previously entered into that certain Severance Pay Agreement dated _____, 20__ (the "Severance Pay Agreement"); and

WHEREAS, Section 14(d) of the Severance Pay Agreement provides for the payment of a benefit to you by the Company in consideration for certain covenants, including your execution and non-revocation of a general release of claims by you against the Company and its subsidiaries and affiliates.

NOW, THEREFORE, in consideration of the premises and the mutual covenants herein contained, you and the Company hereby agree as follows:

ONE: Your signing of this Agreement confirms that your employment with the Company shall terminate at the close of business on _____, or earlier upon our mutual agreement.

TWO: As a material inducement for the payment of the benefit under Section 14(d) of the Severance Pay Agreement, and except as otherwise provided in this Agreement, you and the Company hereby irrevocably and unconditionally release, acquit and forever discharge the other from any and all Claims either may have against the other. For purposes of this Agreement and the preceding sentence, the words "Releasee" or "Releasees" and "Claim" or "Claims" shall have the meanings set forth below:

(a) The words "Releasee" or "Releasees" shall refer to you and to the Company and each of the Company's owners, stockholders, predecessors, successors, assigns, agents, directors, officers, employees, representatives, attorneys, advisors, parent companies, divisions, subsidiaries, affiliates (and agents, directors, officers, employees, representatives, attorneys and advisors of such parent companies, divisions, subsidiaries and affiliates) and all persons acting by, through, under or in concert with any of them.

(b) The words "Claim" or "Claims" shall refer to any charges, complaints, claims, liabilities, obligations, promises, agreements, controversies, damages, actions, causes of action, suits, rights, demands, costs, losses, debts and expenses (including attorneys' fees and costs actually incurred) of any nature whatsoever, known or unknown, suspected or unsuspected, which you or the Company now, in the past or, except as limited by law or regulation such as the Age Discrimination in Employment Act (ADEA), in the future may have, own or hold against any of the Releasees; *provided, however*, that the word "Claim" or "Claims" shall not refer to any charges, complaints, claims, liabilities, obligations, promises, agreements, controversies, damages, actions, causes of action, suits, rights, demands, costs, losses, debts and expenses (including attorneys' fees and costs actually incurred) arising under [*identify severance, employee benefits, stock option, indemnification and D&O and other agreements containing duties, rights obligations etc. of either party that are to remain operative*]. Claims released pursuant to this Agreement by you and the Company include, but are not limited to, rights arising out of alleged violations of any contracts, express or implied, any tort, any claim that you failed to perform or negligently performed or breached your duties during employment at the Company, any legal restrictions on the Company's right to terminate employees or any federal, state or other governmental statute,

regulation, or ordinance, including, without limitation: (1) Title VII of the Civil Rights Act of 1964 (race, color, religion, sex and national origin discrimination); (2) 42 U.S.C. § 1981 (discrimination); (3) 29 U.S.C. §§ 621-634 (age discrimination); (4) 29 U.S.C. § 206(d)(l) (equal pay); (5) 42 U.S.C. §§ 12101, et seq. (disability); (6) the California Constitution, Article I, Section 8 (discrimination); (7) the California Fair Employment and Housing Act (discrimination, including race, color, national origin, ancestry, physical handicap, medical condition, marital status, religion, sex or age); (8) California Labor Code Section 1102.1 (sexual orientation discrimination); (9) the Executive Order 11246 (race, color, religion, sex and national origin discrimination); (10) the Executive Order 11141 (age discrimination); (11) §§ 503 and 504 of the Rehabilitation Act of 1973 (handicap discrimination); (12) The Worker Adjustment and Retraining Act (WARN Act); (13) the California Labor Code (wages, hours, working conditions, benefits and other matters); (14) the Fair Labor Standards Act (wages, hours, working conditions and other matters); the Federal Employee Polygraph Protection Act (prohibits employer from requiring employee to take polygraph test as condition of employment); and (15) any federal, state or other governmental statute, regulation or ordinance which is similar to any of the statutes described in clauses (1) through (14).

THREE: You and the Company expressly waive and relinquish all rights and benefits afforded by any statute (including but not limited to Section 1542 of the Civil Code of the State of California) which limits the effect of a release with respect to unknown claims. You and the Company do so understanding and acknowledging the significance of the release of unknown claims and the waiver of statutory protection against a release of unknown claims (including but not limited to Section 1542). Section 1542 of the Civil Code of the State of California states as follows:

> “A GENERAL RELEASE DOES NOT EXTEND TO CLAIMS WHICH THE CREDITOR DOES NOT KNOW OR SUSPECT TO EXIST IN HIS FAVOR AT THE TIME OF EXECUTING THE RELEASE, WHICH IF KNOWN BY HIM MUST HAVE MATERIALLY AFFECTED HIS SETTLEMENT WITH THE DEBTOR.”

Thus, notwithstanding the provisions of Section 1542 or of any similar statute, and for the purpose of implementing a full and complete release and discharge of the Releasees, you and the Company expressly acknowledge that this Agreement is intended to include in its effect, without limitation, all Claims which are known and all Claims which you or the Company do not know or suspect to exist in your or the Company’s favor at the time of execution of this Agreement and that this Agreement contemplates the extinguishment of all such Claims.

FOUR: The parties acknowledge that they might hereafter discover facts different from, or in addition to, those they now know or believe to be true with respect to a Claim or Claims released herein, and they expressly agree to assume the risk of possible discovery of additional or different facts, and agree that this Agreement shall be and remain effective, in all respects, regardless of such additional or different discovered facts.

FIVE: You hereby represent and acknowledge that you have not filed any Claim of any kind against the Company or others released in this Agreement. You further hereby expressly agree never to initiate against the Company or others released in this Agreement any administrative proceeding, lawsuit or any other legal or equitable proceeding of any kind asserting any Claims that are released in this Agreement.

The Company hereby represents and acknowledges that it has not filed any Claim of any kind against you or others released in this Agreement. The Company further hereby expressly agrees never to initiate against you or others released in this Agreement any administrative proceeding, lawsuit or

any other legal or equitable proceeding of any kind asserting any Claims that are released in this Agreement.

SIX: You hereby represent and agree that you have not assigned or transferred, or attempted to have assigned or transfer, to any person or entity, any of the Claims that you are releasing in this Agreement.

The Company hereby represents and agrees that it has not assigned or transferred, or attempted to have assigned or transfer, to any person or entity, any of the Claims that it is releasing in this Agreement.

SEVEN: As a further material inducement to the Company to enter into this Agreement, you hereby agree to indemnify and hold each of the Releasees harmless from all loss, costs, damages, or expenses, including without limitation, attorneys' fees incurred by the Releasees, arising out of any breach of this Agreement by you or the fact that any representation made in this Agreement by you was false when made.

As a further material inducement to you to enter into this Agreement, the Company hereby agrees to indemnify and hold each of the Releasees harmless from all loss, costs, damages, or expenses, including without limitation, attorneys' fees incurred by the Releasees, arising out of any breach of this Agreement by it or the fact that any representation made in this Agreement by it was knowingly false when made.

EIGHT: You and the Company represent and acknowledge that in executing this Agreement, neither is relying upon any representation or statement not set forth in this Agreement or the Severance Agreement.

NINE:

(a) This Agreement shall not in any way be construed as an admission by the Company that it has acted wrongfully with respect to you or any other person, or that you have any rights whatsoever against the Company, and the Company specifically disclaims any liability to or wrongful acts against you or any other person, on the part of itself, its employees or its agents. This Agreement shall not in any way be construed as an admission by you that you have acted wrongfully with respect to the Company, or that you failed to perform your duties or negligently performed or breached your duties, or that the Company had good cause to terminate your employment.

(b) If you are a party or are threatened to be made a party to any proceeding by reason of the fact that you were an officer or director of the Company, the Company shall indemnify you against any expenses (including reasonable attorneys' fees; *provided*, that counsel has been approved by the Company prior to retention, which approval shall not be unreasonably withheld), judgments, fines, settlements and other amounts actually or reasonably incurred by you in connection with that proceeding; *provided*, that you acted in good faith and in a manner you reasonably believed to be in the best interest of the Company. The limitations of California Corporations Code Section 317 shall apply to this assurance of indemnification.

(c) You agree to cooperate with the Company and its designated attorneys, representatives and agents in connection with any actual or threatened judicial, administrative or other legal or equitable proceeding in which the Company is or may become involved. Upon reasonable notice, you agree to meet with and provide to the Company or its designated attorneys, representatives or agents

all information and knowledge you have relating to the subject matter of any such proceeding. The Company agrees to reimburse you for any reasonable costs you incur in providing such cooperation.

TEN: This Agreement is made and entered into in California. This Agreement shall in all respects be interpreted, enforced and governed by and under the laws of the State of California and applicable Federal law. Any dispute about the validity, interpretation, effect or alleged violation of this Agreement (an "arbitrable dispute") must be submitted to arbitration in San Diego, California. Arbitration shall take place before an experienced employment arbitrator licensed to practice law in such state and selected in accordance with the then existing JAMS arbitration rules applicable to employment disputes; *provided, however,* that in any event, the arbitrator shall allow reasonable discovery. Arbitration shall be the exclusive remedy for any arbitrable dispute. The arbitrator in any arbitrable dispute shall not have authority to modify or change the Agreement in any respect. You and the Company shall each be responsible for payment of one-half (1/2) the amount of the arbitrator's fee(s); *provided, however,* that in no event shall you be required to pay any fee or cost of arbitration that is unique to arbitration or exceeds the costs you would have incurred had any arbitrable dispute been pursued in a court of competent jurisdiction. The Company shall make up any shortfall. Should any party to this Agreement institute any legal action or administrative proceeding against the other with respect to any Claim waived by this Agreement or pursue any arbitrable dispute by any method other than arbitration, the prevailing party shall be entitled to recover from the non-prevailing party all damages, costs, expenses and attorneys' fees incurred as a result of that action. The arbitrator's decision and/or award shall be rendered in writing and will be fully enforceable and subject to an entry of judgment by the Superior Court of the State of California for the County of San Diego, or any other court of competent jurisdiction.

ELEVEN: Both you and the Company understand that this Agreement is final and binding eight (8) days after its execution and return. Should you nevertheless attempt to challenge the enforceability of this Agreement as provided in Paragraph TEN or, in violation of that Paragraph, through litigation, as a further limitation on any right to make such a challenge, you shall initially tender to the Company, by certified check delivered to the Company, all monies received pursuant to Section 14(d) of the Severance Pay Agreement, plus interest, and invite the Company to retain such monies and agree with you to cancel this Agreement and void the Company's obligations under Section 14(d) of the Severance Pay Agreement. In the event the Company accepts this offer, the Company shall retain such monies and this Agreement shall be canceled and the Company shall have no obligation under Section 14(d) of the Severance Pay Agreement. In the event the Company does not accept such offer, the Company shall so notify you and shall place such monies in an interest-bearing escrow account pending resolution of the dispute between you and the Company as to whether or not this Agreement and the Company's obligations under Section 14(d) of the Severance Pay Agreement shall be set aside and/or otherwise rendered voidable or unenforceable. Additionally, any consulting agreement then in effect between you and the Company shall be immediately rescinded with no requirement of notice.

TWELVE: Any notices required to be given under this Agreement shall be delivered either personally or by first class United States mail, postage prepaid, addressed to the respective parties as follows:

To Company: [TO COME]

Attn: [TO COME]

To You: _____

_____

_____

THIRTEEN: You understand and acknowledge that you have been given a period of forty-five (45) days to review and consider this Agreement (as well as statistical data on the persons eligible for similar benefits) before signing it and may use as much of this forty-five (45) day period as you wish prior to signing. You are encouraged, at your personal expense, to consult with an attorney before signing this Agreement. You understand and acknowledge that whether or not you do so is your decision. You may revoke this Agreement within seven (7) days of signing it. If you wish to revoke, the Company's Vice President, Human Resources must receive written notice from you no later than the close of business on the seventh (7th) day after you have signed the Agreement. If revoked, this Agreement shall not be effective and enforceable, and you will not receive payments or benefits under Section 14(d) of the Severance Pay Agreement.

FOURTEEN: This Agreement constitutes the entire agreement of the parties hereto and supersedes any and all other agreements (except the Severance Pay Agreement) with respect to the subject matter of this Agreement, whether written or oral, between you and the Company. All modifications and amendments to this Agreement must be in writing and signed by the parties.

FIFTEEN: Each party agrees, without further consideration, to sign or cause to be signed, and to deliver to the other party, any other documents and to take any other action as may be necessary to fulfill the obligations under this Agreement.

SIXTEEN: If any provision of this Agreement or the application thereof is held invalid, the invalidity shall not affect other provisions or applications of the Agreement which can be given effect without the invalid provisions or application; and to this end the provisions of this Agreement are declared to be severable.

SEVENTEEN: This Agreement may be executed in counterparts.

I have read the foregoing General Release, and I accept and agree to the provisions it contains and hereby execute it voluntarily and with full understanding of its consequences. I am aware it includes a release of all known or unknown claims.

DATED: _____

_____

DATED: _____

_____

You acknowledge that you first received this Agreement on [date].

_____

SEMPRA ENERGY

SEVERANCE PAY AGREEMENT

THIS AGREEMENT (this "Agreement"), dated as of April 3, 2010, (the "Effective Date") is made by and between SEMPRA ENERGY, a California corporation ("Sempra Energy"), and Caroline A. Winn (the "Executive").

WHEREAS, the Executive is currently employed by Sempra Energy or a direct or indirect subsidiary of Sempra Energy (Sempra Energy and its subsidiaries are hereinafter collectively referred to as the "Company") as Vice President - Customer Services; and

WHEREAS, Sempra Energy and the Executive desire to enter into this Agreement; and

WHEREAS, the Board of Directors of Sempra Energy (the "Board") has authorized this Agreement.

NOW, THEREFORE, in consideration of the premises and mutual covenants herein contained, the Company and the Executive hereby agree as follows:

Section 1. Definitions. For purposes of this Agreement, the following capitalized terms have the meanings set forth below:

"Accounting Firm" has the meaning assigned thereto in Section 9(b) hereof.

"Act" has the meaning assigned thereto in Section 2 hereof.

"Additional Post-Change in Control Severance Payment" has the meaning assigned thereto in Section 6(a) hereof.

"Affiliate" has the meaning set forth in Rule 12b-2 promulgated under the Exchange Act.

"Annual Base Salary" means the Executive's annual base salary from the Company.

"Asset Purchaser" has the meaning assigned thereto in Section 16(e).

"Asset Sale" has the meaning assigned thereto in Section 16(e).

"Average Annual Bonus" means the average of the annual bonuses from the Company earned by the Executive with respect to the three (3) fiscal years of the Company immediately preceding the Date of Termination (the "Bonus Fiscal Years"); *provided*, *however*, that, if the Executive was employed by the Company during all or any portion of one or two of the Bonus Fiscal Years (but not three of the Bonus Fiscal Years), "Average Annual Bonus" means the average of the annual bonuses (if any) from the Company earned by the Executive with respect to the Bonus Fiscal Years during all or any portion of which the Executive was employed by the Company; and, *provided*, *further*, that, if the Executive was not employed by the Company during all or any portion of any of the Bonus Fiscal Years, "Average Annual Bonus" means zero.

"Beneficial Owner" has the meaning set forth in Rule 13d-3 promulgated under the Exchange Act.

"Cause" means:

(a) Prior to a Change in Control, (i) the willful failure by the Executive to substantially perform the Executive's duties with the Company (other than any such failure resulting from the Executive's incapacity due to physical or mental illness, (ii) the grossly negligent performance of such obligations referenced in clause (i) of this definition, (iii) the Executive's gross insubordination; and/or (iv) the Executive's commission of one or more acts of moral turpitude that constitute a violation of applicable law (including but not limited to a felony) which have or result in an adverse effect on the Company, monetarily or otherwise, or one or more significant acts of dishonesty. For purposes of clause (i) of this subsection (a), no act, or failure to act, on the Executive's part shall be deemed "willful" unless done, or omitted to be done, by the Executive not in good faith and without reasonable belief that the Executive's act, or failure to act, was in the best interests of the Company.

(b) From and after a Change in Control, (i) the willful and continued failure by the Executive to substantially perform the Executive's duties with the Company (other than any such failure resulting from the Executive's incapacity due to physical or mental illness or any such actual or anticipated failure after the issuance of a Notice of Termination for Good Reason by the Executive pursuant to Section 3 hereof) and/or (ii) the Executive's commission of one or more acts of moral turpitude that constitute a violation of applicable law (including but not limited to a felony) which have or result in an adverse effect on the Company, monetarily or otherwise, or one or more significant acts of dishonesty. For purposes of clause (i) of this subsection (b), no act, or failure to act, on the Executive's part shall be deemed "willful" unless done, or omitted to be done, by the Executive not in good faith and without reasonable belief that the Executive's act, or failure to act, was in the best interests of the Company. Notwithstanding the foregoing, the Executive shall not be deemed terminated for Cause pursuant to clause (i) of this subsection (b) unless and until the Executive shall have been provided with reasonable notice of and, if possible, a reasonable opportunity to cure the facts and circumstances claimed to provide a basis for termination of the Executive's employment for Cause.

"Change in Control" shall be deemed to have occurred on the date that a change in the ownership of Sempra Energy, a change in the effective control of Sempra Energy, or a change in the ownership of a substantial portion of assets of Sempra Energy occurs (each, as defined in subsection (a) below), except as otherwise provided in subsections (b), (c) and (d) below:

(a) (i) a "change in the ownership of Sempra Energy" occurs on the date that any one person, or more than one person acting as a group, acquires ownership of stock of Sempra Energy that, together with stock held by such person or group, constitutes more than fifty percent (50%) of the total fair market value or total voting power of the stock of Sempra Energy,

(ii) a "change in the effective control of Sempra Energy" occurs only on either of the following dates:

(A) the date any one person, or more than one person acting as a group, acquires (or has acquired during the twelve (12) month period ending on the date of the most recent acquisition by such person or persons) ownership of stock of Sempra Energy possessing thirty percent (30%) or more of the total voting power of the stock of Sempra Energy, or

(B) the date a majority of the members of the Board is replaced during any twelve (12) month period by directors whose appointment or election is not endorsed by a majority of the members of the Board before the date of appointment or election, and

(iii) a "change in the ownership of a substantial portion of assets of Sempra Energy" occurs on the date any one person, or more than one person acting as a group, acquires (or has acquired during the twelve (12) month period ending on the date of the most recent acquisition by such person or persons) assets from Sempra Energy that have a total gross fair market value equal to or more than eighty-five percent (85%) of the total gross fair market value of all of the assets of Sempra Energy immediately before such acquisition or acquisitions.

(b) A "change in the ownership of Sempra Energy" or "a change in the effective control of Sempra Energy" shall not occur under clause (a)(i) or (a)(ii) by reason of any of the following:

(i) an acquisition of ownership of stock of Sempra Energy directly from Sempra Energy or its Affiliates other than in connection with the acquisition by Sempra Energy or its Affiliates of a business,

(ii) a merger or consolidation which would result in the voting securities of Sempra Energy outstanding immediately prior to such merger or consolidation continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity or any parent thereof), in combination with the ownership of any trustee or other fiduciary holding securities under an employee benefit plan of the Company, at least sixty percent (60%) of the combined voting power of the securities of Sempra Energy or such surviving entity or any parent thereof outstanding immediately after such merger or consolidation, or

(iii) a merger or consolidation effected to implement a recapitalization of Sempra Energy (or similar transaction) in which no Person is or becomes the Beneficial Owner, directly or indirectly, of securities of Sempra Energy (not including the securities beneficially owned by such Person any securities acquired directly from Sempra Energy or its Affiliates other than in connection with the acquisition by Sempra Energy or its Affiliates of a business) representing twenty percent (20%) or more of the combined voting power of Sempra Energy's then outstanding securities.

(c) A "change in the ownership of a substantial portion of assets of Sempra Energy" shall not occur under clause (a)(iii) by reason of a sale or disposition by Sempra Energy of the assets of Sempra Energy to an entity, at least sixty percent (60%) of the combined voting power of the voting securities of which are owned by shareholders of Sempra Energy in substantially the same proportions as their ownership of Sempra Energy immediately prior to such sale.

(d) This definition of "Change in Control" shall be limited to the definition of a "change in control event" relating to Sempra Energy under Treasury Regulation Section 1.409A-3(i)(5). A "Change in Control" shall only occur if there is a "change in control event" relating to Sempra Energy under Treasury Regulation Section 1.409A-3(i)(5) with respect to the Executive.

"Change in Control Date" means the date on which a Change in Control occurs.

"Code" means the Internal Revenue Code of 1986, as amended.

"Compensation Committee" means the compensation committee of the Board.

"Consulting Period" has the meaning assigned thereto in Section 14(e) hereof.

"Date of Termination" has the meaning assigned thereto in Section 3(b) hereof.

"Deferred Compensation Plan" has the meaning assigned thereto in Section 5(f) hereof.

"Disability" has the meaning set forth in the Company's long-term disability plan or its successor; *provided*, *however*, that the Board may not terminate the Executive's employment hereunder by reason of Disability unless (i) at the time of such termination there is no reasonable expectation that the Executive will return to work within the next ninety (90) day period and (ii) such termination is permitted by all applicable disability laws.

"Exchange Act" means the Securities Exchange Act of 1934, as amended, and the applicable rulings and regulations thereunder.

"Excise Tax" has the meaning assigned thereto in Section 9(a) hereof.

"Good Reason" means:

a. Prior to a Change in Control, the occurrence of any of the following without the prior written consent of the Executive, unless such act or failure to act is corrected by the Company prior to the Date of Termination specified in the Notice of Termination (as required under Section 3 hereof):

i. the assignment to the Executive of any duties materially inconsistent with the range of duties and responsibilities appropriate to a senior Executive within the Company (such range determined by reference to past, current and reasonable practices within the Company);

ii. a material reduction in the Executive's overall standing and responsibilities within the Company, but not including (A) a mere change in title or (B) a transfer within the Company, which, in the case of both (A) and (B), does not adversely affect the Executive's overall status within the Company;

iii. a material reduction by the Company in the Executive's aggregate annualized compensation and benefits opportunities, except for across-the-board reductions (or modifications of benefit plans) similarly affecting all similarly situated executives (both of the Company and of any Person then in control of the Company) of comparable rank with the Executive;

iv. the failure by the Company to pay to the Executive any portion of the Executive's current compensation and benefits or any portion of an installment of deferred compensation under any deferred compensation program of the Company within thirty (30) days of the date such compensation is due;

v. any purported termination of the Executive's employment that is not effected pursuant to a Notice of Termination satisfying the requirements of Section 3 hereof; for purposes of this Agreement, no such purported termination shall be effective;

vi. the failure by Sempra Energy to perform its obligations under Section 16(c), (d) or (e) hereof;

vii. the failure by the Company to provide the indemnification and D&O insurance protection Section 11 of this Agreement requires it to provide; or

viii. the failure by Sempra Energy to comply with any material provision of this Agreement.

b. From and after a Change in Control, the occurrence of any of the following without the prior written consent of the Executive, unless such act or failure to act is corrected by the Company

prior to the Date of Termination specified in the Notice of Termination (as required under Section 3 hereof):

i. an adverse change in the Executive's title, authority, duties, responsibilities or reporting lines as in effect immediately prior to the Change in Control;

ii. a reduction by the Company in the Executive's aggregate annualized compensation opportunities, except for across-the-board reductions in base salaries, annual bonus opportunities or long-term incentive compensation opportunities of less than ten percent (10%) similarly affecting all similarly situated executives (both of the Company and of any Person then in control of the Company) of comparable rank with the Executive; or the failure by the Company to continue in effect any material benefit plan in which the Executive participates immediately prior to the Change in Control, unless an equitable arrangement (embodied in an ongoing substitute or alternative plan) has been made with respect to such plan, or the failure by the Company to continue the Executive's participation therein (or in such substitute or alternative plan) on a basis not materially less favorable, both in terms of the amount of benefits provided and the level of the Executive's participation relative to other participants, as existed at the time of the Change in Control;

iii. the relocation of the Executive's principal place of employment immediately prior to the Change in Control Date (the "Principal Location") to a location which is both further away from the Executive's residence and more than thirty (30) miles from such Principal Location, or the Company's requiring the Executive to be based anywhere other than such Principal Location (or permitted relocation thereof), or a substantial increase in the Executive's business travel obligations outside of the Southern California area as of the Effective Date other than any such increase that (A) arises in connection with extraordinary business activities of the Company of limited duration and (B) is understood not to be part of the Executive's regular duties with the Company;

iv. the failure by the Company to pay to the Executive any portion of the Executive's current compensation and benefits or any portion of an installment of deferred compensation under any deferred compensation program of the Company within thirty (30) days of the date such compensation is due;

v. any purported termination of the Executive's employment that is not effected pursuant to a Notice of Termination satisfying the requirements of Section 3 hereof; for purposes of this Agreement, no such purported termination shall be effective;

vi. the failure by Sempra Energy to perform its obligations under Section 16(c), (d) or (e) hereof;

vii. the failure by the Company to provide the indemnification and D&O insurance protection Section 11 of this Agreement requires it to provide; or

viii. the failure by Sempra Energy to comply with any material provision of this Agreement.

Following a Change in Control, the Executive's determination that an act or failure to act constitutes Good Reason shall be presumed to be valid unless such determination is deemed to be unreasonable by an arbitrator pursuant to the procedure described in Section 13 hereof. The Executive's right to terminate the Executive's employment for Good Reason shall not be affected by the Executive's incapacity due to physical or mental illness. The Executive's continued employment shall not constitute

consent to, or a waiver of rights with respect to, any act or failure to act constituting Good Reason hereunder.

"Incentive Compensation Awards" means awards granted under Incentive Compensation Plans providing the Executive with the opportunity to earn, on a year-by-year basis, annual and long-term incentive compensation.

"Incentive Compensation Plans" means annual incentive compensation plans and long-term incentive compensation plans of the Company, which long-term incentive compensation plans may include plans offering stock options, restricted stock and other long-term incentive compensation.

"Involuntary Termination" means (a) the Executive's Separation from Service by reason of a termination of employment by the Company other than for Cause, death, or Disability, or (b) the Executive's Separation from Service by reason of resignation of employment with the Company for Good Reason.

"JAMS Rules" has the meaning assigned thereto in Section 13 hereof.

"Notice of Termination" has the meaning assigned thereto in Section 3(a) hereof.

"Payment" has the meaning assigned thereto in Section 9(a) hereof.

"Payment in Lieu of Notice" has the meaning assigned thereto in Section 3(b) hereof.

"Person" has the meaning set forth in section 3(a)(9) of the Exchange Act, as modified and used in sections 13(d) and 14(d) thereof, except that such term shall not include (i) the Company or any of its Affiliates, (ii) a trustee or other fiduciary holding securities under an employee benefit plan of the Company or any of its Affiliates, (iii) an underwriter temporarily holding securities pursuant to an offering of such securities, (iv) a corporation owned, directly or indirectly, by the shareholders of the Company in substantially the same proportions as their ownership of stock of the Company, or (v) a person or group as used in Rule 13d-1(b) promulgated under the Exchange Act.

"Post-Change in Control Accrued Obligations" has the meaning assigned thereto in Section 6(a) hereof.

"Post-Change in Control Severance Payment" has the meaning assigned thereto in Section 6 hereof.

"Pre-Change in Control Accrued Obligations" has the meaning assigned thereto in Section 5(a) hereof.

"Pre-Change in Control Severance Payment" has the meaning assigned thereto in Section 5 hereof.

"Principal Location" has the meaning assigned thereto in clause (b)(iii) of the definition of Good Reason, above.

"Proprietary Information" has the meaning assigned thereto in Section 14(a) hereof.

"Release" has the meaning assigned thereto in Section 14(d) hereof.

"Section 409A Payments" means any of the following: (a) the Payment in Lieu of Notice; (b) the Pre-Change in Control Severance Payment; (c) the Post-Change in Control Severance Payment; (d) the Additional Post-Change in Control Severance Payment; (e) the Consulting Payment; (f) the financial planning services and the related payments provided under Sections 5(e) and 6(e); and (g) the legal fees and expenses reimbursed under Section 15.

"Sempra Energy Control Group" means Sempra Energy and all persons with whom Sempra Energy would be considered a single employer under Section 414(b) or 414(c) of the Code, as determined from time to time.

"Separation from Service", with respect to the Executive (or another Service Provider), means the Executive's (or such Service Provider's) (a) termination of employment or (b) other termination or reduction in services, provided that such termination or reduction in clause (a) or (b) constitutes a "separation from service," as defined in Treasury Regulation Section 1.409A-1(h), with respect to the Service Recipient.

"Service Provider" means the Executive or any other "service provider," as defined in Treasury Regulation Section 1.409A-1(f).

"Service Recipient," with respect to the Executive, means Sempra Energy (if the Executive is employed by Sempra Energy), or the subsidiary of Sempra Energy employing the Executive, whichever is applicable, and all persons considered part of the "service recipient," as defined in Treasury Regulation Section 1.409A-1(g), as determined from time to time. As provided in Treasury Regulation Section 1.409A-1(g), the "Service Recipient" shall mean the person for whom the services are performed and with respect to whom the legally binding right to compensation arises, and all persons with whom such person would be considered a single employer under Section 414(b) or 414(c) of the Code.

"Specified Employee" means a Service Provider who, as of the date of the Service Provider's Separation from Service is a "Key Employee" of the Service Recipient any stock of which is publicly traded on an established securities market or otherwise. For purposes of this definition, a Service Provider is a "Key Employee" if the Service Provider meets the requirements of Section 416(i)(1)(A)(i), (ii) or (iii) of the Code (applied in accordance with the Treasury Regulations thereunder and disregarding Section 416(i)(5) of the Code) at any time during the Testing Year. If a Service Provider is a "Key Employee" (as defined above) as of a Specified Employee Identification Date, the Service Provider shall be treated as "Key Employee" for the entire twelve (12) month period beginning on the Specified Employee Effective Date. For purposes of this definition, a Service Provider's compensation for a Testing Year shall mean such Service Provider's compensation, as determined under Treasury Regulation Section 1.415(c)-2(a) (and applied as if the Service Recipient were not using any safe harbor provided in Treasury Regulation Section 1.415(c)-2(d), were not using any of the elective special timing rules provided in Treasury Regulation Section 1.415(c)-2(e), and were not using any of the elective special rules provided in Treasury Regulation Section 1.415(c)-2(g)), from the Service Recipient for such Testing Year. The "Specified Employees" shall be determined in accordance with Section 409A(a)(2)(B)(i) of the Code and Treasury Regulation Section 1.409A-1(i).

"Specified Employee Effective Date" means the first day of the fourth month following the Specified Employee Identification Date. The Specified Employee Effective Date may be changed by Sempra Energy, in its discretion, in accordance with Treasury Regulation Section 1.409A-1(i)(4).

"Specified Employee Identification Date", for purposes of Treasury Regulation Section 1.409A-1(i)(3), shall mean December 31. The "Specified Employee Identification Date" shall apply to all

"nonqualified deferred compensation plans" (as defined in Treasury Regulation Section 1.409A-1(a)) of the Service Recipient and all affected Service Providers. The "Specified Employee Identification Date" may be changed by Sempra Energy, in its discretion, in accordance with Treasury Regulation Section 1.409A-1(i)(3).

"Testing Year" shall mean the twelve (12) month period ending on the Specified Employee Identification Date, as determined from time to time.

"Underpayment" has the meaning assigned thereto in Section 9(b) hereof.

For purposes of this Agreement, references to any "Treasury Regulation" shall mean such Treasury Regulation as in effect on the date hereof.

Section 2. Sarbanes-Oxley Act of 2002. Notwithstanding anything herein to the contrary, if the Company determines, in its good faith judgment, that any provision of this Agreement is likely to be interpreted as a personal loan prohibited by the Sarbanes-Oxley Act of 2002 and the rules and regulations promulgated thereunder (the "Act"), then such provision shall be modified as necessary or appropriate so as to not violate the Act; and if this cannot be accomplished, then the Company shall use its reasonable efforts to provide the Executive with similar, but lawful, substitute benefit(s) at a cost to the Company not to significantly exceed the amount the Company would have otherwise paid to provide such benefit(s) to the Executive. In addition, if the Executive is required to forfeit or to make any repayment of any compensation or benefit(s) to the Company under the Act or any other law, such forfeiture or repayment shall not constitute Good Reason.

Section 3. Notice and Date of Termination

(a) Any termination of the Executive's employment by the Company or by the Executive shall be communicated by a written notice of termination to the other party (the "Notice of Termination"). Where applicable, the Notice of Termination shall indicate the specific termination provision in this Agreement relied upon and shall set forth in reasonable detail the facts and circumstances claimed to provide a basis for termination of the Executive's employment under the provision so indicated. Unless the Board determines otherwise, a Notice of Termination by the Executive alleging a termination for Good Reason must be made within 180 days of the act or failure to act that the Executive alleges to constitute Good Reason.

(b) The date of the Executive's termination of employment with the Company (the "Date of Termination") shall be determined as follows: (i) if the Executive has a Separation from Service by reason of the Company terminating his or her employment, either with or without Cause, the Date of Termination shall be the date specified in the Notice of Termination (which, in the case of a termination by the Company other than for Cause, shall not be less than two (2) weeks from the date such Notice of Termination is given unless the Company elects to pay the Executive, in addition to any other amounts payable hereunder, an amount (the "Payment in Lieu of Notice") equal to two (2) weeks of the Executive's Annual Base Salary in effect on the Date of Termination), and (ii) if the basis for the Executive's Involuntary Termination is his resignation for Good Reason, the Date of Termination shall be determined by the Executive and specified in the Notice of Termination, but shall not in any event be less than fifteen (15) days nor more than sixty (60) days after the date such Notice of Termination is given. The Payment in Lieu of Notice shall be paid on such date as is determined by the Company within thirty (30) days after the date of the Executive's Separation from Service; *provided*, *however*, that if the

Executive is a Specified Employee on the date of his or her Separation from Service, such Payment in Lieu of Notice shall be paid as provided in Section 10 hereof.

Section 4. Termination from the Board. Upon the termination of the Executive's employment for any reason, the Executive's membership on the Board, the board of directors of any of the Company's Affiliates, any committees of the Board and any committees of the board of directors of any of the Company's Affiliates, if applicable, shall be automatically terminated.

Section 5. Severance Benefits upon Involuntary Termination Prior to Change in Control

. Except as provided in Section 6 and Section 19(i) hereof, in the event of the Involuntary Termination of the Executive prior to a Change in Control, the Company shall pay the Executive, in one lump sum cash payment, an amount (the "Pre-Change in Control Severance Payment") equal to one-half (0.5) times the greater of: (X) 145% of the Executive's Annual Base Salary as in effect on the Date of Termination, and (Y) the Executive's Annual Base Salary as in effect on the Date of Termination, plus the Executive's Average Annual Bonus. In addition to the Pre-Change in Control Severance Payment, the Executive shall be entitled to the following additional benefits specified in subsections (a) through (e). Except as provided in Section 5(f), the Pre-Change in Control Severance Payment and the payment under Section 5(a) shall be paid on such date as is determined by the Company within thirty (30) days after the date of the Involuntary Termination; *provided*, *however*, that, if the Executive is a Specified Employee on the date of the Executive's Involuntary Termination, the Pre-Change in Control Severance Payment and the financial planning services and the related payments provided under Section 5(e) shall be paid as provided in Section 10 hereof.

(a) Accrued Obligations. The Company shall pay the Executive a lump sum amount in cash equal to the sum of (A) the Executive's Annual Base Salary through the Date of Termination to the extent not theretofore paid, (B) an amount equal to any annual Incentive Compensation Awards earned with respect to fiscal years ended prior to the year that includes the Date of Termination to the extent not theretofore paid, (C) any accrued and unpaid vacation, if any, and (D) reimbursement for unreimbursed business expenses, if any, properly incurred by the Executive in the performance of his duties in accordance with policies established from time to time by the Board, in each case to the extent not theretofore paid. (The amounts specified in clauses (A), (B), (C) and (D) shall be hereinafter referred to as the "Pre-Change in Control Accrued Obligations").

(b) Equity Based Compensation. The Executive shall retain all rights to any equity-based compensation awards to the extent set forth in the applicable plan and/or award agreement.

(c) Welfare Benefits. Subject to Section 12 below, for a period of six (6) months following the date of the Involuntary Termination (and an additional six (6) months if the Executive provides consulting services under Section 14(e) hereof), the Executive and his dependents shall be provided with health insurance benefits substantially similar to those provided to the Executive and his dependents immediately prior to the date of the Involuntary Termination; *provided*, *however*, that such benefits shall be provided on substantially the same terms and conditions and at the same cost to the Executive as in effect immediately prior to the date of the Involuntary Termination. Such benefits shall be provided through insurance maintained by the Company under the Company's benefit plans. Such benefits shall be provided in a manner that complies with Treasury Regulation Section 1.409A-1(a)(5).

(d) Outplacement Services. The Executive shall receive reasonable outplacement services, on an in-kind basis, suitable to his position and directly related to the Executive's Involuntary

Termination, for a period of twelve (12) months following the date of the Involuntary Termination, in an aggregate amount of cost to the Company not to exceed $50,000. Notwithstanding the foregoing, the Executive shall cease to receive outplacement services on the date the Executive accepts employment with a subsequent employer. Such outplacement services shall be provided in a manner that complies with Treasury Regulation Section 1.409A-1(b)(9)(v)(A).

(e) Financial Planning Services. The Executive shall receive financial planning services, on an in-kind basis, for a period of twelve (12) months following the Date of Termination. Such financial planning services shall include expert financial and legal resources to assist the Executive with financial planning needs and shall be limited to (i) current investment portfolio management, (ii) tax planning, (iii) tax return preparation, and (iv) estate planning advice and document preparation (including wills and trusts); *provided*, *however*, that the Company shall provide such financial planning services during any taxable year of the Executive only to the extent the cost to the Company for such taxable year does not exceed $25,000. The Company shall provide such financial planning services through a financial planner selected by the Company, and shall pay the fees for such financial planning services. The financial planning services provided during any taxable year of the Executive shall not affect the financial planning services provided in any other taxable year of the Executive. The Executive's right to financial planning services shall not be subject to liquidation or exchange for any other benefit. Such financial planning services shall be provided in a manner that complies with Treasury Regulation Section 1.409A-3(i)(1)(iv).

(f) Deferral of Payments. The Executive shall have the right to elect to defer the Pre-Change in Control Severance Payment to be received by the Executive pursuant to this Section 5 under the terms and conditions of the Sempra Energy 2005 Deferred Compensation Plan (the "Deferred Compensation Plan"). Any such deferral election shall be made in accordance with Section 18(b) hereof.

Section 6. Severance Benefits upon Involuntary Termination in Connection with and after Change in Control

. Notwithstanding the provisions of Section 5 above, and except as provided in Section 19(i) hereof, in the event of the Involuntary Termination of the Executive on or within two (2) years following a Change in Control, in lieu of the payments described in Section 5 above, the Company shall pay the Executive, in one lump sum cash payment, an amount (the "Post-Change in Control Severance Payment") equal to the greater of: (X) 145% of the Executive's Annual Base Salary as in effect immediately prior to the Change in Control or the Date of Termination, whichever is greater, and (Y) the Executive's Annual Base Salary as in effect immediately prior to the Change in Control or on the Date of Termination, whichever is greater, plus the Executive's Average Annual Bonus; *provided, however,* that, in the event that the Involuntary Termination occurs prior to the fifth anniversary of the Effective Date, the Post-Change in Control Severance Payment shall be increased by twenty-five percent (25%). In addition to the Post-Change in Control Severance Payment, the Executive shall be entitled to the following additional benefits specified in subsections (a) through (e). Except as provided in Sections 6(f) and 6(g), the Post-Change in Control Severance Payment and the payments under Section 6(a) shall be paid on such date as is determined by the Company within thirty (30) days after the date of the Involuntary Termination; *provided*, *however*, that, if the Executive is a Specified Employee on the date of the Executive's Involuntary Termination, the Post-Change in Control Severance Payment, the Additional Post-Change in Control Severance Payment under Section 6(a)(E), and the financial planning services and the related payments provided under Section 6(e) shall be paid as provided in Section 10 hereof.

(a) Accrued Obligations. The Company shall pay the Executive a lump sum amount in cash equal to the sum of (A) the Executive's Annual Base Salary through the Date of Termination to the

extent not theretofore paid, (B) an amount equal to any annual Incentive Compensation Awards earned with respect to fiscal years ended prior to the year that includes the Date of Termination to the extent not theretofore paid, (C) any accrued and unpaid vacation, if any, (D) reimbursement for unreimbursed business expenses, if any, properly incurred by the Executive in the performance of his duties in accordance with policies established from time to time by the Board, and (E) an amount (the "Additional Post-Change in Control Severance Payment") equal to: (i) the greater of: (X) 45% of the Executive's Annual Base Salary as in effect immediately prior to the Change in Control or on the Date of Termination, whichever is greater, or (Y) the Executive's Average Annual Bonus, multiplied by (ii) a fraction, the numerator of which shall be the number of days from the beginning of such fiscal year to and including the Date of Termination and the denominator of which shall be 365, in the case of each amount described in clause (A), (B), (C) or (D) to the extent not theretofore paid. (The amounts specified in clauses (A), (B), (C), (D) and (E) shall be hereinafter referred to as the "Post-Change in Control Accrued Obligations").

(b) Equity-Based Compensation. Notwithstanding the provisions of any applicable equity-compensation plan or award agreement to the contrary, all equity-based Incentive Compensation Awards (including, without limitation, stock options, stock appreciation rights, restricted stock awards, restricted stock units, performance share awards, awards covered under Section 162(m) of the Code, and dividend equivalents) held by the Executive shall immediately vest and become exercisable or payable, as the case may be, as of the Date of Termination, to be exercised or paid, as the case may be, in accordance with the terms of the applicable Incentive Compensation Plan and Incentive Compensation Award agreement, and any restrictions on any such Incentive Compensation Awards shall automatically lapse; *provided, however*, that any such stock option or stock appreciation rights awards granted on or after June 26, 1998 shall remain outstanding and exercisable until the earlier of (A) the later of eighteen (18) months following the Date of Termination or the period specified in the applicable Incentive Compensation Award agreements or (B) the expiration of the original term of such Incentive Compensation Award (or, if earlier, the tenth anniversary of the original date of grant) (it being understood that all Incentive Compensation Awards granted prior to or after June 26, 1998 shall remain outstanding and exercisable for a period that is no less than that provided for in the applicable agreement in effect as of the date of grant).

(c) Welfare Benefits. Subject to Section 12 below, for a period of six (6) months following the date of Involuntary Termination (and an additional twelve (12) months if the Executive provides consulting services under Section 14(e) hereof), the Executive and his dependents shall be provided with life, disability, accident and health insurance benefits substantially similar to those provided to the Executive and his dependents immediately prior to the date of Involuntary Termination or the Change in Control Date, whichever is more favorable to the Executive; *provided, however*, that such benefits shall be provided on substantially the same terms and conditions and at the same cost to the Executive as in effect immediately prior to the date of Involuntary Termination or the Change in Control Date, whichever is more favorable to the Executive. Such benefits shall be provided through insurance maintained by the Company under the Company benefit plans. Such benefits shall be provided in a manner that complies with Treasury Regulation Section 1.409A-1(a)(5).

(d) Outplacement Services. The Executive shall receive reasonable outplacement services, on an in-kind basis, suitable to his position and directly related to the Executive's Involuntary Termination, for a period of eighteen (18) months following the date of Involuntary Termination (but in no event beyond the last day of the Executive's second taxable year following the Executive's taxable year in which the Involuntary Termination occurs), in the aggregate amount of cost to the Company not to exceed $50,000. Notwithstanding the foregoing, the Executive shall cease to receive outplacement services on

the date the Executive accepts employment with a subsequent employer. Such outplacement services shall be provided in a manner that complies with Treasury Regulation Section 1.409A-1(b)(9)(v)(A).

(e) Financial Planning Services. The Executive shall receive financial planning services, on an in-kind basis, for a period of eighteen (18) months following the date of Involuntary Termination. Such financial planning services shall include expert financial and legal resources to assist the Executive with financial planning needs and shall be limited to (i) current investment portfolio management, (ii) tax planning, (iii) tax return preparation, and (iv) estate planning advice and document preparation (including wills and trusts); *provided, however*, that the Company shall provide such financial services during any taxable year of the Executive only to the extent the cost to the Company for such taxable year does not exceed $25,000. The Company shall provide such financial planning services through a financial planner selected by the Company, and shall pay the fees for such financial planning services. The financial planning services provided during any taxable year of the Executive shall not affect the financial planning services provided in any other taxable year of the Executive. The Executive's right to financial planning services shall not be subject to liquidation or exchange for any other benefit. Such financial planning services shall be provided in a manner that complies with Section 1.409A-3(i)(1)(iv).

(f) Involuntary Termination in Connection with a Change in Control. Notwithstanding anything contained herein, in the event of an Involuntary Termination prior to a Change in Control, if the Involuntary Termination (1) was at the request of a third party who has taken steps reasonably calculated to effect such Change in Control or (2) otherwise arose in connection with or in anticipation of such Change in Control, then the Executive shall, in lieu of the payments described in Section 5 hereof, be entitled to the Post-Change in Control Severance Payment and the additional benefits described in this Section 6 as if such Involuntary Termination had occurred within two (2) years following the Change in Control. The amounts specified in Section 6 that are to be paid under this Section 6(f) shall be reduced by any amount previously paid under Section 5. The amounts to be paid under this Section 6(f) shall be paid within thirty (30) days after the Change in Control Date of such Change in Control.

(g) Deferral of Payments. The Executive shall have the right to elect to defer the Post-Change in Control Severance Payment to be received by the Executive pursuant to this Section 6 under the terms and conditions of the Deferred Compensation Plan. Any such deferral election shall be made in accordance with Section 18(b) hereof.

Section 7. Severance Benefits upon Termination by the Company for Cause or by the Executive Other than for Good Reason. If the Executive's employment shall be terminated for Cause, or if the Executive terminates employment other than for Good Reason, the Company shall have no further obligations to the Executive under this Agreement other than the Pre-Change in Control Accrued Obligations and any amounts or benefits described in Section 11 hereof.

Section 8. Severance Benefits upon Termination due to Death or Disability. If the Executive has a Separation from Service by reason of death or Disability, the Company shall pay the Executive or his estate, as the case may be, the Post-Change in Control Accrued Obligations (without regard to whether a Change in Control has occurred) and any amounts or benefits described in Section 11 hereof. Such payments shall be in addition to those rights and benefits to which the Executive or his estate may be entitled under the relevant Company plans or programs. Such payments shall be paid on such date as determined by the Company within thirty (30) days after the date of the Separation from Service; *provided, however*, that if the Executive is a Specified Employee on the date of the Executive's Separation from Service by reason of Disability, the Additional Post-Change in Control Severance Payment under Section 6(a)(E) shall be paid as provided in Section 10 hereof.

Section 9. Limitation on Payments by the Company.

(a) Anything in this Agreement to the contrary notwithstanding and except as set forth in this Section 9 below, in the event it shall be determined that any payment or distribution in the nature of compensation (within the meaning of Section 280G(b)(2) of the Code) to or for the benefit of the Executive, whether paid or payable pursuant to this Agreement or otherwise (the "Payment") would be subject (in whole or in part) to the excise tax imposed by Section 4999 of the Code, (the "Excise Tax"), then, subject to subsection (b), the Pre-Change in Control Severance Benefit or the Post-Change in Control Severance Payment (whichever is applicable) payable under this Agreement shall be reduced under this subsection (a) to the amount equal to the Reduced Payment. For such Payment payable under this Agreement, the "Reduced Payment" shall be the amount equal to the greatest portion of the Payment (which may be zero) that, if paid, would result in no portion of any Payment being subject to the Excise Tax.

(b) The Pre-Change in Control Severance Benefit or the Post-Change in Control Severance Payment (whichever is applicable) payable under this Agreement shall not be reduced under subsection (a) if:

(i) such reduction in such Payment is not sufficient to cause no portion of any Payment to be subject to the Excise Tax, or

(ii) the Net After-Tax Unreduced Payments (as defined below) would equal or exceed one hundred and five percent (105%) of the Net After-Tax Reduced Payments (as defined below).

For purposes of determining the amount of any Reduced Payment under subsection (a), and the Net-After Tax Reduced Payments and the Net After-Tax Unreduced Payments, the Executive shall be considered to pay federal, state and local income and employment taxes at the Executive's applicable marginal rates taking into consideration any reduction in federal income taxes which could be obtained from the deduction of state and local income taxes, and any reduction or disallowance of itemized deductions and personal exemptions under applicable tax law). The applicable federal, state and local income and employment taxes and the Excise Tax (to the extent applicable) are collectively referred to as the "Taxes".

(c) The following definitions shall apply for purposes of this Section 9:

(i) "Net After-Tax Reduced Payments" shall mean the total amount of all Payments that the Executive would retain, on a Net After-Tax Basis, in the event that the Payments payable under this Agreement are reduced pursuant to subsection (a).

(ii) "Net After-Tax Unreduced Payments" shall mean the total amount of all Payments that the Executive would retain, on a Net After-Tax Basis, in the event that the Payments payable under this Agreement are not reduced pursuant to subsection (a).

(iii) "Net After-Tax Basis" shall mean, with respect to the Payments, either with or without reduction under subsection (a) (as applicable), the amount that would be retained by the Executive from such Payments after the payment of all Taxes.

(d) All determinations required to be made under this Section 9 and the assumptions to be utilized in arriving at such determinations, shall be made by a nationally recognized accounting firm as may be agreed by the Company and the Executive (the "Accounting Firm"); *provided*, that the Accounting Firm's determination shall be made based upon "substantial authority" within the meaning of Section

6662 of the Code. The Accounting Firm shall provide detailed supporting calculations to both the Company and the Executive within fifteen (15) business days of the receipt of notice from the Executive that there has been a Payment or such earlier time as is requested by the Company. All fees and expenses of the Accounting Firm shall be borne solely by the Company. Any determination by the Accounting Firm shall be binding upon the Company and the Executive. For purposes of determining whether and the extent to which the Payments will be subject to the Excise Tax, (i) no portion of the Payments the receipt or enjoyment of which the Executive shall have waived at such time and in such manner as not to constitute a "payment" within the meaning of Section 280G(b) of the Code shall be taken into account, (ii) no portion of the Payments shall be taken into account which, in the written opinion of the Accounting Firm, does not constitute a "parachute payment" within the meaning of Section 280G(b)(2) of the Code (including by reason of Section 280G(b)(4)(A) of the Code) and, in calculating the Excise Tax, no portion of such Payments shall be taken into account which, in the opinion of the Accounting Firm, constitutes reasonable compensation for services actually rendered, within the meaning of Section 280G(b)(4)(B) of the Code, in excess of the base amount (as defined in Section 280G(b)(3) of the Code) allocable to such reasonable compensation, and (iii) the value of any non-cash benefit or any deferred payment or benefit included in the Payments shall be determined by the Accounting Firm in accordance with the principles of Sections 280G(d)(3) and (4) of the Code.

Section 10. Delayed Distribution under Section 409A of the Code. If the Executive is a Specified Employee on the date of the Executive's Involuntary Termination (or on the date of the Executive's Separation from Service by reason of Disability), the Section 409A Payments, and any other payments or benefits under this Agreement subject to Section 409A of the Code, shall be delayed in order to avoid a prohibited distribution under Section 409A(a)(2)(B)(i) of the Code, and such payments or benefits shall be paid or distributed to the Executive during the thirty (30) day period commencing on the earlier of (a) the expiration of the six-month period measured from the date of the Executive's Separation from Service or (b) the date of the Executive's death. Upon the expiration of the applicable six-month period under Section 409A(a)(2)(B)(i) of the Code, all payments deferred pursuant to this Section 10 (excluding in-kind benefits) shall be paid in a lump sum payment to the Executive, plus interest thereon from the date of the Executive's Involuntary Termination through the payment date at an annual rate equal to Moody's Rate. The "Moody's Rate" shall mean the average of the daily Moody's Corporate Bond Yield Average - Monthly Average Corporates as published by Moody's Investors Service, Inc. (or any successor) for the month next preceding the Date of Termination. Any remaining payments due under the Agreement shall be paid as otherwise provided herein.

Section 11. Nonexclusivity of Rights. Nothing in this Agreement shall prevent or limit the Executive's continuing or future participation in any benefit, plan, program, policy or practice provided by the Company and for which the Executive may qualify (except with respect to any benefit to which the Executive has waived his rights in writing), including, without limitation, any and all indemnification arrangements in favor of the Executive (whether under agreements or under the Company's charter documents or otherwise), and insurance policies covering the Executive, nor shall anything herein limit or otherwise affect such rights as the Executive may have under any other contract or agreement entered into after the Effective Date with the Company. Amounts which are vested benefits or which the Executive is otherwise entitled to receive under any benefit, plan, policy, practice or program of, or any contract or agreement entered into with, the Company shall be payable in accordance with such benefit, plan, policy, practice or program or contract or agreement except as explicitly modified by this Agreement. At all times during the Executive's employment with the Company and thereafter, the Company shall provide (to the extent permissible under applicable law) the Executive with indemnification and D&O insurance insuring the Executive against insurable events which occur or have occurred while the Executive was a director or the Executive officer of the Company, on terms and

conditions that are at least as generous as that then provided to any other current or former director or the Executive officer of the Company or any Affiliate. Such indemnification and D&O insurance shall be provided in a manner that complies with Treasury Regulation Section 1.409A-1(b)(10).

Section 12. Full Settlement; Mitigation. The Company's obligation to make the payments provided for in this Agreement and otherwise to perform its obligations hereunder shall not be affected by any set-off, counterclaim, recoupment, defense or other claim, right or action which the Company may have against the Executive or others, provided that nothing herein shall preclude the Company from separately pursuing recovery from the Executive based on any such claim. In no event shall the Executive be obligated to seek other employment or take any other action by way of mitigation of the amounts (including amounts for damages for breach) payable to the Executive under any of the provisions of this Agreement, and such amounts shall not be reduced whether or not the Executive obtains other employment.

Section 13. Dispute Resolution.

Any disagreement, dispute, controversy or claim arising out of or relating to this Agreement or the interpretation of this Agreement or any arrangements relating to this Agreement or contemplated in this Agreement or the breach, termination or invalidity thereof shall be settled by final and binding arbitration administered by JAMS in San Diego, California in accordance with the then existing JAMS arbitration rules applicable to employment disputes (the "JAMS Rules"); *provided that*, notwithstanding any provision in such rules to the contrary, in all cases the parties shall be entitled to reasonable discovery. In the event of such an arbitration proceeding, the Executive and the Company shall select a mutually acceptable neutral arbitrator from among the JAMS panel of arbitrators. In the event the Executive and the Company cannot agree on an arbitrator, the arbitrator shall be selected in accordance with the then existing JAMS Rules. Neither the Executive nor the Company nor the arbitrator shall disclose the existence, content or results of any arbitration hereunder without the prior written consent of all parties, except to the extent necessary to enforce any arbitration award in a court of competent jurisdiction. Except as provided herein, the Federal Arbitration Act shall govern the interpretation of, enforcement of and all proceedings under this agreement to arbitrate. The arbitrator shall apply the substantive law (and the law of remedies, if applicable) of the state of California, or federal law, or both, as applicable, and the arbitrator is without jurisdiction to apply any different substantive law. The arbitrator shall have the authority to entertain a motion to dismiss and/or a motion for summary judgment by any party and shall apply the standards governing such motions under the Federal Rules of Civil Procedure. The arbitrator shall render an award and a written, reasoned opinion in support thereof. Judgment upon the award may be entered in any court having jurisdiction thereof. The Executive shall not be required to pay any arbitration fee or cost that is unique to arbitration or greater than any amount he would be required to pay to pursue his claims in a court of competent jurisdiction.

Section 14. Executive's Covenants.

(a) Confidentiality. The Executive acknowledges that in the course of his employment with the Company, he has acquired non-public privileged or confidential information and trade secrets concerning the operations, future plans and methods of doing business ("Proprietary Information") of the Company and its Affiliates; and the Executive agrees that it would be extremely damaging to the Company and its Affiliates if such Proprietary Information were disclosed to a competitor of the Company and its Affiliates or to any other person or corporation. The Executive understands and agrees that all Proprietary Information has been divulged to the Executive in confidence and further understands and agrees to keep all Proprietary Information secret and confidential (except for such information which is or becomes publicly available other than as a result of a breach by the Executive of this provision or

information the Executive is required by any governmental, administrative or court order to disclose) without limitation in time. In view of the nature of the Executive's employment and the Proprietary Information the Executive has acquired during the course of such employment, the Executive likewise agrees that the Company and its Affiliates would be irreparably harmed by any disclosure of Proprietary Information in violation of the terms of this paragraph and that the Company and its Affiliates shall therefore be entitled to preliminary and/or permanent injunctive relief prohibiting the Executive from engaging in any activity or threatened activity in violation of the terms of this paragraph and to any other relief available to them. Inquiries regarding whether specific information constitutes Proprietary Information shall be directed to the Company's Senior Vice President, Public Policy (or, if such position is vacant, the Company's then Chief Executive Officer); *provided*, that the Company shall not unreasonably classify information as Proprietary Information.

(b) Non-Solicitation of Employees. The Executive recognizes that he possesses and will possess confidential information about other employees of the Company and its Affiliates relating to their education, experience, skills, abilities, compensation and benefits, and inter-personal relationships with customers of the Company and its Affiliates. The Executive recognizes that the information he possesses and will possess about these other employees is not generally known, is of substantial value to the Company and its Affiliates in developing their business and in securing and retaining customers, and has been and will be acquired by him because of his business position with the Company and its Affiliates. The Executive agrees that at all times during the Executive's employment with the Company and for a period of one (1) year thereafter, he will not, directly or indirectly, solicit or recruit any employee of the Company or its Affiliates for the purpose of being employed by him or by any competitor of the Company or its Affiliates on whose behalf he is acting as an agent, representative or employee and that he will not convey any such confidential information or trade secrets about other employees of the Company and its Affiliates to any other person; *provided, however*, that it shall not constitute a solicitation or recruitment of employment in violation of this paragraph to discuss employment opportunities with any employee of the Company or its Affiliates who has either first contacted the Executive or regarding whose employment the Executive has discussed with and received the written approval of the Company's Vice President, Human Resources (or, if such position is vacant, the Company's then Chief Executive Officer), prior to making such solicitation or recruitment. In view of the nature of the Executive's employment with the Company, the Executive likewise agrees that the Company and its Affiliates would be irreparably harmed by any solicitation or recruitment in violation of the terms of this paragraph and that the Company and its Affiliates shall therefore be entitled to preliminary and/or permanent injunctive relief prohibiting the Executive from engaging in any activity or threatened activity in violation of the terms of this paragraph and to any other relief available to them.

(c) Survival of Provisions. The obligations contained in Section 14(a) and Section 14(b) above shall survive the termination of the Executive's employment within the Company and shall be fully enforceable thereafter. If it is determined by a court of competent jurisdiction in any state that any restriction in Section 14(a) or Section 14(b) above is excessive in duration or scope or is unreasonable or unenforceable under the laws of that state, it is the intention of the parties that such restriction may be modified or amended by the court to render it enforceable to the maximum extent permitted by the law of that state.

(d) Release; Lump Sum Payment. In the event of the Executive's Involuntary Termination, if the Executive (i) agrees to the covenants described in Section 14(a) and Section 14(b) above, (ii) executes a release (the "Release") of all claims substantially in the form attached hereto as Exhibit A within fifty (50) days after the date of Involuntary Termination and does not revoke such Release in accordance with the terms thereof, and (iii) agrees to provide the consulting services described

in Section 14(e) below, then in consideration for such covenants, the Company shall pay the Executive, in one cash lump sum, an amount (the "Consulting Payment") in cash equal to one-half (0.5) times the greater of: (X) 145% of the Executive's Annual Base Salary as in effect on the Date of Termination, and (Y) the Executive's Annual Base Salary as in effect on the Date of Termination, plus the Executive's Average Annual Bonus. Except as provided in this subsection, the Consulting Payment shall be paid on such date as is determined by the Company within the ten (10) day period commencing on the 60th day after the date of the Executive's Involuntary Termination; *provided, however*, that if the Executive is a Specified Employee on the date of the Executive's Involuntary Termination, the Consulting Payment shall be paid as provided in Section 10 hereof. The Executive shall have the right to elect to defer the Consulting Payment under the terms and conditions of the Company's Deferred Compensation Plan. Any such deferral election shall be made in accordance with Section 18(b) hereof.

(e) Consulting. If the Executive agrees to the covenants described in Section 14(d) above, then the Executive shall have the obligation to provide consulting services to the Company as an independent contractor, commencing on the Date of Termination and ending on the first anniversary of the Date of Termination (the "Consulting Period"). The Executive shall hold himself available at reasonable times and on reasonable notice to render such consulting services as may be so assigned to him by the Board or the Company's then Chief Executive Officer; *provided, however*, that unless the parties otherwise agree, the consulting services rendered by the Executive during the Consulting Period shall not exceed twenty (20) hours each month; and, *provided, further*, that the consulting services rendered by the Executive during the Consulting Period shall in no event exceed twenty percent (20%) of the average level of services performed by the Executive for the Company over the thirty-six (36) month period immediately preceding the Executive's Separation from Service (or the full period of services to the Company, if the Executive has been providing services to the Company for less than thirty-six (36) months). The Company agrees to use its best efforts during the Consulting Period to secure the benefit of the Executive's consulting services so as to minimize the interference with the Executive's other activities, including requiring the performance of consulting services at the Company's offices only when such services may not be reasonably performed off-site by the Executive.

Section 15. Legal Fees.

(a) Reimbursement of Legal Fees. Subject to subsection (b), in the event of the Executive's Separation from Service either (1) prior to a Change in Control, or (2) on or within two (2) years following a Change in Control, the Company shall reimburse the Executive for all legal fees and expenses (including but not limited to fees and expenses in connection with any arbitration) incurred by the Executive in disputing any issue arising under this Agreement relating to the Executive's Separation from Service or in seeking to obtain or enforce any benefit or right provided by this Agreement.

(b) Requirements for Reimbursement. The Company shall reimburse the Executive's legal fees and expenses pursuant to subsection (a) above only to the extent the arbitrator or court determines the following: (i) the Executive disputed such issue, or sought to obtain or enforce such benefit or right, in good faith, (ii) the Executive had a reasonable basis for such claim, and (iii) in the case of subsection (a)(1) above, the Executive is the prevailing party. In addition, the Company shall reimburse such legal fees and expenses, only if such legal fees and expenses are incurred during the twenty (20) year period beginning on the date of the Executive's Separation from Service. The legal fees and expenses paid to the Executive for any taxable year of the Executive shall not affect the legal fees and expenses paid to the Executive for any other taxable year of the Executive. The legal fees and expenses shall be paid to the Executive on or before the last day of the Executive's taxable year following the taxable year in which the fees or expenses are incurred. The Executive's right to reimbursement of legal fees and expenses shall not be subject to liquidation or exchange for any other benefit. Such right to

reimbursement of legal fees and expenses shall be provided in a manner that complies with Treasury Regulation Section 1.409A-3(i)(1)(iv). If the Executive is a Specified Employee on the date of the Executive's Separation from Service, such right to reimbursement of legal fees and expenses shall be paid as provided in Section 10 hereof.

Section 16. Successors.

(a) Assignment by the Executive. This Agreement is personal to the Executive and without the prior written consent of Sempra Energy shall not be assignable by the Executive otherwise than by will or the laws of descent and distribution. This Agreement shall inure to the benefit of and be enforceable by the Executive's legal representatives.

(b) Successors and Assigns of Sempra Energy. This Agreement shall inure to the benefit of and be binding upon Sempra Energy, its successors and assigns. Sempra Energy may not assign this Agreement to any person or entity (except for a successor described in Section 16(c), (d) or (e) below) without the Executive's written consent.

(c) Assumption. Sempra Energy shall require any successor (whether direct or indirect, by purchase, merger, consolidation or otherwise) to all or substantially all of the business and/or assets of Sempra Energy to assume expressly and agree to perform the obligations and satisfy and discharge the liabilities of this Agreement in the same manner and to the same extent that Sempra Energy would have been required to perform the obligations and satisfy and discharge the liabilities under this Agreement if no such succession had taken place, and Sempra Energy shall have no further obligations and liabilities under this Agreement. Upon such assumption, references to Sempra Energy in this Agreement shall be replaced with references to such successor.

(d) Sale of Subsidiary. In the event that (i) the Executive is employed by a direct or indirect subsidiary of Sempra Energy that is a member of the Sempra Energy Control Group, (ii) Sempra Energy, directly or indirectly through one or more intermediaries, sells or otherwise disposes of such subsidiary, and (iii) such subsidiary ceases to be a member of the Sempra Energy Control Group, then if, on the date such subsidiary ceases to be a member of the Sempra Energy Control Group, the Executive continues in employment with such subsidiary and the Executive does not have a Separation from Service, Sempra Energy shall require such subsidiary or any successor (whether direct or indirect, by purchase merger, consolidation or otherwise) to such subsidiary, or the parent thereof, to assume expressly and agree to perform the obligations and satisfy and discharge the liabilities under this Agreement in the same manner and to the same extent that Sempra Energy would have been required to perform the obligations and satisfy and discharge the liabilities under this Agreement, if such subsidiary had not ceased to be part of the Sempra Energy Control Group, and, upon such assumption, Sempra Energy shall have no further obligations and liabilities under the Agreement. Upon such assumption, (i) references to Sempra Energy in this Agreement shall be replaced with references to such subsidiary, or such successor or parent thereof, assuming this Agreement, and (ii) subsection (b) of the definition of "Cause" and subsection (b) of the definition of "Good Reason" shall apply thereafter, as if a Change in Control had occurred on the date of such cessation.

(e) Sale of Assets of Subsidiary. In the event that (i) the Executive is employed by a direct or indirect subsidiary of Sempra Energy, and (ii) such subsidiary sells or otherwise disposes of substantial assets of such subsidiary to an unrelated service recipient, as determined under Treasury Regulation Section 1.409A-1(f)(2)(ii) (the "Asset Purchaser"), in a transaction described in Treasury Regulation Section 1.409A-1(h)(4) (an "Asset Sale"), then if, on the date of such Asset Sale, the Executive becomes employed by the Asset Purchaser, Sempra Energy and the Asset Purchaser shall

specify, in accordance with Treasury Regulation Section 1.409A-1(h)(4), that the Executive shall not be treated as having a Separation from Service, and Sempra Energy shall require such Asset Purchaser, or the parent thereof, to assume expressly and agree to perform the obligations and satisfy and discharge the liabilities under this Agreement in the same manner and to the same extent that Sempra Energy would have been required to perform the obligations and satisfy and discharge the liabilities under this Agreement, if the Asset Sale had not taken place, and, upon such assumption, Sempra Energy shall have no further obligations and liabilities under the Agreement. Upon such assumption, (i) references to Sempra Energy in this Agreement shall be replaced with references to the Asset Purchaser or the parent thereof, as applicable, and (ii) subsection (b) of the definition of "Cause" and subsection (b) of the definition of "Good Reason" shall apply thereafter, as if a Change in Control had occurred on the date of the Asset Sale.

Section 17. Administration Prior to Change in Control. Prior to a Change in Control, the Compensation Committee shall have full and complete authority to construe and interpret the provisions of this Agreement, to determine an individual's entitlement to benefits under this Agreement, to make in its sole and absolute discretion all determinations contemplated under this Agreement, to investigate and make factual determinations necessary or advisable to administer or implement this Agreement, and to adopt such rules and procedures as it deems necessary or advisable for the administration or implementation of this Agreement. All determinations made under this Agreement by the Compensation Committee shall be final and binding on all interested persons. Prior to a Change in Control, the Compensation Committee may delegate responsibilities for the operation and administration of this Agreement to one or more officers or employees of the Company. The provisions of this Section 17 shall terminate and be of no further force and effect upon the occurrence of a Change in Control.

Section 18. Section 409A of the Code.

(a) Compliance with and Exemption from Section 409A of the Code. Certain payments and benefits payable under this Agreement (including, without limitation, the Section 409A Payments) are intended to comply with the requirements of Section 409A of the Code. Certain payments and benefits payable under this Agreement are intended to be exempt from the requirements of Section 409A of the Code. This Agreement shall be interpreted in accordance with the applicable requirements of, and exemptions from, Section 409A of the Code and the Treasury Regulations thereunder. To the extent the payments and benefits under this Agreement are subject to Section 409A of the Code, this Agreement shall be interpreted, construed and administered in a manner that satisfies the requirements of Sections 409A(a)(2), (3) and (4) of the Code and the Treasury Regulations thereunder (subject to the transitional relief under Internal Revenue Service Notice 2005-1, the Proposed Regulations under Section 409A of the Code, Internal Revenue Service Notice 2006-79, Internal Revenue Service Notice 2007-78, Internal Revenue Service Notice 2007-86 and other applicable authority issued by the Internal Revenue Service). As provided in Internal Revenue Notice 2007-86, notwithstanding any other provision of this Agreement, with respect to an election or amendment to change a time or form of payment under this Agreement made on or after January 1, 2008 and on or before December 31, 2008, the election or amendment shall apply only with respect to payments that would not otherwise be payable in 2008, and shall not cause payments to be made in 2008 that would not otherwise be payable in 2008. If the Company and the Executive determine that any compensation, benefits or other payments that are payable under this Agreement and intended to comply with Sections 409A(a)(2), (3) and (4) of the Code do not comply with Section 409A of the Code, the Treasury Regulations thereunder and other applicable authority issued by the Internal Revenue Service, to the extent permitted under Section 409A of the Code, the Treasury Regulations thereunder and any applicable authority issued by the Internal Revenue Service, the Company and the Executive agree to amend this Agreement, or take such other actions as the Company and the Executive

deem reasonably necessary or appropriate, to cause such compensation, benefits and other payments to comply with the requirements of Section 409A of the Code, the Treasury Regulations thereunder and other applicable authority issued by the Internal Revenue Service, while providing compensation, benefits and other payments that are, in the aggregate, no less favorable than the compensation, benefits and other payments provided under this Agreement. In the case of any compensation, benefits or other payments that are payable under this Agreement and intended to comply with Sections 409A(a)(2), (3) and (4) of the Code, if any provision of the Agreement would cause such compensation, benefits or other payments to fail to so comply, such provision shall not be effective and shall be null and void with respect to such compensation, benefits or other payments to the extent such provision would cause a failure to comply, and such provision shall otherwise remain in full force and effect.

(b) Deferral Elections. As provided in Sections 5(f), 6(g) and 14(d), the Executive may elect to defer the Pre-Change in Control Severance Payment, the Post-Change in Control Severance Payment and the Consulting Payment as follows. The Executive's deferral election shall satisfy the requirements of Treasury Regulation Section 1.409A-2(b) and the terms and conditions of the Deferred Compensation Plan. Such deferral election shall designate the whole percentage (up to a maximum of 100%) of the Pre-Change in Control Severance Payment, the Post-Change in Control Severance Payment and the Consulting Payment to be deferred, shall be irrevocable when made, and shall not take effect until at least twelve (12) months after the date on which the election is made. Such deferral election shall provide that the amount deferred shall be deferred for a period of not less than five (5) years from the date the payment of the amount deferred would otherwise have been made, in accordance with Treasury Regulation Section 1.409A-2(b)(1)(ii).

Section 19. Miscellaneous.

(a) Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the State of California, without reference to its principles of conflict of laws. The captions of this Agreement are not part of the provisions hereof and shall have no force or effect. This Agreement may not be amended, modified, repealed, waived, extended or discharged except by an agreement in writing signed by the party against whom enforcement of such amendment, modification, repeal, waiver, extension or discharge is sought. No person, other than pursuant to a resolution of the Board or a committee thereof, shall have authority on behalf of the Company to agree to amend, modify, repeal, waive, extend or discharge any provision of this Agreement or anything in reference thereto.

(b) Notices. All notices and other communications hereunder shall be in writing and shall be given by hand delivery to the other party or by registered or certified mail, return receipt requested, postage prepaid, addressed, in either case, to the Company's headquarters or to such other address as either party shall have furnished to the other in writing in accordance herewith. Notices and communications shall be effective when actually received by the addressee.

(c) Severability. The invalidity or unenforceability of any provision of this Agreement shall not affect the validity or enforceability of any other provision of this Agreement.

(d) Taxes. The Company may withhold from any amounts payable under this Agreement such federal, state or local taxes as shall be required to be withheld pursuant to any applicable law or regulation.

(e) No Waiver. The Executive's or the Company's failure to insist upon strict compliance with any provision hereof or any other provision of this Agreement or the failure to assert any right the Executive or the Company may have hereunder, including, without limitation, the right of the

Executive to terminate employment for Good Reason pursuant to Section 1 hereof, or the right of the Company to terminate the Executive's employment for Cause pursuant to Section 1 hereof shall not be deemed to be a waiver of such provision or right or any other provision or right of this Agreement.

(f) Entire Agreement; Exclusive Benefit; Supersession of Prior Agreement. This instrument contains the entire agreement of the Executive, the Company or any predecessor or subsidiary thereof with respect to any severance or termination pay. The Pre-Change in Control Severance Payment, the Post-Change in Control Severance Payment and all other benefits provided hereunder shall be in lieu of any other severance payments to which the Executive is entitled under any other severance plan or program or arrangement sponsored by the Company, as well as pursuant to any individual employment or severance agreement that was entered into by the Executive and the Company, and, upon the Effective Date of this Agreement, all such plans, programs, arrangements and agreements are hereby automatically superseded and terminated.

(g) No Right of Employment. Nothing in this Agreement shall be construed as giving the Executive any right to be retained in the employ of the Company or shall interfere in any way with the right of the Company to terminate the Executive's employment at any time, with or without Cause.

(h) Unfunded Obligation. The obligations under this Agreement shall be unfunded. Benefits payable under this Agreement shall be paid from the general assets of the Company. The Company shall have no obligation to establish any fund or to set aside any assets to provide benefits under this Agreement.

(i) Termination upon Sale of Assets of Subsidiary. Notwithstanding anything contained herein, this Agreement shall automatically terminate and be of no further force and effect and no benefits shall be payable hereunder in the event that (i) the Executive is employed by a direct or indirect subsidiary of Sempra Energy, and (ii) an Asset Sale (as defined in Section 16(e)) occurs (other than such a sale or disposition which is part of a transaction or series of transactions which would result in a Change in Control), and (iii) as a result of such Asset Sale, the Executive is offered employment by the Asset Purchaser in an executive position with reasonably comparable status, compensation, benefits and severance agreement (including the assumption of this Agreement in accordance with Section 16(e)) and which is consistent with the Executive's experience and education, but the Executive declines to accept such offer and the Executive fails to become employed by the Asset Purchaser on the date of the Asset Sale.

(j) Term. The term of this Agreement shall commence on the Effective Date and shall continue until the third (3rd) anniversary of the Effective Date; *provided*, *however*, that commencing on the second (2nd) anniversary of the Effective Date (and each anniversary of the Effective Date thereafter), the term of this Agreement shall automatically be extended for one (1) additional year, unless at least ninety (90) days prior to such date, the Company or the Executive shall give written notice to the other party that it or he, as the case may be, does not wish to so extend this Agreement. Notwithstanding the foregoing, if the Company gives such written notice to the Executive less than two (2) years after a Change in Control, the term of this Agreement shall be automatically extended until the later of (A) the date that is one (1) year after the anniversary of the Effective Date that follows such written notice or (B) the second (2nd) anniversary of the Change in Control Date.

(k) Counterparts. This Agreement may be executed in several counterparts, each of which shall be deemed to be an original but all of which together shall constitute one and the same instrument.

IN WITNESS WHEREOF, the Executive and, pursuant to due authorization from its Board of Directors, the Company have caused this Agreement to be executed as of the day and year first above written.

SEMPRA ENERGY

_____

G. Joyce Rowland
Senior Vice President, Human Resources

_____

Date

EXECUTIVE

_____

Caroline A. Winn
Vice President, Customer Services

_____

Date

EXHIBIT A

GENERAL RELEASE

This GENERAL RELEASE (the "Agreement"), dated _____, is made by and between _____, a California corporation (the "Company") and _____ ("you" or "your").

WHEREAS, you and the Company have previously entered into that certain Severance Pay Agreement dated _____, 20__ (the "Severance Pay Agreement"); and

WHEREAS, Section 14(d) of the Severance Pay Agreement provides for the payment of a benefit to you by the Company in consideration for certain covenants, including your execution and non-revocation of a general release of claims by you against the Company and its subsidiaries and affiliates.

NOW, THEREFORE, in consideration of the premises and the mutual covenants herein contained, you and the Company hereby agree as follows:

ONE: Your signing of this Agreement confirms that your employment with the Company shall terminate at the close of business on _____, or earlier upon our mutual agreement.

TWO: As a material inducement for the payment of the benefit under Section 14(d) of the Severance Pay Agreement, and except as otherwise provided in this Agreement, you and the Company hereby irrevocably and unconditionally release, acquit and forever discharge the other from any and all Claims either may have against the other. For purposes of this Agreement and the preceding sentence, the words "Releasee" or "Releasees" and "Claim" or "Claims" shall have the meanings set forth below:

(a) The words "Releasee" or "Releasees" shall refer to you and to the Company and each of the Company's owners, stockholders, predecessors, successors, assigns, agents, directors, officers, employees, representatives, attorneys, advisors, parent companies, divisions, subsidiaries, affiliates (and agents, directors, officers, employees, representatives, attorneys and advisors of such parent companies, divisions, subsidiaries and affiliates) and all persons acting by, through, under or in concert with any of them.

(b) The words "Claim" or "Claims" shall refer to any charges, complaints, claims, liabilities, obligations, promises, agreements, controversies, damages, actions, causes of action, suits, rights, demands, costs, losses, debts and expenses (including attorneys' fees and costs actually incurred) of any nature whatsoever, known or unknown, suspected or unsuspected, which you or the Company now, in the past or, except as limited by law or regulation such as the Age Discrimination in Employment Act (ADEA), in the future may have, own or hold against any of the Releasees; *provided, however*, that the word "Claim" or "Claims" shall not refer to any charges, complaints, claims, liabilities, obligations, promises, agreements, controversies, damages, actions, causes of action, suits, rights, demands, costs, losses, debts and expenses (including attorneys' fees and costs actually incurred) arising under [*identify severance, employee benefits, stock option, indemnification and D&O and other agreements containing duties, rights obligations etc. of either party that are to remain operative*]. Claims released pursuant to this Agreement by you and the Company include, but are not limited to, rights arising out of alleged violations of any contracts, express or implied, any tort, any claim that you failed to perform or negligently performed or breached your duties during employment at the Company, any legal restrictions on the Company's right to terminate employees or any federal, state or other governmental statute,

regulation, or ordinance, including, without limitation: (1) Title VII of the Civil Rights Act of 1964 (race, color, religion, sex and national origin discrimination); (2) 42 U.S.C. § 1981 (discrimination); (3) 29 U.S.C. §§ 621-634 (age discrimination); (4) 29 U.S.C. § 206(d)(l) (equal pay); (5) 42 U.S.C. §§ 12101, et seq. (disability); (6) the California Constitution, Article I, Section 8 (discrimination); (7) the California Fair Employment and Housing Act (discrimination, including race, color, national origin, ancestry, physical handicap, medical condition, marital status, religion, sex or age); (8) California Labor Code Section 1102.1 (sexual orientation discrimination); (9) the Executive Order 11246 (race, color, religion, sex and national origin discrimination); (10) the Executive Order 11141 (age discrimination); (11) §§ 503 and 504 of the Rehabilitation Act of 1973 (handicap discrimination); (12) The Worker Adjustment and Retraining Act (WARN Act); (13) the California Labor Code (wages, hours, working conditions, benefits and other matters); (14) the Fair Labor Standards Act (wages, hours, working conditions and other matters); the Federal Employee Polygraph Protection Act (prohibits employer from requiring employee to take polygraph test as condition of employment); and (15) any federal, state or other governmental statute, regulation or ordinance which is similar to any of the statutes described in clauses (1) through (14).

THREE: You and the Company expressly waive and relinquish all rights and benefits afforded by any statute (including but not limited to Section 1542 of the Civil Code of the State of California) which limits the effect of a release with respect to unknown claims. You and the Company do so understanding and acknowledging the significance of the release of unknown claims and the waiver of statutory protection against a release of unknown claims (including but not limited to Section 1542). Section 1542 of the Civil Code of the State of California states as follows:

> “A GENERAL RELEASE DOES NOT EXTEND TO CLAIMS WHICH THE CREDITOR DOES NOT KNOW OR SUSPECT TO EXIST IN HIS FAVOR AT THE TIME OF EXECUTING THE RELEASE, WHICH IF KNOWN BY HIM MUST HAVE MATERIALLY AFFECTED HIS SETTLEMENT WITH THE DEBTOR.”

Thus, notwithstanding the provisions of Section 1542 or of any similar statute, and for the purpose of implementing a full and complete release and discharge of the Releasees, you and the Company expressly acknowledge that this Agreement is intended to include in its effect, without limitation, all Claims which are known and all Claims which you or the Company do not know or suspect to exist in your or the Company’s favor at the time of execution of this Agreement and that this Agreement contemplates the extinguishment of all such Claims.

FOUR: The parties acknowledge that they might hereafter discover facts different from, or in addition to, those they now know or believe to be true with respect to a Claim or Claims released herein, and they expressly agree to assume the risk of possible discovery of additional or different facts, and agree that this Agreement shall be and remain effective, in all respects, regardless of such additional or different discovered facts.

FIVE: You hereby represent and acknowledge that you have not filed any Claim of any kind against the Company or others released in this Agreement. You further hereby expressly agree never to initiate against the Company or others released in this Agreement any administrative proceeding, lawsuit or any other legal or equitable proceeding of any kind asserting any Claims that are released in this Agreement.

The Company hereby represents and acknowledges that it has not filed any Claim of any kind against you or others released in this Agreement. The Company further hereby expressly agrees never to initiate against you or others released in this Agreement any administrative proceeding, lawsuit or

any other legal or equitable proceeding of any kind asserting any Claims that are released in this Agreement.

SIX: You hereby represent and agree that you have not assigned or transferred, or attempted to have assigned or transfer, to any person or entity, any of the Claims that you are releasing in this Agreement.

The Company hereby represents and agrees that it has not assigned or transferred, or attempted to have assigned or transfer, to any person or entity, any of the Claims that it is releasing in this Agreement.

SEVEN: As a further material inducement to the Company to enter into this Agreement, you hereby agree to indemnify and hold each of the Releasees harmless from all loss, costs, damages, or expenses, including without limitation, attorneys' fees incurred by the Releasees, arising out of any breach of this Agreement by you or the fact that any representation made in this Agreement by you was false when made.

As a further material inducement to you to enter into this Agreement, the Company hereby agrees to indemnify and hold each of the Releasees harmless from all loss, costs, damages, or expenses, including without limitation, attorneys' fees incurred by the Releasees, arising out of any breach of this Agreement by it or the fact that any representation made in this Agreement by it was knowingly false when made.

EIGHT: You and the Company represent and acknowledge that in executing this Agreement, neither is relying upon any representation or statement not set forth in this Agreement or the Severance Agreement.

NINE:

(a) This Agreement shall not in any way be construed as an admission by the Company that it has acted wrongfully with respect to you or any other person, or that you have any rights whatsoever against the Company, and the Company specifically disclaims any liability to or wrongful acts against you or any other person, on the part of itself, its employees or its agents. This Agreement shall not in any way be construed as an admission by you that you have acted wrongfully with respect to the Company, or that you failed to perform your duties or negligently performed or breached your duties, or that the Company had good cause to terminate your employment.

(b) If you are a party or are threatened to be made a party to any proceeding by reason of the fact that you were an officer or director of the Company, the Company shall indemnify you against any expenses (including reasonable attorneys' fees; *provided*, that counsel has been approved by the Company prior to retention, which approval shall not be unreasonably withheld), judgments, fines, settlements and other amounts actually or reasonably incurred by you in connection with that proceeding; *provided*, that you acted in good faith and in a manner you reasonably believed to be in the best interest of the Company. The limitations of California Corporations Code Section 317 shall apply to this assurance of indemnification.

(c) You agree to cooperate with the Company and its designated attorneys, representatives and agents in connection with any actual or threatened judicial, administrative or other legal or equitable proceeding in which the Company is or may become involved. Upon reasonable notice, you agree to meet with and provide to the Company or its designated attorneys, representatives or agents

all information and knowledge you have relating to the subject matter of any such proceeding. The Company agrees to reimburse you for any reasonable costs you incur in providing such cooperation.

TEN: This Agreement is made and entered into in California. This Agreement shall in all respects be interpreted, enforced and governed by and under the laws of the State of California and applicable Federal law. Any dispute about the validity, interpretation, effect or alleged violation of this Agreement (an "arbitrable dispute") must be submitted to arbitration in San Diego, California. Arbitration shall take place before an experienced employment arbitrator licensed to practice law in such state and selected in accordance with the then existing JAMS arbitration rules applicable to employment disputes; *provided*, *however*, that in any event, the arbitrator shall allow reasonable discovery. Arbitration shall be the exclusive remedy for any arbitrable dispute. The arbitrator in any arbitrable dispute shall not have authority to modify or change the Agreement in any respect. You and the Company shall each be responsible for payment of one-half (1/2) the amount of the arbitrator's fee(s); *provided*, *however*, that in no event shall you be required to pay any fee or cost of arbitration that is unique to arbitration or exceeds the costs you would have incurred had any arbitrable dispute been pursued in a court of competent jurisdiction. The Company shall make up any shortfall. Should any party to this Agreement institute any legal action or administrative proceeding against the other with respect to any Claim waived by this Agreement or pursue any arbitrable dispute by any method other than arbitration, the prevailing party shall be entitled to recover from the non-prevailing party all damages, costs, expenses and attorneys' fees incurred as a result of that action. The arbitrator's decision and/or award shall be rendered in writing and will be fully enforceable and subject to an entry of judgment by the Superior Court of the State of California for the County of San Diego, or any other court of competent jurisdiction.

ELEVEN: Both you and the Company understand that this Agreement is final and binding eight (8) days after its execution and return. Should you nevertheless attempt to challenge the enforceability of this Agreement as provided in Paragraph TEN or, in violation of that Paragraph, through litigation, as a further limitation on any right to make such a challenge, you shall initially tender to the Company, by certified check delivered to the Company, all monies received pursuant to Section 14(d) of the Severance Pay Agreement, plus interest, and invite the Company to retain such monies and agree with you to cancel this Agreement and void the Company's obligations under Section 14(d) of the Severance Pay Agreement. In the event the Company accepts this offer, the Company shall retain such monies and this Agreement shall be canceled and the Company shall have no obligation under Section 14(d) of the Severance Pay Agreement. In the event the Company does not accept such offer, the Company shall so notify you and shall place such monies in an interest-bearing escrow account pending resolution of the dispute between you and the Company as to whether or not this Agreement and the Company's obligations under Section 14(d) of the Severance Pay Agreement shall be set aside and/or otherwise rendered voidable or unenforceable. Additionally, any consulting agreement then in effect between you and the Company shall be immediately rescinded with no requirement of notice.

TWELVE: Any notices required to be given under this Agreement shall be delivered either personally or by first class United States mail, postage prepaid, addressed to the respective parties as follows:

To Company: [TO COME]

Attn: [TO COME]

To You: _____

_____

_____

THIRTEEN: You understand and acknowledge that you have been given a period of forty-five (45) days to review and consider this Agreement (as well as statistical data on the persons eligible for similar benefits) before signing it and may use as much of this forty-five (45) day period as you wish prior to signing. You are encouraged, at your personal expense, to consult with an attorney before signing this Agreement. You understand and acknowledge that whether or not you do so is your decision. You may revoke this Agreement within seven (7) days of signing it. If you wish to revoke, the Company's Vice President, Human Resources must receive written notice from you no later than the close of business on the seventh (7th) day after you have signed the Agreement. If revoked, this Agreement shall not be effective and enforceable, and you will not receive payments or benefits under Section 14(d) of the Severance Pay Agreement.

FOURTEEN: This Agreement constitutes the entire agreement of the parties hereto and supersedes any and all other agreements (except the Severance Pay Agreement) with respect to the subject matter of this Agreement, whether written or oral, between you and the Company. All modifications and amendments to this Agreement must be in writing and signed by the parties.

FIFTEEN: Each party agrees, without further consideration, to sign or cause to be signed, and to deliver to the other party, any other documents and to take any other action as may be necessary to fulfill the obligations under this Agreement.

SIXTEEN: If any provision of this Agreement or the application thereof is held invalid, the invalidity shall not affect other provisions or applications of the Agreement which can be given effect without the invalid provisions or application; and to this end the provisions of this Agreement are declared to be severable.

SEVENTEEN: This Agreement may be executed in counterparts.

I have read the foregoing General Release, and I accept and agree to the provisions it contains and hereby execute it voluntarily and with full understanding of its consequences. I am aware it includes a release of all known or unknown claims.

DATED: _____

_____

DATED: _____

_____

You acknowledge that you first received this Agreement on [date].

_____

SEMPRA ENERGY

SEVERANCE PAY AGREEMENT

THIS AGREEMENT (this "Agreement"), dated as of January 4, 2014 (the "Effective Date"), is made by and between SEMPRA ENERGY, a California corporation ("Sempra Energy"), and Patricia K. Wagner (the "Executive").

WHEREAS, the Executive is currently employed by Sempra Energy or a direct or indirect subsidiary of Sempra Energy (Sempra Energy and its subsidiaries are hereinafter collectively referred to as the "Company") as President and Chief Executive Officer, Sempra U.S. Gas and Power; and

WHEREAS, Sempra Energy and the Executive desire to enter into this Agreement; and

WHEREAS, the Board of Directors of Sempra Energy (the "Board") has authorized this Agreement.

NOW, THEREFORE, in consideration of the premises and mutual covenants herein contained, the Company and the Executive hereby agree as follows:

Section 1. Definitions. For purposes of this Agreement, the following capitalized terms have the meanings set forth below:

"Accounting Firm" has the meaning assigned thereto in Section 8(d) hereof.

"Accrued Obligations" means the sum of (A) the Executive's Annual Base Salary through the Date of Termination to the extent not theretofore paid, (B) an amount equal to any annual Incentive Compensation Awards earned with respect to fiscal years ended prior to the year that includes the Date of Termination to the extent not theretofore paid, (C) any accrued and unpaid vacation, if any, and (D) reimbursement for unreimbursed business expenses, if any, properly incurred by the Executive in the performance of his duties in accordance with policies established from time to time by the Board, in each case to the extent not theretofore paid.

"Affiliate" has the meaning set forth in Rule 12b-2 promulgated under the Exchange Act.

"Annual Base Salary" means the Executive's annual base salary from the Company.

"Asset Purchaser" has the meaning assigned thereto in Section 16(e).

"Asset Sale" has the meaning assigned thereto in Section 16(e).

"Average Annual Bonus" means the average of the annual bonuses from the Company earned by the Executive with respect to the three (3) fiscal years of the Company immediately preceding the Date of Termination (the "Bonus Fiscal Years"); *provided*, *however*, that, if the Executive was employed by the Company for less than three (3) Bonus Fiscal Years, "Average Annual Bonus" means the average of the annual bonuses (if any) from the Company earned by the Executive with respect to the Bonus Fiscal Years during which the Executive was employed by the Company; and, *provided*, *further*,

that, if the Executive was not employed by the Company during any of the Bonus Fiscal Years, "Average Annual Bonus" means zero.

"Cause" means:

(a) Prior to a Change in Control, (i) the willful failure by the Executive to substantially perform the Executive's duties with the Company (other than any such failure resulting from the Executive's incapacity due to physical or mental illness, (ii) the grossly negligent performance of such obligations referenced in clause (i) of this definition, (iii) the Executive's gross insubordination; and/or (iv) the Executive's commission of one or more acts of moral turpitude that constitute a violation of applicable law (including but not limited to a felony) which have or result in an adverse effect on the Company, monetarily or otherwise, or one or more significant acts of dishonesty. For purposes of clause (i) of this subsection (a), no act, or failure to act, on the Executive's part shall be deemed "willful" unless done, or omitted to be done, by the Executive not in good faith and without reasonable belief that the Executive's act, or failure to act, was in the best interests of the Company.

(b) From and after a Change in Control, (i) the willful and continued failure by the Executive to substantially perform the Executive's duties with the Company (other than any such failure resulting from the Executive's incapacity due to physical or mental illness or any such actual or anticipated failure after the issuance of a Notice of Termination for Good Reason by the Executive pursuant to Section 2 hereof) and/or (ii) the Executive's commission of one or more acts of moral turpitude that constitute a violation of applicable law (including but not limited to a felony) which have or result in an adverse effect on the Company, monetarily or otherwise, or one or more significant acts of dishonesty. For purposes of clause (i) of this subsection (b), no act, or failure to act, on the Executive's part shall be deemed "willful" unless done, or omitted to be done, by the Executive not in good faith and without reasonable belief that the Executive's act, or failure to act, was in the best interests of the Company. Notwithstanding the foregoing, the Executive shall not be deemed terminated for Cause pursuant to clause (i) of this subsection (b) unless and until the Executive shall have been provided with reasonable notice of and, if possible, a reasonable opportunity to cure the facts and circumstances claimed to provide a basis for termination of the Executive's employment for Cause.

"Change in Control" shall be deemed to have occurred on the date that a change in the ownership of Sempra Energy, a change in the effective control of Sempra Energy, or a change in the ownership of a substantial portion of assets of Sempra Energy occurs (each, as defined in subsection (a) below), except as otherwise provided in subsections (b), (c) and (d) below:

(a) (i) a "change in the ownership of Sempra Energy" occurs on the date that any one person, or more than one person acting as a group, acquires ownership of stock of Sempra Energy that, together with stock held by such person or group, constitutes more than fifty percent (50%) of the total fair market value or total voting power of the stock of Sempra Energy,

(ii) a "change in the effective control of Sempra Energy" occurs only on either of the following dates:

(A) the date any one person, or more than one person acting as a group, acquires (or has acquired during the twelve (12) month period ending on the date of the most recent acquisition by such person or persons) ownership of stock of Sempra Energy possessing thirty percent (30%) or more of the total voting power of the stock of Sempra Energy, or

(B) the date a majority of the members of the Board is replaced during any twelve (12) month period by directors whose appointment or election is not endorsed by a majority of the members of the Board before the date of appointment or election, and

(iii) a "change in the ownership of a substantial portion of assets of Sempra Energy" occurs on the date any one person, or more than one person acting as a group, acquires (or has acquired during the twelve (12) month period ending on the date of the most recent acquisition by such person or persons) assets from Sempra Energy that have a total gross fair market value equal to or more than eighty-five percent (85%) of the total gross fair market value of all of the assets of Sempra Energy immediately before such acquisition or acquisitions.

(b) A "change in the ownership of Sempra Energy" or "a change in the effective control of Sempra Energy" shall not occur under clause (a)(i) or (a)(ii) by reason of any of the following:

(i) an acquisition of ownership of stock of Sempra Energy directly from Sempra Energy or its Affiliates other than in connection with the acquisition by Sempra Energy or its Affiliates of a business,

(ii) a merger or consolidation which would result in the voting securities of Sempra Energy outstanding immediately prior to such merger or consolidation continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity or any parent thereof), in combination with the ownership of any trustee or other fiduciary holding securities under an employee benefit plan of the Company, at least sixty percent (60%) of the combined voting power of the securities of Sempra Energy or such surviving entity or any parent thereof outstanding immediately after such merger or consolidation, or

(iii) a merger or consolidation effected to implement a recapitalization of Sempra Energy (or similar transaction) in which no Person is or becomes the Beneficial Owner (within the meaning of Rule 13d-3 promulgated under the Exchange Act), directly or indirectly, of securities of Sempra Energy (not including the securities beneficially owned by such Person any securities acquired directly from Sempra Energy or its Affiliates other than in connection with the acquisition by Sempra Energy or its Affiliates of a business) representing twenty percent (20%) or more of the combined voting power of Sempra Energy's then outstanding securities.

(c) A "change in the ownership of a substantial portion of assets of Sempra Energy" shall not occur under clause (a)(iii) by reason of a sale or disposition by Sempra Energy of the assets of Sempra Energy to an entity, at least sixty percent (60%) of the combined voting power of the voting securities of which are owned by shareholders of Sempra Energy in substantially the same proportions as their ownership of Sempra Energy immediately prior to such sale.

(d) This definition of "Change in Control" shall be limited to the definition of a "change in control event" relating to Sempra Energy under Treasury Regulation Section 1.409A-3(i)(5). A "Change in Control" shall only occur if there is a "change in control event" relating to Sempra Energy under Treasury Regulation Section 1.409A-3(i)(5) with respect to the Executive.

"Change in Control Date" means the date on which a Change in Control occurs.

"Code" means the Internal Revenue Code of 1986, as amended.

"Compensation Committee" means the compensation committee of the Board.

"Consulting Payment" has the meaning assigned thereto in Section 14(d) hereof.

"Consulting Period" has the meaning assigned thereto in Section 14(e) hereof.

"Date of Termination" has the meaning assigned thereto in Section 2(b) hereof.

"Deferred Compensation Plan" has the meaning assigned thereto in Section 4(f) hereof.

"Disability" has the meaning set forth in the Company's long-term disability plan or its successor; *provided*, *however*, that the Board may not terminate the Executive's employment hereunder by reason of Disability unless (i) at the time of such termination there is no reasonable expectation that the Executive will return to work within the next ninety (90) day period and (ii) such termination is permitted by all applicable disability laws.

"Exchange Act" means the Securities Exchange Act of 1934, as amended, and the applicable rulings and regulations thereunder.

"Excise Tax" has the meaning assigned thereto in Section 8(a) hereof.

"Good Reason" means:

a. Prior to a Change in Control, the occurrence of any of the following without the prior written consent of the Executive, unless such act or failure to act is corrected by the Company prior to the Date of Termination specified in the Notice of Termination (as required under Section 2 hereof):

i. the assignment to the Executive of any duties materially inconsistent with the range of duties and responsibilities appropriate to a senior Executive within the Company (such range determined by reference to past, current and reasonable practices within the Company);

ii. a material reduction in the Executive's overall standing and responsibilities within the Company, but not including (A) a mere change in title or (B) a transfer within the Company, which, in the case of both (A) and (B), does not adversely affect the Executive's overall status within the Company;

iii. a material reduction by the Company in the Executive's aggregate annualized compensation and benefits opportunities, except for across-the-board reductions (or modifications of benefit plans) similarly affecting all similarly situated executives (both of the Company and of any Person then in control of the Company) of comparable rank with the Executive;

iv. the failure by the Company to pay to the Executive any portion of the Executive's current compensation and benefits or any portion of an installment of deferred compensation under any deferred compensation program of the Company within thirty (30) days of the date such compensation is due;

v. any purported termination of the Executive's employment that is not effected pursuant to a Notice of Termination satisfying the requirements of Section 2 hereof; for purposes of this Agreement, no such purported termination shall be effective;

vi. the failure by Sempra Energy to perform its obligations under Section 16(c), (d) or (e) hereof;

vii. the failure by the Company to provide the indemnification and D&O insurance protection Section 10 of this Agreement requires it to provide; or

viii. the failure by Sempra Energy to comply with any material provision of this Agreement.

b. From and after a Change in Control, the occurrence of any of the following without the prior written consent of the Executive, unless such act or failure to act is corrected by the Company

prior to the Date of Termination specified in the Notice of Termination (as required under Section 2 hereof):

i. an adverse change in the Executive's title, authority, duties, responsibilities or reporting lines as in effect immediately prior to the Change in Control;

ii. a reduction by the Company in the Executive's aggregate annualized compensation opportunities, except for across-the-board reductions in base salaries, annual bonus opportunities or long-term incentive compensation opportunities of less than ten percent (10%) similarly affecting all similarly situated executives (both of the Company and of any Person then in control of the Company) of comparable rank with the Executive; or the failure by the Company to continue in effect any material benefit plan in which the Executive participates immediately prior to the Change in Control, unless an equitable arrangement (embodied in an ongoing substitute or alternative plan) has been made with respect to such plan, or the failure by the Company to continue the Executive's participation therein (or in such substitute or alternative plan) on a basis not materially less favorable, both in terms of the amount of benefits provided and the level of the Executive's participation relative to other participants, as existed at the time of the Change in Control;

iii. the relocation of the Executive's principal place of employment immediately prior to the Change in Control Date (the "Principal Location") to a location which is both further away from the Executive's residence and more than thirty (30) miles from such Principal Location, or the Company's requiring the Executive to be based anywhere other than such Principal Location (or permitted relocation thereof), or a substantial increase in the Executive's business travel obligations outside of the Southern California area as of the Effective Date other than any such increase that (A) arises in connection with extraordinary business activities of the Company of limited duration and (B) is understood not to be part of the Executive's regular duties with the Company;

iv. the failure by the Company to pay to the Executive any portion of the Executive's current compensation and benefits or any portion of an installment of deferred compensation under any deferred compensation program of the Company within thirty (30) days of the date such compensation is due;

v. any purported termination of the Executive's employment that is not effected pursuant to a Notice of Termination satisfying the requirements of Section 2 hereof; for purposes of this Agreement, no such purported termination shall be effective;

vi. the failure by Sempra Energy to perform its obligations under Section 16(c), (d) or (e) hereof;

vii. the failure by the Company to provide the indemnification and D&O insurance protection Section 10 of this Agreement requires it to provide; or

viii. the failure by Sempra Energy to comply with any material provision of this Agreement.

Following a Change in Control, the Executive's determination that an act or failure to act constitutes Good Reason shall be presumed to be valid unless such determination is deemed to be unreasonable by an arbitrator pursuant to the procedure described in Section 13 hereof. The Executive's right to terminate the Executive's employment for Good Reason shall not be affected by the Executive's incapacity due to physical or mental illness. The Executive's continued employment shall not constitute consent to, or a waiver of rights with respect to, any act or failure to act constituting Good Reason hereunder.

"Incentive Compensation Awards" means awards granted under Incentive Compensation Plans providing the Executive with the opportunity to earn, on a year-by-year basis, annual and long-term incentive compensation.

"Incentive Compensation Plans" means annual incentive compensation plans and long-term incentive compensation plans of the Company, which long-term incentive compensation plans may include plans offering stock options, restricted stock and other long-term incentive compensation.

"Involuntary Termination" means (a) the Executive's Separation from Service by reason other than for Cause, death, or Disability, or Mandatory Retirement, or (b) the Executive's Separation from Service by reason of resignation of employment for Good Reason.

"JAMS Rules" has the meaning assigned thereto in Section 13 hereof.

"Mandatory Retirement" means termination of employment pursuant to the Company's mandatory retirement policy.

"Notice of Termination" has the meaning assigned thereto in Section 2(a) hereof.

"Payment" has the meaning assigned thereto in Section 8(a) hereof.

"Payment in Lieu of Notice" has the meaning assigned thereto in Section 2(b) hereof.

"Person" has the meaning set forth in section 3(a)(9) of the Exchange Act, as modified and used in sections 13(d) and 14(d) thereof, except that such term shall not include (i) the Company or any of its Affiliates, (ii) a trustee or other fiduciary holding securities under an employee benefit plan of the Company or any of its Affiliates, (iii) an underwriter temporarily holding securities pursuant to an offering of such securities, (iv) a corporation owned, directly or indirectly, by the shareholders of the Company in substantially the same proportions as their ownership of stock of the Company, or (v) a person or group as used in Rule 13d-1(b) promulgated under the Exchange Act.

"Post-Change in Control Severance Payment" has the meaning assigned thereto in Section 5 hereof.

"Pre-Change in Control Severance Payment" has the meaning assigned thereto in Section 4 hereof.

"Principal Location" has the meaning assigned thereto in clause (b)(iii) of the definition of Good Reason, above.

"Proprietary Information" has the meaning assigned thereto in Section 14(a) hereof.

"Pro Rata Bonus" has the meaning assigned thereto in Section 5(b) hereof.

"Release" has the meaning assigned thereto in Section 4 hereof.

"Section 409A Payments" means any of the following: (a) the Payment in Lieu of Notice; (b) the Pre-Change in Control Severance Payment; (c) the Post-Change in Control Severance Payment; (d) the Pro Rata Bonus; (e) the Consulting Payment; (f) the payment under Section 5(c); (g) the financial planning services and the related payments provided under Sections 4(e) and 5(g); (h) the legal fees and expenses reimbursed under Section 15; and (i) any other payment that the Company determines in its sole discretion is subject to Section 409A of the Code as non-qualified deferred compensation.

"Sempra Energy Control Group" means Sempra Energy and all persons with whom Sempra Energy would be considered a single employer under Section 414(b) or 414(c) of the Code, as determined from time to time.

"Separation from Service" has the meaning set forth in Treasury Regulation Section 1.409A-1(h), with respect to the Service Recipient.

"SERP" has the meaning assigned thereto in Section 5(c) hereof.

"Specified Employee" shall be determined in accordance with Section 409A(a)(2)(B)(i) of the Code and Treasury Regulation 1.409A-1(i).

For purposes of this Agreement, references to any "Treasury Regulation" shall mean such Treasury Regulation as in effect on the date hereof.

Section 2. Notice and Date of Termination

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(a) Any termination of the Executive's employment by the Company or by the Executive shall be communicated by a written notice of termination to the other party (the "Notice of Termination"). Where applicable, the Notice of Termination shall indicate the specific termination provision in this Agreement relied upon and shall set forth in reasonable detail the facts and circumstances claimed to provide a basis for termination of the Executive's employment under the provision so indicated. Unless the Board determines otherwise, a Notice of Termination by the Executive alleging a termination for Good Reason must be made within 180 days of the act or failure to act that the Executive alleges to constitute Good Reason.

(b) The date of the Executive's termination of employment with the Company (the "Date of Termination") shall be determined as follows: (i) if the Executive's Separation from Service is at the volition of the Company, the Date of Termination shall be the date specified in the Notice of Termination (which, in the case of a termination by the Company other than for Cause, shall not be less than two (2) weeks from the date such Notice of Termination is given unless the Company elects to pay the Executive, in addition to any other amounts payable hereunder, an amount (the "Payment in Lieu of Notice") equal to two (2) weeks of the Executive's Annual Base Salary in effect on the Date of Termination), and (ii) if the Executive's Separation from Service is by the Executive for Good Reason, the Date of Termination shall be determined by the Executive and specified in the Notice of Termination, but shall not in any event be less than fifteen (15) days nor more than sixty (60) days after the date such Notice of Termination is given. The Payment in Lieu of Notice shall be paid on such date as is required by law, but no later than thirty (30) days after the date of the Executive's Separation from Service; *provided, however*, that if the Executive is a Specified Employee on the date of his or her Separation from Service, such Payment in Lieu of Notice shall be paid as provided in Section 9 hereof.

Section 3. Termination from the Board. Upon the termination of the Executive's employment for any reason, the Executive's membership on the Board, the board of directors of any of the Company's Affiliates, any committees of the Board and any committees of the board of directors of any of the Company's Affiliates, if applicable, shall be automatically terminated.

Section 4. Severance Benefits upon Involuntary Termination Prior to Change in Control

. Except as provided in Section 5(h) and Section 19(i) hereof, in the event of the Involuntary Termination of the Executive prior to a Change in Control, the Company shall pay the Executive, in one lump sum cash payment, an amount (the "Pre-Change in Control Severance Payment") equal to one-half (0.5) times the greater of: (X) 170% of the Executive's Annual Base Salary as in effect

on the Date of Termination, and (Y) the Executive's Annual Base Salary as in effect on the Date of Termination, plus the Executive's Average Annual Bonus. In addition to the Pre-Change in Control Severance Payment, the Executive shall be entitled to the following additional benefits specified in subsections (a) through (e). The Company's obligation to pay the Pre-Change in Control Severance Payment or provide the benefits set forth in subsections (c), (d) and (e) are subject to and conditioned upon the Executive executing a release (the "Release") of all claims substantially in the form attached hereto as Exhibit A within fifty (50) days after the date of Involuntary Termination and Executive not revoking such Release in accordance with the terms thereof. Except as provided in Section 4(f), the Pre-Change in Control Severance Payment shall be paid on such date as is determined by the Company within sixty (60) days after the date of the Involuntary Termination; but not before the Release becomes effective and irrevocable. If the fifty (50) day period in which the Release could become effective spans more than one taxable year, then the Pre-Change in Control Severance Payment shall not be made until the later taxable year. Notwithstanding the foregoing, if the Executive is a Specified Employee on the date of the Executive's Involuntary Termination, the Pre-Change in Control Severance Payment and the financial planning services and the related payments provided under Section 4(e) shall be paid as provided in Section 9 hereof.

(a) Accrued Obligations. The Company shall pay the Executive a lump sum amount in cash equal to the Accrued Obligations within the time required by law.

(b) Equity Based Compensation. The Executive shall retain all rights to any equity-based compensation awards to the extent set forth in the applicable plan and/or award agreement.

(c) Welfare Benefits. Subject to Section 12 below, for a period of six (6) months following the date of the Involuntary Termination (and an additional twelve (12) months if the Executive provides consulting services under Section 14(e) hereof), the Executive and his dependents shall be provided with health insurance benefits substantially similar to those provided to the Executive and his dependents immediately prior to the date of the Involuntary Termination; *provided*, *however*, that such benefits shall be provided on substantially the same terms and conditions and at the same cost to the Executive as in effect immediately prior to the date of the Involuntary Termination. Such benefits shall be provided through insurance maintained by the Company under the Company's benefit plans. Such benefits shall be provided in a manner that complies with Treasury Regulation Section 1.409A-1(a)(5). Notwithstanding the foregoing, if the Company determines in its sole discretion that it cannot provide the foregoing benefit without potentially violating applicable law (including, without limitation, Section 2716 of the Public Health Service Act), the Company shall in lieu thereof provide to the Executive a taxable monthly payment in an amount equal to the monthly premium that the Executive would be required to pay to continue the Executive's and his covered dependents' group insurance coverages under COBRA as in effect on the Date of Termination (which amount shall be based on the premiums for the first month of COBRA coverage); *provided, however,* that, if the Executive is a Specified Employee on the Date of Termination, then such payments shall be paid as provided in Section 9 hereof.

(d) Outplacement Services. The Executive shall receive reasonable outplacement services, on an in-kind basis, suitable to his position and directly related to the Executive's Involuntary Termination, for a period of eighteen (18) months following the date of the Involuntary Termination, in an aggregate amount of cost to the Company not to exceed $50,000. Notwithstanding the foregoing, the Executive shall cease to receive outplacement services on the date the Executive accepts employment with a subsequent employer. Such outplacement services shall be provided in a manner that complies with Treasury Regulation Section 1.409A-1(b)(9)(v)(A).

(e) Financial Planning Services. The Executive shall receive financial planning services, on an in-kind basis, for a period of eighteen (18) months following the Date of Termination. Such financial planning services shall include expert financial and legal resources to assist the Executive with financial planning needs and shall be limited to (i) current investment portfolio management, (ii) tax

planning, (iii) tax return preparation, and (iv) estate planning advice and document preparation (including wills and trusts); *provided*, *however*, that the Company shall provide such financial planning services during any taxable year of the Executive only to the extent the cost to the Company for such taxable year does not exceed $25,000. The Company shall provide such financial planning services through a financial planner selected by the Company, and shall pay the fees for such financial planning services. The financial planning services provided during any taxable year of the Executive shall not affect the financial planning services provided in any other taxable year of the Executive. The Executive's right to financial planning services shall not be subject to liquidation or exchange for any other benefit. Such financial planning services shall be provided in a manner that complies with Treasury Regulation Section 1.409A-3(i)(1)(iv).

(f) Deferral of Payments. The Executive shall have the right to elect to defer the Pre-Change in Control Severance Payment to be received by the Executive pursuant to this Section 4 under the terms and conditions of the Sempra Energy 2005 Deferred Compensation Plan (the "Deferred Compensation Plan"). Any such deferral election shall be made in accordance with Section 18(b) hereof.

Section 5. Severance Benefits upon Involuntary Termination in Connection with and after Change in Control

. Notwithstanding the provisions of Section 4 above, and except as provided in Section 19(i) hereof, in the event of the Involuntary Termination of the Executive on or within two (2) years following a Change in Control, in lieu of the payments described in Section 4 above, the Company shall pay the Executive, in one lump sum cash payment, an amount (the "Post-Change in Control Severance Payment") equal to the greater of: (X) 170% of the Executive's Annual Base Salary as in effect immediately prior to the Change in Control or the Date of Termination, whichever is greater, and (Y) the Executive's Annual Base Salary as in effect immediately prior to the Change in Control or on the Date of Termination, whichever is greater, plus the Executive's Average Annual Bonus. In addition to the Post-Change in Control Severance Payment, the Executive shall be entitled to the following additional benefits specified in subsections (a) through (g). The Company's obligation to pay the Post-Change in Control Severance Payment or provide the benefits set forth in subsections (b),(c), (d), (e), (f) and (g) are subject to and conditioned upon the Executive executing the Release within fifty (50) days after the date of Involuntary Termination and Executive not revoking such Release in accordance with the terms thereof. Except as provided in Sections 5(h) and 5(i), the Post-Change in Control Severance Payment, the Pro Rata Bonus and the payments under Section 6(c) shall be paid on such date as is determined by the Company within sixty (60) days after the date of the Involuntary Termination. If the fifty (50) day period in which the Release could become effective spans more than one taxable year, then the Post-Change in Control Severance Payment, Pro Rata Bonus and payments under Section 5(c) shall not be made until the later taxable year. Notwithstanding the foregoing, if the Executive is a Specified Employee on the date of the Executive's Involuntary Termination, the Post-Change in Control Severance Payment, the Pro Rata Bonus, the payment under Section 5(c) and the financial planning services and the related payments provided under Section 5(g) shall be paid as provided in Section 9 hereof.

(a) Accrued Obligations. The Company shall pay the Executive a lump sum amount in cash equal to the Accrued Obligations within the time required by law.

(b) Pro Rata Bonus. The Company shall pay the Executive a lump sum amount in cash equal to: (i) the greater of: (X) 70% of the Executive's Annual Base Salary as in effect immediately prior to the Change in Control or on the Date of Termination, whichever is greater, or (Y) the Executive's Average Annual Bonus, multiplied by (ii) a fraction, the numerator of which shall be the number of days from the beginning of such fiscal year to and including the Date of Termination and the denominator of which shall be 365 equal to (the "Pro Rata Bonus").

(c) Pension Supplement. The Executive shall be entitled to receive a Supplemental Retirement Benefit under the Sempra Energy Supplemental Executive Retirement Plan, as in effect from

time to time ("SERP"), determined in accordance with this Section 5(c), in the event that the Executive is a "Participant" (as defined in the SERP) as of the Date of Termination. Such Supplemental Retirement Benefit shall be determined by crediting the Executive with additional months of Service (if any) equal to the number of full calendar months from the Date of Termination to the date on which the Executive would have attained age 62. The Executive shall be entitled to receive such Supplemental Retirement Benefit without regard to whether the Executive has attained age 55 or completed five years of "Service" (as defined in the SERP) as of the Date of Termination. The Executive shall be treated as qualified for "Retirement" (as defined in the SERP) as of the Date of Termination, and the Executive's Vesting Factor with respect to the Supplemental Retirement Benefit shall be 100%. The Executive's Supplemental Retirement Benefit shall be calculated based on the Executive's actual age as of the date of commencement of payment of such Supplemental Retirement Benefit (the "SERP Distribution Date"), and by applying the applicable early retirement factors under the SERP, if the Executive has not attained age 62 but has attained age 55 as of the SERP Distribution Date. If the Executive has not attained age 55 as of the SERP Distribution Date, the Executive's Supplemental Retirement Benefit shall be calculated by applying the applicable early retirement factor under the SERP for age 55, and the Supplemental Retirement Benefit otherwise payable at age 55 shall be actuarially adjusted to the Executive's actual age as of the SERP Distribution Date using the following actuarial assumptions: (i) the applicable mortality table promulgated by the Internal Revenue Service under Section 417(e)(3) of the Code, as in effect on the first day of the calendar year in which the SERP Distribution Date occurs, and (ii) the applicable interest rate promulgated by the Internal Revenue Service under Section 417(a)(3) of the Code for the November next preceding the first day of the calendar year in which the SERP Distribution Date occurs. The Executive's Supplemental Retirement Benefit shall be determined in accordance with this Section 5(c), notwithstanding any contrary provisions of the SERP and, to the extent subject to Section 409A of the Code, shall be paid in accordance with Treasury Regulation Section 1.409A-3(c)(1). The Supplemental Retirement Benefit paid to or on behalf of the Executive in accordance with this Section 5(c) shall be in full satisfaction of any and all of the benefits payable to or on behalf of the Executive under the SERP.

(d) Equity-Based Compensation. Notwithstanding the provisions of any applicable equity-compensation plan or award agreement to the contrary, all equity-based Incentive Compensation Awards (including, without limitation, stock options, stock appreciation rights, restricted stock awards, restricted stock units, performance share awards, awards covered under Section 162(m) of the Code, and dividend equivalents) held by the Executive shall immediately vest and become exercisable or payable, as the case may be, as of the Date of Termination, to be exercised or paid, as the case may be, in accordance with the terms of the applicable Incentive Compensation Plan and Incentive Compensation Award agreement, and any restrictions on any such Incentive Compensation Awards shall automatically lapse; *provided, however*, that any such stock option or stock appreciation rights awards granted on or after June 26, 1998 shall remain outstanding and exercisable until the earlier of (A) the later of eighteen (18) months following the Date of Termination or the period specified in the applicable Incentive Compensation Award agreements or (B) the expiration of the original term of such Incentive Compensation Award (or, if earlier, the tenth anniversary of the original date of grant) (it being understood that all Incentive Compensation Awards granted prior to or after June 26, 1998 shall remain outstanding and exercisable for a period that is no less than that provided for in the applicable agreement in effect as of the date of grant).

(e) Welfare Benefits. Subject to Section 12 below, for a period of twelve (12) months following the date of Involuntary Termination (and an additional twelve (12) months if the Executive provides consulting services under Section 14(e) hereof), the Executive and his dependents shall be provided with life, disability, accident and health insurance benefits substantially similar to those provided to the Executive and his dependents immediately prior to the date of Involuntary Termination or the Change in Control Date, whichever is more favorable to the Executive; *provided, however*, that such benefits shall be provided on substantially the same terms and conditions and at the same cost to the Executive as in effect immediately prior to the date of Involuntary Termination or the Change in Control

Date, whichever is more favorable to the Executive. Such benefits shall be provided through insurance maintained by the Company under the Company benefit plans. Such benefits shall be provided in a manner that complies with Treasury Regulation Section 1.409A-1(a)(5). Notwithstanding the foregoing, if the Company determines in its sole discretion that it cannot provide the foregoing benefit without potentially violating applicable law (including, without limitation, Section 2716 of the Public Health Service Act), the Company shall in lieu thereof provide to the Executive a taxable monthly payment in an amount equal to the monthly premium that the Executive would be required to pay to continue the Executive's and his covered dependents' group insurance coverages under COBRA as in effect on the Date of Termination (which amount shall be based on the premiums for the first month of COBRA coverage); *provided, however,* that, if the Executive is a Specified Employee on the Date of Termination, then such payments shall be paid as provided in Section 9 hereof.

(f) Outplacement Services. The Executive shall receive reasonable outplacement services, on an in-kind basis, suitable to his position and directly related to the Executive's Involuntary Termination, for a period of twenty-four (24) months following the date of Involuntary Termination (but in no event beyond the last day of the Executive's second taxable year following the Executive's taxable year in which the Involuntary Termination occurs), in the aggregate amount of cost to the Company not to exceed $50,000. Notwithstanding the foregoing, the Executive shall cease to receive outplacement services on the date the Executive accepts employment with a subsequent employer. Such outplacement services shall be provided in a manner that complies with Treasury Regulation Section 1.409A-1(b)(9)(v)(A).

(g) Financial Planning Services. The Executive shall receive financial planning services, on an in-kind basis, for a period of twenty-four (24) months following the date of Involuntary Termination. Such financial planning services shall include expert financial and legal resources to assist the Executive with financial planning needs and shall be limited to (i) current investment portfolio management, (ii) tax planning, (iii) tax return preparation, and (iv) estate planning advice and document preparation (including wills and trusts); *provided*, *however*, that the Company shall provide such financial services during any taxable year of the Executive only to the extent the cost to the Company for such taxable year does not exceed $25,000. The Company shall provide such financial planning services through a financial planner selected by the Company, and shall pay the fees for such financial planning services. The financial planning services provided during any taxable year of the Executive shall not affect the financial planning services provided in any other taxable year of the Executive. The Executive's right to financial planning services shall not be subject to liquidation or exchange for any other benefit. Such financial planning services shall be provided in a manner that complies with Section 1.409A-3(i)(1)(iv).

(h) Involuntary Termination in Connection with a Change in Control. Notwithstanding anything contained herein, in the event of an Involuntary Termination prior to a Change in Control, if the Involuntary Termination (1) was at the request of a third party who has taken steps reasonably calculated to effect such Change in Control or (2) otherwise arose in connection with or in anticipation of such Change in Control, then the Executive shall, in lieu of the payments described in Section 4 hereof, be entitled to the Post-Change in Control Severance Payment and the additional benefits described in this Section 5 as if such Involuntary Termination had occurred within two (2) years following the Change in Control. The amounts specified in Section 5 that are to be paid under this Section 5(h) shall be reduced by any amount previously paid under Section 4. The amounts to be paid under this Section 5(h) shall be paid within sixty (60) days after the Change in Control Date of such Change in Control.

(i) Deferral of Payments. The Executive shall have the right to elect to defer the Post-Change in Control Severance Payment and the Pro Rata Bonus to be received by the Executive pursuant to this Section 5 under the terms and conditions of the Deferred Compensation Plan. Any such deferral election shall be made in accordance with Section 18(b) hereof.

Section 6. Severance Benefits upon Termination by the Company for Cause or by the Executive Other than for Good Reason. If the Executive's employment shall be terminated for Cause, or if the Executive terminates employment other than for Good Reason, the Company shall have no further obligations to the Executive under this Agreement other than the Accrued Obligations and any amounts or benefits described in Section 10 hereof.

Section 7. Severance Benefits upon Termination due to Death or Disability. If the Executive has a Separation from Service by reason of death or Disability, the Company shall pay the Executive or his estate, as the case may be, the Accrued Obligations and the Pro Rata Bonus (without regard to whether a Change in Control has occurred) and any amounts or benefits described in Section 10 hereof. Such payments shall be in addition to those rights and benefits to which the Executive or his estate may be entitled under the relevant Company plans or programs. The Company's obligation to pay the Pro Rata Bonus is conditioned upon the Executive, the Executive's representative or the Executive's estate, as the case may be executing the Release within fifty (50) days after the date of Executive's Separation from Service and not revoking such Release in accordance with the terms thereof. The Accrued Obligations shall be paid within the time required by law and the Pro Rata Bonus shall be paid on such date as determined by the Company within sixty (60) days after the date of the Separation from Service but not before the Release becomes effective and irrevocable. If the fifty (50) day period in which the Release could become effective spans more than one taxable year, then the Pro Rata Bonus shall not be made until the later taxable year. Notwithstanding the foregoing, if the Executive is a Specified Employee on the date of the Executive's Separation from Service, the Pro Rata Bonus shall be paid as provided in Section 9 hereof.

Section 8. Limitations on Payments by the Company.

(a) Anything in this Agreement to the contrary notwithstanding and except as set forth in this Section 8 below, in the event it shall be determined that any payment or distribution in the nature of compensation (within the meaning of Section 280G(b)(2) of the Code) to or for the benefit of the Executive, whether paid or payable pursuant to this Agreement or otherwise (the "Payment") would be subject (in whole or in part) to the excise tax imposed by Section 4999 of the Code, (the "Excise Tax"), then, subject to subsection (b), the Pre-Change in Control Severance Benefit or the Post-Change in Control Severance Payment (whichever is applicable) payable under this Agreement shall be reduced under this subsection (a) to the amount equal to the Reduced Payment. For such Payment payable under this Agreement, the "Reduced Payment" shall be the amount equal to the greatest portion of the Payment (which may be zero) that, if paid, would result in no portion of any Payment being subject to the Excise Tax.

(b) The Pre-Change in Control Severance Benefit or the Post-Change in Control Severance Payment (whichever is applicable) payable under this Agreement shall not be reduced under subsection (a) if:

(i) such reduction in such Payment is not sufficient to cause no portion of any Payment to be subject to the Excise Tax, or

(ii) the Net After-Tax Unreduced Payments (as defined below) would equal or exceed one hundred and five percent (105%) of the Net After-Tax Reduced Payments (as defined below).

For purposes of determining the amount of any Reduced Payment under subsection (a), and the Net-After Tax Reduced Payments and the Net After-Tax Unreduced Payments, the Executive shall be considered to pay federal, state and local income and employment taxes at the Executive's applicable marginal rates taking into consideration any reduction in federal income taxes which could be obtained from the deduction of state and local income taxes, and any reduction or disallowance of itemized deductions and personal exemptions under applicable tax law). The applicable federal, state and local income and employment taxes and the Excise Tax (to the extent applicable) are collectively referred to as the "Taxes".

(c) The following definitions shall apply for purposes of this Section 8:

(i) "Net After-Tax Reduced Payments" shall mean the total amount of all Payments that the Executive would retain, on a Net After-Tax Basis, in the event that the Payments payable under this Agreement are reduced pursuant to subsection (a).

(ii) "Net After-Tax Unreduced Payments" shall mean the total amount of all Payments that the Executive would retain, on a Net After-Tax Basis, in the event that the Payments payable under this Agreement are not reduced pursuant to subsection (a).

(iii) "Net After-Tax Basis" shall mean, with respect to the Payments, either with or without reduction under subsection (a) (as applicable), the amount that would be retained by the Executive from such Payments after the payment of all Taxes.

(d) All determinations required to be made under this Section 8 and the assumptions to be utilized in arriving at such determinations, shall be made by a nationally recognized accounting firm as may be agreed by the Company and the Executive (the "Accounting Firm"); *provided*, that the Accounting Firm's determination shall be made based upon "substantial authority" within the meaning of Section 6662 of the Code. The Accounting Firm shall provide detailed supporting calculations to both the Company and the Executive within fifteen (15) business days of the receipt of notice from the Executive that there has been a Payment or such earlier time as is requested by the Company. All fees and expenses of the Accounting Firm shall be borne solely by the Company. Any determination by the Accounting Firm shall be binding upon the Company and the Executive. For purposes of determining whether and the extent to which the Payments will be subject to the Excise Tax, (i) no portion of the Payments the receipt or enjoyment of which the Executive shall have waived at such time and in such manner as not to constitute a "payment" within the meaning of Section 280G(b) of the Code shall be taken into account, (ii) no portion of the Payments shall be taken into account which, in the written opinion of the Accounting Firm, does not constitute a "parachute payment" within the meaning of Section 280G(b)(2) of the Code (including by reason of Section 280G(b)(4)(A) of the Code) and, in calculating the Excise Tax, no portion of such Payments shall be taken into account which, in the opinion of the Accounting Firm, constitutes reasonable compensation for services actually rendered, within the meaning of Section 280G(b)(4)(B) of the Code, in excess of the base amount (as defined in Section 280G(b)(3) of the Code) allocable to such reasonable compensation, and (iii) the value of any non-cash benefit or any deferred payment or benefit included in the Payments shall be determined by the Accounting Firm in accordance with the principles of Sections 280G(d)(3) and (4) of the Code.

Section 9. Delayed Distribution under Section 409A of the Code. If the Executive is a Specified Employee on the date of the Executive's Involuntary Termination (or on the date of the Executive's Separation from Service by reason of Disability), the Section 409A Payments, and any other payments or benefits under this Agreement subject to Section 409A of the Code, shall be delayed in order to avoid a prohibited distribution under Section 409A(a)(2)(B)(i) of the Code, and such payments or benefits shall be paid or distributed to the Executive during the thirty (30) day period commencing on the earlier of (a) the expiration of the six-month period measured from the date of the Executive's Separation from Service or (b) the date of the Executive's death. Upon the expiration of the applicable six-month period under Section 409A(a)(2)(B)(i) of the Code, all payments deferred pursuant to this Section 9 (excluding in-kind benefits) shall be paid in a lump sum payment to the Executive, plus interest thereon from the date of the Executive's Involuntary Termination through the payment date at an annual rate equal to Moody's Rate. The "Moody's Rate" shall mean the average of the daily Moody's Corporate Bond Yield Average - Monthly Average Corporates as published by Moody's Investors Service, Inc. (or any successor) for the month next preceding the Date of Termination. Any remaining payments due under the Agreement shall be paid as otherwise provided herein.

Section 10. Nonexclusivity of Rights. Nothing in this Agreement shall prevent or limit the Executive's continuing or future participation in any benefit, plan, program, policy or practice provided by the Company and for which the Executive may qualify (except with respect to any benefit to

which the Executive has waived his rights in writing), including, without limitation, any and all indemnification arrangements in favor of the Executive (whether under agreements or under the Company's charter documents or otherwise), and insurance policies covering the Executive, nor shall anything herein limit or otherwise affect such rights as the Executive may have under any other contract or agreement entered into after the Effective Date with the Company. Amounts which are vested benefits or which the Executive is otherwise entitled to receive under any benefit, plan, policy, practice or program of, or any contract or agreement entered into with, the Company shall be payable in accordance with such benefit, plan, policy, practice or program or contract or agreement except as explicitly modified by this Agreement. At all times during the Executive's employment with the Company and thereafter, the Company shall provide (to the extent permissible under applicable law) the Executive with indemnification and D&O insurance insuring the Executive against insurable events which occur or have occurred while the Executive was a director or the Executive officer of the Company, on terms and conditions that are at least as generous as that then provided to any other current or former director or the Executive officer of the Company or any Affiliate. Such indemnification and D&O insurance shall be provided in a manner that complies with Treasury Regulation Section 1.409A-1(b)(10).

Section 11. Clawbacks. Notwithstanding anything herein to the contrary, if the Company determines, in its good faith judgment, that if the Executive is required to forfeit or to make any repayment of any compensation or benefit(s) to the Company under the Sarbanes-Oxley Act of 2002 or pursuant to the Dodd-Frank Wall Street Reform and Consumer Protection Act or any other law, such forfeiture or repayment shall not constitute Good Reason.

Section 12. Full Settlement; Mitigation. The Company's obligation to make the payments provided for in this Agreement and otherwise to perform its obligations hereunder shall not be affected by any set-off, counterclaim, recoupment, defense or other claim, right or action which the Company may have against the Executive or others, provided that nothing herein shall preclude the Company from separately pursuing recovery from the Executive based on any such claim. In no event shall the Executive be obligated to seek other employment or take any other action by way of mitigation of the amounts (including amounts for damages for breach) payable to the Executive under any of the provisions of this Agreement, and such amounts shall not be reduced whether or not the Executive obtains other employment.

Section 13. Dispute Resolution.

(a) If any dispute arises between Executive and the Company, including, but not limited to, disputes relating to or arising out of this Agreement, any action relating to or arising out of my employment or its termination, and/or any disputes regarding the interpretation, enforceability, or validity of this Agreement ("Arbitrable Dispute"), Executive and the Company waive the right to resolve the dispute through litigation in a judicial forum and agree to resolve the Arbitrable Dispute through final and binding arbitration, except as prohibited by law. Arbitration shall be the exclusive remedy for any Arbitrable Dispute.

(b) As to any Arbitrable Dispute, the Company and Executive waive any right to a jury trial or a court bench trial. The Company and Executive also waive the right to bring, maintain, or participate in any class, collective, or representative proceeding, whether in arbitration or otherwise. Further, Arbitrable Disputes must be brought in the individual capacity of the party asserting the claim, and cannot be maintained on a class, collective, or representative basis.

(c) Arbitration shall take place at the office of the Judicial Arbitration and Mediation Service ("JAMS") (or, if Executive is employed outside of California, the American Arbitration Association ("AAA")) nearest to the location where Executive last worked for the Company. Except to the extent it conflicts with the rules and procedures set forth in this Arbitration Agreement, arbitration shall be conducted in accordance with the JAMs Employment Arbitration Rules & Procedures (if Executive is employed outside of California, the AAA Employment Arbitration Rules & Mediation Procedures), copies of which are attached for my reference and available at www.jamsadr.com; tel:

800.352.5267 and www.adr.org; tel: 800.778.7879, before a single experienced, neutral employment arbitrator selected in accordance with those rules.

(d) The Company will be responsible for paying any filing fee and the fees and costs of the arbitrator. Each party shall pay its own attorneys' fees. However, if any party prevails on a statutory claim that authorizes an award of attorneys' fees to the prevailing party, or if there is a written agreement providing for attorneys' fees, the arbitrator may award reasonable attorneys' fees to the prevailing party, applying the same standards a court would apply under the law applicable to the claim.

(e) The arbitrator shall apply the Federal Rules of Evidence, shall have the authority to entertain a motion to dismiss or a motion for summary judgment by any party, and shall apply the standards governing such motions under the Federal Rules of Civil Procedure. The arbitrator does not have the authority to consider, certify, or hear an arbitration as a class action, collective action, or any other type of representative action. The Company and Executive recognize that this Agreement arises out of or concerns interstate commerce and that the Federal Arbitration Act shall govern the arbitration and shall govern the interpretation or enforcement of this Arbitration Agreement or any arbitration award.

(f) EXECUTIVE ACKNOWLEDGES THAT BY ENTERING INTO THIS AGREEMENT, EXECUTIVE IS WAIVING ANY RIGHT HE OR SHE MAY HAVE TO A TRIAL BY JURY.

Section 14. Executive's Covenants.

(a) Confidentiality. The Executive acknowledges that in the course of his employment with the Company, he has acquired non-public privileged or confidential information and trade secrets concerning the operations, future plans and methods of doing business ("Proprietary Information") of the Company and its Affiliates; and the Executive agrees that it would be extremely damaging to the Company and its Affiliates if such Proprietary Information were disclosed to a competitor of the Company and its Affiliates or to any other person or corporation. The Executive understands and agrees that all Proprietary Information has been divulged to the Executive in confidence and further understands and agrees to keep all Proprietary Information secret and confidential (except for such information which is or becomes publicly available other than as a result of a breach by the Executive of this provision or information the Executive is required by any governmental, administrative or court order to disclose) without limitation in time. In view of the nature of the Executive's employment and the Proprietary Information the Executive has acquired during the course of such employment, the Executive likewise agrees that the Company and its Affiliates would be irreparably harmed by any disclosure of Proprietary Information in violation of the terms of this paragraph and that the Company and its Affiliates shall therefore be entitled to preliminary and/or permanent injunctive relief prohibiting the Executive from engaging in any activity or threatened activity in violation of the terms of this paragraph and to any other relief available to them. Inquiries regarding whether specific information constitutes Proprietary Information shall be directed to the Company's Senior Vice President, Public Policy (or, if such position is vacant, the Company's then Chief Executive Officer); *provided*, that the Company shall not unreasonably classify information as Proprietary Information.

(b) Non-Solicitation of Employees. The Executive recognizes that he possesses and will possess confidential information about other employees of the Company and its Affiliates relating to their education, experience, skills, abilities, compensation and benefits, and inter-personal relationships with customers of the Company and its Affiliates. The Executive recognizes that the information he possesses and will possess about these other employees is not generally known, is of substantial value to the Company and its Affiliates in developing their business and in securing and retaining customers, and has been and will be acquired by him because of his business position with the Company and its Affiliates. The Executive agrees that at all times during the Executive's employment with the Company and for a period of one (1) year thereafter, he will not, directly or indirectly, solicit or recruit any employee of the Company or its Affiliates for the purpose of being employed by him or by any competitor of the Company or its Affiliates on whose behalf he is acting as an agent, representative or employee and

that he will not convey any such confidential information or trade secrets about other employees of the Company and its Affiliates to any other person; *provided, however*, that it shall not constitute a solicitation or recruitment of employment in violation of this paragraph to discuss employment opportunities with any employee of the Company or its Affiliates who has either first contacted the Executive or regarding whose employment the Executive has discussed with and received the written approval of the Company's Vice President, Human Resources (or, if such position is vacant, the Company's then Chief Executive Officer), prior to making such solicitation or recruitment. In view of the nature of the Executive's employment with the Company, the Executive likewise agrees that the Company and its Affiliates would be irreparably harmed by any solicitation or recruitment in violation of the terms of this paragraph and that the Company and its Affiliates shall therefore be entitled to preliminary and/or permanent injunctive relief prohibiting the Executive from engaging in any activity or threatened activity in violation of the terms of this paragraph and to any other relief available to them.

(c) Survival of Provisions. The obligations contained in Section 14(a) and Section 14(b) above shall survive the termination of the Executive's employment within the Company and shall be fully enforceable thereafter. If it is determined by a court of competent jurisdiction in any state that any restriction in Section 14(a) or Section 14(b) above is excessive in duration or scope or is unreasonable or unenforceable under the laws of that state, it is the intention of the parties that such restriction may be modified or amended by the court to render it enforceable to the maximum extent permitted by the law of that state.

(d) Release; Lump Sum Payment. In the event of the Executive's Involuntary Termination, if the Executive (i) reconfirms and agrees to abide by the covenants described in Section 14(a) and Section 14(b) above, (ii) executes the Release within fifty (50) days after the date of Involuntary Termination and does not revoke such Release in accordance with the terms thereof, and (iii) agrees to provide the consulting services described in Section 14(e) below, then in consideration for such covenants and consulting services, the Company shall pay the Executive, in one cash lump sum, an amount (the "Consulting Payment") in cash equal to the greater of: (X) 170% of the Executive's Annual Base Salary as in effect on the Date of Termination, and (Y) the Executive's Annual Base Salary as in effect on the Date of Termination, plus the Executive's Average Annual Bonus. Except as provided in this subsection, the Consulting Payment shall be paid on such date as is determined by the Company within the ten (10) day period commencing on the 60th day after the date of the Executive's Involuntary Termination; *provided, however*, that if the Executive is a Specified Employee on the date of the Executive's Involuntary Termination, the Consulting Payment shall be paid as provided in Section 9 hereof. The Executive shall have the right to elect to defer the Consulting Payment under the terms and conditions of the Company's Deferred Compensation Plan. Any such deferral election shall be made in accordance with Section 18(b) hereof.

(e) Consulting. If the Executive agrees to the provisions of Section 14(d) above, then the Executive shall have the obligation to provide consulting services to the Company as an independent contractor, commencing on the Date of Termination and ending on the second anniversary of the Date of Termination (the "Consulting Period"). The Executive shall hold himself available at reasonable times and on reasonable notice to render such consulting services as may be so assigned to him by the Board or the Company's then Chief Executive Officer; *provided, however*, that unless the parties otherwise agree, the consulting services rendered by the Executive during the Consulting Period shall not exceed twenty (20) hours each month; and, *provided, further*, that the consulting services rendered by the Executive during the Consulting Period shall in no event exceed twenty percent (20%) of the average level of services performed by the Executive for the Company over the thirty-six (36) month period immediately preceding the Executive's Separation from Service (or the full period of services to the Company, if the Executive has been providing services to the Company for less than thirty-six (36) months). The Company agrees to use its best efforts during the Consulting Period to secure the benefit of the Executive's consulting services so as to minimize the interference with the Executive's other activities,

including requiring the performance of consulting services at the Company's offices only when such services may not be reasonably performed off-site by the Executive.

Section 15. Legal Fees.

(a) Reimbursement of Legal Fees. Subject to subsection (b), in the event of the Executive's Separation from Service either (1) prior to a Change in Control, or (2) on or within two (2) years following a Change in Control, the Company shall reimburse the Executive for all legal fees and expenses (including but not limited to fees and expenses in connection with any arbitration) incurred by the Executive in disputing any issue arising under this Agreement relating to the Executive's Separation from Service or in seeking to obtain or enforce any benefit or right provided by this Agreement.

(b) Requirements for Reimbursement. The Company shall reimburse the Executive's legal fees and expenses pursuant to subsection (a) above only to the extent the arbitrator or court determines the following: (i) the Executive disputed such issue, or sought to obtain or enforce such benefit or right, in good faith, (ii) the Executive had a reasonable basis for such claim, and (iii) in the case of subsection (a)(1) above, the Executive is the prevailing party. In addition, the Company shall reimburse such legal fees and expenses, only if such legal fees and expenses are incurred during the twenty (20) year period beginning on the date of the Executive's Separation from Service. The legal fees and expenses paid to the Executive for any taxable year of the Executive shall not affect the legal fees and expenses paid to the Executive for any other taxable year of the Executive. The legal fees and expenses shall be paid to the Executive on or before the last day of the Executive's taxable year following the taxable year in which the fees or expenses are incurred. The Executive's right to reimbursement of legal fees and expenses shall not be subject to liquidation or exchange for any other benefit. Such right to reimbursement of legal fees and expenses shall be provided in a manner that complies with Treasury Regulation Section 1.409A-3(i)(1)(iv). If the Executive is a Specified Employee on the date of the Executive's Separation from Service, such right to reimbursement of legal fees and expenses shall be paid as provided in Section 10 hereof.

Section 16. Successors.

(a) Assignment by the Executive. This Agreement is personal to the Executive and without the prior written consent of Sempra Energy shall not be assignable by the Executive otherwise than by will or the laws of descent and distribution. This Agreement shall inure to the benefit of and be enforceable by the Executive's legal representatives.

(b) Successors and Assigns of Sempra Energy. This Agreement shall inure to the benefit of and be binding upon Sempra Energy, its successors and assigns. Sempra Energy may not assign this Agreement to any person or entity (except for a successor described in Section 16(c), (d) or (e) below) without the Executive's written consent.

(c) Assumption. Sempra Energy shall require any successor (whether direct or indirect, by purchase, merger, consolidation or otherwise) to all or substantially all of the business and/or assets of Sempra Energy to assume expressly and agree to perform the obligations and satisfy and discharge the liabilities of this Agreement in the same manner and to the same extent that Sempra Energy would have been required to perform the obligations and satisfy and discharge the liabilities under this Agreement if no such succession had taken place, and Sempra Energy shall have no further obligations and liabilities under this Agreement. Upon such assumption, references to Sempra Energy in this Agreement shall be replaced with references to such successor.

(d) Sale of Subsidiary. In the event that (i) the Executive is employed by a direct or indirect subsidiary of Sempra Energy that is a member of the Sempra Energy Control Group, (ii) Sempra Energy, directly or indirectly through one or more intermediaries, sells or otherwise disposes of such subsidiary, and (iii) such subsidiary ceases to be a member of the Sempra Energy Control Group, then if, on the date such subsidiary ceases to be a member of the Sempra Energy Control Group, the Executive continues in employment with such subsidiary and the Executive does not have a Separation from Service, Sempra Energy shall require such subsidiary or any successor (whether direct or indirect, by purchase

merger, consolidation or otherwise) to such subsidiary, or the parent thereof, to assume expressly and agree to perform the obligations and satisfy and discharge the liabilities under this Agreement in the same manner and to the same extent that Sempra Energy would have been required to perform the obligations and satisfy and discharge the liabilities under this Agreement, if such subsidiary had not ceased to be part of the Sempra Energy Control Group, and, upon such assumption, Sempra Energy shall have no further obligations and liabilities under the Agreement. Upon such assumption, (i) references to Sempra Energy in this Agreement shall be replaced with references to such subsidiary, or such successor or parent thereof, assuming this Agreement, and (ii) subsection (b) of the definition of "Cause" and subsection (b) of the definition of "Good Reason" shall apply thereafter, as if a Change in Control had occurred on the date of such cessation.

(e) Sale of Assets of Subsidiary. In the event that (i) the Executive is employed by a direct or indirect subsidiary of Sempra Energy, and (ii) such subsidiary sells or otherwise disposes of substantial assets of such subsidiary to an unrelated service recipient, as determined under Treasury Regulation Section 1.409A-1(f)(2)(ii) (the "Asset Purchaser"), in a transaction described in Treasury Regulation Section 1.409A-1(h)(4) (an "Asset Sale"), then if, on the date of such Asset Sale, the Executive becomes employed by the Asset Purchaser, Sempra Energy and the Asset Purchaser shall specify, in accordance with Treasury Regulation Section 1.409A-1(h)(4), that the Executive shall not be treated as having a Separation from Service, and Sempra Energy shall require such Asset Purchaser, or the parent thereof, to assume expressly and agree to perform the obligations and satisfy and discharge the liabilities under this Agreement in the same manner and to the same extent that Sempra Energy would have been required to perform the obligations and satisfy and discharge the liabilities under this Agreement, if the Asset Sale had not taken place, and, upon such assumption, Sempra Energy shall have no further obligations and liabilities under the Agreement. Upon such assumption, (i) references to Sempra Energy in this Agreement shall be replaced with references to the Asset Purchaser or the parent thereof, as applicable, and (ii) subsection (b) of the definition of "Cause" and subsection (b) of the definition of "Good Reason" shall apply thereafter, as if a Change in Control had occurred on the date of the Asset Sale.

Section 17. Administration Prior to Change in Control. Prior to a Change in Control, the Compensation Committee shall have full and complete authority to construe and interpret the provisions of this Agreement, to determine an individual's entitlement to benefits under this Agreement, to make in its sole and absolute discretion all determinations contemplated under this Agreement, to investigate and make factual determinations necessary or advisable to administer or implement this Agreement, and to adopt such rules and procedures as it deems necessary or advisable for the administration or implementation of this Agreement. All determinations made under this Agreement by the Compensation Committee shall be final and binding on all interested persons. Prior to a Change in Control, the Compensation Committee may delegate responsibilities for the operation and administration of this Agreement to one or more officers or employees of the Company. The provisions of this Section 17 shall terminate and be of no further force and effect upon the occurrence of a Change in Control.

Section 18. Section 409A of the Code.

(a) Compliance with and Exemption from Section 409A of the Code. Certain payments and benefits payable under this Agreement (including, without limitation, the Section 409A Payments) are intended to comply with the requirements of Section 409A of the Code. Certain payments and benefits payable under this Agreement are intended to be exempt from the requirements of Section 409A of the Code. This Agreement shall be interpreted in accordance with the applicable requirements of, and exemptions from, Section 409A of the Code and the Treasury Regulations thereunder. To the extent the payments and benefits under this Agreement are subject to Section 409A of the Code, this Agreement shall be interpreted, construed and administered in a manner that satisfies the requirements of Sections 409A(a)(2), (3) and (4) of the Code and the Treasury Regulations thereunder (subject to the transitional relief under Internal Revenue Service Notice 2005-1, the Proposed Regulations under Section 409A of the

Code, Internal Revenue Service Notice 2006-79, Internal Revenue Service Notice 2007-78, Internal Revenue Service Notice 2007-86 and other applicable authority issued by the Internal Revenue Service). As provided in Internal Revenue Notice 2007-86, notwithstanding any other provision of this Agreement, with respect to an election or amendment to change a time or form of payment under this Agreement made on or after January 1, 2008 and on or before December 31, 2008, the election or amendment shall apply only with respect to payments that would not otherwise be payable in 2008, and shall not cause payments to be made in 2008 that would not otherwise be payable in 2008. If the Company and the Executive determine that any compensation, benefits or other payments that are payable under this Agreement and intended to comply with Sections 409A(a)(2), (3) and (4) of the Code do not comply with Section 409A of the Code, the Treasury Regulations thereunder and other applicable authority issued by the Internal Revenue Service, to the extent permitted under Section 409A of the Code, the Treasury Regulations thereunder and any applicable authority issued by the Internal Revenue Service, the Company and the Executive agree to amend this Agreement, or take such other actions as the Company and the Executive deem reasonably necessary or appropriate, to cause such compensation, benefits and other payments to comply with the requirements of Section 409A of the Code, the Treasury Regulations thereunder and other applicable authority issued by the Internal Revenue Service, while providing compensation, benefits and other payments that are, in the aggregate, no less favorable than the compensation, benefits and other payments provided under this Agreement. In the case of any compensation, benefits or other payments that are payable under this Agreement and intended to comply with Sections 409A(a)(2), (3) and (4) of the Code, if any provision of the Agreement would cause such compensation, benefits or other payments to fail to so comply, such provision shall not be effective and shall be null and void with respect to such compensation, benefits or other payments to the extent such provision would cause a failure to comply, and such provision shall otherwise remain in full force and effect.

(b) Deferral Elections. As provided in Sections 4(f), 5(i) and 14(d), the Executive may elect to defer the Pre-Change in Control Severance Payment, the Post-Change in Control Severance Payment and the Consulting Payment as follows. The Executive's deferral election shall satisfy the requirements of Treasury Regulation Section 1.409A-2(b) and the terms and conditions of the Deferred Compensation Plan. Such deferral election shall designate the whole percentage (up to a maximum of 100%) of the Pre-Change in Control Severance Payment, the Post-Change in Control Severance Payment and the Consulting Payment to be deferred, shall be irrevocable when made, and shall not take effect until at least twelve (12) months after the date on which the election is made. Such deferral election shall provide that the amount deferred shall be deferred for a period of not less than five (5) years from the date the payment of the amount deferred would otherwise have been made, in accordance with Treasury Regulation Section 1.409A-2(b)(1)(ii).

Section 19. Miscellaneous.

(a) Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the State of California, without reference to its principles of conflict of laws. The captions of this Agreement are not part of the provisions hereof and shall have no force or effect. This Agreement may not be amended, modified, repealed, waived, extended or discharged except by an agreement in writing signed by the party against whom enforcement of such amendment, modification, repeal, waiver, extension or discharge is sought. No person, other than pursuant to a resolution of the Board or a committee thereof, shall have authority on behalf of the Company to agree to amend, modify, repeal, waive, extend or discharge any provision of this Agreement or anything in reference thereto.

(b) Notices. All notices and other communications hereunder shall be in writing and shall be given by hand delivery to the other party or by registered or certified mail, return receipt requested, postage prepaid, addressed, in either case, to the Company's headquarters or to such other address as either party shall have furnished to the other in writing in accordance herewith. Notices and communications shall be effective when actually received by the addressee.

(c) Severability. The invalidity or unenforceability of any provision of this Agreement shall not affect the validity or enforceability of any other provision of this Agreement.

(d) Taxes. The Company may withhold from any amounts payable under this Agreement such federal, state or local taxes as shall be required to be withheld pursuant to any applicable law or regulation.

(e) No Waiver. The Executive's or the Company's failure to insist upon strict compliance with any provision hereof or any other provision of this Agreement or the failure to assert any right the Executive or the Company may have hereunder, including, without limitation, the right of the Executive to terminate employment for Good Reason pursuant to Section 1 hereof, or the right of the Company to terminate the Executive's employment for Cause pursuant to Section 1 hereof shall not be deemed to be a waiver of such provision or right or any other provision or right of this Agreement.

(f) Entire Agreement; Exclusive Benefit; Supersession of Prior Agreement. This instrument contains the entire agreement of the Executive, the Company or any predecessor or subsidiary thereof with respect to any severance or termination pay. The Pre-Change in Control Severance Payment, the Post-Change in Control Severance Payment and all other benefits provided hereunder shall be in lieu of any other severance payments to which the Executive is entitled under any other severance plan or program or arrangement sponsored by the Company, as well as pursuant to any individual employment or severance agreement that was entered into by the Executive and the Company, and, upon the Effective Date of this Agreement, all such plans, programs, arrangements and agreements are hereby automatically superseded and terminated.

(g) No Right of Employment. Nothing in this Agreement shall be construed as giving the Executive any right to be retained in the employ of the Company or shall interfere in any way with the right of the Company to terminate the Executive's employment at any time, with or without Cause.

(h) Unfunded Obligation. The obligations under this Agreement shall be unfunded. Benefits payable under this Agreement shall be paid from the general assets of the Company. The Company shall have no obligation to establish any fund or to set aside any assets to provide benefits under this Agreement.

(i) Termination upon Sale of Assets of Subsidiary. Notwithstanding anything contained herein, this Agreement shall automatically terminate and be of no further force and effect and no benefits shall be payable hereunder in the event that (i) the Executive is employed by a direct or indirect subsidiary of Sempra Energy, and (ii) an Asset Sale (as defined in Section 16(e)) occurs (other than such a sale or disposition which is part of a transaction or series of transactions which would result in a Change in Control), and (iii) as a result of such Asset Sale, the Executive is offered employment by the Asset Purchaser in an executive position with reasonably comparable status, compensation, benefits and severance agreement (including the assumption of this Agreement in accordance with Section 16(e)) and which is consistent with the Executive's experience and education, but the Executive declines to accept such offer and the Executive fails to become employed by the Asset Purchaser on the date of the Asset Sale.

(j) Term. The term of this Agreement shall commence on the Effective Date and shall continue until the third (3rd) anniversary of the Effective Date; *provided, however*, that commencing on the second (2nd) anniversary of the Effective Date (and each anniversary of the Effective Date thereafter), the term of this Agreement shall automatically be extended for one (1) additional year, unless at least ninety (90) days prior to such date, the Company or the Executive shall give written notice to the other party that it or he, as the case may be, does not wish to so extend this Agreement. Notwithstanding the foregoing, if the Company gives such written notice to the Executive less than two (2) years after a Change in Control, the term of this Agreement shall be automatically extended until the later of (A) the date that is one (1) year after the anniversary of the Effective Date that follows such written notice or (B) the second (2nd) anniversary of the Change in Control Date.

(k) Counterparts. This Agreement may be executed in several counterparts, each of which shall be deemed to be an original but all of which together shall constitute one and the same instrument.

[*remainder of page intentionally left blank*]

IN WITNESS WHEREOF, the Executive and, pursuant to due authorization from its Board of Directors, the Company have caused this Agreement to be executed as of the day and year first above written.

SEMPRA ENERGY

_____

G. Joyce Rowland
Senior Vice President, Human Resources, Diversity and Inclusion

_____

Date

EXECUTIVE

_____

Patricia K. Wagner
President and Chief Executive Officer,
Sempra U.S. Gas and Power

_____

Date

EXHIBIT A

GENERAL RELEASE

This GENERAL RELEASE (the "Agreement"), dated _____, is made by and between _____, a California corporation (the "Company") and _____ ("you" or "your").

WHEREAS, you and the Company have previously entered into that certain Severance Pay Agreement dated _____, 20___ (the "Severance Pay Agreement"); and

WHEREAS, your right to receive certain severance pay and benefits pursuant to the terms of Section 4 or Section 5 of the Severance Pay Agreement, as applicable, are subject to and conditioned upon your execution and non-revocation of a general release of claims by you against the Company and its subsidiaries and affiliates.

WHEREAS, your right to receive the Consulting Payment provided pursuant to Section 14(d) of the Severance Pay Agreement is subject to and conditioned upon your execution and non-revocation of a general release of claims by you against the Company and its subsidiaries and affiliates; and your adherence to the covenants described under Section 14 of the Severance Pay Agreement.

NOW, THEREFORE, in consideration of the premises and the mutual covenants herein contained, you and the Company hereby agree as follows:

ONE: Your signing of this Agreement confirms that your employment with the Company shall terminate at the close of business on _____, or earlier upon our mutual agreement.

TWO: As a material inducement for the payment of the severance and benefit under the Severance Pay Agreement, and except as otherwise provided in this Agreement, you and the Company hereby irrevocably and unconditionally release, acquit and forever discharge the other from any and all Claims either may have against the other. For purposes of this Agreement and the preceding sentence, the words "Releasee" or "Releasees" and "Claim" or "Claims" shall have the meanings set forth below:

(a) The words "Releasee" or "Releasees" shall refer to you and to the Company and each of the Company's owners, stockholders, predecessors, successors, assigns, agents, directors, officers, employees, representatives, attorneys, advisors, parent companies, divisions, subsidiaries, affiliates (and agents, directors, officers, employees, representatives, attorneys and advisors of such parent companies, divisions, subsidiaries and affiliates) and all persons acting by, through, under or in concert with any of them.

(b) The words "Claim" or "Claims" shall refer to any charges, complaints, claims, liabilities, obligations, promises, agreements, controversies, damages, actions, causes of action, suits, rights, demands, costs, losses, debts and expenses (including attorneys' fees and costs actually incurred) of any nature whatsoever, known or unknown, suspected or unsuspected, which you or the Company now, in the past or, in the future may have, own or hold against any of the Releasees; *provided, however*, that the word "Claim" or "Claims" shall not refer to any charges, complaints, claims, liabilities, obligations, promises, agreements, controversies, damages, actions, causes of action, suits, rights, demands, costs, losses, debts and expenses (including attorneys' fees and costs actually incurred) arising under [*identify severance, employee benefits, stock option, indemnification and D&O and other agreements containing duties, rights obligations etc. of either party that are to remain operative*]. Claims released pursuant to

this Agreement by you and the Company include, but are not limited to, rights arising out of alleged violations of any contracts, express or implied, any tort, claim, any claim that you failed to perform or negligently performed or breached your duties during employment at the Company, any legal restrictions on the Company's right to terminate employment relationships; and any federal, state or other governmental statute, regulation, or ordinance, governing the employment relationship including, without limitation, all state and federal laws and regulations prohibiting discrimination based on protected categories, and all state and federal laws and regulations prohibiting retaliation against employees for engaging in protected activity or legal off-duty conduct. This release does not extend to claims for workers' compensation or other claims which by law may not be waived or released by this Agreement.

THREE: You and the Company expressly waive and relinquish all rights and benefits afforded by any statute (including but not limited to Section 1542 of the Civil Code of the State of California and analogous laws of other states) which limits the effect of a release with respect to unknown claims. You and the Company do so understanding and acknowledging the significance of the release of unknown claims and the waiver of statutory protection against a release of unknown claims (including but not limited to Section 1542 and analogous laws of other states). Section 1542 of the Civil Code of the State of California states as follows:

> "A GENERAL RELEASE DOES NOT EXTEND TO CLAIMS WHICH THE CREDITOR DOES NOT KNOW OR SUSPECT TO EXIST IN HIS OR HER FAVOR AT THE TIME OF EXECUTING THE RELEASE, WHICH IF KNOWN BY HIM OR HER MUST HAVE MATERIALLY AFFECTED HIS OR HER SETTLEMENT WITH THE DEBTOR."

Thus, notwithstanding the provisions of Section 1542 or of any similar statute, and for the purpose of implementing a full and complete release and discharge of the Releasees, you and the Company expressly acknowledge that this Agreement is intended to include in its effect, without limitation, all Claims which are known and all Claims which you or the Company do not know or suspect to exist in your or the Company's favor at the time of execution of this Agreement and that this Agreement contemplates the extinguishment of all such Claims.

FOUR: The parties acknowledge that they might hereafter discover facts different from, or in addition to, those they now know or believe to be true with respect to a Claim or Claims released herein, and they expressly agree to assume the risk of possible discovery of additional or different facts, and agree that this Agreement shall be and remain effective, in all respects, regardless of such additional or different discovered facts.

FIVE: You hereby represent and acknowledge that you have not filed any Claim of any kind against the Company or others released in this Agreement. You further hereby expressly agree never to initiate against the Company or others released in this Agreement any administrative proceeding, lawsuit or any other legal or equitable proceeding of any kind asserting any Claims that are released in this Agreement. You agree that you will not be entitled to any monetary recovery that may result from any agency action against the Company related to the Claims released by this Agreement.

The Company hereby represents and acknowledges that it has not filed any Claim of any kind against you or others released in this Agreement. The Company further hereby expressly agrees never to initiate against you or others released in this Agreement any administrative proceeding, lawsuit or any other legal or equitable proceeding of any kind asserting any Claims that are released in this Agreement.

SIX: You hereby represent and agree that you have not assigned or transferred, or attempted to have assigned or transfer, to any person or entity, any of the Claims that you are releasing in this Agreement.

The Company hereby represents and agrees that it has not assigned or transferred, or attempted to have assigned or transfer, to any person or entity, any of the Claims that it is releasing in this Agreement.

SEVEN: As a further material inducement to the Company to enter into this Agreement, you hereby agree to indemnify and hold each of the Releasees harmless from all loss, costs, damages, or expenses, including without limitation, attorneys' fees incurred by the Releasees, arising out of any breach of this Agreement by you or the fact that any representation made in this Agreement by you was false when made.

As a further material inducement to you to enter into this Agreement, the Company hereby agrees to indemnify and hold each of the Releasees harmless from all loss, costs, damages, or expenses, including without limitation, attorneys' fees incurred by the Releasees, arising out of any breach of this Agreement by it or the fact that any representation made in this Agreement by it was knowingly false when made.

EIGHT: You and the Company represent and acknowledge that in executing this Agreement, neither is relying upon any representation or statement not set forth in this Agreement or the Severance Agreement.

NINE: (a) This Agreement shall not in any way be construed as an admission by the Company that it has acted wrongfully with respect to you or any other person, or that you have any rights whatsoever against the Company, and the Company specifically disclaims any liability to or wrongful acts against you or any other person, on the part of itself, its employees or its agents. This Agreement shall not in any way be construed as an admission by you that you have acted wrongfully with respect to the Company, or that you failed to perform your duties or negligently performed or breached your duties, or that the Company had good cause to terminate your employment.

(b) If you are a party or are threatened to be made a party to any proceeding by reason of the fact that you were an officer or director of the Company, the Company shall indemnify you against any expenses (including reasonable attorneys' fees; *provided*, that counsel has been approved by the Company prior to retention, which approval shall not be unreasonably withheld), judgments, fines, settlements and other amounts actually or reasonably incurred by you in connection with that proceeding; *provided*, that you acted in good faith and in a manner you reasonably believed to be in the best interest of the Company. The limitations of California Corporations Code Section 317 shall apply to this assurance of indemnification.

(c) You agree to cooperate with the Company and its designated attorneys, representatives and agents in connection with any actual or threatened judicial, administrative or other legal or equitable proceeding in which the Company is or may become involved. Upon reasonable notice, you agree to meet with and provide to the Company or its designated attorneys, representatives or agents all information and knowledge you have relating to the subject matter of any such proceeding. The Company agrees to reimburse you for any reasonable costs you incur in providing such cooperation.

TEN: This Agreement is entered into in California and shall be governed by substantive California law, except as provided in this section. If any dispute arises between you and the Company, including but

not limited to, disputes relating to this Agreement, or if you prosecute a claim you purported to release by means of this Agreement ("Arbitrable Dispute"), you and the Company agree to resolve that Arbitrable Dispute through final and binding arbitration under this section. You also agree to arbitrate any Arbitrable Dispute which also involves any other released party who offers or agrees to arbitrate the dispute under this section. Your agreement to arbitrate applies, for example, to disputes about the validity, interpretation, or effect of this Agreement or alleged violations of it, claims of discrimination under federal or state law, or other statutory violation claims.

As to any Arbitrable Dispute, you and the Company waive any right to a jury trial or a court bench trial. You and the Company also waive the right to bring, maintain, or participate in any class, collective, or representative proceeding, whether in arbitration or otherwise. Further, Arbitrable Disputes must be brought in the individual capacity of the party asserting the claim, and cannot be maintained on a class, collective, or representative basis.

Arbitration shall take place in San Diego, California under the employment dispute resolution rules of the Judicial Arbitration and Mediation Service ("JAMS"), (or, if you are employed outside of California at the time of the termination of your employment, at the nearest location of the American Arbitration Association and in accordance with the AAA rules), before an experienced employment arbitrator selected in accordance with those rules. The arbitrator may not modify or change this Agreement in any way. The Company will be responsible for paying any filing fee and the fees and costs of the Arbitrator; provided, however, that if you are the party initiating the claim, you will contribute an amount equal to the filing fee to initiate a claim in the court of general jurisdiction in the state in which you are employed by the Company. Each party shall pay for its own costs and attorneys' fees, if any. However if any party prevails on a statutory claim which affords the prevailing party attorneys' fees and costs, or if there is a written agreement providing for attorneys' fees and/or costs, the Arbitrator may award reasonable attorney's fees and/or costs to the prevailing party, applying the same standards a court would apply under the law applicable to the claim. The Arbitrator shall apply the Federal Rules of Evidence and shall have the authority to entertain a motion to dismiss or a motion for summary judgment by any party and shall apply the standards governing such motions under the Federal Rules of Civil Procedure. The Federal Arbitration Act shall govern the arbitration and shall govern the interpretation or enforcement of this section or any arbitration award. The arbitrator will not have the authority to consider, certify, or hear an arbitration as a class action, collective action, or any other type of representative action.

To the extent that the Federal Arbitration Act is inapplicable, California law pertaining to arbitration agreements shall apply. Arbitration in this manner shall be the exclusive remedy for any Arbitrable Dispute. Except as prohibited by the ADEA, should you or the Company attempt to resolve an Arbitrable Dispute by any method other than arbitration pursuant to this section, the responding party will be entitled to recover from the initiating party all damages, expenses, and attorneys' fees incurred as a result of this breach. This Section TEN supersedes any existing arbitration agreement between the Company and me as to any Arbitrable Dispute. Notwithstanding anything in this Section TEN to the contrary, a claim for benefits under an ERISA-covered plan shall not be an Arbitrable Dispute.

ELEVEN: Both you and the Company understand that this Agreement is final and binding eight (8) days after its execution and return. Should you nevertheless attempt to challenge the enforceability of this Agreement as provided in Paragraph TEN or, in violation of that Paragraph, through litigation, as a further limitation on any right to make such a challenge, you shall initially tender to the Company, by certified check delivered to the Company, all monies received pursuant to Sections 4 or 5 of the Severance Pay Agreement, as applicable, plus interest, and invite the Company to retain such monies and agree with you to cancel this Agreement and void the Company's obligations under Section 14(d) of the Severance Pay Agreement. In the event the Company accepts this offer, the Company shall retain such monies and this Agreement shall be canceled and the Company shall have no obligation under the

Severance Pay Agreement. In the event the Company does not accept such offer, the Company shall so notify you and shall place such monies in an interest-bearing escrow account pending resolution of the dispute between you and the Company as to whether or not this Agreement and the Company's obligations under the Severance Pay Agreement shall be set aside and/or otherwise rendered voidable or unenforceable. Additionally, any consulting agreement then in effect between you and the Company shall be immediately rescinded with no requirement of notice.

TWELVE: Any notices required to be given under this Agreement shall be delivered either personally or by first class United States mail, postage prepaid, addressed to the respective parties as follows:

To Company: [TO COME]

Attn: [TO COME]

To You: _____

_____

_____

THIRTEEN: You understand and acknowledge that you have been given a period of forty-five (45) days to review and consider this Agreement (as well as statistical data on the persons eligible for similar benefits) before signing it and may use as much of this forty-five (45) day period as you wish prior to signing. You are encouraged, at your personal expense, to consult with an attorney before signing this Agreement. You understand and acknowledge that whether or not you do so is your decision. You may revoke this Agreement within seven (7) days of signing it. If you wish to revoke, the Company's Vice President, Human Resources must receive written notice from you no later than the close of business on the seventh (7th) day after you have signed the Agreement. If revoked, this Agreement shall not be effective and enforceable, and you will not receive payments or benefits under Sections 4 or 5, and Section 14 of the Severance Pay Agreement, as applicable.

FOURTEEN: This Agreement constitutes the entire agreement of the parties hereto and supersedes any and all other agreements (except the Severance Pay Agreement) with respect to the subject matter of this Agreement, whether written or oral, between you and the Company. All modifications and amendments to this Agreement must be in writing and signed by the parties.

FIFTEEN: Each party agrees, without further consideration, to sign or cause to be signed, and to deliver to the other party, any other documents and to take any other action as may be necessary to fulfill the obligations under this Agreement.

SIXTEEN: If any provision of this Agreement or the application thereof is held invalid, the invalidity shall not affect other provisions or applications of the Agreement which can be given effect without the invalid provisions or application; and to this end the provisions of this Agreement are declared to be severable.

SEVENTEEN: This Agreement may be executed in counterparts.

I have read the foregoing General Release, and I accept and agree to the provisions it contains and hereby execute it voluntarily and with full understanding of its consequences. I am aware it includes a release of all known or unknown claims.

DATED: _____

_____

DATED: _____

_____

You acknowledge that you first received this Agreement on [date].

_____

EXHIBIT 12.1

SEMPRA ENERGY

COMPUTATION OF RATIO OF EARNINGS TO COMBINED FIXED CHARGES

AND PREFERRED STOCK DIVIDENDS

(Dollars in millions)

	2012	2013	2014	2015	2016
Fixed charges and preferred stock dividends:					
Interest	$ 601	$ 620	$ 636	$ 677	$ 701
Interest portion of annual rentals	2	2	3	2	3
Preferred dividends of subsidiaries(1)	6	6	1	2	2
Total fixed charges	609	628	640	681	706
Preferred dividends for purpose of ratio	—	—	—	—	—
Combined fixed charges and preferred dividends for purpose of ratio	$ 609	$ 628	$ 640	$ 681	$ 706
Earnings:					
Pretax income from continuing operations before adjustment for income or loss from equity investees	$ 1,255	$ 1,399	$ 1,443	$ 1,600	$ 1,824
Add:					
Total fixed charges (from above)	609	628	640	681	706
Distributed income of equity investees	50	51	61	83	53
Less:					
Interest capitalized	53	23	40	69	90
Preferred dividends of subsidiaries(1)	6	6	1	2	2
Total earnings for purpose of ratio	$ 1,855	$ 2,049	$ 2,103	$ 2,293	$ 2,491
Ratio of earnings to combined fixed charges and preferred stock dividends	3.05	3.26	3.29	3.37	3.53
Ratio of earnings to fixed charges	3.05	3.26	3.29	3.37	3.53

(1) In computing this ratio, “Preferred dividends of subsidiaries” represents the before-tax earnings necessary to pay such dividends, computed at the effective tax rates for the applicable periods.

EXHIBIT 12.2

SAN DIEGO GAS & ELECTRIC COMPANY

COMPUTATION OF RATIO OF EARNINGS TO COMBINED FIXED CHARGES

AND PREFERRED STOCK DIVIDENDS

(Dollars in millions)

	2012	2013	2014	2015	2016
Fixed charges and preferred stock dividends:					
Interest	$ 220	$ 231	$ 238	$ 241	$ 239
Interest portion of annual rentals	1	1	1	1	1
Total fixed charges	221	232	239	242	240
Preferred stock dividends(1)	7	5	—	—	—
Combined fixed charges and preferred stock dividends for purpose of ratio	$ 228	$ 237	$ 239	$ 242	$ 240
Earnings:					
Pretax income from continuing operations	$ 705	$ 626	$ 797	$ 890	$ 845
Add: Total fixed charges (from above)	221	232	239	242	240
Less: Interest capitalized	—	—	1	—	—
Total earnings for purpose of ratio	$ 926	$ 858	$ 1,035	$ 1,132	$ 1,085
Ratio of earnings to combined fixed charges and preferred stock dividends	4.06	3.62	4.33	4.68	4.52
Ratio of earnings to fixed charges	4.19	3.70	4.33	4.68	4.52

(1) In computing this ratio, “Preferred stock dividends” represents the before-tax earnings necessary to pay such dividends, computed at the effective tax rates for the applicable periods.

EXHIBIT 12.3

SOUTHERN CALIFORNIA GAS COMPANY

COMPUTATION OF RATIO OF EARNINGS TO COMBINED FIXED CHARGES

AND PREFERRED STOCK DIVIDENDS

(Dollars in millions)

	2012	2013	2014	2015	2016
Fixed charges and preferred stock dividends:					
Interest	$ 77	$ 76	$ 77	$ 96	$ 111
Interest portion of annual rentals	1	1	2	1	2
Total fixed charges	78	77	79	97	113
Preferred stock dividends(1)	2	2	2	2	2
Combined fixed charges and preferred stock dividends for purpose of ratio	$ 80	$ 79	$ 81	$ 99	$ 115
Earnings:					
Pretax income from continuing operations	$ 369	$ 481	$ 472	$ 558	$ 493
Add: Total fixed charges (from above)	78	77	79	97	113
Less: Interest capitalized	1	1	1	1	1
Total earnings for purpose of ratio	$ 446	$ 557	$ 550	$ 654	$ 605
Ratio of earnings to combined fixed charges and preferred stock dividends	5.58	7.05	6.79	6.61	5.26
Ratio of earnings to fixed charges	5.72	7.23	6.96	6.74	5.35

(1) In computing this ratio, “Preferred stock dividends” represents the before-tax earnings necessary to pay such dividends, computed at the effective tax rates for the applicable periods.

SEMPRA ENERGY FINANCIAL REPORT
TABLE OF CONTENTS

This Financial Report is a combined report for the following separate companies (each a separate Securities and Exchange Commission registrant):

Sempra Energy ***San Diego Gas & Electric Company*** ***Southern California Gas Company***

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

We provide below:

- A description of our business
- An executive summary
- A discussion and analysis of our operating results for 2014 through 2016
- Information about our capital resources and liquidity
- Major factors expected to influence our future operating results
- A discussion of market risk affecting our businesses
- A table of accounting policies that we consider critical to our financial condition and results of operations

You should read Management's Discussion and Analysis of Financial Condition and Results of Operations in conjunction with the Consolidated Financial Statements and the Notes to Consolidated Financial Statements included in this Annual Report, and also in conjunction with "Risk Factors" contained in our 2016 Annual Report on Form 10-K.

This report includes information for the following separate registrants:

- Sempra Energy and its consolidated entities
- San Diego Gas & Electric Company (SDG&E) and its consolidated variable interest entity (VIE)
- Southern California Gas Company (SoCalGas)

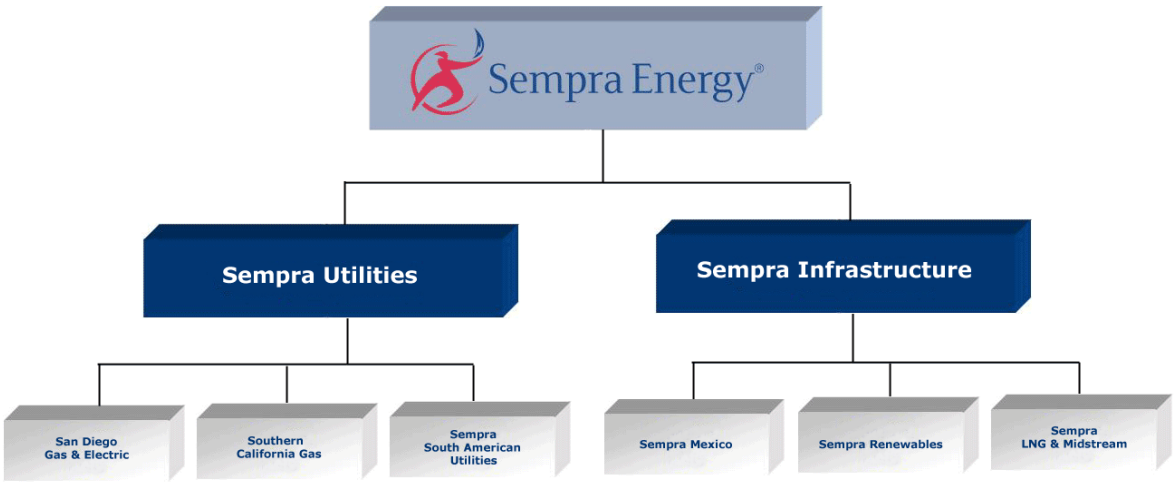
References to "we," "our" and "Sempra Energy Consolidated" are to Sempra Energy and its consolidated entities, collectively, unless otherwise indicated by its context. All references to "Sempra Utilities" and "Sempra Infrastructure," and to their respective principal segments, are not intended to refer to any legal entity with the same or similar name.

Throughout this report, we refer to the following as Consolidated Financial Statements and Notes to Consolidated Financial Statements when discussed together or collectively:

- the Consolidated Financial Statements and related Notes of Sempra Energy and its subsidiaries and VIEs;
- the Consolidated Financial Statements and related Notes of SDG&E and its VIE; and
- the Financial Statements and related Notes of SoCalGas.

OUR BUSINESS

Sempra Energy is a Fortune 500 energy-services holding company whose operating units invest in, develop and operate energy infrastructure, and provide gas and electricity services to their customers in North and South America. Our operating units, Sempra Utilities and Sempra Infrastructure, and their separate, reportable segments are illustrated below.



Prior to December 31, 2016, our reportable segments were grouped under the following operating units:

- California Utilities (which included the SDG&E and SoCalGas segments)
- Sempra International (which included the Sempra South American Utilities and Sempra Mexico segments)
- Sempra U.S. Gas & Power (which included the Sempra Renewables and Sempra Natural Gas segments)

The grouping of our segments within our operating units as of December 31, 2016 reflects a realignment of management oversight of our operations. As part of this realignment, we changed the name of our "Sempra Natural Gas" segment to "Sempra LNG & Midstream." This name change and the realignment of our segments within our new operating units had no impact on our historical financial position, results of operations, cash flows or segment results previously reported.

We provide the following for our reportable segments in the discussions below:

- Business overview
- Capital project updates

SDG&E

Business Overview

SAN DIEGO GAS & ELECTRIC COMPANY (SDG&E)		
Business summary	Market	Service territory
A regulated public utility; infrastructure supports electric generation, transmission and distribution, and natural gas distribution	▪ Provides electricity to a population of 3.6 million (1.4 million meters) ▪ Provides natural gas to a population of 3.3 million (0.9 million meters)	Serves the county of San Diego, California (electric and natural gas) and an adjacent portion of southern Orange County (electric only) covering 4,100 square miles

SDG&E delivers electricity to customers in San Diego County and an adjacent portion of southern Orange County, California. SDG&E's electric energy is purchased from others or generated from its own electric generation facilities, which include Palomar Energy Center, Miramar Energy Center, Desert Star Energy Center and Cuyamaca Peak Energy Plant. SDG&E also delivers natural gas in San Diego County and transports electricity and natural gas for others.

SDG&E is regulated by federal, state and local governmental agencies, including:

- The California Public Utilities Commission (CPUC), which regulates SDG&E's rates and operations in California.
- The Federal Energy Regulatory Commission (FERC), which regulates SDG&E's electric transmission operations and interstate transportation of natural gas and various related matters.
- The Nuclear Regulatory Commission (NRC), which regulates the San Onofre Nuclear Generating Station (SONGS).
- Municipalities and other local authorities, which may influence decisions affecting the location of utility assets, including natural gas pipelines and electric lines.

SDG&E's financial statements include a VIE, Otay Mesa Energy Center LLC (Otay Mesa VIE), of which SDG&E is the primary beneficiary. As we discuss in Note 1 of the Notes to Consolidated Financial Statements in "Variable Interest Entities," SDG&E has a long-term power purchase agreement (PPA) with Otay Mesa VIE.

Sempra Energy indirectly owns all of the outstanding capital stock of SDG&E.

Capital Project Updates

We summarize below information regarding certain major capital projects at SDG&E.

CAPITAL PROJECTS – SDG&E		
Project description	Estimated cost (in millions)	Status
Cleveland National Forest (CNF) Transmission Projects		
§ 2012 application for various transmission line replacement projects in and around CNF, in order to promote fire safety.	$ 680	§ May 2016 CPUC final decision granted a permit to construct, at an estimated total cost of $680 million: $470 million for the various transmission-level facilities and $210 million for associated distribution-level facilities, including distribution circuits and additional undergrounding required by the final environmental impact statement. § July 2016, the CNF Foundation and the Protect Our Communities Foundation filed a joint application for rehearing of the final decision. § Estimated completion: in phases through 2020
Sycamore-Peñasquitos Transmission Project		
§ 2014 application for a 230-kilovolt (kV) transmission project to provide 16.7-mile connection between Sycamore Canyon and Peñasquitos substations, in order to ensure grid reliability and access to renewable energy.	$ 260	§ October 2016 CPUC final decision granted a Certificate of Public Convenience and Necessity (CPCN) to construct project at an estimated cost not to exceed $260 million. Estimated completion: 2018 §
South Orange County Reliability Enhancement		
§ 2012 application to replace/upgrade existing 230-kV transmission lines to enhance the capacity and reliability of electric service to the south Orange County area.	$ 381	§ December 2016 CPUC final decision granted a CPCN to construct SDG&E's proposed project at an estimated cost not to exceed $381 million. § In January 2017, the City of San Juan Capistrano and local opposition group, Frontlines, filed applications for rehearing of the final decision.
Electric Vehicle Charging		
§ 2014 application to build and own a total of 5,500 electric vehicle charging units at estimated cost of $103 million, of which $59 million is capital investment.	$ 45	§ January 2016 CPUC final decision denies proposal but authorizes a 3-year, $45 million program providing up to 3,500 charging units. Estimated completion: 2020 §
§ January 2017 application, pursuant to Senate Bill (SB) 350, to perform various activities and make investments in support of electric vehicle charging at an estimated cost of $349 million, of which $298 million is capital investment.	$ 298	§ Application pending
Energy Storage Projects		
§ 2016 expedited application to own and operate two energy storage projects totaling 37.5 megawatts (MW) to enhance electric reliability in the San Diego service territory.	Not disclosed	§ August 2016 CPUC approval. § Estimated completion: first quarter of 2017

We discuss additional matters related to SDG&E in "California Utilities – Joint Matters" and in "Factors Influencing Future Performance."

SOCALGAS

Business Overview

SOUTHERN CALIFORNIA GAS COMPANY		
Business summary	Market	Service territory
A regulated public utility; infrastructure supports natural gas distribution, transmission and storage	▪ Residential, commercial, industrial, utility electric generation and wholesale customers ▪ Covers a population of 21.7 million (5.9 million meters)	Southern California and portions of central California (excluding San Diego County, the city of Long Beach and the desert area of San Bernardino County) covering 20,000 square miles

SoCalGas is the nation's largest natural gas distribution utility, based on customer meters. It owns and operates a natural gas distribution, transmission and storage system that supplies natural gas throughout its service territory.

SoCalGas' natural gas storage facilities have a combined working gas capacity of 137 billion cubic feet (Bcf) and have over 200 injection, withdrawal and observation wells that provide natural gas storage services for core, noncore and non-end-use customers. SoCalGas' and SDG&E's core customers are allocated a portion of SoCalGas' storage capacity. SoCalGas offers the remaining storage capacity for sale to others, including SDG&E for its non-core customer requirements, through an open bid process.

SoCalGas is regulated by federal, state and local governmental agencies, including

- The CPUC, which regulates SoCalGas' rates and operations in California.
- The California Department of Conservation's Division of Oil, Gas, and Geothermal Resources (DOGGR), which regulates the operations of SoCalGas' natural gas storage facilities.
- Municipalities and other local authorities, which may influence decisions affecting the location of utility assets, including natural gas pipelines and electric lines.

Sempra Energy indirectly owns all of the common stock of SoCalGas, which also has publicly held preferred stock with liquidation preferences totaling $22 million, representing less than one percent of the ordinary voting power of SoCalGas shares.

In addition to general recurring improvements to its transmission and storage systems, over the next several years, SoCalGas expects to make significant capital expenditures for pipeline safety projects pursuant to the Pipeline Safety Enhancement Plan (PSEP). We discuss these capital projects in "California Utilities – Joint Matters," below, and additional matters related to SoCalGas in "Factors Influencing Future Performance." We also discuss matters concerning the Aliso Canyon natural gas storage facility in Note 15 of the Notes to Consolidated Financial Statements.

CALIFORNIA UTILITIES – JOINT MATTERS

We refer to SDG&E and SoCalGas collectively as the California Utilities, which do not include the utilities in our other segments.

CPUC General Rate Case (GRC)

The CPUC uses a general rate case proceeding to set sufficient rates to allow the California Utilities to recover their reasonable cost of operations and maintenance and to provide the opportunity to realize their authorized rates of return on their investment.

In June 2016, the CPUC approved a final decision (2016 GRC FD) in the California Utilities' 2016 GRC, which is effective retroactive to January 1, 2016 and established their authorized 2016 revenue requirements and the ratemaking mechanisms by which those requirements would change on an annual basis over the subsequent three-year (2016-2018) period. The adopted revenue requirements associated with the seven-month period through July 2016 are being recovered in rates over a 17-month period, beginning August 2016.

The 2016 GRC FD also resulted in certain accounting and financial impacts associated with bonus depreciation, flow-through income tax repairs deductions related to prior years, and the treatment of differences between income tax incurred and income tax forecasted in the GRC for 2016 through 2018.

We discuss the 2016 GRC and the 2016 GRC FD in Note 14 of the Notes to Consolidated Financial Statements.

Incentive Mechanisms

The CPUC applies performance-based measures and incentive mechanisms to all California investor-owned utilities (IOUs), under which the California Utilities have earnings potential above authorized base margins if they achieve or exceed specific performance

and operating goals. Generally, for performance-based awards, if performance is above or below specific benchmarks, the utility is eligible for financial awards or subject to financial penalties.

SDG&E has incentive mechanisms associated with:

- operational incentives (electric reliability)
- energy efficiency

SoCalGas has incentive mechanisms associated with:

- energy efficiency
- natural gas procurement
- unbundled natural gas storage and system operator hub services

Incentive awards are included in revenues when we receive required CPUC approval of the award, the timing of which may not be consistent from year to year. We would record penalties for results below the specified benchmarks against revenues when we believe it is probable that the CPUC would assess a penalty.

Energy Efficiency. The CPUC has established incentive mechanisms that are based on the effectiveness of energy efficiency programs.

ENERGY EFFICIENCY AWARDS RECORDED IN REVENUES

(Dollars in millions)

	SDG&E			SoCalGas		
Award period (program years)	2016	2015	2014	2016	2015	2014
For second half of 2014 and first half of 2015	$ 4	$ —	$ —	$ 4	$ —	$ —
For second half of 2013 and first half of 2014	—	7	—	—	4	—
For full year 2012 and first half of 2013	—	—	8	—	—	6

In September 2015, the CPUC issued a decision granting two rehearing requests filed by the Office of Ratepayer Advocates (ORA) and The Utility Reform Network (TURN) regarding the utility incentive awards for SDG&E and SoCalGas, as well as Southern California Edison Company (Edison) and Pacific Gas and Electric Company (PG&E), for program years 2006 through 2008, which totaled $16 million for SDG&E and $17 million for SoCalGas. In December 2016, SoCalGas and SDG&E submitted to the CPUC settlement agreements reached with ORA and TURN wherein the parties agreed that SDG&E and SoCalGas would offset up to a total of approximately $4 million each against future incentive awards over the next three years beginning in 2017. If the total incentive awards ultimately authorized for 2017 through 2019 are less than approximately $4 million for either utility, the applicable utility is released from paying any remaining unapplied amount. The CPUC issued a proposed decision in January 2017 approving the settlement agreements.

Natural Gas Procurement. The California Utilities procure natural gas on behalf of their core natural gas customers. The CPUC has established incentive mechanisms to allow the California Utilities the opportunity to share in the savings and/or costs from buying natural gas for their core customers at prices below or above monthly market-based benchmarks. SoCalGas procures natural gas for SDG&E's core natural gas customers' requirements. SoCalGas' gas cost incentive mechanism (GCIM) is applied on the combined portfolio basis.

GCIM AWARDS RECORDED IN REVENUES

(Dollars in millions)

	SoCalGas		
Award period (program years)	2016	2015	2014
April 2014 - March 2015	$ —	$ 7	$ —
April 2013 - March 2014	—	14	—
April 2012 - March 2013	—	—	6

In January 2017, the CPUC approved a $5 million GCIM award for SoCalGas for the award period from April 2015 through March 2016.

Operational Incentives. The CPUC may establish operational incentives and associated performance benchmarks as part of a general rate case or cost of service proceeding. In the 2016 GRC FD, the CPUC did not establish any operational incentives for SoCalGas, but established an electric reliability incentive for SDG&E. Outcomes could vary from a maximum annual penalty of $8 million to a maximum annual award of $8 million.

Capital Project Updates

We summarize below information regarding certain joint capital projects of the California Utilities.

JOINT CAPITAL PROJECTS – CALIFORNIA UTILITIES

Project description	Estimated cost (in millions)	Status
Pipeline Safety & Reliability Project		
§ September 2015 application seeking authority to recover the full cost of the project, involving construction of an approximately 47-mile, 36-inch natural gas transmission pipeline in San Diego County.	$ 633	§ March 2016 amended application provided detailed analysis and testimony supporting proposed project, and revised estimated cost of $633 million. Revised request also presents additional information on costs and benefits of project alternatives, safety evaluation and compliance analysis, and statutory and procedural requirements.
§ Would implement pipeline safety requirements and modernize system; improve system reliability and resiliency by minimizing dependence on a single pipeline; and enhance operational flexibility to manage stress conditions by increasing system capacity.		§ Procedural schedule set for two phases to address (1) long-term need and planning assumptions, and (2) costs, alternatives and environmental impacts. Phase 1 evidentiary hearings scheduled for second quarter of 2017, draft environmental impact report (EIR) by August 2018, and Phase 2 to follow the draft EIR.
Southern Gas System Reliability Project (North-South Pipeline)		
§ 2013 application sought authority to recover the full cost of the project intended to enhance reliability on the southern portions of the California Utilities' integrated natural gas transmission system (Southern System).	$ 21	§ July 2016 CPUC final decision denied the California Utilities' request for a permit to construct, resulting in SoCalGas recording a pretax impairment charge of $21 million ($13 million after-tax) in 2016 for the development costs invested in the project. § Expect to seek recovery of all or a portion of these costs in a future general rate case filing.

We discuss additional matters related to the California Utilities in "Factors Influencing Future Performance."

SEMPRA SOUTH AMERICAN UTILITIES

Business Overview

SEMPRA SOUTH AMERICAN UTILITIES

Business summary	Market	Service territory
Develops, owns and operates, or holds interests in electric transmission, distribution and generation infrastructure	▪ Provides electricity to a population of approximately 2 million (approximately 0.7 million meters) in Chile and approximately 4.9 million consumers (approximately 1.1 million meters) in Peru	▪ Region of Valparaíso in central Chile ▪ Southern zone of metropolitan Lima, Peru

Chilquinta Energía S.A. (Chilquinta Energía), a wholly owned subsidiary of Sempra South American Utilities, is an electric distribution utility serving customers primarily in central Chile.

In November 2015, Chilquinta Energía's joint venture, Eletrans S.A., completed construction of a 220-kV transmission line in Chile. The project earns a return in U.S. dollars, indexed to the Consumer Price Index (CPI) for 20 years and a regulated return thereafter.

Sempra South American Utilities owns 83.6 percent of Luz del Sur S.A.A. (Luz del Sur), an electric distribution utility that serves consumers in Peru, and delivers approximately one-third of all power used in the country. The remaining shares of Luz del Sur trade on the Lima Stock Exchange (Bolsa de Valores de Lima) under the symbol LUSURC1.

In 2016, Luz del Sur completed construction of four substations and their related transmission lines in Lima. The capitalized cost of the project earns a regulated return for 30 years.

Luz del Sur owns Santa Teresa, a 100-MW hydroelectric power plant in Peru that began commercial operations in September 2015 and supplies electricity to non-regulated customers. Luz del Sur also sells excess electricity generated from the Santa Teresa plant into the spot market.

Sempra South American Utilities also owns interests in Tecnored S.A. (Tecnored) in Chile and Tecsur S.A. (Tecsur) in Peru, two energy-services companies that provide electric construction and infrastructure services to Chilquinta Energía and Luz del Sur, as well as third parties. Tecnored also sells electricity to non-regulated customers.

Revenues generated by our South American utilities, Chilquinta Energía and Luz del Sur, are based on tariffs that are set by government agencies in their respective countries based on an efficient model distribution company defined by those agencies.

Capital Project Updates

We summarize below information regarding major projects in process at Sempra South American Utilities. Chilquinta Energía's projects will be financed by the joint venture partners during construction, and other financing may be pursued upon project completion. Luz del Sur intends to finance its projects through its existing debt program in Peru's capital markets.

MAJOR PROJECTS UNDER CONSTRUCTION AT DECEMBER 31, 2016 – SEMPRA SOUTH AMERICAN UTILITIES

Project description	Our share of estimated cost (in millions)	Status
Chilquinta Energía - Eletrans S.A.		
§ Second of two, 220-kV transmission lines awarded in May 2012. § 50-mile transmission line extending from Ciruelos to Pichirropulli. § Once in operation, will earn a return in U.S. dollars, indexed to the CPI, for 20 years and a regulated return thereafter. § 50-percent equity interest in joint venture.	$ 42	§ Estimated completion: second half of 2017
Chilquinta Energía - Eletrans II S.A.		
§ Two 220-kV transmission lines awarded in June 2013. § Transmission lines to extend approximately 60 miles in total. § Once in operation, will earn a return in U.S. dollars, indexed to the CPI, for 20 years and a regulated return thereafter. § 50-percent equity interest in joint venture.	$ 40	§ Estimated completion: 2018
Luz Del Sur - Lima Substations and Transmission Lines (second investment)		
§ Amended transmission investment plan includes development and operation of five substations and related transmission lines. § Once in operation, the capitalized cost of the projects will earn a regulated return for 30 years.	$ 130	§ Estimated completion: 2017 through 2020 as portions are completed

We discuss additional matters related to Sempra South American Utilities in "Factors Influencing Future Performance."

SEMPRA MEXICO

Business Overview

SEMPRA MEXICO		
Business summary	Market	Geographic area
Develops, owns and operates, or holds interests in: ▪ natural gas transmission pipelines ▪ liquid petroleum gas (LPG) and ethane systems ▪ a natural gas distribution utility ▪ electric generation facilities, including wind, solar and a natural gas-fired power plant ▪ a terminal for the import of liquefied natural gas (LNG) ▪ a terminal for the storage of LPG ▪ marketing operations for the purchase of LNG and the purchase and sale of natural gas	▪ Natural gas ▪ Wholesale electricity ▪ Liquefied natural gas ▪ Liquid petroleum gas	▪ Mexico

Our Sempra Mexico segment includes the operating companies of our subsidiary, Infraestructura Energética Nova, S.A.B. de C.V. (IEnova), as well as certain holding companies and risk management activity. IEnova is a separate legal entity, and its common stock is traded on the Mexican Stock Exchange (La Bolsa Mexicana de Valores, S.A.B. de C.V., or BMV) under the symbol IENOVA. In October 2016, IEnova completed a private follow-on offering in the U.S. and outside of Mexico and a concurrent public offering in Mexico of its common stock. Upon completion of the equity offerings, Sempra Energy beneficially owns 66.4 percent of IEnova. Prior to the offerings, Sempra Energy beneficially owned 81.1 percent of IEnova. We discuss the offerings and IEnova further in Note 1 of the Notes to Consolidated Financial Statements.

Gas Business

Pipelines. Sempra Mexico develops, owns and operates natural gas transmission pipelines, and LPG and ethane systems in Mexico. These assets are contracted under long-term, U.S. dollar-based agreements with:

- Petróleos Mexicanos (or PEMEX, the Mexican state-owned oil company);
- the Federal Electricity Commission (Comisión Federal de Electricidad, or CFE);
- Shell México Gas Natural (Shell);
- Gazprom Marketing & Trading Mexico (Gazprom);
- Centro Nacional de Control de Gas (CENAGAS);
- InterGen; and
- other similar counterparties.

In 2016, we had contracted capacity for these assets of 11,257 million cubic feet (MMcf) per day of natural gas and ethane, and 114,000 barrels per day of LPG.

On September 26, 2016, IEnova completed the acquisition of PEMEX's 50-percent interest in Gasoductos de Chihuahua S. de R.L. de C.V. (GdC), increasing IEnova's ownership interest in GdC to 100 percent. GdC became a consolidated subsidiary of IEnova on this date. IEnova will continue holding an indirect 25-percent ownership interest in the Los Ramones Norte pipeline through GdC's 50-percent interest in Ductos y Energéticos del Norte, S. de R.L. de C.V. (DEN). As of the acquisition date, IEnova accounts for its 50-percent interest in DEN as an equity method investment. We expect the GdC acquisition to have strategic benefits, including opportunities for expansion into other infrastructure projects and a larger platform and presence in Mexico to participate in energy sector reform. We discuss the acquisition further in Note 3 of the Notes to Consolidated Financial Statements.

At December 31, 2016, IEnova has $1.5 billion in goodwill related to its acquisition of GdC. Goodwill is subject to impairment testing annually, as we discuss in "Critical Accounting Policies and Estimates, and Key Noncash Performance Indicators" below and in Note 1 of the Notes to Consolidated Financial Statements.

LNG. Sempra Mexico's Energía Costa Azul LNG import terminal in Baja California, Mexico is capable of processing 1 Bcf of natural gas per day. The Energía Costa Azul facility generates revenue under capacity services agreements with Shell and Gazprom, expiring in 2028, that permit them, together, to use one-half of the terminal's capacity.

In connection with Sempra LNG & Midstream's LNG purchase agreement with Tangguh PSC Contractors (Tangguh PSC), Sempra Mexico purchases from Sempra LNG & Midstream the LNG delivered to Energía Costa Azul by Tangguh PSC. Sempra Mexico uses the natural gas produced from this LNG and from purchases in the market to supply a contract for the sale of natural gas to Mexico's national electric company, the CFE, at prices that are based on the Southern California border index. If LNG volumes received from Tangguh PSC are not sufficient to satisfy the commitment to the CFE, Sempra Mexico may purchase natural gas from Sempra LNG & Midstream's natural gas marketing operations.

Natural Gas Distribution. Sempra Mexico's natural gas distribution utility, Ecogas México, S. de R.L. de C.V. (Ecogas), operates in three separate areas in Mexico, and had approximately 119,000 meters (serving more than 400,000 consumers) and sales volume of approximately 80 MMcf per day in 2016. Ecogas is subject to regulation by the Energy Regulatory Commission (Comisión Reguladora de Energía, or CRE) and by the labor and environmental agencies of city, state and federal governments in Mexico.

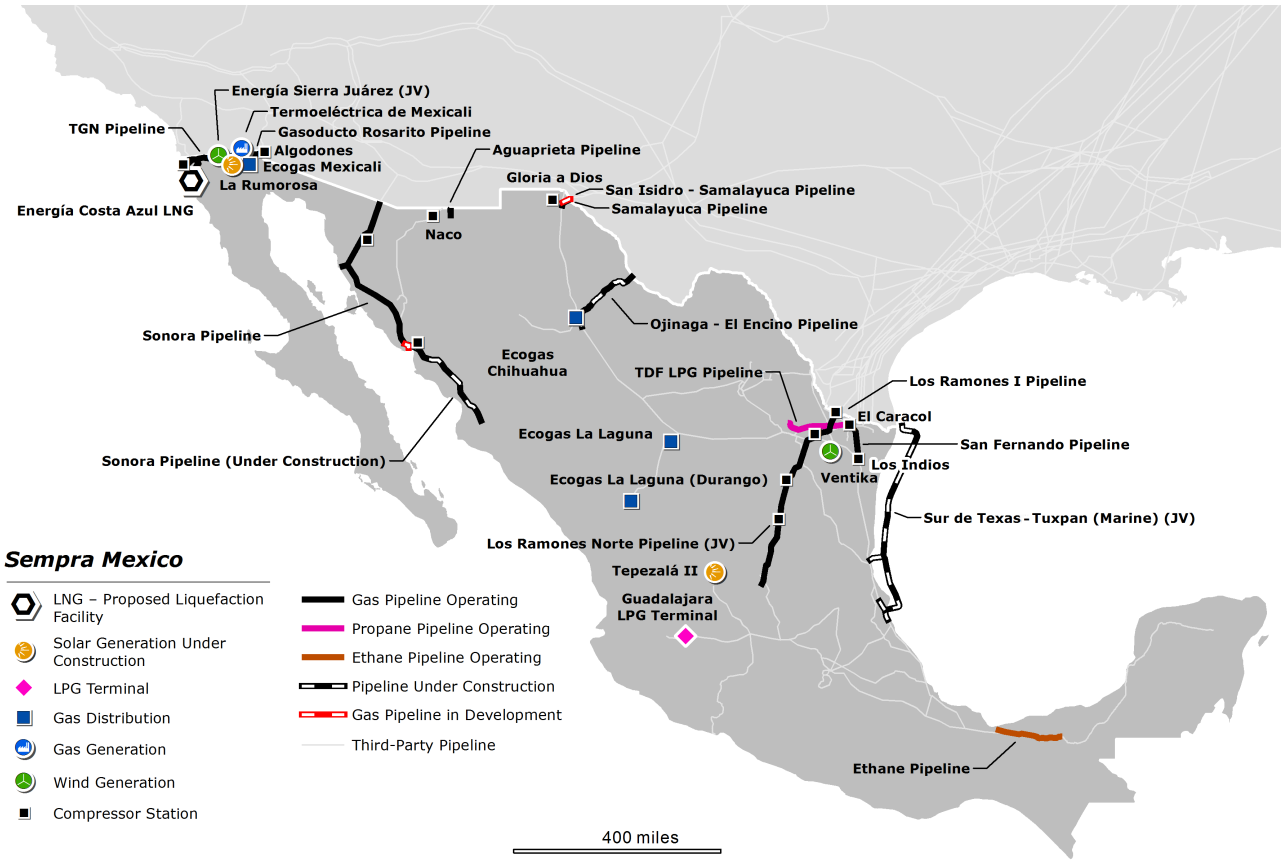
Power Business

Natural Gas-Fired Generation. Sempra Mexico's Termoeléctrica de Mexicali (TdM), a 625-MW natural gas-fired power plant, is located in Mexicali, Baja California, Mexico. It has an Energy Management Agreement (EMA) with Sempra LNG & Midstream for energy marketing, scheduling and other related services to support its sales of generated power into the California electricity market. Under the EMA, TdM pays fees to Sempra LNG & Midstream for these revenue-generating services. TdM also purchases fuel from Sempra LNG & Midstream. Sempra Mexico records revenue for the sale of power generated by TdM, and records cost of sales for the purchases of natural gas and energy management services provided by Sempra LNG & Midstream.

In February 2016, management approved a plan to market and sell TdM. As a result, we stopped depreciating the plant and classified the plant as held for sale. In connection with the sales process, in September 2016, Sempra Mexico obtained market information indicating that the fair value of TdM may be less than its carrying value. After performing an analysis of the information, Sempra Mexico reduced the carrying value of TdM by recognizing an impairment charge against earnings of $90 million. We discuss TdM further in Notes 3 and 10 of the Notes to Consolidated Financial Statements.

Wind Power Generation. We provide information on the Energía Sierra Juárez wind power generation project and IEnova's acquisition of the Ventika, S.A.P.I. de C.V. and Ventika II, S.A.P.I. de C.V. (collectively, Ventika) wind power generation facilities in the table below and in Note 3 of the Notes to Consolidated Financial Statements.

The following map shows the location of Sempra Mexico's principal assets and investments:


Energía Sierra Juárez (JV)
Termoeléctrica de Mexicali
TGN Pipeline
Gasoducto Rosarito Pipeline
Algodones
Ecogas Mexicali
La Rumorosa
Energía Costa Azul LNG
Aguaprieta Pipeline
Gloria a Dios
San Isidro - Samalayuca Pipeline
Samalayuca Pipeline
Naco
Ojinaga - El Encino Pipeline
Sonora Pipeline
Ecogas Chihuahua
TDF LPG Pipeline
Los Ramones I Pipeline
El Caracol
Ecogas La Laguna
San Fernando Pipeline
Los Indios
Sonora Pipeline (Under Construction)
Ventika
Ecogas La Laguna (Durango)
Sur de Texas - Tuxpan (Marine) (JV)
Los Ramones Norte Pipeline (JV)
Tepezalá II
Guadalajara LPG Terminal
Ethane Pipeline
400 miles
Sempra Mexico
LNG – Proposed Liquefaction Facility
Solar Generation Under Construction
LPG Terminal
Gas Distribution
Gas Generation
Wind Generation
Compressor Station
Gas Pipeline Operating
Propane Pipeline Operating
Ethane Pipeline Operating
Pipeline Under Construction
Gas Pipeline in Development
Third-Party Pipeline

The table below summarizes certain projects that were completed, either by IEnova or through its joint venture partnerships, or acquired during the last three years.

PROJECTS COMPLETED OR ACQUIRED IN 2016, 2015 AND 2014 – SEMPRA MEXICO	
Project description	
Ethane Pipeline	
§ 140-mile pipeline to transport ethane from Tabasco, Mexico to Veracruz, Mexico. § Capacity fully contracted under 21-year contract with PEMEX denominated in U.S. dollars. § Wholly owned by IEnova through GdC acquisition.	§ Completed in phases during 2015.
Los Ramones Pipeline - First Phase	
§ 72-mile pipeline extending from Tamaulipas to Nuevo Leon. § Two compression stations. § Capacity fully contracted by CENAGAS under 25-year contract denominated in Mexican pesos, indexed to the U.S. dollar (adjusted annually for inflation and fluctuation of exchange rate). § Wholly owned by IEnova through GdC acquisition.	§ Pipeline began operations at the end of 2014. § Compression stations completed in December 2015.
Los Ramones Norte Pipeline	
§ 280-mile pipeline, which connects first phase of Los Ramones, from Nuevo Leon to San Luis Potosi. § Two compression stations. § Capacity fully contracted by CENAGAS under 25-year contract denominated in Mexican pesos, indexed to the U.S. dollar (adjusted annually for inflation and fluctuation of exchange rate). § IEnova holds indirect 25-percent ownership through DEN joint venture.	§ Pipeline began operations in February 2016. § Compression stations completed in June 2016.
Energía Sierra Juárez Wind	
§ Wind power generation project in Baja California. § SDG&E has a 20-year contract for up to 155 MW of renewable power supplied from first phase of project. § First phase of project jointly owned with InterGen N.V.	§ First phase began operations in June 2015.
Ventika Wind	
§ Fully operational 252-MW wind farm located in Nuevo Leon, Mexico. § Acquired for cash of $310 million plus the assumption of $610 million of existing debt. § All capacity contracted under 20-year, U.S. dollar-denominated contracts with five private off-takers.	§ Acquired by IEnova in December 2016.

Capital Project Updates

We summarize major projects in process at Sempra Mexico below. The ability to successfully complete major construction projects is subject to a number of risks and uncertainties. For a discussion of these risks and uncertainties, see "Risk Factors" in our 2016 Annual Report on Form 10-K.

MAJOR PROJECTS UNDER CONSTRUCTION AT DECEMBER 31, 2016 – SEMPRA MEXICO

Project description	Our share of estimated cost (in millions)	Status
Sonora Pipeline		
§ Sempra Mexico awarded two contracts in October 2012 by the CFE to build and operate a 500-mile pipeline network. § Comprised of two segments that will interconnect to the U.S. interstate pipeline system. § Pipeline to transport natural gas from the U.S.-Mexico border south of Tucson, Arizona through the Mexican state of Sonora to the northern part of the Mexican state of Sinaloa along the Gulf of California. § Capacity is fully contracted by the CFE under two 25-year contracts denominated in U.S. dollars.	$ 1,000	§ First segment completed in stages from fourth quarter of 2014 through August 2015. § Estimated completion: first half of 2017
Ojinaga Pipeline		
§ December 2014 agreement with CFE for development, construction and operation of the approximately 137-mile pipeline. § Natural gas transportation services agreement for a 25-year term, denominated in U.S. dollars, for 100 percent of the transport capacity, equal to 1.4 Bcf per day.	$ 300	§ Estimated completion: first half of 2017
San Isidro Pipeline		
§ July 2015 agreement with CFE for development, construction and operation of the approximately 14-mile pipeline. § Natural gas transportation services agreement for a 25-year term, denominated in U.S. dollars, for 100 percent of the transport capacity, equal to 1.1 Bcf per day.	$ 110	§ Estimated completion: first half of 2017
Sur de Texas - Tuxpan Marine Pipeline		
§ In June 2016, Infraestructura Marina del Golfo, a joint venture between IEnova and a subsidiary of TransCanada Corporation, was awarded the right to build, own and operate the natural gas pipeline by the CFE. § Sempra Mexico has a 40-percent interest in the joint venture and TransCanada Corporation owns the remaining 60-percent interest. § Natural gas transportation services agreement for a 25-year term, denominated in U.S. dollars.	$ 840	§ Estimated completion: second half of 2018
La Rumorosa and Tepezalá II Solar Complexes		
§ In September 2016, IEnova was awarded two solar energy projects in an auction conducted by Mexico's National Center of Electricity Control (Centro Nacional de Control de Energía). § La Rumorosa Solar complex is a 41-MW photovoltaic project located in Baja California, Mexico. § Tepezalá II Solar complex is a 100-MW photovoltaic project located in Aguascalientes, Mexico. § Contracted by the CFE under a 15-year renewable energy and capacity agreement and a 20-year clean energy certificate agreement.	$ 150	§ Estimated completion: first half of 2019

We discuss additional matters related to Sempra Mexico in "Factors Influencing Future Performance."

SEMPRA RENEWABLES

Business Overview

SEMPRA RENEWABLES		
Business summary	Market	Geographic area
Develops, owns, operates, or holds interests in renewable energy generation projects	▪ Wholesale electricity	▪ U.S.A.

Sempra Renewables develops, invests in and operates renewable energy generation projects that have long-term contracts with electric load serving entities, which provide electric service to end-users and wholesale customers.

The majority of Sempra Renewables' wind farm assets earn production tax credits (PTC) based on the number of megawatt hours of electricity they generate. A PTC is a federal subsidy that pays wind-energy producers a flat rate for generating clean energy. Because PTCs last for ten years after project completion, any wind turbine that is under construction before the end of 2019 will earn a full decade of PTCs at phased-out rates beginning with construction starting in 2017 through 2019. For each of the years ended December 31, 2016, 2015 and 2014, PTCs represented a large portion of our wind farm earnings, often exceeding earnings from operations.

Certain of Sempra Renewables' wind and solar power projects are held by limited liability companies whose members are Sempra Renewables and financial institutions. The financial institutions are noncontrolling tax equity investors to which earnings, tax attributes and cash flows are allocated in accordance with the respective limited liability company agreements. We discuss these tax equity arrangements in "Variable Interest Entities" and in "Noncontrolling Interests" in Note 1 of the Notes to Consolidated Financial Statements.

The following table provides information about the Sempra Renewables wind and solar energy generation facilities that were operational as of December 31, 2016. The generating capacity of these facilities is fully contracted under long-term PPAs for the periods indicated in the table.

SEMPRA RENEWABLES OPERATING FACILITIES

Capacity in Megawatts at December 31, 2016

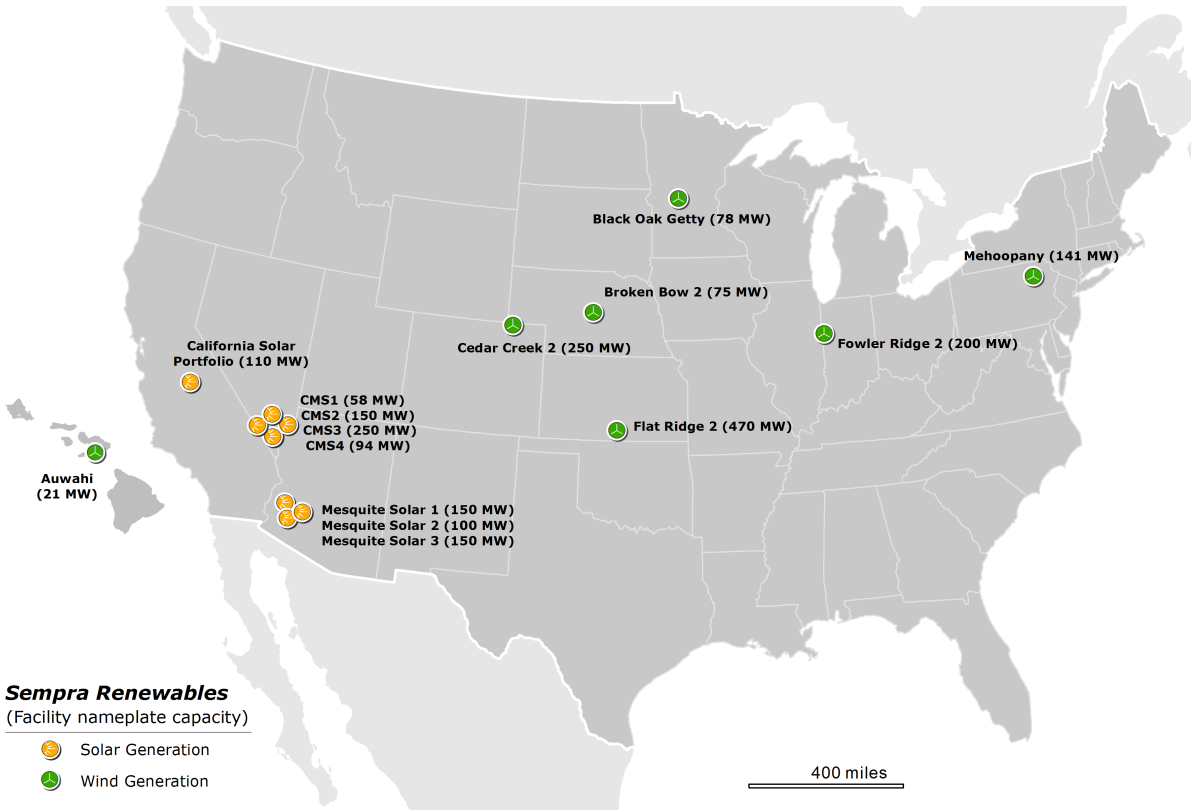
Name	Generating capacity	PPA term in years	First in service(1)	Location
Wholly owned facility:				
Copper Mountain Solar 1	58	20	2008	Boulder City, Nevada
Total	58			
Tax equity-owned facilities(2):				
Black Oak Getty Wind	78	20	2016	Stearns County, Minnesota
Copper Mountain Solar 4	94	20	2016	Boulder City, Nevada
Mesquite Solar 2	100	20	2016	Maricopa County, Arizona
Mesquite Solar 3	150	25	2016	Maricopa County, Arizona
Total	422			
Jointly owned facilities(3):				
Auwahi Wind	11	20	2012	Maui, Hawaii
Broken Bow 2 Wind	38	25	2014	Custer County, Nebraska
Cedar Creek 2 Wind	125	25	2011	New Raymer, Colorado
Flat Ridge 2 Wind	235	20 and 25	2012	Wichita, Kansas
Fowler Ridge 2 Wind	100	20	2009	Benton County, Indiana
Mehoopany Wind	71	20	2012	Wyoming County, Pennsylvania
Total wind	580			
California solar partnership	55	25	2013	Tulare and Kings Counties, California
Copper Mountain Solar 2	75	25	2012	Boulder City, Nevada
Copper Mountain Solar 3	125	20	2014	Boulder City, Nevada
Mesquite Solar 1	75	20	2011	Maricopa County, Arizona
Total solar	330			
Total MW in operation	1,390			

(1) If placed in service in phases, indicates the year the first phase went into service.

(2) Represents facilities that we own through tax equity arrangements. We consolidate these entities and report noncontrolling interests.

(3) Sempra Renewables has a 50-percent interest in each of these facilities and accounts for them as equity method investments. The generating capacity represents Sempra Renewables' share only.

The following map shows the location and full nameplate generating capacity of Sempra Renewables' projects in operation as of December 31, 2016:



SEMPRA LNG & MIDSTREAM

Business Overview

SEMPRA LNG & MIDSTREAM		
Business summary	Market	Geographic area
Develops, owns and operates, or holds interests in LNG and natural gas midstream assets and operations: ▪ a terminal in the U.S. for the import and export of LNG and sale of natural gas ▪ natural gas pipelines and storage facilities ▪ marketing operations	▪ Liquefied natural gas ▪ Natural gas	▪ U.S.A.

Sempra LNG & Midstream develops and invests in LNG-related infrastructure and has a 50.2-percent equity interest in the Cameron LNG regasification terminal and the Cameron LNG liquefaction project under construction in Louisiana, a project developed and permitted by Sempra LNG & Midstream. Sempra LNG & Midstream develops, owns and operates, or holds interests in, natural gas underground storage and related pipeline facilities in Alabama, Louisiana and Mississippi. It also provides natural gas marketing, trading and risk management services through the utilization and optimization of contracted natural gas supply, transportation and storage capacity, as well as optimizing its assets in the short-term services market.

LNG

In August 2014, Sempra Energy and three project partners provided their respective final investment decision with regard to the Cameron LNG Holdings, LLC (Cameron LNG JV) joint venture for the development, construction and operation of a three-train natural gas liquefaction export facility at the existing Cameron LNG, LLC regasification terminal. Beginning from the October 1, 2014 joint venture effective date, Cameron LNG, LLC was no longer wholly owned, and Sempra LNG & Midstream began accounting for its investment in the joint venture under the equity method. We discuss the 2014 formation of the Cameron LNG JV, including the contribution of our share of equity to the joint venture through the contribution of the Cameron LNG, LLC regasification terminal in Hackberry, Louisiana, in Note 3 of the Notes to Consolidated Financial Statements.

The existing regasification terminal is capable of processing 1.5 Bcf of natural gas per day, and it currently generates revenue under a terminal services agreement for approximately 3.75 Bcf of natural gas storage and associated send-out rights of approximately 600 MMcf of natural gas per day through 2029. The agreement allows the customer to pay capacity reservation and usage fees to use the facilities to receive, store and regasify the customer's LNG.

There is an agreement in place that will result in the termination of the current terminal services agreement at the point during construction of the new liquefaction facilities when piping tie-ins to the existing regasification terminal become necessary, which we expect to occur when progress on the construction of the three-train liquefaction project, described below, makes regasification no longer possible under the terms of the services agreement.

Sempra LNG & Midstream has an LNG purchase agreement with Tangguh PSC for the supply of the equivalent of 500 MMcf of natural gas per day from Tangguh PSC's Indonesian liquefaction facility with delivery to Sempra Mexico's Energía Costa Azul receipt terminal at a price based on the Southern California border index for natural gas. The LNG purchase agreement allows Tangguh PSC to divert deliveries to other global markets in exchange for cash differential payments to Sempra LNG & Midstream. Sempra LNG & Midstream also may enter into short-term supply agreements to purchase LNG to be received, stored and regasified at the terminal for sale to other parties.

Storage

Sempra LNG & Midstream has 42 Bcf of operational working natural gas storage capacity and a project under development as follows:

- Bay Gas Storage Company, Ltd. is a facility located 40 miles north of Mobile, Alabama, that provides underground storage (20 Bcf of operational working natural gas storage capacity) and delivery of natural gas. Sempra LNG & Midstream owns 91 percent of the project. It is the easternmost salt dome storage facility on the Gulf Coast, with direct service to the Florida market and markets across the Southeast, Mid-Atlantic and Northeast regions.
- Mississippi Hub, LLC (Mississippi Hub) is an underground salt dome with 22 Bcf of operational working natural gas storage capacity located 45 miles southeast of Jackson, Mississippi. It has access to natural gas from shale basins of East Texas and Louisiana, traditional Gulf Coast supplies and LNG, with multiple interconnections to serve the Southeast and Northeast regions.

- LA Storage is a salt cavern development project in Cameron Parish, Louisiana. Sempra LNG & Midstream owns 77 percent of the project and ProLiance Transportation LLC owns the remaining 23 percent. The project's location provides access to several LNG facilities in the area and could be positioned to support LNG export from various liquefaction terminals, when operational, if anticipated cash flows support further investment.

Transportation

In the second quarter of 2016, Sempra LNG & Midstream sold its 25-percent interest in Rockies Express Pipeline LLC (Rockies Express) and permanently released pipeline capacity that it held with Rockies Express and others. We discuss Rockies Express further in Notes 3 and 15 of the Notes to Consolidated Financial Statements.

Generation

Sempra LNG & Midstream sells electricity under short-term and long-term contracts and into the spot market and other competitive markets. Sempra LNG & Midstream purchases natural gas to fuel Sempra Mexico's TdM power plant, described above, and prior to April 2015, to fuel its Mesquite Power natural gas-fired power plant. Sempra LNG & Midstream sold the first 625-MW block of the Mesquite Power plant in February 2013 and the remaining 625-MW block, together with a related power sales contract, in April 2015.

Sempra LNG & Midstream has an EMA with Sempra Mexico to provide energy marketing, scheduling and other related services to Sempra Mexico's TdM power plant to support its sales of generated power into the California electricity market. We discuss the EMA in "Sempra Mexico – Business Overview – Power Business – Natural Gas-Fired Generation" above.

Distribution

As we discuss in Note 3 of the Notes to Consolidated Financial Statements, in September 2016, Sempra LNG & Midstream sold 100 percent of the outstanding equity of EnergySouth Inc. (EnergySouth), the parent company of Mobile Gas Service Corporation (Mobile Gas) and Willmut Gas Company (Willmut Gas). Mobile Gas and Willmut Gas are regulated natural gas distribution utilities in southwest Alabama and in Mississippi, respectively.

Capital Project Updates

We summarize the Cameron LNG JV three-train liquefaction project below. Sempra LNG & Midstream's ability to successfully complete major infrastructure projects is subject to a number of risks and uncertainties, which we discuss below and in "Risk Factors" in our 2016 Annual Report on Form 10-K.

MAJOR PROJECT UNDER CONSTRUCTION AT DECEMBER 31, 2016 – SEMPRA LNG & MIDSTREAM

Project description	Status
Cameron LNG JV Three-Train Liquefaction Project	
§ Construction began in the second half of 2014. § Sempra Energy contributed Cameron LNG, LLC's existing facilities to Cameron LNG JV. § Capacity of 13.9 million tonnes per annum (Mtpa) of LNG with an expected export capability of 12 Mtpa of LNG, or approximately 1.7 Bcf per day. § Anticipated incremental investment of approximately $7 billion. § Authorized to export LNG to both Free Trade Agreement (FTA) and non-FTA countries. § 20-year liquefaction and regasification tolling capacity agreements for full nameplate capacity.	§ Cameron LNG JV has received authorizations from the U.S. Department of Energy (DOE) to export up to 14.95 Mtpa of LNG to FTA and Non-FTA countries. § Latest indication by the EPC contractor for in-service dates: mid-2018 for train one, late 2018 for train two, and mid-2019 for train three.

Cameron LNG JV Three-Train Liquefaction Project

Construction on the current three-train liquefaction project began in the second half of 2014 under an engineering, procurement and construction (EPC) contract with a joint venture between CB&I Shaw Constructors, Inc., a wholly owned subsidiary of Chicago Bridge & Iron Company N.V., and Chiyoda International Corporation, a wholly owned subsidiary of Chiyoda Corporation.

- *Incremental investment.* The anticipated incremental investment by Cameron LNG JV in the three-train liquefaction project is estimated to be approximately $7 billion, including the cost of the lump-sum, turnkey EPC contract, development engineering costs

and permitting costs, but excluding capitalized interest and other financing costs. The majority of the incremental investment will be project-financed and the balance provided by the project partners. We expect that our remaining equity requirements to complete the project will be met by a combination of our share of cash generated from each liquefaction train as it comes on line and additional cash contributions. If construction, financing or other project costs are higher than we currently expect, we may have to contribute additional cash exceeding our current expectations.

- *Total estimated cost.* The total cost of the facility, including the cost of our original facility contributed to the joint venture plus interest during construction, financing costs and required reserves, is estimated to be approximately $10 billion.
- *Construction delay.* In late October 2016, Cameron LNG JV received indication from the EPC contractor that the in-service date for each train may be delayed. Any such construction delays would defer a portion of the 2018 and 2019 earnings anticipated from this project.
- *Transportation agreements.* Sempra LNG & Midstream has agreements totaling 1.45 Bcf per day of firm natural gas transportation service to the Cameron LNG JV facilities on the Cameron Interstate Pipeline with ENGIE S.A. and affiliates of Mitsubishi Corporation and Mitsui & Co., Ltd. The terms of these agreements are concurrent with the liquefaction and regasification tolling capacity agreements.
- *Financing agreements and guarantees.* Sempra Energy and the project partners executed project financing documents and completion guarantees, which became effective on October 1, 2014 and will terminate upon financial completion of the project. Sempra Energy and the project partners executed project financing documents for senior secured debt in an initial aggregate principal amount up to $7.4 billion for the purpose of financing the cost of development and construction of the Cameron LNG JV liquefaction project. Sempra Energy has entered into guarantees under which it has severally guaranteed 50.2 percent of Cameron LNG JV's obligations under the project financing and financing-related agreements, for a maximum amount of $3.9 billion. The project financing and completion guarantees became effective on October 1, 2014, and will terminate upon financial completion of the project, which will occur upon satisfaction of certain conditions, including all three trains achieving commercial operation and meeting certain operational performance tests. We expect the project to achieve financial completion and the completion guarantees to be terminated approximately nine months after all three trains achieve commercial operation.

We discuss matters related to Cameron LNG JV further in Notes 3 and 4 of the Notes to Consolidated Financial Statements.

We discuss additional matters related to Sempra LNG & Midstream, including Cameron LNG JV, in "Factors Influencing Future Performance."

EXECUTIVE SUMMARY

BUSINESS STRATEGY

Our objective is to increase shareholder value by developing, investing in and operating long-term-contracted energy infrastructure assets and operating our regulated utilities in a safe and reliable manner.

The key components of our strategy include the following disciplined growth platforms:

- U.S. and South American utilities
- U.S. and Mexican energy infrastructure

Operating within these areas, we are focused on generating stable, predictable earnings and cash flows by investing in assets that are primarily regulated or contracted on a long-term basis. We have a robust capital program and take a disciplined approach to deploying this capital to areas that fit our strategy and are designed to create shareholder value. By doing so, our goal is to deliver long-term growth above the utility average, but with a commensurate risk profile.

KEY EVENTS AND ISSUES IN 2016

Below are key events and issues that affected our business in 2016; some of these may continue to affect our future results.

- In March 2016, Sempra LNG & Midstream recorded an impairment charge related to its investment in Rockies Express ($27 million earnings impact).
- In May 2016, Sempra LNG & Midstream recorded a charge related to permanently released pipeline capacity with Rockies Express and others ($123 million earnings impact).
- In June 2016, the CPUC approved a final decision (2016 GRC FD) in the California Utilities' 2016 GRC, effective retroactive to January 1, 2016.

- In September 2016, Sempra Mexico reduced the carrying value of TdM by recognizing an impairment charge ($90 million earnings impact).
- In September 2016, Sempra LNG & Midstream recorded a gain on the sale of EnergySouth, the parent company of Mobile Gas and Willmut Gas ($78 million earnings impact).
- In September 2016, Sempra Mexico's subsidiary, IEnova, purchased the remaining 50-percent interest in GdC for $1.144 billion, and recorded a noncash gain associated with the remeasurement of its 50-percent equity interest in GdC immediately prior to the transaction ($350 million earnings impact).
- In October 2016, IEnova completed a private follow-on offering of its common stock in the U.S. and outside of Mexico and a concurrent public common stock offering in Mexico, generating net proceeds of approximately $1.57 billion. Sempra Energy also purchased stock in the Mexican offering. Upon completion of the equity offerings, our beneficial ownership of IEnova decreased from 81.1 percent to 66.4 percent.
- In December 2016, Sempra Mexico acquired the 252-MW Ventika wind power generation facilities in Nuevo Leon, Mexico for cash of $310 million, plus the assumption of $610 million of existing debt.
- As of December 31, 2016, SoCalGas has recorded an estimated $780 million for certain costs and $606 million for expected recovery of costs from insurance related to the Aliso Canyon natural gas storage facility gas leak, which we discuss further in Note 15 of the Notes to Consolidated Financial Statements.

RESULTS OF OPERATIONS

We discuss the following in Results of Operations:

- Overall results of our operations
- Our segment results
- Adjusted earnings and adjusted earnings per share
- Significant changes in revenues, costs and earnings between periods

OVERALL RESULTS OF OPERATIONS OF SEMPRA ENERGY

In 2016, our earnings increased by $21 million (2%) to $1.4 billion and our diluted earnings per share increased by $0.09 per share (2%) to $5.46 per share. In 2015 compared to 2014, our earnings increased by $188 million (16%) to $1.3 billion and our diluted earnings per share increased by $0.74 per share (16%) to $5.37 per share. Our earnings and diluted earnings per share were impacted by variances discussed in "Segment Results" below and by the items included in the table "Sempra Energy Adjusted Earnings and Adjusted Earnings Per Share," also below.

SEGMENT RESULTS

The following section presents earnings (losses) by Sempra Energy segment, as well as Parent and other, and the related discussion of the changes in segment earnings (losses). Variance amounts presented are the after-tax earnings impact (based on applicable statutory tax rates), unless otherwise noted, and before noncontrolling interests, where applicable.

SEMPRA ENERGY EARNINGS (LOSSES) BY SEGMENT
(Dollars in millions)

	Years ended December 31,		
	2016	2015	2014
Sempra Utilities:			
SDG&E	$ 570	$ 587	$ 507
SoCalGas(1)	349	419	332
Sempra South American Utilities	156	175	172
Sempra Infrastructure:			
Sempra Mexico	463	213	192
Sempra Renewables	55	63	81
Sempra LNG & Midstream	(107)	44	50
Parent and other(2)	(116)	(152)	(173)
Earnings	$ 1,370	$ 1,349	$ 1,161

(1) After preferred dividends.

(2) Includes after-tax interest expense ($169 million in 2016, $157 million in 2015 and $144 million in 2014), intercompany eliminations recorded in consolidation and certain corporate costs.

SEMPRA UTILITIES

SDG&E

The decrease in earnings of $17 million (3%) in 2016 was primarily due to:

- $31 million of charges associated with prior years' income tax benefits generated from income tax repairs deductions that were reallocated to ratepayers pursuant to the 2016 GRC FD ($22 million related to 2015 estimated benefits and $9 million related to the true-up of 2012-2014 estimated benefits used in the 2016 GRC FD to actuals), as we discuss in Notes 6 and 14 of the Notes to Consolidated Financial Statements;
- $15 million reduction to the loss from plant closure in 2015 primarily based on the CPUC approval of a compliance filing related to SDG&E's authorized recovery of its investment in SONGS pursuant to an amended settlement agreement approved by the CPUC in 2014;
- $9 million lower favorable impact in 2016 related to the resolution of prior years' income tax items; and
- $7 million lower earnings from electric transmission primarily due to lower formulaic revenues associated with lower borrowing costs; **offset by**
- $23 million higher CPUC base operating margin authorized for 2016, including lower generation major maintenance costs, and lower non-refundable operating costs;
- $9 million increase in allowance for funds used during construction (AFUDC) related to equity;
- $7 million related to excess tax benefits associated with the adoption of a new accounting standard related to share-based compensation; and
- $7 million lower net interest expense.

The increase in earnings of $80 million (16%) in 2015 compared to 2014 was primarily due to:

- $15 million reduction to the loss from plant closure in 2015 compared to a $21 million charge in 2014 to adjust the total loss from plant closure;
- $26 million higher earnings from electric transmission operations primarily due to higher rate base;
- $14 million higher CPUC base operating margin authorized for 2015, and lower non-refundable operating costs;
- $7 million lower generation major maintenance costs; and
- $7 million higher favorable resolution of prior years' income tax items; **offset by**
- $7 million higher earnings in 2014 associated with SDG&E's annual FERC formulaic rate adjustment.

SoCalGas

The decrease in earnings of $70 million (17%) in 2016 was primarily due to:

- $49 million of charges associated with prior years' income tax benefits generated from income tax repairs deductions that were reallocated to ratepayers pursuant to the 2016 GRC FD ($43 million related to 2015 estimated benefits and $6 million related to the true-up of 2012-2014 estimated benefits used in the 2016 GRC FD to actuals);
- $16 million charge associated with tracking the 2016 income tax benefit from certain flow-through items in relation to forecasted amounts in the 2016 GRC FD, as we discuss in Notes 6 and 14 of the Notes to Consolidated Financial Statements;
- $16 million lower favorable impact in 2016 related to the resolution of prior years' income tax items;
- $13 million impairment of assets related to the Southern Gas System Reliability project;
- $13 million lower regulatory awards;
- $11 million of earnings in 2015 from a CPUC-approved retroactive increase in authorized GRC revenue requirement for years 2012 through 2014 due to increased rate base; and
- $8 million higher net interest expense primarily due to debt issuances in the second quarter of 2015; **offset by**
- $27 million higher CPUC base operating margin authorized for 2016, and lower non-refundable operating costs; and
- $23 million higher earnings associated with the PSEP and advanced metering assets.

The increase in earnings of $87 million (26%) in 2015 compared to 2014 was primarily due to:

- $34 million higher earnings primarily due to a lower effective tax rate, including $11 million earnings impact from higher favorable resolution of prior years' income tax items in 2015;
- $31 million higher CPUC base operating margin authorized for 2015, and lower non-refundable operating costs;
- $11 million of earnings from a retroactive increase, approved by the CPUC in 2015, in authorized GRC revenue requirement for years 2012 through 2014 due to increased rate base;
- $10 million from an increase in AFUDC related to equity; and
- $8 million higher regulatory awards; **offset by**
- $8 million higher interest expense.

Sempra South American Utilities

Because our operations in South America use their local currency as their functional currency, revenues and expenses are translated into U.S. dollars at average exchange rates for the period for consolidation in Sempra Energy Consolidated's results of operations. The year-to-year variances discussed below are as adjusted for the difference in foreign currency translation rates between years. We discuss these and other foreign currency effects below in "Impact of Foreign Currency and Inflation Rates on Results of Operations."

The decrease in earnings of $19 million (11%) in 2016 was primarily due to:

- $15 million higher income tax expense, including $17 million related to Peruvian tax reform, as we discuss below in "Changes in Revenues, Costs and Earnings – Income Taxes;"
- $9 million lower earnings from foreign currency translation effects;
- $7 million business interruption insurance proceeds in 2015 for the Santa Teresa hydroelectric power plant, which was expected to begin commercial operation in September 2014, but did not commence operation until September 2015 due to construction delays; and
- $3 million primarily due to lower capitalized interest due to completion of construction of the Santa Teresa hydroelectric power plant in 2015; **offset by**
- $10 million higher earnings from operations mainly due to the start of operations of the Santa Teresa hydroelectric power plant in September 2015.

The increase in earnings of $3 million (2%) in 2015 compared to 2014 was primarily due to:

- $21 million higher earnings from operations, mainly in Peru, due to an increase in volumes and rates, which rates include foreign currency adjustments;
- $7 million business interruption insurance proceeds for the Santa Teresa hydroelectric power plant;
- $4 million higher earnings from early termination fees from commercial power contracts;
- $4 million decrease in earnings attributable to noncontrolling interests in 2015; and
- $3 million lower net interest expense, mainly in Chile, related to inflationary effect on local bonds; **offset by**
- $20 million lower earnings from foreign currency translation effects;
- $9 million higher income tax expense, including $18 million income tax benefit in 2014 related to Peruvian tax reform, offset by $6 million income tax expense in 2014 related to Chilean tax reform, as we discuss below in "Changes in Revenues, Costs and Earnings – Income Taxes;" and
- $8 million lower earnings associated with the relocation of electrical infrastructure.

Sempra Mexico

The increase in earnings of $250 million in 2016 was primarily due to:

- $432 million noncash gain associated with the remeasurement of our 50-percent equity interest in GdC, as we discuss in Note 3 of the Notes to Consolidated Financial Statements;
- $20 million incremental earnings from the increase in our ownership interest in GdC from 50 percent to 100 percent on September 26, 2016; and
- $8 million increase in earnings from our distribution company mainly associated with new distribution rates; **offset by**
- $111 million impairment of TdM assets held for sale;
- $80 million increase in earnings attributable to noncontrolling interests at IEnova, as we discuss below in "Changes in Revenues, Costs and Earnings – Earnings Attributable to Noncontrolling Interests;"
- $36 million favorable impact in 2016 compared to $49 million favorable impact in 2015 due primarily to transactional effects from foreign currency and inflation, including amounts in equity earnings from our joint ventures; and
- $8 million deferred income tax expense on our investment in the TdM natural gas-fired power plant as a result of management's decision to hold the asset for sale.

The increase in earnings of $21 million (11%) in 2015 compared to 2014 was primarily due to:

- $37 million higher pipeline earnings, primarily due to the start of operations of certain pipelines in the fourth quarter of 2014; and
- $31 million favorable variance due to effects from foreign currency and inflation, including amounts in earnings from our joint ventures; **offset by**
- $5 million losses in 2015 from operations at our TdM power plant compared to $13 million earnings for the same period in 2014, primarily due to lower capacity revenues and lower volumes;
- $14 million gain in 2014 from the sale of a 50-percent equity interest in the first phase of the Energía Sierra Juárez project;
- $10 million unfavorable impact from income taxes ($5 million expense in 2015 compared to $5 million benefit in 2014); and
- $6 million increase in earnings attributable to noncontrolling interests at IEnova.

Sempra Renewables

The decrease in earnings of $8 million (13%) in 2016 was primarily due to:

- $12 million lower solar investment tax credits from projects placed in service in 2015; and
- $5 million gain in 2015 from the sale of the Rosamond Solar development project; **offset by**
- $8 million higher earnings from increased production at our wind and solar assets.

The decrease in earnings of $18 million (22%) in 2015 compared to 2014 was primarily due to:

- $24 million gains in 2014 from the sale of 50-percent equity interests in Copper Mountain Solar 3 and Broken Bow 2 Wind; **offset by**
- $5 million gain in 2015 from the sale of the Rosamond Solar development project; and
- $4 million higher earnings from increased solar capacity, offset by lower earnings from decreased production at wind projects.

Sempra LNG & Midstream

The decrease of $151 million in 2016 was primarily due to:

- $123 million loss on permanent release of pipeline capacity, as we discuss in Note 15 of the Notes to Consolidated Financial Statements;
- $36 million gain in 2015 on the sale of the remaining 625-MW block of the Mesquite Power plant, net of related expenses;
- $36 million lower equity earnings resulting from the sale of the investment in Rockies Express;
- $27 million impairment charge in the first quarter of 2016 related to the investment in Rockies Express; and
- $15 million lower results primarily driven by changes in natural gas prices; **offset by**
- $78 million gain on the sale of EnergySouth, net of related expenses, as we discuss in Note 3 of the Notes to Consolidated Financial Statements.

The decrease in earnings of $6 million (12%) in 2015 compared to 2014 was primarily due to:

- $29 million lower results primarily driven by the effect of lower natural gas prices;
- $25 million tax benefit in 2014 due to the release of Louisiana state valuation allowance against a deferred tax asset associated with Cameron LNG developments; and

- $10 million development expense associated with the potential expansion of our LNG business; **offset by**
- $36 million gain in 2015 on the sale of the remaining 625-MW block of the Mesquite Power plant and a related power sale contract, net of related expenses;
- $11 million higher equity earnings from Rockies Express due to additional capacity placed in service in 2015; and
- $9 million lower net losses from the Mesquite Power plant due to the sale of the remaining block in April 2015.

Parent and Other

The decrease in losses of $36 million (24%) in 2016 was primarily due to:

- $32 million higher income tax benefits, including;
  - $40 million lower U.S. tax expense in 2016 as a result of a change in planned repatriation, as we discuss below in "Changes in Revenues, Costs and Earnings – Income Taxes," and
  - $17 million related to excess tax benefits associated with the adoption of a new accounting standard related to share-based compensation, *offset by*
  - $14 million income tax benefits in 2015 associated with the favorable resolution of prior years' income tax items, and
  - $7 million income tax benefits in 2015 from a decrease in state valuation allowances; and
- $10 million higher investment gains in 2016 on dedicated assets in support of our executive retirement and deferred compensation plans, net of the increase in deferred compensation liability associated with the investments; **offset by**
- $10 million higher net interest expense.

The decrease in losses of $21 million (12%) in 2015 compared to 2014 was primarily due to:

- $39 million higher income tax benefits, including;
  - $18 million lower U.S. income tax expense in 2015 as a result of lower planned repatriation of current year earnings from certain non-U.S. subsidiaries,
  - $14 million of income tax benefits in 2015 associated with the resolution of prior years' income tax items, and
  - $5 million higher income tax benefits from a decrease in state valuation allowances; **offset by**
- $11 million lower investment gains in 2015 on dedicated assets in support of our executive retirement and deferred compensation plans, net of the decrease in deferred compensation liability associated with the investments.

ADJUSTED EARNINGS AND ADJUSTED EARNINGS PER SHARE

We prepare the consolidated financial statements in conformity with U.S. GAAP. However, management may use earnings and earnings per share adjusted to exclude certain items (adjusted earnings and adjusted earnings per share) internally for financial planning, for analysis of performance and for reporting of results to the Board of Directors. We may also use adjusted earnings and adjusted earnings per share when communicating our financial results and earnings outlook to analysts and investors. Adjusted earnings and adjusted earnings per share are non-GAAP financial measures. Because of the significance and/or nature of the excluded items, management believes that these non-GAAP financial measures provide a meaningful comparison of the performance of Sempra Energy's and the California Utilities' business operations to prior and future periods.

Non-GAAP financial measures are supplementary information that should be considered in addition to, but not as a substitute for, the information prepared in accordance with U.S. GAAP. The table below reconciles adjusted earnings and adjusted earnings per share to Sempra Energy Earnings and Diluted Earnings Per Common Share, which we consider to be the most directly comparable financial measures calculated in accordance with U.S. GAAP, for the years ended December 31, 2016, 2015 and 2014.

SEMPRA ENERGY ADJUSTED EARNINGS AND ADJUSTED EARNINGS PER SHARE

(Dollars in millions, except per share amounts)

	Pretax amount	Income tax expense (benefit)(1)	Non-controlling interests	Earnings	Diluted EPS
	Year ended December 31, 2016				
Sempra Energy GAAP Earnings				$ 1,370	$ 5.46
Excluded items:					
Remeasurement gain in connection with GdC	$ (617)	$ 185	$ 82	(350)	(1.39)
Gain on sale of EnergySouth	(130)	52	—	(78)	(0.31)
Permanent release of pipeline capacity	206	(83)	—	123	0.49
SDG&E tax repairs adjustments related to 2016 GRC FD	52	(21)	—	31	0.12
SoCalGas tax repairs adjustments related to 2016 GRC FD	83	(34)	—	49	0.19
Impairment of investment in Rockies Express	44	(17)	—	27	0.11
Impairment of TdM assets held for sale	131	(20)	(21)	90	0.36
Deferred income tax expense associated with TdM	—	8	(3)	5	0.02
Sempra Energy Adjusted Earnings				$ 1,267	$ 5.05
Weighted-average number of shares outstanding, diluted (thousands)					251,155
	Year ended December 31, 2015				
Sempra Energy GAAP Earnings				$ 1,349	$ 5.37
Excluded items:					
Gain on sale of Mesquite Power block 2	$ (61)	$ 25	$ —	(36)	(0.14)
SONGS plant closure adjustment	(26)	11	—	(15)	(0.06)
Sempra Energy Adjusted Earnings				$ 1,298	$ 5.17
Weighted-average number of shares outstanding, diluted (thousands)					250,923
	Year ended December 31, 2014				
Sempra Energy GAAP Earnings				$ 1,161	$ 4.63
Excluded item:					
SONGS plant closure loss(2)	$ 6	$ 15	$ —	21	0.08
Sempra Energy Adjusted Earnings				$ 1,182	$ 4.71
Weighted-average number of shares outstanding, diluted (thousands)					250,655

(1) Income taxes were calculated based on applicable statutory tax rates, except for adjustments that are solely income tax. Income taxes on the impairment of TdM were calculated based on the applicable statutory tax rate, including translation from historic to current exchange rates.

(2) After including a $17 million charge to reduce certain tax regulatory assets attributed to SONGS, the adjustment to loss from plant closure is a $21 million charge to earnings.

The tables below reconcile adjusted earnings to SDG&E's and SoCalGas' Earnings, which we consider to be the most directly comparable financial measure calculated in accordance with U.S. GAAP, for the years ended December 31, 2016, 2015 and 2014. SoCalGas had no reconciling adjustments for the years ended December 31, 2015 or 2014.

SDG&E ADJUSTED EARNINGS
(Dollars in millions)

	Pretax amount	Income tax (benefit) expense(1)	Earnings
	Year ended December 31, 2016		
SDG&E GAAP Earnings			$ 570
Excluded item:			
SDG&E tax repairs adjustments related to 2016 GRC FD	$ 52	$ (21)	31
SDG&E Adjusted Earnings			$ 601
	Year ended December 31, 2015		
SDG&E GAAP Earnings			$ 587
Excluded item:			
SONGS plant closure adjustment	$ (26)	$ 11	(15)
SDG&E Adjusted Earnings			$ 572
	Year ended December 31, 2014		
SDG&E GAAP Earnings			$ 507
Excluded item:			
SONGS plant closure loss(2)	$ 6	$ 15	21
SDG&E Adjusted Earnings			$ 528

(1) Income taxes were calculated based on applicable statutory tax rates, except for adjustments that are solely income tax.
(2) After including a $17 million charge to reduce certain tax regulatory assets attributed to SONGS, the adjustment to loss from plant closure is a $21 million charge to earnings.

SOCALGAS ADJUSTED EARNINGS
(Dollars in millions)

	Pretax amount	Income tax benefit(1)	Earnings
	Year ended December 31, 2016		
SoCalGas GAAP Earnings			$ 349
Excluded item:			
SoCalGas tax repairs adjustments related to 2016 GRC FD	$ 83	$ (34)	49
SoCalGas Adjusted Earnings			$ 398

(1) Income taxes were calculated based on applicable statutory tax rates.

CHANGES IN REVENUES, COSTS AND EARNINGS

This section contains a discussion of the differences between periods in the specific line items of the Consolidated Statements of Operations for Sempra Energy, SDG&E and SoCalGas.

Utilities Revenues

Our utilities revenues include

Electric revenues at:

- SDG&E
- Sempra South American Utilities' Chilquinta Energía and Luz del Sur

Natural gas revenues at:

- SDG&E
- SoCalGas
- Sempra Mexico's Ecogas
- Sempra LNG & Midstream's Mobile Gas and Willmut Gas (prior to September 12, 2016)

Intercompany revenues included in the separate revenues of each utility are eliminated in the Sempra Energy Consolidated Statements of Operations.

SoCalGas and SDG&E currently operate under a regulatory framework that:

- permits SDG&E to recover the actual cost incurred to generate or procure electricity based on annual estimates of the cost of electricity supplied to customers. The differences in cost between estimates and actual are recovered in subsequent periods through rates.
- permits the cost of natural gas purchased for core customers (primarily residential and small commercial and industrial customers) to be passed through to customers in rates substantially as incurred. However, SoCalGas' GCIM provides SoCalGas the opportunity to share in the savings and/or costs from buying natural gas for its core customers at prices below or above monthly market-based benchmarks. This mechanism permits full recovery of costs incurred when average purchase costs are within a price range around the benchmark price. Any higher costs incurred or savings realized outside this range are shared between the core customers and SoCalGas. We provide further discussion in "Our Business" above.
- also permits the California Utilities to recover certain expenses for programs authorized by the CPUC, or "refundable programs."

Because changes in SDG&E's and SoCalGas' cost of electricity and/or natural gas is substantially recovered in rates, changes in these costs are reflected in the changes in revenues, and therefore do not impact earnings. In addition to the change in cost or market prices, electric or natural gas revenues recorded during a period are impacted by customer billing cycles causing a difference between customer billings and recorded or authorized costs. These differences are required to be balanced over time, resulting in over- and undercollected regulatory balancing accounts. We discuss balancing accounts and their effects further in Note 14 of the Notes to Consolidated Financial Statements.

The table below summarizes revenues and cost of sales for our utilities, net of intercompany activity:

UTILITIES REVENUES AND COST OF SALES
(Dollars in millions)

	Years ended December 31,		
	2016	2015	2014
Electric revenues:			
SDG&E	$ 3,754	$ 3,719	$ 3,785
Sempra South American Utilities	1,463	1,447	1,434
Eliminations and adjustments	(6)	(8)	(10)
Total	5,211	5,158	5,209
Natural gas revenues:			
SoCalGas	3,471	3,489	3,855
SDG&E	499	500	544
Sempra Mexico	88	81	109
Sempra LNG & Midstream	68	103	113
Eliminations and adjustments	(76)	(77)	(72)
Total	4,050	4,096	4,549
Total utilities revenues	$ 9,261	$ 9,254	$ 9,758
Cost of electric fuel and purchased power:			
SDG&E	$ 1,187	$ 1,151	$ 1,309
Sempra South American Utilities	1,001	985	972
Total	$ 2,188	$ 2,136	$ 2,281
Cost of natural gas:			
SoCalGas	$ 891	$ 921	$ 1,449
SDG&E	127	153	208
Sempra Mexico	52	49	74
Sempra LNG & Midstream	17	31	44
Eliminations and adjustments	(20)	(20)	(17)
Total	$ 1,067	$ 1,134	$ 1,758

The table below summarizes electric and natural gas volumes sold for our utilities:

UTILITIES VOLUMES

(Electric volumes in millions of kilowatt-hours, natural gas volumes in billion cubic feet)

	Years ended December 31,		
	2016	2015	2014
Electric volumes:			
SDG&E:			
Residential(1)	6,685	7,143	7,338
Commercial(1)	6,700	6,877	6,974
Industrial	2,189	2,161	2,067
Direct access	3,515	3,652	3,648
Street and highway lighting	75	83	88
Total(4)	19,164	19,916	20,115
Sempra South American Utilities:			
Luz del Sur(2)	7,387	7,549	7,287
Chilquinta Energía	2,900	2,887	2,944
Total	10,287	10,436	10,231
Natural gas volumes(3):			
SDG&E:			
Natural gas sales	40	38	39
Transportation	31	35	34
Total(4)	71	73	73
SoCalGas:			
Natural gas sales	294	291	287
Transportation	610	634	657
Total(4)	904	925	944
Sempra Mexico – Ecogas	29	25	24

(1) Rooftop solar installations, weather and energy efficiency initiatives are impacting residential and commercial volumes sold by SDG&E. As of December 31, 2016, the residential and commercial rooftop solar capacity in SDG&E's territory totals 694 MW, an increase in capacity of 198 MW in 2016.

(2) The decrease in electric volumes in 2016 is primarily due to the migration of regulated and non-regulated customers to tolling customers, who pay only a tolling fee and do not contribute to customer load.

(3) In September 2016, Sempra LNG & Midstream completed the sale of EnergySouth, the parent company of Mobile Gas and Willmut Gas. Volume information for Mobile Gas and Willmut Gas has been excluded for all years presented due to immateriality.

(4) Includes intercompany sales.

Electric Revenues and Cost of Electric Fuel and Purchased Power

Our electric revenues increased by $53 million (1%), remaining at $5.2 billion in 2016 primarily due to:

- $35 million increase at SDG&E, including:
  - $37 million higher authorized revenue in the 2016 GRC FD,
  - $36 million higher cost of electric fuel and purchased power, which we discuss below,
  - $31 million higher recovery of costs associated with CPUC-authorized refundable programs, which revenues are fully offset in operation and maintenance expenses, and
  - $5 million to adjust estimated 2015 income tax benefits generated from income tax repairs deductions that were reallocated to ratepayers pursuant to the CPUC 2016 GRC FD to actual deductions taken on the 2015 tax return. This amount reflects the increase in income tax expense, *offset by*
  - $52 million of charges associated with prior years' income tax benefits generated from income tax repairs deductions that were reallocated to ratepayers pursuant to the 2016 GRC FD ($37 million related to 2015 estimated benefits and $15 million related to the true-up of 2012-2014 estimated benefits used in the 2016 GRC FD to actuals); and
- $16 million increase at Sempra South American Utilities, including:
  - $117 million due to higher rates at Luz del Sur and Chilquinta Energía primarily due to $81 million of increased costs passed through to customers, *offset by*
  - $69 million due to foreign currency exchange rate effects,
  - $24 million lower volumes at Luz del Sur, net of the effects of higher revenues from the Santa Teresa hydroelectric power plant, which began commercial operations in September 2015, and
  - $9 million business interruption insurance proceeds in 2015.

In 2015 compared to 2014, our electric revenues decreased by $51 million (1%) to $5.2 billion primarily due to:

- $66 million decrease at SDG&E, including:
  - $158 million lower cost of electric fuel and purchased power, which we discuss below, and
  - $57 million lower recovery of costs associated with CPUC-authorized refundable programs, which revenues are fully offset in operation and maintenance expenses, *offset by*
  - $88 million higher revenues from CPUC-authorized 2015 attrition and, starting in 2015, authorized revenues for the recovery of the SONGS regulatory assets pursuant to an amended settlement agreement approved by the CPUC in 2014, which we discuss below in "Depreciation and Amortization" and in Note 13 of the Notes to Consolidated Financial Statements, and
  - $52 million higher authorized revenues from electric transmission; **offset by**
- $13 million increase at Sempra South American Utilities, including:
  - higher rates and volumes at Luz del Sur, offset by foreign currency effects, and
  - $9 million business interruption insurance proceeds in 2015, *offset by*
  - foreign currency effects at Chilquinta Energía, offset by higher rates and volumes, and
  - lower revenues and volumes associated with the transfer of certain non-regulated customers from Chilquinta Energía to Tecnored, an energy-services subsidiary of Sempra South American Utilities. Our energy-service companies are part of our energy-related businesses, which revenues are discussed below in "Energy-Related Businesses: Revenues and Cost of Sales."

Our utilities' cost of electric fuel and purchased power increased by $52 million (2%) to $2.2 billion in 2016 due to:

- $36 million increase at SDG&E, including:
  - an increase from the incremental purchase of renewable energy at higher prices, *offset by*
  - a decrease in cost of purchased power due to declining natural gas prices, and
  - a decrease in consumption due to increased rooftop solar installations, weather impacts and energy efficiency initiatives; and
- $16 million increase at Sempra South American Utilities driven primarily by
  - $81 million of increased costs passed through to customers, *offset by*
  - $48 million due to foreign currency exchange rate effects, and
  - $28 million lower volumes at Luz del Sur, net of the effects of increased costs at the Santa Teresa hydroelectric power plant.

Our utilities' cost of electric fuel and purchased power decreased by $145 million (6%) to $2.1 billion in 2015 compared to 2014 primarily due to:

- $158 million decrease at SDG&E, including:
  - a decrease in cost of purchased power due to declining natural gas prices, and
  - a decrease in consumption due to energy efficiency initiatives, including an increase in rooftop solar installations, *offset by*
  - an increase from the incremental purchase of renewable energy at higher prices; **offset by**
- $13 million increase at Sempra South American Utilities driven primarily by higher rates and volumes at both Luz del Sur and Chilquinta Energía, offset by foreign currency exchange rate effects.

Natural Gas Revenues and Cost of Natural Gas

The table below summarizes average cost of natural gas sold by the California Utilities and included in Cost of Natural Gas. The average cost of natural gas sold at each utility in the table below is impacted by market prices, as well as transportation, tariff and other charges.

CALIFORNIA UTILITIES AVERAGE COST OF NATURAL GAS

(Dollars per thousand cubic feet)

	Years ended December 31,		
	2016	2015	2014
SoCalGas	$ 3.05	$ 3.18	$ 5.06
SDG&E	3.20	4.05	5.44

In 2016, our natural gas revenues decreased by $46 million (1%), remaining at $4.1 billion, and the cost of natural gas decreased by $67 million (6%), remaining at $1.1 billion. The decrease in natural gas revenues included

- $35 million decrease at Sempra LNG & Midstream primarily due to the sale of Mobile Gas and Willmut Gas in September 2016;
- $18 million decrease at SoCalGas, which included

- $83 million of charges associated with prior years' income tax benefits generated from income tax repairs deductions that were reallocated to ratepayers pursuant to the 2016 GRC FD ($72 million related to estimated 2015 benefits and $11 million related to the true-up of 2012-2014 estimated benefits used in the 2016 GRC FD to actuals),
- $30 million decrease in cost of natural gas sold, due to $38 million from lower average prices offset by $8 million from higher volume,
- $27 million charge associated with tracking the 2016 income tax benefit from certain flow-through items in relation to forecasted amounts in the 2016 GRC FD,
- $21 million lower regulatory awards, and
- $19 million increase in 2015 from a CPUC-approved retroactive increase in authorized GRC revenue requirement for years 2012 through 2014 due to increased rate base, *offset by*
- $56 million higher revenues primarily associated with the PSEP and advanced metering assets,
- $52 million higher recovery of costs associated with CPUC-authorized refundable programs, which revenues are fully offset in operation and maintenance expenses,
- $49 million higher authorized revenue in the 2016 GRC FD, and
- $19 million to adjust estimated 2015 income tax benefits generated from income tax repairs deductions that were reallocated to ratepayers pursuant to the CPUC 2016 GRC FD to actual deductions taken on the 2015 tax return. This amount reflects the increase in income tax expense; and

- $1 million decrease at SDG&E, which included
  - $26 million decrease in cost of natural gas sold, due to $34 million from lower average prices offset by $8 million from higher volume, *offset by*
  - $9 million higher recovery of costs associated with CPUC-authorized refundable programs, which revenues are fully offset in operation and maintenance expenses, and
  - $8 million higher revenues primarily associated with the PSEP.

In 2015 compared to 2014, our natural gas revenues decreased by $453 million (10%) to $4.1 billion, and the cost of natural gas decreased by $624 million (35%) to $1.1 billion. The decrease in natural gas revenues included

- $366 million decrease at SoCalGas, which included
  - $528 million decrease in cost of natural gas sold, due to $543 million from lower average prices offset by $15 million from higher sales volumes driven mainly by cooler weather in 2015, *offset by*
  - $57 million higher revenues from CPUC-authorized 2015 attrition,
  - $45 million higher recovery of costs associated with CPUC-authorized refundable programs, which revenues are fully offset in operation and maintenance expenses,
  - $19 million increase from a retroactive increase, approved by the CPUC in 2015, in authorized GRC revenue requirement for years 2012 through 2014 due to increased rate base, and
  - $13 million higher regulatory awards;
- $44 million decrease at SDG&E, which included
  - $55 million decrease in cost of natural gas sold, primarily due to $52 million from lower average prices, *offset by*
  - $8 million higher revenues from CPUC-authorized 2015 attrition; and
- $28 million lower revenues at Sempra Mexico primarily due to foreign currency effects and lower natural gas prices at Ecogas.

Energy-Related Businesses: Revenues and Cost of Sales

The table below shows revenues and cost of sales for our energy-related businesses.

ENERGY-RELATED BUSINESSES: REVENUES AND COST OF SALES

(Dollars in millions)

	Years ended December 31,		
	2016	2015	2014
REVENUES			
Sempra South American Utilities	$ 93	$ 97	$ 100
Sempra Mexico	637	588	709
Sempra Renewables	34	36	35
Sempra LNG & Midstream	440	550	866
Intersegment revenues, eliminations and adjustments(1)	(282)	(294)	(433)
Total revenues	$ 922	$ 977	$ 1,277
COST OF SALES(2)			
Cost of natural gas, electric fuel and purchased power:			
Sempra South American Utilities	$ 13	$ 22	$ 11
Sempra Mexico	200	221	350
Sempra LNG & Midstream	337	375	617
Eliminations and adjustments(1)	(273)	(283)	(426)
Total	$ 277	$ 335	$ 552
Other cost of sales:			
Sempra South American Utilities	$ 69	$ 64	$ 68
Sempra Mexico	10	15	14
Sempra LNG & Midstream	251	79	89
Eliminations and adjustments(1)	(8)	(10)	(8)
Total	$ 322	$ 148	$ 163

(1) Includes eliminations of intercompany activity.

(2) Excludes depreciation and amortization, which are shown separately on the Consolidated Statements of Operations.

Revenues from our energy-related businesses decreased by $55 million (6%) to $922 million in 2016. The decrease included

- $110 million decrease at Sempra LNG & Midstream, which included
  - $63 million primarily driven by changes in natural gas prices and lower volumes,
  - $34 million lower power revenues due to the sale of the second block of Mesquite Power in April 2015, and
  - $13 million from lower natural gas sales to Sempra Mexico; **offset by**
- $49 million higher revenues at Sempra Mexico primarily due to:
  - $82 million due to the acquisition of the remaining 50-percent interest in GdC in September 2016, *offset by*
  - $30 million lower power volumes at the TdM power plant; and
- $12 million primarily from lower intercompany eliminations associated with sales between Sempra LNG & Midstream and Sempra Mexico.

In 2015 compared to 2014, revenues from our energy-related businesses decreased by $300 million (23%) to $977 million. The decrease included

- $316 million decrease at Sempra LNG & Midstream mainly from lower natural gas prices and volumes and lower power revenues due to the sale of the remaining block of Mesquite Power and a related power sale contract in April 2015, as well as from the deconsolidation of Cameron LNG, LLC as of October 1, 2014;
- $121 million lower revenues at Sempra Mexico primarily due to lower natural gas prices and volumes in its gas business and lower power prices and volumes and capacity revenues in its power business, offset by higher transportation revenues from a section of the Sonora natural gas pipeline that commenced operations in the fourth quarter of 2014; and
- $3 million decrease at Sempra South American Utilities primarily due to foreign currency effects, offset by higher revenues associated with the transfer of certain non-regulated customers from Chilquinta Energía. Those revenues were included in “Electric Revenues” in prior years; **offset by**
- $139 million primarily from lower intercompany eliminations associated with sales between Sempra LNG & Midstream and Sempra Mexico.

The cost of natural gas, electric fuel and purchased power for our energy-related businesses decreased by $58 million (17%) to $277 million in 2016 primarily due to:

- $38 million decrease at Sempra LNG & Midstream primarily due to lower natural gas costs and lower electric fuel costs due to the sale of the remaining block of Mesquite Power in April 2015; and
- $21 million decrease at Sempra Mexico primarily due to lower natural gas volumes and costs; **offset by**
- $10 million primarily from lower intercompany eliminations of costs associated with sales between Sempra LNG & Midstream and Sempra Mexico.

The cost of natural gas, electric fuel and purchased power for our energy-related businesses decreased by $217 million (39%) to $335 million in 2015 compared to 2014 primarily due to:

- $242 million decrease at Sempra LNG & Midstream primarily due to lower natural gas costs and volumes and lower electric fuel costs due to the sale of the remaining block of Mesquite Power in April 2015; and
- $129 million decrease at Sempra Mexico primarily due to lower natural gas costs and volumes; **offset by**
- $143 million primarily from lower intercompany eliminations of costs associated with sales between Sempra LNG & Midstream and Sempra Mexico.

Other cost of sales increased by $174 million to $322 million in 2016 primarily due to the $206 million charge related to Sempra LNG & Midstream's permanent release of pipeline capacity in the second quarter of 2016, offset by $33 million of capacity costs in 2015 on the Rockies Express pipeline.

Operation and Maintenance

In the table below, we provide a breakdown of our operation and maintenance expenses by segment.

OPERATION AND MAINTENANCE
(Dollars in millions)

	Years ended December 31,		
	2016	2015	2014
Sempra Utilities:			
SDG&E	$ 1,048	$ 1,017	$ 1,076
SoCalGas	1,385	1,361	1,321
Sempra South American Utilities	172	160	173
Sempra Infrastructure:			
Sempra Mexico	150	126	121
Sempra Renewables	54	50	50
Sempra LNG & Midstream	156	177	181
Parent and other(1)	5	(5)	13
Total operation and maintenance	$ 2,970	$ 2,886	$ 2,935

(1) Includes intercompany eliminations recorded in consolidation.

Our operation and maintenance expenses increased by $84 million (3%) to $3.0 billion in 2016 primarily due to:

- $31 million increase at SDG&E, which included
  - $40 million higher expenses associated with CPUC-authorized refundable programs, for which all costs incurred are fully recovered in revenue (refundable program expenses), and
  - $10 million at Otay Mesa VIE primarily due to major maintenance at the Otay Mesa Energy Center (OMEC) plant in the second quarter of 2016, *offset by*
  - $14 million lower litigation expense, and
  - $8 million lower non-refundable operating costs, including labor, contract services and administrative and support costs;
- $24 million increase at SoCalGas, which included
  - $52 million higher expenses associated with CPUC-authorized refundable programs, for which all costs incurred are fully recovered in revenue (refundable program expenses), *offset by*
  - $33 million lower non-refundable operating costs, including labor, contract services and administrative and support costs; and
- $24 million increase at Sempra Mexico primarily from $17 million higher operating costs due to the acquisition of the remaining 50-percent interest in GdC in September 2016; **offset by**
- $21 million decrease at Sempra LNG & Midstream, $9 million of which is attributable to the sale of EnergySouth in September 2016.

Our operation and maintenance expenses decreased by $49 million (2%), remaining at $2.9 billion in 2015 compared to 2014 primarily due to:

- $59 million decrease at SDG&E, which included
  - $53 million lower expenses associated with CPUC-authorized refundable programs, for which all costs incurred are fully recovered in revenue (refundable program expenses), and
  - $8 million lower non-refundable operating costs, including $11 million lower major maintenance costs at its electric generating facilities, as well as labor, contract services and administrative and support costs; and
- $18 million decrease at Parent and Other primarily due to lower employee benefit and deferred compensation costs; **offset by**
- $40 million increase at SoCalGas primarily due to $45 million higher expenses associated with CPUC-authorized refundable programs for which all costs incurred are fully recovered in revenue (refundable program expenses).

Depreciation and Amortization

Our depreciation and amortization expense was

- $1,312 million in 2016
- $1,250 million in 2015
- $1,156 million in 2014

The increase of $62 million (5%) in 2016 was primarily due to:

- $42 million increase at SDG&E from depreciation on higher utility plant base, higher depreciation at Otay Mesa VIE and higher amortization; and
- $15 million higher depreciation at SoCalGas from higher utility plant base.

The increase of $94 million (8%) in 2015 compared to 2014 was primarily due to:

- $74 million higher depreciation and amortization at SDG&E mainly from $42 million from the start of amortization of SONGS regulatory assets and from higher utility plant base. As we discuss in Note 13 of the Notes to Consolidated Financial Statements, based on an amended settlement agreement approved by the CPUC in 2014, SDG&E is authorized to recover in rates its remaining investment in SONGS, including base plant and construction work in progress; and
- $30 million higher depreciation at SoCalGas from higher utility plant base; **offset by**
- $12 million lower depreciation expense at Sempra LNG & Midstream primarily due to the deconsolidation of Cameron LNG, LLC as of October 1, 2014.

Impairment Losses

In 2016, Sempra Mexico reduced the carrying value of TdM by recognizing a noncash impairment charge of $131 million. We discuss deferred income tax impacts related to TdM and this impairment in Note 3 of the Notes to Consolidated Financial Statements. Also in 2016, SoCalGas recorded a $21 million impairment of assets related to the Southern Gas System Reliability project.

Plant Closure Adjustment (Loss)

In 2015, SDG&E recorded a $26 million pretax reduction to the loss from SONGS plant closure. In 2014, SDG&E recorded a $6 million pretax charge to adjust the total loss from plant closure. We discuss SONGS further in Notes 13 and 15 of the Notes to Consolidated Financial Statements.

Gain on Sale of Assets

Gain on sale of assets includes, in 2016, $130 million from the sale of EnergySouth, and in 2015, $61 million from the sale of the remaining 625-MW block of the Mesquite Power plant and a related power sale contract, and $8 million from the sale of the Rosamond Solar development project.

Also included in this line item are gains on the sale of 50-percent equity interests in 2014 as follows:

- $27 million for Copper Mountain Solar 3
- $19 million for the first phase of the Energía Sierra Juárez Wind project
- $14 million for the Broken Bow 2 Wind project

Equity Earnings, Before Income Tax

Equity earnings from our equity method investments were

- $6 million in 2016
- $104 million in 2015
- $81 million in 2014

The decrease of $98 million in equity earnings in 2016 was primarily due to a $44 million impairment charge related to Rockies Express in the first quarter of 2016, and $61 million lower equity earnings as a result of the sale of our 25-percent interest in Rockies Express in May 2016.

The increase of $23 million in equity earnings in 2015 compared to 2014 was primarily due to:

- $19 million higher equity earnings from Rockies Express mainly due to east-to-west capacity placed in service in 2015; and
- $4 million higher earnings at Sempra Renewables due to higher earnings from increased solar capacity, offset by lower earnings from decreased production at wind projects.

We provide further details about equity method investments in Note 4 of the Notes to Consolidated Financial Statements.

Remeasurement of Equity Method Investment

In the third quarter of 2016, Sempra Mexico recorded a $617 million noncash gain associated with the remeasurement of its 50-percent equity interest in GdC. We discuss the transaction further in Notes 3 and 10 of the Notes to Consolidated Financial Statements.

Other Income, Net

Other income, net, was

- $132 million in 2016
- $126 million in 2015
- $137 million in 2014

Other income, net, includes equity-related AFUDC at the California Utilities and regulated entities at Sempra Mexico and Sempra LNG & Midstream; interest on regulatory balancing accounts; gains and losses from our investments and interest rate swaps; foreign currency transaction gains and losses; electrical infrastructure relocation income in Peru; and other, sundry amounts. The investment activity is on dedicated assets in support of certain executive benefit plans, as we discuss in Note 7 of the Notes to Consolidated Financial Statements.

Other income, net, increased by $6 million (5%) to $132 million in 2016 and included the following activity:

- $20 million higher investment gains in 2016 on dedicated assets in support of our executive retirement and deferred compensation plans;
- $9 million increase in equity-related AFUDC, including
  - $9 million increase at SDG&E, and
  - $4 million increase at SoCalGas, *offset by*
  - $6 million decrease at Sempra Mexico; and
- $6 million lower foreign currency losses in 2016; **offset by**
- $28 million higher losses on interest rate and foreign exchange instruments in 2016; and
- $6 million lower income from the sale of other investments.

In 2015 compared to 2014, other income, net, decreased by $11 million (8%) and included the following activity:

- $24 million lower investment gains in 2015 on dedicated assets in support of our executive retirement and deferred compensation plans; and
- $14 million lower electrical infrastructure income in Peru; **offset by**
- $11 million lower net losses on interest rate and foreign exchange instruments in 2015;
- $9 million higher income from the sale of other investments;
- $8 million lower foreign currency losses in 2015; and
- $1 million increase in equity-related AFUDC, including
  - $10 million increase at SoCalGas, *offset by*
  - $10 million decrease at Sempra Mexico related to construction of the Sonora natural gas pipeline.

We provide further details of the components of other income, net, in Note 1 of the Notes to Consolidated Financial Statements.

Interest Expense

Interest expense was

- $553 million in 2016
- $561 million in 2015
- $554 million in 2014

The decrease of $8 million (1%) in 2016 was primarily due to:

- $26 million higher capitalized interest primarily due to:
  - $18 million increase at Sempra Renewables primarily for solar projects, and
  - $10 million increase at Sempra Mexico primarily for the Ojinaga and San Isidro pipeline projects; **offset by**
- $13 million increase at SoCalGas primarily due to debt issuances in 2015 and 2016; and
- $6 million higher lease interest on our downtown headquarters building.

The increase of $7 million (1%) in 2015 compared to 2014 was primarily due to:

- $24 million increase in long-term debt interest at Parent and Other primarily due to debt issuances in 2014 and 2015, net of maturities; and
- $15 million increase at SoCalGas primarily due to debt issuances in 2014 and 2015; **offset by**
- $33 million increase in capitalized interest at Sempra LNG & Midstream primarily related to its investment in Cameron LNG JV, which has not commenced its planned principal operations.

Income Taxes

The table below shows the income tax expense and effective income tax rates for Sempra Energy, SDG&E and SoCalGas.

INCOME TAX EXPENSE AND EFFECTIVE INCOME TAX RATES

(Dollars in millions)

	Years ended December 31,					
	2016		2015		2014	
	Income tax expense	Effective income tax rate	Income tax expense	Effective income tax rate	Income tax expense	Effective income tax rate
Sempra Energy Consolidated	$ 389	21%	$ 341	20%	$ 300	20%
SDG&E	280	33	284	32	270	34
SoCalGas	143	29	138	25	139	29

Sempra Energy Consolidated

Sempra Energy's income tax expense increased in 2016 due to higher pretax income and a higher effective income tax rate. The higher effective income tax rate was primarily due to:

- $3 million income tax expense in 2016 compared to $56 million income tax benefit in 2015 from the resolution of prior years' income tax items. The amount in 2016 includes $14 million income tax expense from lower actual repairs deductions at SDG&E and SoCalGas taken on the 2015 tax return compared to amounts estimated in 2015, as discussed in Note 14 of the Notes to Consolidated Financial Statements; and
- $17 million income tax expense from the remeasurement of our Peruvian deferred income tax balances as a result of tax reform in Peru as discussed below; **offset by**
- $34 million income tax benefit associated with the adoption of a new accounting standard related to share-based compensation; and
- $40 million lower U.S. income tax expense as a result of a change in planned repatriation from certain non-U.S. subsidiaries, as discussed below and in Note 6 of the Notes to Consolidated Financial Statements.

Sempra Energy's income tax expense increased in 2015 compared to 2014 due to higher pretax income. The effective income tax rate remained the same in 2015. However, the effective income tax rate was affected by:

- $21 million higher favorable resolution of prior years' income tax items including settlement with the California Franchise Tax Board in 2015;
- $20 million U.S income tax expense in 2015 on the planned repatriation from certain non-U.S. subsidiaries, compared to $38 million in 2014, as discussed below; and
- $17 million charge in 2014 to reduce certain tax regulatory assets attributed to SDG&E's investment in SONGS, as we discuss in Note 13 of the Notes to Consolidated Financial Statements; **offset by**

- $25 million tax benefit in 2014 due to the release of Louisiana state valuation allowance against a deferred tax asset associated with Cameron LNG developments.

We report as part of our pretax results the income or loss attributable to noncontrolling interests. However, we do not record income taxes for a portion of this income or loss, as some of our entities with noncontrolling interests are currently treated as partnerships for income tax purposes, and thus we are only liable for income taxes on the portion of the earnings that are allocated to us. Our pretax income, however, includes 100 percent of these entities. As our entities with noncontrolling interests grow, and as we may continue to invest in such entities, the impact on our effective income tax rate may become more significant.

Based on the current tax law, we anticipate that Sempra Energy's effective income tax rate will be approximately 28 percent in 2017 compared to 21 percent in 2016. In the years 2018 through 2021, based on current tax law, we anticipate that Sempra Energy's effective income tax rate will range from 29 percent to 33 percent. The effective income tax rate in 2016 was impacted by significant items that could not be reliably forecasted. However, the income tax effects of items that cannot be reliably forecasted are not factored into these 2017-2021 forecasted effective tax rates. The increase in the forecasted effective income tax rates is primarily due to a forecasted increase in pretax income without a proportional increase in the forecasted flow-through deductions at the California Utilities. Flow-through deductions are subject to review by the CPUC and, at the CPUC's discretion, the flow-through benefits of these items could be changed, which could have a material adverse impact on Sempra Energy's and the California Utilities' earnings, financial condition and cash flow. We discuss the items that are subject to flow-through treatment at the California Utilities in Note 6 of the Notes to Consolidated Financial Statements.

SDG&E

SDG&E's income tax expense decreased in 2016 due to lower pretax income, offset by a higher effective income tax rate. The higher effective income tax rate was primarily due to:

- $11 million lower income tax benefit in 2016 from the resolution of prior years' income tax items, including $3 million income tax expense in 2016 from lower actual repairs deductions taken on the 2015 tax return compared to amounts estimated in 2015; **offset by**
- $7 million income tax benefit associated with the adoption of a new accounting standard related to share-based compensation.

SDG&E's income tax expense increased in 2015 compared to 2014 due to higher pretax income, offset by a lower effective income tax rate, primarily from the $17 million charge in 2014 to reduce certain tax regulatory assets attributed to SDG&E's investment in SONGS.

Based on the current tax law, we anticipate that SDG&E's effective income tax rate will be approximately 37 percent in 2017 compared to 33 percent in 2016. In the years 2018 through 2021, based on current tax law, we anticipate that SDG&E's effective income tax rate will range from 37 percent to 38 percent. The effective income tax rate in 2016 was impacted by significant items that could not be reliably forecasted. However, the income tax effects of items that cannot be reliably forecasted are not factored into these forecasted 2017-2021 effective tax rates. The increase in the forecasted effective income tax rates is primarily due to a forecasted increase in pretax income without a proportional increase in the forecasted flow-through deductions.

SoCalGas

SoCalGas' income tax expense increased in 2016 due to a higher effective income tax rate, offset by lower pretax income. The higher effective income tax rate was primarily due to:

- $10 million income tax expense in 2016 compared to $18 million income tax benefit in 2015 from the resolution of prior years' income tax items. The amount in 2016 includes $11 million income tax expense from lower actual repairs deductions taken on the 2015 tax return compared to amounts estimated in 2015; **offset by**
- $4 million income tax benefit associated with the adoption of a new accounting standard related to share-based compensation.

SoCalGas' income tax expense decreased slightly in 2015 compared to 2014 due to a lower effective income tax rate, offset by higher pretax income. The lower effective income tax rate was primarily due to:

- $10 million higher favorable resolution of prior years' income tax items in 2015;
- higher deductions for certain repairs expenditures that are capitalized for financial statement purposes; and
- higher deductions for self-developed software expenditures.

Based on the current tax law, we anticipate that SoCalGas' effective income tax rate will be approximately 33 percent in 2017 compared to 29 percent in 2016. In the years 2018 through 2021, based on current tax law, we anticipate that SoCalGas' effective income tax rate will range from 31 percent to 33 percent. The effective income tax rate in 2016 was impacted by significant items that could not be reliably forecasted. However, the income tax effects of items that cannot be reliably forecasted are not factored into these 2017-2021 forecasted effective tax rates. The increase in the forecasted effective income tax rates is primarily due to a forecasted increase in pretax income without a proportional increase in the forecasted flow-through deductions.

Tax Legislation

United States. Due to bonus depreciation, Sempra Energy, SDG&E and SoCalGas have U.S. federal net operating loss (NOL) carryforwards. Based on current projections, Sempra Energy, SDG&E and SoCalGas do not expect any of their NOL or income tax credits to expire prior to the end of the carryforward period, as allowed under current U.S. federal income tax law. We discuss our NOLs and tax credit carryforwards further in Note 6 of the Notes to Consolidated Financial Statements and potential U.S. federal tax reform in "Factors Influencing Future Performance."

Peru. On December 10, 2016, the Peruvian president, through a presidential decree, enacted income tax law changes that became effective on January 1, 2017. Among other changes, the new law imposes an increase in the corporate income tax rate from 28 percent in 2016 to 29.5 percent in 2017 and beyond, as well as a decrease in the dividend withholding tax rate from 6.8 percent in 2016 to 5 percent in 2017 and beyond. As a result of the increase to the Peruvian corporate income tax rate to 29.5 percent, we remeasured our Peruvian deferred income tax balances, resulting in $17 million income tax expense recorded in 2016. We do not expect a material impact as a result of the decrease to the dividend withholding tax rate.

Pursuant to tax reform legislation passed in 2014, we recorded an $18 million tax benefit in 2014 for remeasurement of our Peruvian tax balances.

Chile. Pursuant to tax reform legislation passed in 2014, we recorded an additional $6 million of income tax expense in 2014 for remeasurement of our Chilean deferred tax balances.

Repatriation of Foreign Earnings

We no longer plan to repatriate undistributed non-U.S earnings and accordingly, in 2016, we reversed $20 million of U.S. income tax expense accrued on these earnings in 2015. We intend to indefinitely reinvest cumulative undistributed earnings from all of our non-U.S. subsidiaries and non-U.S. corporate joint ventures and use such earnings to support non-U.S operations. Therefore, we do not intend to use these cumulative undistributed earnings as a source of funding for U.S. operations. In 2014, we made distributions of approximately $288 million from our non-U.S. subsidiaries, $100 million of which was from previously taxed income and therefore not subject to additional U.S. federal income tax.

Equity Earnings, Net of Income Tax

Equity earnings of unconsolidated subsidiaries, net of income tax, which are all from Sempra South American Utilities' and Sempra Mexico's equity method investments, were

- $78 million in 2016
- $85 million in 2015
- $38 million in 2014

The decrease of $7 million in 2016 was primarily due to IEnova's acquisition of the remaining 50-percent interest in GdC, increasing IEnova's ownership in GdC to 100 percent, offset by higher equity earnings at the Eletrans joint venture.

The increase of $47 million in 2015 compared to 2014 was primarily due to:

- start of operations in December 2014 of the Los Ramones I pipeline;
- higher earnings from the Energía Sierra Juárez wind-powered electric generation facility commencing operations in the second quarter of 2015; and
- equity-related AFUDC for the Los Ramones Norte pipeline project.

Earnings Attributable to Noncontrolling Interests

Earnings attributable to noncontrolling interests were $148 million for 2016 compared to $98 million for 2015. The net change of $50 million included

- $80 million at Sempra Mexico, primarily due to:
  - $82 million gain associated with the remeasurement of our 50-percent equity interest in GdC, and
  - $14 million due to the decrease in our controlling interest from 81.1 percent to 66.4 percent following IEnova's equity offerings in October 2016, *offset by*
  - $21 million impairment of TdM assets held for sale; **offset by**
- $24 million decrease at SDG&E, primarily due to an increase in operating expenses as a result of major maintenance at the OMEC plant in the second quarter of 2016.

Earnings attributable to noncontrolling interests were $98 million for 2015 compared to $100 million for 2014. The net change of $2 million included

- $7 million decrease in earnings attributable to noncontrolling interests at Sempra South American Utilities, before adjustments for the effects of foreign currency translation; **offset by**
- $6 million increase in earnings attributable to noncontrolling interests of IEnova in 2015.

TRANSACTIONS WITH AFFILIATES

We provide information about our related party transactions in Note 1 of the Notes to Consolidated Financial Statements.

BOOK VALUE PER SHARE

Sempra Energy's book value per share on the last day of each year was

- $51.77 in 2016
- $47.56 in 2015
- $45.98 in 2014

The increases in 2016 and 2015 were primarily the result of comprehensive income exceeding dividends. In 2016, the increase was also attributable to IEnova's follow-on equity offerings and a cumulative-effect adjustment to retained earnings for previously unrecognized excess tax benefits from share-based compensation.

IMPACT OF FOREIGN CURRENCY AND INFLATION RATES ON RESULTS OF OPERATIONS

Foreign Currency Translation

Our operations in South America and our natural gas distribution utility in Mexico use their local currency as their functional currency. The assets and liabilities of these foreign operations are translated into U.S. dollars at current exchange rates at the end of the reporting period, and revenues and expenses are translated at average exchange rates for the reporting period. The resulting noncash translation adjustments do not enter into the calculation of earnings or retained earnings, but are reflected in Other Comprehensive Income (Loss) (OCI) and in Accumulated Other Comprehensive Income (Loss) (AOCI). However, any difference in average exchange rates used for the translation of income statement activity from year to year can cause a variance in Sempra Energy's comparative results of operations. Changes in foreign currency translation rates between years impacted our comparative reported results as follows:

TRANSLATION IMPACT FROM CHANGE IN AVERAGE FOREIGN CURRENCY EXCHANGE RATES

(Dollars in millions)

	2016 compared to 2015	2015 compared to 2014
Lower earnings from foreign currency translation:		
Sempra South American Utilities	$ 8	$ 18
Sempra Mexico – Ecogas	2	2
Total	$ 10	$ 20

Transactional Impacts

Some income statement activities at our foreign operations and their joint ventures are also impacted by transactional gains and losses, which we discuss below. A summary of these foreign currency transactional gains and losses included in our reported results is as follows:

TRANSACTIONAL GAINS (LOSSES) FROM FOREIGN CURRENCY AND INFLATION

(Dollars in millions)

	Total reported amounts			Transactional (losses) gains included in reported amounts		
	Years ended December 31,					
	2016	2015	2014	2016	2015	2014
Other income, net	$ 132	$ 126	$ 137	$ (33)	$ (11)	$ (30)
Income tax expense	389	341	300	38	43	44
Equity earnings, net of income tax	78	85	38	23	17	2
Earnings	1,370	1,349	1,161	25	40	12

Foreign Currency Exchange Rate and Inflation Impacts on Income Taxes and Related Hedging Activity

Our Mexican subsidiaries have U.S. dollar denominated cash balances, receivables, payables and debt (monetary assets and liabilities) that give rise to Mexican currency exchange rate movements for Mexican income tax purposes. They also have deferred income tax assets and liabilities, which are significant, denominated in the Mexican peso that must be translated to U.S. dollars for financial reporting purposes. In addition, monetary assets and liabilities and certain nonmonetary assets and liabilities are adjusted for Mexican inflation for Mexican income tax purposes. As a result, fluctuations in both the currency exchange rate for the Mexican peso against the U.S. dollar and Mexican inflation may expose us to fluctuations in Income Tax Expense and Equity Earnings, Net of Income Tax. We utilize short-term foreign currency derivatives as a means to manage exposure to the currency exchange rate on our monetary assets and liabilities. However, we generally do not hedge our deferred income tax assets and liabilities, which makes us susceptible to volatility in income tax expense caused by exchange rate fluctuations and inflation. The derivative activity impacts Other Income, Net.

The income tax expense of our South American subsidiaries is similarly impacted by inflation and currency exchange rate movements related to U.S. dollar denominated monetary assets and liabilities.

Other Transactions

Although the financial statements of our Mexican subsidiaries and joint ventures (DEN, Energía Sierra Juárez and Infraestructura Marina del Golfo) have the U.S. dollar as the functional currency, some transactions may be denominated in the local currency; such transactions are remeasured into U.S. dollars. This remeasurement creates transactional gains and losses that are included in Other Income, Net, for our consolidated subsidiaries and in Equity Earnings, Net of Income Tax, for our joint ventures (including GdC until September 26, 2016).

We utilize cross-currency swaps that exchange our Mexican-peso denominated principal and interest payments into the U.S. dollar and swap Mexican variable interest rates for U.S. fixed interest rates. The impacts of these cross-currency swaps are offset in OCI and are reclassified from AOCI into earnings through Interest Expense as settlements occur.

Certain of our Mexican pipeline projects (namely Los Ramones I at GdC and Los Ramones Norte within our DEN joint venture) generate revenue based on tariffs that are set by government agencies in Mexico, with contracts denominated in Mexican pesos that are indexed to the U.S. dollar, adjusted annually for inflation and fluctuation in the exchange rate. The resultant gains and losses from remeasuring the local currency amounts into U.S. dollars are included in Revenues: Energy-Related Businesses or Equity Earnings, Net of Income Tax. The activity of foreign currency forwards and swaps related to these contracts settle through Revenues: Energy-Related Businesses or Equity Earnings, Net of Income Tax.

Our joint ventures in Chile (Eletrans S.A. and Eletrans II S.A., collectively Eletrans) use the U.S. dollar as the functional currency, but have certain construction commitments that are denominated in the Chilean Unidad de Fomento (CLF). Eletrans entered into forward exchange contracts to manage the foreign currency exchange risk of the CLF relative to the U.S. dollar. The forward exchange contracts settle based on anticipated payments to vendors, generally monthly, ending in 2018, with activity recorded in Equity Earnings, Net of Income Tax.

CAPITAL RESOURCES AND LIQUIDITY

OVERVIEW

We expect our cash flows from operations to fund a substantial portion of our capital expenditures and dividends. We may also meet our cash requirements through borrowings under our credit facilities, issuances of securities, distributions from our equity method investments, project financing and equity sales, including tax equity.

Sempra Energy Consolidated cash and cash equivalents decreased by $54 million in 2016 to $349 million at December 31, 2016. Cash flows from operations for 2016 were $2.3 billion. Significant sources (uses) of cash from investing and financing activity that affected capital resources, liquidity and cash flows in 2016 included

Sources of cash:

- $3 billion issuances of debt with maturities greater than 90 days, including $498 million at SDG&E and $499 million at SoCalGas
- $1.2 billion proceeds received from the IEnova follow-on common stock offerings, net of offering costs and Sempra Energy's participation
- $692 million net increase in short-term debt
- $761 million net proceeds from Sempra LNG & Midstream's sale of EnergySouth and its 25-percent interest in Rockies Express
- $474 million net proceeds from tax equity funding from certain wind and solar power generation projects at Sempra Renewables
- $100 million withdrawals from the Nuclear Decommissioning Trust assets at SDG&E for SONGS decommissioning costs. We discuss the Nuclear Decommissioning Trusts further in Note 13 of the Notes to Consolidated Financial Statements

Uses of cash:

- $4.2 billion in expenditures for property, plant and equipment (PP&E), including $1.4 billion at SDG&E and $1.3 billion at SoCalGas
- $2.1 billion retirements and repayments of debt with maturities greater than 90 days, including $204 million at SDG&E and $3 million at SoCalGas
- $1.6 billion for investments in and acquisitions of businesses
- $686 million common dividends paid

We discuss these events in more detail later in this section.

Our lines of credit provide liquidity and support commercial paper. As we discuss in Note 5 of the Notes to Consolidated Financial Statements, Sempra Energy, Sempra Global (the holding company for our subsidiaries not subject to California utility regulation) and the California Utilities each have five-year revolving credit facilities expiring in 2020. The table below shows the amount of available funds, including available unused credit on these three credit facilities, at December 31, 2016. Our foreign operations have additional general purpose credit facilities aggregating $1.7 billion, with $1 billion available unused credit at December 31, 2016.

AVAILABLE FUNDS AT DECEMBER 31, 2016
(Dollars in millions)

	Sempra Energy Consolidated	SDG&E	SoCalGas
Unrestricted cash and cash equivalents(1)	$ 349	$ 8	$ 12
Available unused credit(2)	3,027	750	688

(1) Amounts at Sempra Energy Consolidated include $228 million held in non-U.S. jurisdictions that are unavailable to fund U.S. operations unless repatriated, as we discuss below.

(2) Available unused credit is the total available on the Sempra Energy, Sempra Global and the California Utilities' credit facilities. Borrowings on the shared line of credit at SDG&E and SoCalGas are limited to $750 million for each utility and a combined total of $1 billion.

Sempra Energy Consolidated

We believe that these available funds, combined with cash flows from operations, distributions from equity method investments, proceeds of securities issuances, project financing, equity sales (including tax equity) and partnering in joint ventures will be adequate to fund operations, including to:

- finance capital expenditures
- meet liquidity requirements
- fund shareholder dividends
- fund new business acquisitions or start-ups
- repay maturing long-term debt
- fund expenditures related to the natural gas leak at SoCalGas' Aliso Canyon natural gas storage facility

Sempra Energy and the California Utilities currently have ready access to the long-term debt markets and are not currently constrained in their ability to borrow at reasonable rates. However, changing economic conditions could affect the availability and cost of both short-term and long-term financing. Also, cash flows from operations may be impacted by the timing of commencement and completion of large projects at Sempra Infrastructure. If cash flows from operations were to be significantly reduced or we were unable to borrow under acceptable terms, we would likely first reduce or postpone discretionary capital expenditures (not related to safety) and investments in new businesses. If these measures were necessary, they would primarily impact our Sempra Infrastructure

businesses before we would reduce funds necessary for the ongoing needs of our utilities. We monitor our ability to finance the needs of our operating, investing and financing activities in a manner consistent with our intention to maintain strong, investment-grade credit ratings and capital structure.

At December 31, 2016 and 2015, our cash and cash equivalents held in non-U.S. jurisdictions that were unavailable to fund U.S. operations unless repatriated were $228 million and $301 million, respectively. We discuss repatriation in "Results of Operations –Changes in Revenues, Costs and Earnings – Income Taxes" above.

We have significant investments in several trusts to provide for future payments of pensions and other postretirement benefits, and nuclear decommissioning. Changes in asset values, which are dependent on the activity in the equity and fixed income markets, have not affected the trust funds' abilities to make required payments. However, changes in asset values may, along with a number of other factors such as changes to discount rates, assumed rates of returns, mortality tables, and regulations, impact funding requirements for pension and other postretirement benefit plans and SDG&E's nuclear decommissioning trusts. At the California Utilities, funding requirements are generally recoverable in rates. In 2016, sale and purchase activities in our Nuclear Decommissioning Trust increased significantly compared to prior years as a result of a change to our asset mix intended to reduce the overall risk profile of the trust. We discuss our employee benefit plans and SDG&E's nuclear decommissioning trusts, including our investment allocation strategies for assets in these trusts, in Notes 7 and 13, respectively, of the Notes to Consolidated Financial Statements.

We discuss matters regarding Sempra Energy, SDG&E and SoCalGas common stock dividends below in "Dividends."

Short-Term Borrowings

Our short-term debt is primarily used to meet liquidity requirements, fund shareholder dividends, and temporarily finance capital expenditures and new business acquisitions or start-ups. Our corporate short-term, unsecured promissory notes, or commercial paper, were our primary sources of short-term debt funding in 2016. At our California Utilities, short-term debt is used primarily to meet working capital needs.

The following table shows selected statistics for our commercial paper borrowings for 2016:

COMMERCIAL PAPER STATISTICS

(Dollars in millions)

	Sempra Energy Consolidated	SDG&E	SoCalGas
Amount outstanding at December 31, 2016	$ 1,243	$ —	$ 62
Weighted average interest rate at December 31, 2016	1.107%	—%	0.75%
Maximum month-end amount outstanding during 2016(1)	$ 2,309	$ 244	$ 255
Monthly weighted average amount outstanding during 2016	$ 1,344	$ 95	$ 36
Monthly weighted average interest rate during 2016	0.997%	1.029%	0.497%

(1) The largest amount outstanding at the end of the last day of any month during the year.

Loans to Affiliates

At December 31, 2016, Sempra Energy has provided loans to unconsolidated affiliates totaling $227 million, which we discuss in Note 1 of the Notes to Consolidated Financial Statements.

California Utilities

SDG&E and SoCalGas expect that available funds, cash flows from operations and debt issuances will continue to be adequate to meet their working capital and capital expenditure requirements.

Changes in balancing accounts for significant costs at SDG&E and SoCalGas, particularly a change in status between over- and under- collected, may have a significant impact on cash flows, as these changes generally represent the difference between when costs are incurred and when they are ultimately recovered in rates through billings to customers. SDG&E uses the Energy Resource Recovery Account (ERRA) balancing account to record the net of its actual cost incurred for electric fuel and purchased power. SDG&E's ERRA balance was undercollected by $25 million at December 31, 2016 and overcollected by $25 million at December 31, 2015. During 2016, the ERRA undercollected balance was primarily caused by actual volumes being lower than authorized sales in 2016.

SoCalGas and SDG&E use the Core Fixed Cost Account (CFCA) balancing account to record the difference between the authorized margin and other costs allocated to core customers. Because warmer weather experienced in 2015 and 2016 resulted in lower natural gas consumption compared to authorized levels, SoCalGas' CFCA balance was undercollected by $114 million at December 31, 2016

and $328 million at December 31, 2015. SDG&E's CFCA balance was undercollected by $66 million at December 31, 2016 and $105 million at December 31, 2015.

We discuss matters regarding SDG&E and SoCalGas common stock dividends below in "Dividends."

SoCalGas

Aliso Canyon Natural Gas Storage Facility Gas Leak

We provide information on the natural gas leak at the Aliso Canyon storage facility in Note 15 of the Notes to Consolidated Financial Statements, in "Factors Influencing Future Performance" below and in "Risk Factors" in our 2016 Annual Report on Form 10-K. The costs of defending against the related civil and criminal lawsuits and cooperating with related investigations, and any damages, restitution, and civil, administrative and criminal fines, costs and other penalties, if awarded or imposed, as well as costs of mitigating the actual natural gas released, could be significant and to the extent not covered by insurance (including any costs in excess of applicable policy limits), or if there were to be significant delays in receiving insurance recoveries, such costs could have a material adverse effect on SoCalGas' and Sempra Energy's cash flows, financial condition and results of operations. Also, higher operating costs and additional capital expenditures incurred by SoCalGas as a result of new laws, orders, rules and regulations arising out of this incident or our responses thereto could be significant and may not be recoverable in customer rates, which may have a material adverse effect on SoCalGas' and Sempra Energy's results of operations, cash flows, and financial condition.

The total costs incurred to remediate and stop the leak and to mitigate local community impacts are significant and may increase, and to the extent not covered by insurance (including any costs in excess of applicable policy limits), or if there were to be significant delays in receiving insurance recoveries, such costs could have a material adverse effect on SoCalGas' and Sempra Energy's cash flows, financial condition and results of operations.

Sempra South American Utilities

We expect working capital and capital expenditure requirements, projects, joint venture investments, and loans to affiliates at Chilquinta Energía and Luz del Sur and dividends at Luz del Sur to be funded by available funds, funds internally generated by those businesses, issuances of corporate bonds and other external borrowings.

Sempra Mexico

We expect working capital and capital expenditure requirements, projects, joint venture investments and dividends in Mexico to be funded by available funds, including credit facilities, and funds internally generated by the Mexico businesses, securities issuances, project financing, interim funding from the parent or affiliates, and partnering in joint ventures.

Sempra Mexico also expects to generate cash from the sale of its 625-MW natural gas-fired TdM power plant located in Mexicali, Baja California, Mexico. As we discuss in Note 3 of the Notes to Consolidated Financial Statements, in February 2016, management approved a plan to market and sell the TdM plant, and we continue to actively pursue its sale. TdM had a net book value of $154 million (including associated assets and liabilities) at December 31, 2016.

In 2016, 2015 and 2014, IEnova paid dividends of $26 million, $32 million and $31 million, respectively, to its minority shareholders.

Sempra Renewables

We expect Sempra Renewables to require funds for the development of and investment in electric renewable energy projects. Projects at Sempra Renewables may be financed through a combination of operating cash flow, project financing, funds from the parent, partnering in joint ventures, and other forms of equity sales, including tax equity. The varying costs and structure of these alternative financing sources impact the projects' returns and their earnings profile.

Sempra LNG & Midstream

We expect Sempra LNG & Midstream to require funding for the development and expansion of its portfolio of projects, which may be financed through a combination of operating cash flow, funding from the parent, project financing and partnering in joint ventures.

Sempra LNG & Midstream, through its interest in Cameron LNG JV, is developing a natural gas liquefaction export facility at the Cameron LNG JV terminal. The majority of the current three-train liquefaction project is project-financed, with most or all of the remainder of the capital requirements to be provided by the project partners, including Sempra Energy, through equity contributions under a joint venture agreement. We expect that our remaining equity requirements to complete the project will be met by a combination of our share of cash generated from each liquefaction train as it comes on line and additional cash contributions. Sempra Energy signed guarantees for 50.2 percent of Cameron LNG JV's obligations under the financing agreements, for a maximum amount of $3.9 billion. The project financing and guarantees became effective on October 1, 2014, the effective date of the joint venture formation. The guarantees will terminate upon satisfaction of certain conditions, including all three trains achieving commercial

operation and meeting certain operational performance tests. The guarantees are anticipated to be terminated approximately nine months after all three trains achieve commercial operation.

We discuss Cameron LNG JV and the joint venture financing further in “Factors Influencing Future Performance – Sempra LNG & Midstream – Cameron LNG JV Three-Train Liquefaction Project” below, in Notes 3 and 4 of the Notes to Consolidated Financial Statements and in “Risk Factors” in our 2016 Annual Report on Form 10-K.

CASH FLOWS FROM OPERATING ACTIVITIES

CASH PROVIDED BY OPERATING ACTIVITIES
(Dollars in millions)

	2016	2016 change		2015	2015 change		2014
Sempra Energy Consolidated	$ 2,319	$ (586)	(20)%	$ 2,905	$ 744	34%	$ 2,161
SDG&E	1,327	(337)	(20)	1,664	567	52	1,097
SoCalGas	671	(209)	(24)	880	115	15	765

Sempra Energy Consolidated

Cash provided by operating activities at Sempra Energy decreased in 2016 primarily due to:

- $451 million net decrease related to the natural gas leak at the Aliso Canyon storage facility, comprised of:
  - $221 million net decrease in reserve for accrued expenditures in 2016 compared to a $274 million increase in 2015. The $221 million net decrease includes $654 million of cash expenditures, offset by $433 million of additional accruals, *offset by*
  - $281 million net increase in receivable for expected insurance recovery in 2016 compared to a $325 million increase in 2015. The $281 million net increase includes $450 million of additional accruals, offset by $169 million in insurance proceeds. We discuss the Aliso Canyon leak further in Note 15 of the Notes to Consolidated Financial Statements and in “Risk Factors” in our 2016 Annual Report on Form 10-K;
- $267 million lower net income, adjusted for noncash items included in earnings, in 2016 compared to 2015, including charges for income tax benefits previously generated from income tax repairs deductions that were reallocated to ratepayers pursuant to the 2016 GRC FD, as well as lower results at Sempra LNG & Midstream, as we discuss in “Results of Operations” above;
- $348 million net decrease in undercollected regulatory balancing accounts (including long-term amounts included in regulatory assets) in 2016 at the California Utilities compared to a $544 million net decrease in 2015. Over- and undercollected regulatory balancing accounts reflect the difference between customer billings and recorded or CPUC-authorized costs. These differences are required to be balanced over time. See further discussion of changes in regulatory balances at both SDG&E and SoCalGas below;
- $93 million higher income tax payments in 2016; and
- $20 million increase in inventory in 2016 compared to a $65 million decrease in 2015; **offset by**
- $122 million increase in accounts payable in 2016 compared to a $157 million decrease in 2015, primarily due to higher average cost of natural gas purchased at SoCalGas, as well as higher gas purchases as a result of the current moratorium on natural gas injections at the Aliso Canyon storage facility;
- $145 million increase in permanent pipeline capacity release liability at Sempra LNG & Midstream. We discuss the permanent pipeline capacity releases in Note 15 of the Notes to Consolidated Financial Statements;
- $42 million increase in accounts receivable in 2016 compared to a $99 million increase in 2015. The 2015 increase was primarily due to an increase in physical gas sales at SoCalGas;
- $36 million net decrease in greenhouse gas allowance purchases at the California Utilities; and
- $23 million reduction to the SONGS regulatory asset due to cash received for SDG&E’s portion of the DOE settlement with Edison related to spent fuel storage, as we discuss in Note 15 of the Notes to Consolidated Financial Statements.

Cash provided by operating activities at Sempra Energy increased in 2015 compared to 2014 primarily due to:

- $544 million net decrease in net undercollected regulatory balancing accounts in 2015 at the California Utilities (including long-term amounts included in regulatory assets) compared to a $277 million net increase in 2014;
- $245 million higher net income, adjusted for noncash items included in earnings, in 2015 compared to 2014, primarily due to improved operations at the California Utilities, as well as higher pipeline earnings at Sempra Mexico;
- $65 million decrease in inventories in 2015 compared to a $133 million increase in 2014, primarily due to mandated natural gas withdrawals, as well as lower volume added to storage at SoCalGas in 2015 as a result of the moratorium on natural gas injections at its Aliso Canyon natural gas storage facility; and
- $126 million decrease in settlement payments and associated legal fees for wildfire claims at SDG&E in 2015 compared to 2014; **offset by**

- $157 million decrease in accounts payable in 2015 compared to a $109 million increase in 2014, primarily due to lower average cost of natural gas purchased at SoCalGas, as well as the moratorium on natural gas injections at its Aliso Canyon storage facility;
- $179 million in purchases of greenhouse gas allowances ($117 million at SDG&E and $62 million at SoCalGas);
- $99 million increase in accounts receivable in 2015 compared to a $44 million decrease in 2014. The 2015 increase was primarily due to an increase in physical gas sales at SoCalGas; and
- $325 million receivable for expected insurance recovery of certain expenditures related to the natural gas leak at the Aliso Canyon storage facility, and $274 million reserve for accrued expenditures expected to be paid in 2016 related to the leak.

SDG&E

Cash provided by operating activities at SDG&E decreased in 2016 primarily due to:

- $55 million decrease in net undercollected regulatory balancing accounts (including long-term amounts included in regulatory assets) in 2016 compared to a $474 million decrease in 2015, primarily due to changes in electric commodity accounts;
- $49 million higher income tax payments in 2016; and
- $19 million increase in receivables due from affiliates in 2016 compared to a $21 million decrease in 2015; **offset by**
- $72 million higher net income, adjusted for noncash items included in earnings, in 2016 compared to 2015;
- $58 million in purchases of greenhouse gas allowances in 2016 compared to $117 million in 2015; and
- $23 million reduction to the SONGS regulatory asset due to cash received for SDG&E's portion of the DOE settlement with Edison related to spent fuel storage.

Cash provided by operating activities at SDG&E increased in 2015 compared to 2014 primarily due to:

- $474 million decrease in net undercollected regulatory balancing accounts in 2015 compared to a $47 million increase in 2014 (including long-term amounts included in regulatory assets in 2014). The 2015 decrease was primarily associated with the electric commodity accounts;
- $126 million decrease in settlement payments and associated legal fees for wildfire claims in 2015 compared to 2014; and
- $102 million higher net income, adjusted for noncash items included in earnings, in 2015 compared to 2014, primarily due to improved operations; **offset by**
- $117 million in purchases of greenhouse gas allowances in 2015; and
- $88 million income tax payments, net of income tax refunds, in 2015 due to utilization of net operating losses carried forward in 2015.

SoCalGas

Cash provided by operating activities at SoCalGas decreased in 2016 primarily due to:

- $451 million net decrease related to the natural gas leak at the Aliso Canyon storage facility, comprised of:
  - $221 million net decrease in reserve for accrued expenditures in 2016 compared to a $274 million increase in 2015. The $221 million net decrease includes $654 million of cash expenditures, offset by $433 million of additional accruals, *offset by*
  - $281 million net increase in receivable for expected insurance recovery in 2016 compared to a $325 million increase in 2015. The $281 million net increase includes $450 million of additional accruals, offset by $169 million in insurance proceeds;
- $4 million decrease in inventory in 2016 compared to a $102 million decrease in 2015. The decrease in 2015 was primarily due to the moratorium on natural gas injections at the Aliso Canyon storage facility;
- $72 million lower net income, adjusted for noncash items included in earnings, in 2016 compared to 2015;
- $40 million higher income tax payments in 2016;
- $10 million decrease in accrued compensation in 2016 compared to a $31 million increase in 2015; and
- $85 million in purchases of greenhouse gas allowances in 2016 compared to $62 million in 2015; **offset by**
- $36 million increase in accounts payable in 2016 compared to a $143 million decrease in 2015. The 2015 decrease was primarily due to the moratorium on natural gas injections at the Aliso Canyon storage facility, as well as lower average cost of natural gas purchased;
- $293 million increase in net overcollected regulatory balancing accounts (including long-term amounts included in regulatory assets) in 2016 compared to a $70 million decrease in net undercollected regulatory balancing accounts in 2015, primarily due to changes in fixed-cost balancing accounts; and
- $37 million decrease in accounts receivable in 2016 compared to a $90 million increase in 2015. The increase in 2015 was primarily due to an increase in physical gas sales.

Cash provided by operating activities at SoCalGas increased in 2015 compared to 2014 primarily due to:

- $70 million decrease in net undercollected regulatory balancing accounts in 2015 (including long-term amounts included in regulatory assets) compared to a $230 million decrease in net overcollected regulatory balancing accounts in 2014, primarily due to changes associated with the fixed cost balancing accounts;
- $102 million decrease in inventories in 2015 compared to a $113 million increase in 2014, primarily due to mandated natural gas withdrawals, as well as lower volume added to storage in 2015 as a result of the moratorium on natural gas injections at the Aliso Canyon natural gas storage facility; and
- $110 million higher net income, adjusted for noncash items included in earnings, in 2015 compared to 2014, primarily due to improved operations; **offset by**
- $143 million decrease in accounts payable in 2015 compared to a $156 million increase in 2014, primarily due to lower average cost of natural gas purchased, as well as the moratorium on natural gas injections at its Aliso Canyon facility;
- $90 million increase in accounts receivable in 2015 compared to a $30 million decrease in 2014. The increase in 2015 was primarily due to an increase in physical gas sales in 2015;
- $62 million in purchases of greenhouse gas allowances in 2015; and
- $325 million receivable for expected insurance recovery of certain expenditures related to the natural gas leak at the Aliso Canyon storage facility, and $274 million reserve for accrued expenditures expected to be paid in 2016 related to the leak.

CASH FLOWS FROM INVESTING ACTIVITIES

CASH USED IN INVESTING ACTIVITIES
(Dollars in millions)

	2016	2016 change		2015	2015 change		2014
Sempra Energy Consolidated	$ (4,886)	$ 2,001	69 %	$ (2,885)	$ (457)	(14)%	$ (3,342)
SDG&E	(1,319)	233	21	(1,086)	(40)	(4)	(1,126)
SoCalGas	(1,269)	(133)	(9)	(1,402)	298	27	(1,104)

Sempra Energy Consolidated

Cash used in investing activities at Sempra Energy increased in 2016 primarily due to:

- $1.4 billion increase in expenditures for investments and acquisition of businesses. See further detail of these expenditures below;
- $1.1 billion increase in capital expenditures. See further detail of capital expenditures below;
- in 2015, $347 million of net proceeds received from Sempra LNG & Midstream's sale of the remaining 625-MW block of its Mesquite Power plant and a related power sale contract; and
- $63 million lower repayments of advances to unconsolidated affiliates; **offset by**
- $443 million net proceeds received from Sempra LNG & Midstream's sale of its 25-percent interest in Rockies Express in May 2016;
- $318 million net proceeds from Sempra LNG & Midstream's sale of EnergySouth in September 2016; and
- $100 million decrease in Nuclear Decommissioning Trust assets in 2016 primarily as a result of CPUC authorization to withdraw trust funds for SONGS decommissioning costs incurred in 2015 and 2016, compared to a $60 million decrease in 2015.

Cash used in investing activities at Sempra Energy decreased in 2015 compared to 2014 primarily due to:

- $347 million of net proceeds received from Sempra LNG & Midstream's sale of the remaining block of its Mesquite Power plant;
- $43 million net decrease in advances to unconsolidated affiliates in 2015 compared to $167 million net increase in advances in 2014;
- $60 million decrease in Nuclear Decommissioning Trust assets at SDG&E in 2015 due to withdrawals for SONGS decommissioning costs incurred in 2013 and 2014. We discuss the Nuclear Decommissioning Trusts further in Note 13 of the Notes to Consolidated Financial Statements; and
- $26 million proceeds received from Sempra Renewables' sale of the Rosamond Solar development project; **offset by**
- in 2014, $148 million cash proceeds, net of cash sold, from Sempra Renewables' sale of 50-percent equity interests in Copper Mountain Solar 3 ($66 million) and Broken Bow 2 Wind ($58 million), and Sempra Mexico's sale of a 50-percent equity interest in Energía Sierra Juárez ($24 million); and
- $33 million higher capital expenditures in 2015.

SDG&E

Cash used in investing activities at SDG&E increased in 2016 primarily due to:

- $266 million increase in capital expenditures; and

- $31 million net advances to Sempra Energy; **offset by**
- $100 million decrease in Nuclear Decommissioning Trust assets in 2016 primarily as a result of CPUC authorization to withdraw trust funds for SONGS decommissioning costs incurred in 2015 and 2016, compared to a $60 million decrease in 2015.

Cash used in investing activities at SDG&E decreased in 2015 compared to 2014 primarily due to:

- $60 million decrease in Nuclear Decommissioning Trust assets in 2015 as a result of CPUC authorization to access trust funds for SONGS decommissioning costs incurred in 2013 and 2014; and
- $30 million expenditures related to a long-term service agreement in 2014; **offset by**
- $33 million increase in capital expenditures.

SoCalGas

Cash used in investing activities at SoCalGas decreased in 2016 due to:

- $50 million net decrease in advances to Sempra Energy in 2016 compared to a $50 million net increase in 2015; and
- $33 million lower capital expenditures.

Cash used in investing activities at SoCalGas increased in 2015 compared to 2014 due to:

- $248 million increase in capital expenditures; and
- $50 million increase in net advances to Sempra Energy in 2015.

CAPITAL EXPENDITURES AND INVESTMENTS

Sempra Energy Consolidated Expenditures for PP&E

The following table summarizes capital expenditures for the years ended December 31, 2016, 2015 and 2014.

EXPENDITURES FOR PP&E
(Dollars in millions)

	Years ended December 31,		
	2016	2015	2014
SDG&E:			
Improvements to natural gas, including certain pipeline safety, and electric distribution systems	$ 727	$ 639	$ 491
PSEP	121	98	63
Improvements to electric transmission systems	513	396	458
Electric generation plants and equipment	38	—	51
Substation expansions (transmission)	—	—	37
SoCalGas:			
Improvements to distribution, transmission and storage systems, and for certain pipeline safety	905	773	653
PSEP	292	361	206
Advanced metering infrastructure	95	206	230
Other natural gas projects	27	12	15
Sempra South American Utilities:			
Improvements to electric transmission and distribution systems and generation projects in Peru	134	98	122
Improvements to electric transmission and distribution infrastructure in Chile	60	56	52
Sempra Mexico:			
Construction of the Sonora, Ojinaga and San Isidro pipeline projects	302	278	244
Construction of other natural gas pipeline and wind projects, and capital expenditures at Ecogas	28	24	81
Sempra Renewables:			
Construction costs for wind projects	198	14	114
Construction costs for solar projects/facilities	637	62	74
Other	—	5	2
Sempra LNG & Midstream:			
Cameron Interstate Pipeline and other LNG liquefaction development costs	98	55	—
Development costs for Cameron LNG terminal and liquefaction project before formation of Cameron LNG JV	—	—	135
Development of natural gas storage capacity	1	7	58
Other	18	25	19
Parent and other	20	47	18
Total	$ 4,214	$ 3,156	$ 3,123

Sempra Energy Consolidated Investments and Acquisitions

During the years ended December 31, 2016, 2015 and 2014, Sempra Energy made investments in various joint ventures and other businesses, summarized in the following table.

EXPENDITURES FOR INVESTMENTS AND ACQUISITION OF BUSINESSES(1) *(Dollars in millions)*	Years ended December 31,		
	2016	2015	2014
Sempra Mexico:			
Gasoductos de Chihuahua(1)	$ 1,078	$ —	$ —
Infraestructura Marina del Golfo	100	—	—
Ventika	310	—	—
Sempra Renewables:			
Expenditures for wind projects(2)	29	19	4
Expenditures for solar projects/facilities	—	5	210
Other	15	—	—
Sempra LNG & Midstream:			
Cameron LNG JV(3)	47	59	18
Mississippi Hub LLC(4)	—	2	—
Rockies Express Pipeline LLC(5)	—	113	—
Parent and other	3	2	8
Total	$ 1,582	$ 200	$ 240

(1) Net of cash and cash equivalents acquired.
(2) Excludes accrued purchase price of $5 million in 2015.
(3) Includes capitalized interest of $47 million, $49 million and $12 million in 2016, 2015 and 2014, respectively, on Sempra LNG & Midstream's investment, as the joint venture has not commenced planned principal operations.
(4) Investment in industrial development bonds.
(5) Repayment of project debt that matured in early 2015.

Sempra Energy Consolidated Distributions from Investments

Sempra Energy's distributions from investments are primarily the return of investment from equity method and other investments at Sempra Renewables. Distributions of earnings from equity method investments, which are not included in the table below, represent return on the investments and are included in cash flows from operations.

During the years ended December 31, 2016, 2015 and 2014, Sempra Energy received distributions from investments in various joint ventures and other investments as summarized in the following table.

DISTRIBUTIONS FROM INVESTMENTS *(Dollars in millions)*	Years ended December 31,		
	2016	2015	2014
Sempra Renewables	$ 25	$ 15	$ 11
Parent and other	—	—	2
Total	$ 25	$ 15	$ 13

FUTURE CONSTRUCTION EXPENDITURES AND INVESTMENTS

The amounts and timing of capital expenditures are generally subject to approvals by various regulatory and other governmental and environmental bodies, including the CPUC and the FERC. In 2017, we expect to make capital expenditures and investments of approximately $3.4 billion, as summarized in the following table.

FUTURE CONSTRUCTION EXPENDITURES AND INVESTMENTS

(Dollars in millions)

	Year ended December 31, 2017
SDG&E:	
Improvements to natural gas, including certain pipeline safety, and electric and generation distribution systems	$ 840
PSEP	60
Improvements to electric transmission systems	400
SoCalGas:	
Improvements to distribution, transmission and storage systems, and for certain pipeline safety	900
PSEP	200
Other natural gas projects	100
Sempra South American Utilities:	
Improvements to electric transmission and distribution systems and generation projects in Peru	160
Improvements to electric transmission and distribution infrastructure in Chile	110
Sempra Mexico:	
Construction of the Sonora, Ojinaga and San Isidro pipeline projects	190
Construction of other natural gas pipeline and solar projects	170
Sempra Renewables:	
Construction costs for wind and solar projects/facilities	180
Sempra LNG & Midstream:	
Development of LNG and natural gas transportation projects	110
Total	$ 3,420

We discuss significant capital projects, planned and in progress, at each of our segments above in “Our Business.”

Over the next five years, 2017 through 2021, and subject to the factors described below which could cause these estimates to vary substantially, Sempra Energy expects to make aggregate capital expenditures of approximately $12.3 billion at the California Utilities and $1.9 billion at its other subsidiaries.

Capital expenditure amounts include capitalized interest. At the California Utilities, the amounts also include the portion of AFUDC related to debt, but exclude the portion of AFUDC related to equity. At Sempra Mexico and Sempra LNG & Midstream, the amounts also exclude AFUDC related to equity. We provide further details about AFUDC in Note 1 of the Notes to Consolidated Financial Statements.

Periodically, we review our construction, investment and financing programs and revise them in response to changes in regulation, economic conditions, competition, customer growth, inflation, customer rates, the cost and availability of capital, and safety and environmental requirements. We discuss these considerations in more detail in Notes 13, 14 and 15 of the Notes to Consolidated Financial Statements.

Our level of capital expenditures and investments in the next few years may vary substantially and will depend on the cost and availability of financing, regulatory approvals, changes in U.S. federal tax law and business opportunities providing desirable rates of return. We intend to finance our capital expenditures in a manner that will maintain our investment-grade credit ratings and capital structure.

CASH FLOWS FROM FINANCING ACTIVITIES

CASH FLOWS FROM FINANCING ACTIVITIES

(Dollars in millions)

	2016	2016 change	2015	2015 change	2014
Sempra Energy Consolidated	$ 2,513	$ 2,686	$ (173)	$ (1,027)	$ 854
SDG&E	(20)	546	(566)	(576)	10
SoCalGas	552	57	495	98	397

Sempra Energy Consolidated

Financing activities at Sempra Energy were a net source of cash in 2016 compared to a net use of cash in 2015, primarily due to:

- $692 million net increase in short-term debt in 2016 compared to a $622 million net decrease in 2015;
- $1.2 billion proceeds received from the IEnova follow-on common stock offerings, net of offering costs and Sempra Energy's participation, as we discuss in Note 1 of the Notes to Consolidated Financial Statements; and
- $474 million net proceeds from tax equity funding from certain wind and solar power generation projects at Sempra Renewables; **offset by**
- $203 million higher payments on debt, including higher payments of long-term debt of $255 million (payments of $991 million in 2016 compared to $736 million in 2015), offset by lower payments of commercial paper and other short-term debt with maturities greater than 90 days of $52 million (payments of $1.07 billion in 2016 compared to $1.12 billion in 2015);
- $58 million increase in common stock dividends paid in 2016;
- $52 million from excess tax benefits related to share-based compensation in 2015. In connection with the adoption of a new accounting standard related to share-based compensation, discussed in Note 2 of the Notes to Consolidated Financial Statements, $34 million of similar excess tax benefits are now recorded to earnings and included as an operating activity beginning in 2016; and
- $41 million lower issuances of debt, including a decrease in issuances of long-term debt of $812 million ($1.6 billion in 2016 compared to $2.4 billion in 2015), offset by an increase in commercial paper and other short-term debt borrowings with maturities greater than 90 days of $771 million ($1.4 billion in 2016 compared to $633 million in 2015).

Financing activities at Sempra Energy were a net use of cash in 2015 compared to a net source of cash in 2014, primarily due to:

- $622 million net decrease in short-term debt in 2015 compared to a $412 million net increase in 2014; and
- $280 million lower issuances of debt, including a decrease in commercial paper and other short-term debt borrowings with maturities greater than 90 days of $630 million ($633 million in 2015 compared to $1.3 billion in 2014), offset by higher issuances of long-term debt of $350 million ($2.4 billion in 2015 compared to $2 billion in 2014); **offset by**
- $180 million lower payments on debt, including lower payments of long-term debt of $467 million ($736 million in 2015 compared to $1.2 billion in 2014), offset by higher payments of commercial paper and other short-term debt with maturities greater than 90 days of $287 million ($1.1 billion in 2015 compared to $831 million in 2014);
- $74 million purchase of noncontrolling interests in 2014; and
- $52 million tax benefit related to share-based compensation in 2015 (see additional discussion in Notes 2 and 6 of the Notes to Consolidated Financial Statements).

SDG&E

Cash used in financing activities at SDG&E decreased in 2016 primarily due to:

- $343 million lower payments on long-term debt in 2016;
- $125 million decrease in common stock dividends paid in 2016; and
- $54 million higher issuances of long-term debt in 2016.

At SDG&E, financing activities were a net use of cash in 2015 compared to a net source of cash in 2014, primarily due to:

- $523 million higher payments on long-term debt in 2015;
- $131 million net decrease in short-term debt in 2015 compared to a $187 million net increase in 2014; and
- $100 million increase in common stock dividends paid ($300 million in 2015 compared to $200 million in 2014); **offset by**
- $344 million higher issuances of debt with maturities greater than 90 days in 2015.

SoCalGas

Cash provided by financing activities at SoCalGas increased in 2016 primarily due to:

- $62 million increase in short-term debt in 2016 compared to a $50 million decrease in 2015; and
- $50 million common stock dividends paid in 2015; **offset by**
- $100 million lower issuances of long-term debt in 2016.

Cash provided by financing activities at SoCalGas increased in 2015 compared to 2014 primarily due to:

- $250 million payments of long-term debt in 2014; and
- $50 million lower common stock dividends paid in 2015; **offset by**
- $148 million lower issuances of long-term debt in 2015; and
- $50 million net decrease in short-term debt in 2015 compared to an $8 million net increase in 2014.

LONG-TERM DEBT(1)

(Dollars in millions)

	At December 31,			Weighted average at December 31, 2016	
				Maturity	Interest
	2016	2015	2014	(in years)	rate
Sempra Energy Consolidated	$ 15,342	$ 14,041	$ 12,555	10.5	4.23%
SDG&E	4,849	4,505	4,648	14.0	4.19
SoCalGas	2,982	2,490	1,891	13.3	3.72

(1) Includes current portion of long-term debt.

Issuances of Long-Term Debt

Major issuances of long-term debt over the last three years include the following:

ISSUANCES OF LONG-TERM DEBT

(Dollars in millions)

	Amount at issuance	Maturity
2016:		
Sempra Energy 1.625% notes	$ 500	2019
SDG&E 2.50% first mortgage bonds	500	2026
SoCalGas 2.60% first mortgage bonds	500	2026
Luz del Sur 6.50% corporate bonds	50	2025
2015:		
Sempra Energy 2.40% notes	500	2020
Sempra Energy 2.85% notes	400	2020
Sempra Energy 3.75% notes	350	2025
SDG&E 1.914% first mortgage bonds	250	2022
SDG&E variable-rate first mortgage bonds (1.151% at December 31, 2016)	140	2017
SoCalGas 3.20% first mortgage bonds	350	2025
SoCalGas 1.55% first mortgage bonds	250	2018
2014:		
Sempra Energy 3.55% notes	500	2024
SDG&E 366-day 0.40% commercial paper	100	2015
SoCalGas 3.15% first mortgage bonds	500	2024
SoCalGas 4.45% first mortgage bonds	250	2044

Sempra Energy used the proceeds from its issuances of long-term debt primarily to repay outstanding commercial paper and for general corporate purposes. We discuss issuances of long-term debt further in Note 5 of the Notes to Consolidated Financial Statements.

The California Utilities used the proceeds from their issuances of long-term debt:

- for general working capital purposes;
- to support their electric (at SDG&E) and natural gas (at SDG&E and SoCalGas) procurement programs;
- to repay commercial paper, maturing long-term debt and certain long-term debt prior to maturity; and
- to replenish amounts expended and fund future expenditures for the expansion and improvement of their utility plants.

Payments on Long-Term Debt

Major payments on long-term debt over the last three years include the following:

PAYMENTS ON LONG-TERM DEBT

(Dollars in millions)

	Payments	Maturity
2016:		
Sempra Energy 6.5% notes	750	2016
SDG&E 5% industrial development revenue bonds	105	2027
SDG&E 1.914% amortizing first mortgage bonds	35	2022
Luz del Sur 5.05%-6% bank loans	62	2016
2015:		
SDG&E 5.3% first mortgage bonds	250	2015
SDG&E 4.9%-5.5% notes and industrial development revenue bonds	169	2021-2027
SDG&E 366-day commercial paper	100	2015
SDG&E 1.914% amortizing first mortgage bonds	18	2022
Sempra Mexico variable-rate notes	51	2017
Sempra LNG & Midstream variable-rate industrial development bonds	55	2037
2014:		
Sempra Energy 2% notes	500	2014
Sempra Energy variable-rate notes	300	2014
SoCalGas 5.5% notes	250	2014
Luz del Sur 5.1%-6.75% bank loans	62	2015-2016
Luz del Sur 5.72%-6.47% notes	54	2014

In Note 5 of the Notes to Consolidated Financial Statements, we provide information about our lines of credit and additional information about debt activity.

CAPITAL STOCK TRANSACTIONS

Sempra Energy

Cash provided by employee stock option exercises and newly issued shares under our dividend reinvestment and direct stock purchase plans and our 401(k) saving plan was

- $51 million in 2016
- $52 million in 2015
- $56 million in 2014

DIVIDENDS

Sempra Energy

Sempra Energy paid cash dividends on common stock of:

- $686 million in 2016
- $628 million in 2015
- $598 million in 2014

On December 16, 2016, Sempra Energy declared a quarterly dividend of $0.755 per share of common stock that was paid on January 15, 2017.

Dividends declared have increased in each of the last three years due to an increase in the per-share quarterly dividends from $0.66 in 2014 ($2.64 annually) to $0.70 in 2015 ($2.80 annually) to $0.755 in 2016 ($3.02 annually).

On February 23, 2017, our board of directors approved an increase to Sempra Energy’s quarterly common stock dividend to $0.8225 per share ($3.29 annually). Declarations of dividends on our common stock are made at the discretion of the board. While we view

dividends as an integral component of shareholder return, the amount of future dividends will depend on earnings, cash flows, financial and legal requirements, and other relevant factors at that time.

SDG&E

In 2016, 2015 and 2014, SDG&E paid dividends to Enova Corporation (Enova) and Enova paid corresponding dividends to Sempra Energy of $175 million, $300 million and $200 million, respectively. SDG&E's dividends on common stock declared on an annual historical basis may not be indicative of future declarations, and could be impacted over the next few years in order for SDG&E to maintain its authorized capital structure while managing its large capital program (over $1 billion per year).

Enova, a wholly owned subsidiary of Sempra Energy, owns all of SDG&E's outstanding common stock. Accordingly, dividends paid by SDG&E to Enova and dividends paid by Enova to Sempra Energy are both eliminated in Sempra Energy's Consolidated Financial Statements.

SoCalGas

SoCalGas declared and paid common stock dividends to Pacific Enterprises (PE) and PE paid corresponding dividends to Sempra Energy of $50 million and $100 million in 2015 and 2014, respectively. No dividends were declared in 2016. SoCalGas' dividends on common stock declared on an annual historical basis may not be indicative of future declarations, and could be impacted or suspended over the next few years in order for SoCalGas to maintain its authorized capital structure while managing its large capital program (over $1 billion per year).

PE, a wholly owned subsidiary of Sempra Energy, owns all of SoCalGas' outstanding common stock. Accordingly, dividends paid by SoCalGas to PE and dividends paid by PE to Sempra Energy are both eliminated in Sempra Energy's Consolidated Financial Statements.

Dividend Restrictions

The board of directors for each of Sempra Energy, SDG&E and SoCalGas has the discretion to determine the payment and amount of future dividends by each such entity. The CPUC's regulation of SDG&E's and SoCalGas' capital structures limits the amounts that are available for loans and dividends to Sempra Energy. At December 31, 2016, based on these regulations, Sempra Energy could have received loans and dividends of approximately $579 million from SDG&E and $340 million from SoCalGas.

We provide additional information about dividend restrictions in "Restricted Net Assets" in Note 1 of the Notes to Consolidated Financial Statements.

CAPITALIZATION

Our debt to capitalization ratio, calculated as total debt as a percentage of total debt and equity, was as follows:

TOTAL CAPITALIZATION AND DEBT-TO-CAPITALIZATION RATIOS
(Dollars in millions)

	Sempra Energy Consolidated(1)	SDG&E(1)	SoCalGas
	December 31, 2016		
Total capitalization	$ 32,362	$ 10,527	$ 6,554
Debt-to-capitalization ratio	53%	46%	46%
	December 31, 2015		
Total capitalization	$ 27,242	$ 9,949	$ 5,639
Debt-to-capitalization ratio	54%	47%	44%

(1) Includes noncontrolling interest and debt of Otay Mesa VIE with no significant impact.

Significant changes during 2016 that affected capitalization include the following:

- Sempra Energy Consolidated: comprehensive income exceeding dividends plus the sale of noncontrolling interests, partially offset by an increase in both long-term and short-term debt
- SDG&E: comprehensive income exceeding dividends, partially offset by a net increase in debt
- SoCalGas: primarily an increase in both long-term and short-term debt, partially offset by comprehensive income

We provide additional information about these significant changes in Notes 1 and 5 of the Notes to Consolidated Financial Statements.

COMMITMENTS

The following tables summarize principal contractual commitments, primarily long-term, at December 31, 2016 for Sempra Energy Consolidated, SDG&E and SoCalGas. We provide additional information about commitments above and in Notes 5, 7, 13 and 15 of the Notes to Consolidated Financial Statements.

PRINCIPAL CONTRACTUAL COMMITMENTS – SEMPRA ENERGY CONSOLIDATED

(Dollars in millions)

	2017	2018 and 2019	2020 and 2021	Thereafter	Total
Long-term debt	$ 905	$ 2,831	$ 1,530	$ 9,805	$ 15,071
Interest on long-term debt(1)	626	1,092	937	4,735	7,390
Operating leases	78	130	103	306	617
Capital leases(2)	11	24	29	682	746
Purchased-power contracts	666	1,336	1,214	6,205	9,421
Natural gas contracts	388	436	84	144	1,052
LNG contract(3)	446	875	857	4,004	6,182
Construction commitments	398	117	67	245	827
Build-to-suit lease	10	20	22	245	297
SONGS decommissioning	74	124	144	295	637
Sunrise Powerlink wildfire mitigation fund	3	7	6	102	118
Other asset retirement obligations	48	98	86	1,684	1,916
Pension and other postretirement benefit obligations(4)	188	428	480	1,195	2,291
Environmental commitments(5)	8	18	4	44	74
Other	18	15	15	18	66
Total	$ 3,867	$ 7,551	$ 5,578	$ 29,709	$ 46,705

(1) We calculate expected interest payments using the stated interest rate for fixed-rate obligations. We calculate expected interest payments for variable-rate obligations, including fixed-to-floating interest rate swaps, based on forward rates in effect at December 31, 2016.

(2) Of the present value of the net minimum lease payments, $500 million will be recorded as a capital lease obligation when construction of the peaker plant facility is completed and delivery of contracted power commences, which is scheduled to occur in June 2017.

(3) Sempra LNG & Midstream has a purchase agreement with a major international company for the supply of LNG to the Energía Costa Azul terminal. The agreement is priced using a predetermined formula based on forward prices of the index applicable from 2017 to 2028 and an estimated one percent escalation in 2029. We provide more information about this contract in Note 15 of the Notes to Consolidated Financial Statements.

(4) Amounts represent expected company contributions to the plans for the next 10 years.

(5) Excludes amounts related to the natural gas leak at SoCalGas' Aliso Canyon natural gas storage facility.

PRINCIPAL CONTRACTUAL COMMITMENTS – SDG&E

(Dollars in millions)

	2017	2018 and 2019	2020 and 2021	Thereafter	Total
Long-term debt	$ 186	$ 528	$ 421	$ 3,519	$ 4,654
Interest on long-term debt(1)	194	370	345	2,137	3,046
Operating leases	27	45	39	71	182
Capital leases(2)	9	23	29	679	740
Purchased-power contracts	563	1,102	974	5,865	8,504
Construction commitments	59	61	15	8	143
SONGS decommissioning	74	124	144	295	637
Sunrise Powerlink wildfire mitigation fund	3	7	6	102	118
Other asset retirement obligations	5	10	9	169	193
Pension and other postretirement benefit obligations(3)	43	100	104	247	494
Environmental commitments	2	2	2	42	48
Total	$ 1,165	$ 2,372	$ 2,088	$ 13,134	$ 18,759

(1) SDG&E calculates expected interest payments using the stated interest rate for fixed-rate obligations, including floating-to-fixed interest rate swaps. SDG&E calculates expected interest payments for variable-rate obligations based on forward rates in effect at December 31, 2016.

(2) Of the present value of the net minimum lease payments, $500 million will be recorded as a capital lease obligation when construction of the peaker plant facility is completed and delivery of contracted power commences, which is scheduled to occur in June 2017.

(3) Amounts represent expected SDG&E contributions to the plans for the next 10 years.

PRINCIPAL CONTRACTUAL COMMITMENTS – SOCALGAS

(Dollars in millions)

	2017	2018 and 2019	2020 and 2021	Thereafter	Total
Long-term debt	$ —	$ 500	$ —	$ 2,509	$ 3,009
Interest on long-term debt(1)	112	194	189	1,150	1,645
Natural gas contracts	139	158	46	82	425
Operating leases	42	70	52	134	298
Construction commitments	3	6	4	—	13
Environmental commitments(2)	6	16	1	2	25
Pension and other postretirement benefit obligations(3)	91	251	293	838	1,473
Asset retirement obligations	43	88	77	1,451	1,659
Total	$ 436	$ 1,283	$ 662	$ 6,166	$ 8,547

(1) SoCalGas calculates interest payments using the stated interest rate for fixed-rate obligations.

(2) Excludes amounts related to the natural gas leak at the Aliso Canyon natural gas storage facility.

(3) Amounts represent expected SoCalGas contributions to the plans for the next 10 years.

The tables exclude

- contracts between consolidated affiliates
- intercompany debt
- employment contracts

The tables also exclude income tax liabilities at December 31, 2016 of

- $58 million for Sempra Energy Consolidated
- $22 million for SDG&E
- $29 million for SoCalGas

These liabilities relate to uncertain tax positions and were excluded from the tables because we are unable to reasonably estimate the timing of future payments due to uncertainties in the timing of the effective settlement of tax positions. We provide additional information about unrecognized tax benefits in Note 6 of the Notes to Consolidated Financial Statements.

OFF-BALANCE SHEET ARRANGEMENTS

The maximum aggregate amount of guarantees provided by Sempra Energy on behalf of related parties at December 31, 2016 is $4.4 billion. We discuss these guarantees in Note 4 of the Notes to Consolidated Financial Statements.

SDG&E has entered into power purchase arrangements which are variable interests. We discuss variable interests in Note 1 of the Notes to Consolidated Financial Statements.

FACTORS INFLUENCING FUTURE PERFORMANCE

SDG&E

SDG&E's operations have historically provided relatively stable earnings and liquidity. Its performance will depend primarily on the ratemaking and regulatory process, environmental regulations, economic conditions, actions by the California legislature and the changing energy marketplace.

Electric Rate Reform – California Assembly Bill 327

Assembly Bill (AB) 327 became law on January 1, 2014 and restores the authority to establish electric residential rates for electric utility companies in California to the CPUC and removes the rate caps established in AB 1X adopted in early 2001 during California's energy crisis, as well as SB 695 adopted in 2009. Additionally, the bill provides the CPUC the authority to adopt a monthly fixed charge for all residential customers. In July 2015, the CPUC adopted a decision that establishes comprehensive reform and a framework for rates that are more transparent, fair and sustainable. The decision directs changes beginning in summer 2015 and provides a path for continued reforms through 2020. The changes also include fewer rate tiers and a gradual reduction in the difference between the tiered rates, similar to the tier differential that existed prior to the 2000-2001 energy crisis. For SDG&E, the number of

tiers was reduced from four to three in 2015 and was reduced to two on July 1, 2016. The rate differential between the highest and lowest tiers was reduced from approximately 2.4 times to 2.1 times in 2016, with further reductions intended to reach a differential of 1.25 times as early as 2019. The timing of this reduction in rate differential between the highest and lowest tiers may be impacted by a limitation the CPUC has placed on the rate of increase of the lower tier when it is adjusted annually. SDG&E is seeking a change to this limitation, given the priorities established by AB 327. The decision also directs the utilities to pursue expanded time of use rates and implements a high usage surcharge in 2017 for usage that exceeds average customer usage by approximately 400 percent. The decision allows the utilities to seek a fixed charge for residential customers, but sets certain conditions for its implementation, which would be no sooner than 2020. In January 2017, the CPUC also approved a Time-of-Use (TOU) rulemaking that provides a framework and guiding principles for designing, implementing, and modifying the time periods in TOU rates for residential customers. These changes, when fully implemented, should result in significant rate relief for higher-use SDG&E customers who do not exceed the high usage surcharge threshold and will result in a rate structure that better aligns rates with the actual cost to serve customers.

In July 2014, the CPUC initiated a rulemaking proceeding to develop a successor tariff to the state's existing net energy metering (NEM) program pursuant to the provisions of AB 327. The NEM program was originally established in 1995 and is an electric billing tariff mechanism designed to promote the installation of on-site renewable generation. Under NEM, qualifying customer-generators receive a full retail-rate for the energy they generate that is fed back to the utility's power grid. This occurs during times when the customer's generation exceeds their own energy usage. In addition, if a NEM customer generates any electricity over the annual measurement period that exceeds their annual consumption, they receive compensation at a rate equal to a wholesale energy price.

In January 2016, the CPUC adopted modest changes to the NEM program to require NEM customers to pay some costs that would otherwise be borne by non-NEM customers and moves new NEM customers to time-of-use rates. Together with a reduction in tiered rate differentials and the potential implementation of a fixed charge discussed above, the NEM successor tariff begins a process of reducing the cost burden on non-NEM customers. In March 2016, SDG&E, Edison, PG&E, TURN and the California Coalition of Utility Employees filed applications with the CPUC requesting rehearing of its January 2016 decision. In September 2016, the CPUC issued an order denying the rehearing requests in all respects. SDG&E implemented the adopted successor NEM tariff in July 2016, after reaching the 617-MW cap established for the prior NEM program.

Appropriate NEM reform is necessary to ensure that SDG&E is authorized to recover, from NEM customers, the costs incurred in providing grid and energy services, as well as mandated legislative and regulatory public policy programs. SDG&E believes this design would be preferable to recovering these costs from customers not participating in NEM. If NEM self-generating installations were to increase substantially through 2019 when more significant reforms are to take effect, the rate structure adopted by the CPUC could have a material adverse effect on SDG&E's business, cash flows, financial condition, results of operations and/or prospects. For additional discussion, see "Risk Factors" in our 2016 Annual Report on Form 10-K.

Distributed Energy Storage – California Assembly Bill 2868

AB 2868, signed into law in September 2016, requires the CPUC to direct electrical corporations, including SDG&E, to file applications for programs and investments to accelerate the widespread deployment of distributed energy storage systems. AB 2868 sets a cap of 500 MW statewide, divided equally among the state's three largest electrical corporations (SDG&E's share being 166 MW); requires that no more than 25 percent of the capacity of distributed energy storage systems be on the customer side of the utility meter; and requires the CPUC to prioritize these programs and investments for the public sector and low-income customers.

Community Choice Aggregation (CCA)

SDG&E provides bundled electric procurement service through various resources that are typically procured on a long-term basis. While SDG&E provides such procurement service for the majority of its customer load, customers have the ability to receive, through CCA, procurement service from a load serving entity other than SDG&E if the customer's local jurisdiction (city) offers such a program. A number of cities in our service territory have expressed interest in CCA, which, if widely adopted, could result in substantial reductions in the load we are required to serve. When customers are served by another load serving entity, SDG&E no longer serves this departing load and the associated costs of the utility's procured resources are otherwise borne by its remaining bundled procurement customers. This issue is addressed by existing rate mechanisms that attempt to ensure bundled ratepayer indifference in the event of departing load, but these existing mechanisms may not be sufficient to ensure that remaining bundled customers do not experience any cost increase as a result of departing load, and the utility bears some risk that its procured resources may become stranded and associated costs not recoverable.

Renewable Energy Procurement

SDG&E is subject to the Renewables Portfolio Standard (RPS) Program administered by both the CPUC and the California Energy Commission, which requires each California utility to procure 50 percent of its annual electric energy requirements from renewable energy sources by 2030.

The RPS Program currently contains flexible compliance mechanisms that can be used to comply with or meet the RPS Program mandates. The mechanisms provide for a CPUC waiver under certain conditions, including: 1) a finding of inadequate transmission; 2) delays in the start-up of commercial operations of renewable energy projects due to permitting or interconnection; or 3) unexpected curtailment by an electric system balancing authority, such as the California ISO.

SDG&E has procured renewable energy supplies from certain suppliers whose assets are not yet online. Some of these assets remain contingent on electric transmission infrastructure, regulatory approval, project permitting and financing, and the implementation of new technologies.

SDG&E believes it will continue to comply with the RPS Program requirements based on its contracting activity and, if necessary, application of the flexible compliance mechanisms. SDG&E's failure to comply with the RPS Program requirements could subject it to CPUC-imposed penalties, which could materially affect its business, cash flows, financial condition, results of operations and/or prospects. The CPUC has neither audited our RPS Program compliance nor provided us with clearance for any compliance periods.

Clean Energy and Pollution Reduction Act – California SB 350

SB 350 creates new requirements in the areas of renewable energy procurement, energy efficiency, resource planning, and electric vehicle (EV) infrastructure. The measure requires all load serving entities, including SDG&E, to file integrated resource plans that will ultimately enable the electric sector to achieve reductions in greenhouse gas (GHG) emissions of 40 percent compared to 1990 levels by 2030. SB 350 also clearly specifies that the utilities will file applications with the CPUC that highlight how they can help with the development and expansion of the electric charging infrastructure necessary to support the growth of the EV market expected due to the state's alternative fuel vehicle policy initiative. We expect to meet the higher RPS and GHG emissions reductions requirements and are supportive of greater infrastructure development to promote electric vehicle charging.

SONGS

SDG&E has a 20-percent ownership interest in SONGS, formerly a 2,150-MW nuclear generating facility near San Clemente, California, that is in the process of being decommissioned by Edison, the majority owner of SONGS. We discuss regulatory and other matters related to SONGS, including a reopened CPUC proceeding that is considering whether a SONGS-related amended settlement agreement approved in 2014 is reasonable and in the public interest, and the ability to timely withdraw funds from trust accounts for the payment of decommissioning costs, in Notes 13 and 15 of the Notes to Consolidated Financial Statements and in "Risk Factors" in our 2016 Annual Report on Form 10-K.

Wildfire Claims Cost Recovery

In September 2015, SDG&E filed an application with the CPUC requesting rate recovery of an estimated $379 million in costs related to the October 2007 wildfires that have been recorded to the Wildfire Expense Memorandum Account (WEMA), as we discuss in Note 15 of the Notes to Consolidated Financial Statements.

In April 2016, the CPUC issued a ruling establishing the scope and schedule for the proceeding, which will be managed in two phases. Phase 1 will address SDG&E's operational and management prudence surrounding the 2007 wildfires. Phase 2 will address whether SDG&E's actions and decision-making in connection with settling legal claims in relation to the wildfires were reasonable. In October 2016, intervening parties submitted Phase 1 testimony raising various concerns with SDG&E's operations and management prior to and during the 2007 wildfires, and SDG&E responded to that testimony in December 2016. Participating parties asked that the CPUC reject SDG&E's request for cost recovery. A Phase 1 final decision is scheduled to be issued in the second half of 2017. The Phase 2 procedural schedule will be determined after Phase 1 is concluded.

Recovery of these costs in rates will require future regulatory approval. SDG&E will continue to assess the likelihood, amount and timing of such recoveries in rates. Should SDG&E conclude that recovery of excess wildfire costs in rates is no longer probable, at that time SDG&E would record a charge against earnings. If SDG&E had concluded that the recovery of regulatory assets related to CPUC-regulated operations was no longer probable or was less than currently estimated, at December 31, 2016, the resulting after-tax charge against earnings would have been up to approximately $208 million. A failure to obtain substantial or full recovery of the requested amount of these costs from customers, or any negative assessment of the likelihood of recovery, would likely have a material adverse effect on Sempra Energy's and SDG&E's financial condition, cash flows and results of operations. We discuss the October 2007 wildfires and how we assess the probability of recovery of our regulatory assets in Notes 15 and 1, respectively, of the Notes to Consolidated Financial Statements.

SOCALGAS

SoCalGas' operations have historically provided relatively stable earnings and liquidity. Its performance will depend primarily on the ratemaking and regulatory process, environmental regulations, economic conditions, actions by the California legislature and the

changing energy marketplace. SoCalGas' performance will also depend on the resolution of the legal, regulatory and other matters concerning the natural gas leak at Aliso Canyon, which we discuss below and in Note 15 of the Notes to Consolidated Financial Statements and in "Risk Factors" in our 2016 Annual Report on Form 10-K.

Aliso Canyon Natural Gas Storage Facility Gas Leak

In October 2015, SoCalGas discovered a leak at one of its injection-and-withdrawal wells, SS25, at its Aliso Canyon natural gas storage facility located in Los Angeles County, which SoCalGas has operated as a gas storage facility since 1972. SoCalGas worked closely with several of the world's leading experts to stop the leak. On February 18, 2016, DOGGR confirmed that the well was permanently sealed.

Local Community Mitigation Efforts

Pursuant to a stipulation and order by the Los Angeles County Superior Court (Superior Court), SoCalGas provided temporary relocation support to residents in the nearby community who requested it before the well was permanently sealed. Following the permanent sealing of the well and the completion of the Los Angeles County Department of Public Health's (DPH) indoor testing of certain homes in the Porter Ranch community, which concluded that indoor conditions did not present a long-term health risk and that it was safe for residents to return home, the Superior Court issued an order in May 2016. The order ruled that: (1) currently relocated residents be given the choice to request residence cleaning prior to returning home, with such cleaning to be performed according to the DPH's proposed protocol and at SoCalGas' expense, and (2) the relocation program for currently relocated residents would then terminate. SoCalGas completed the cleaning program, and the relocation program ended in July 2016.

Apart from the Superior Court order, in May 2016, the DPH also issued a directive that SoCalGas professionally clean (in accordance with the proposed protocol prepared by the DPH) the homes of all residents located within the Porter Ranch Neighborhood Council boundary, or who participated in the relocation program, or who are located within a five mile radius of the Aliso Canyon natural gas storage facility and have experienced symptoms from the natural gas leak (the Directive). SoCalGas disputes the Directive, contending that it is invalid and unenforceable, and has filed a petition for writ of mandate to set aside the Directive.

The total costs incurred to remediate and stop the leak and to mitigate local community impacts are significant and may increase, and to the extent not covered by insurance (including any costs in excess of applicable policy limits), or if there were to be significant delays in receiving insurance recoveries, such costs could have a material adverse effect on SoCalGas' and Sempra Energy's cash flows, financial condition and results of operations.

Litigation

In connection with the natural gas leak at the Aliso Canyon storage facility, as of February 27, 2017, 250 lawsuits, including over 14,000 plaintiffs, have been filed against SoCalGas, some of which have also named Sempra Energy. Derivative and securities claims have also been filed on behalf of Sempra Energy and/or SoCalGas shareholders against certain officers and directors of Sempra Energy and/or SoCalGas. We provide further detail on these cases, as well as complaints filed by the California Attorney General, acting in an independent capacity and on behalf of the people of the State of California and the California Air Resources Board (CARB), together with the Los Angeles City Attorney; the South Coast Air Quality Management District (SCAQMD); the County of Los Angeles, on behalf of itself and the people of the State of California; and a misdemeanor criminal complaint filed by the Los Angeles County District Attorney's Office; in Note 15 of the Notes to Consolidated Financial Statements. Additional litigation may be filed against us in the future related to the Aliso Canyon incident or our responses thereto.

The costs of defending against these civil and criminal lawsuits, cooperating with these investigations, and any damages, restitution, and civil, administrative and criminal fines, costs and other penalties, if awarded or imposed, as well as costs of mitigating the actual natural gas released, could be significant and to the extent not covered by insurance (including any costs in excess of applicable policy limits), or if there were to be significant delays in receiving insurance recoveries, could have a material adverse effect on SoCalGas' and Sempra Energy's cash flows, financial condition and results of operations.

Governmental Investigations

Various governmental agencies have investigated or are investigating this incident.

- In January 2016, the Governor of the State of California issued the Governor's Order proclaiming a state of emergency to exist in Los Angeles County due to the natural gas leak at the Aliso Canyon facility. The Governor's Order imposes various orders with respect to: stopping the leak; protecting public health and safety; ensuring accountability; and strengthening oversight. We provide further detail regarding the Governor's Order and CARB's *Aliso Canyon Methane Leak Climate Impacts Mitigation Program*, issued pursuant to the Governor's Order, in Note 15 of the Notes to Consolidated Financial Statements.
- In January 2016, SoCalGas entered into a Stipulated Order for Abatement with the SCAQMD and agreed to take various actions in connection with injecting and withdrawing natural gas at Aliso Canyon, sealing the well, monitoring, reporting, safety and funding a health impact study, among other things. In February 2017, SoCalGas entered into a settlement agreement with the SCAQMD that

calls for the SCAQMD to petition its Hearing Board for dismissal of the order. We provide further detail regarding the SCAQMD stipulated abatement order in Note 15 of the Notes to Consolidated Financial Statements.

- In January 2016, the DOGGR and CPUC selected Blade Energy Partners (Blade) to conduct an independent analysis under the direction and supervision of the DOGGR and CPUC to be funded by SoCalGas to investigate the technical root cause of the Aliso Canyon natural gas leak. The timing of the root cause analysis is under the control of Blade, the DOGGR and the CPUC.
- In June 2016, the California Division of Occupational Safety and Health issued four citations to SoCalGas alleging violations of various regulations, including that SoCalGas failed to ensure that testing and inspection of well casing and tubing at the Aliso Canyon storage facility complied with testing and inspection requirements, with total penalties of $60,800. SoCalGas has filed an appeal of all four citations on the grounds that no violations of the cited regulations occurred, the citations are all preempted by federal law, the citations were not issued in a timely manner, and two of the citations are duplicative.
- In February 2017, the CPUC opened a proceeding to determine the feasibility of minimizing or eliminating use of the Aliso Canyon natural gas storage facility, while still maintaining energy and electric reliability for the region, as we discuss below in “SB 380.”

Natural Gas Storage Operations and Reliability

Natural gas withdrawn from storage is important for service reliability during peak demand periods, including peak electric generation needs in the summer and heating needs in the winter. Aliso Canyon, with a storage capacity of 86 Bcf (which represents 63 percent of SoCalGas’ natural gas storage inventory capacity), is the largest SoCalGas storage facility and an important element of SoCalGas’ delivery system. SoCalGas has not injected natural gas into Aliso Canyon since October 25, 2015, pursuant to orders by DOGGR and the Governor, and SB 380. Limited withdrawals of natural gas from Aliso Canyon have been made in 2017 to augment natural gas supplies during critical demand periods.

If the Aliso Canyon facility were to be taken out of service for any meaningful period of time, it could result in an impairment of the facility, significantly higher than expected operating costs and/or additional capital expenditures, and natural gas reliability and electric generation could be jeopardized. At December 31, 2016, the Aliso Canyon facility has a net book value of $531 million, including $217 million of construction work in progress for the project to construct a new compression station. Any significant impairment of this asset could have a material adverse effect on SoCalGas’ and Sempra Energy’s results of operations for the period in which it is recorded. Higher operating costs and additional capital expenditures incurred by SoCalGas may not be recoverable in customer rates, and SoCalGas’ and Sempra Energy’s results of operations, cash flows and financial condition may be materially adversely affected.

Section 455.5 of the California Public Utilities Code, among other things, directs regulated utilities to notify the CPUC if any facility or any portion of a major facility has been out of service for nine consecutive months. Although SoCalGas does not believe the Aliso Canyon facility or any portion of that facility has been out of service for nine consecutive months, SoCalGas provided notification for transparency, and because the process for obtaining authorization to resume injection operations at the facility is taking longer to complete than initially contemplated. In response, and as required by Section 455.5, the CPUC issued a draft Order Instituting Investigation to address whether the Aliso Canyon facility or any portion of that facility has been out of service for nine consecutive months pursuant to Section 455.5, and if it is determined to have been out of service, whether the CPUC should adjust SoCalGas’ rates to reflect the period the facility is deemed to have been out of service. If the CPUC adopts the order as drafted and as required under Section 455.5, hearings on the investigation will be consolidated with SoCalGas’ next GRC proceeding.

In March 2016, the CPUC issued a decision directing SoCalGas to establish a memorandum account to prospectively track its authorized revenue requirement and all revenues that it receives for its normal, business-as-usual costs to own and operate the Aliso Canyon natural gas storage field. The CPUC will determine at a later time whether, and to what extent, the authorized revenues tracked in the memorandum account may be refunded to ratepayers. Pursuant to the CPUC’s decision, SoCalGas filed an advice letter requesting to establish a memorandum account to track all normal, business-as-usual costs to own and operate the Aliso Canyon storage field. In September 2016, the advice letter was approved and made effective as of March 17, 2016, the date of the decision directing the company to establish the account.

Insurance

Excluding directors and officers liability insurance, we have four kinds of insurance policies that together provide between $1.2 billion to $1.4 billion in insurance coverage, depending on the nature of the claims. These policies are subject to various policy limits, exclusions and conditions. We have been communicating with our insurance carriers and intend to pursue the full extent of our insurance coverage. Through December 31, 2016, we have received $169 million of insurance proceeds related to control of well expenses and temporary relocation costs. There can be no assurance that we will be successful in obtaining insurance coverage for costs related to the leak under the applicable policies, and to the extent we are not successful in obtaining coverage, such costs could have a material adverse effect on SoCalGas’ and Sempra Energy’s cash flows, financial condition and results of operations.

Our recorded estimate as of December 31, 2016 of $780 million of certain costs in connection with the Aliso Canyon storage facility leak may rise significantly as more information becomes available, and any costs not included in the $780 million estimate could be

material. To the extent not covered by insurance (including any costs in excess of applicable policy limits), or if there were to be significant delays in receiving insurance recoveries, such costs could have a material adverse effect on Sempra Energy's and SoCalGas' cash flows, financial condition and results of operations.

New Regulation

The Pipeline and Hazardous Materials Safety Administration (PHMSA), DOGGR, SCAQMD, Environmental Protection Agency and CARB have each commenced separate rulemaking proceedings to adopt further regulations covering natural gas storage facilities and injection wells. DOGGR issued new draft regulations for all storage fields in California, and in 2016, the California Legislature enacted four separate bills, discussed below, providing for additional regulation of natural gas storage facilities. Additional hearings in the California Legislature, as well as with various other federal and state regulatory agencies, have been or may be scheduled, additional legislation has been proposed in the California Legislature, and additional laws, orders, rules and regulations may be adopted. The Los Angeles County Board of Supervisors formed a task force to review and potentially implement new, more stringent land use (zoning) requirements and associated regulations and enforcement protocols for oil and gas activities, including natural gas storage field operations, which could materially affect new or modified uses of the Aliso Canyon and other natural gas storage fields located in the County.

We discuss these matters further in Note 15 of the Notes to Consolidated Financial Statements and in "Risk Factors" in our 2016 Annual Report on Form 10-K.

PIPES Act of 2016

In June 2016, the "Protecting our Infrastructure of Pipelines and Enhancing Safety Act of 2016" or the "PIPES Act of 2016" was enacted. Among other things, the PIPES Act:

- requires PHMSA to issue, within two years of passage, "minimum safety standards for underground natural gas storage facilities;"
- imposes a "user fee" on underground storage facilities as needed to implement the safety standards;
- grants PHMSA authority to issue emergency orders and impose emergency restrictions, prohibitions and safety measures on owners and operators of gas or hazardous liquid pipeline facilities without prior notice or an opportunity for hearing, if the Secretary of Energy determines that an unsafe condition or practice, or a combination of unsafe conditions and practices, constitutes or is causing an imminent hazard; and
- directs the Secretary of Energy to establish an Interagency Task Force comprised of representatives from various federal agencies and representatives of state and local governments.

In October 2016, the Interagency Task Force formed by the DOE and PHMSA under the PIPES Act issued its final report on natural gas storage safety. Among other things, the report further provides 44 specific recommendations to industry and to federal, state, and local regulators and governments intended to reduce the likelihood of future leaks and minimize the impacts of any that occur. The report and its 44 recommendations may result in additional regulations.

In December 2016, PHMSA published an interim final rule pursuant to the PIPES Act of 2016 that revises the federal pipeline safety regulations relating to underground natural gas storage facilities. The interim final rule incorporates by reference American Petroleum Institute (API) Recommended Practices 1170, *Design and Operation of Solution-Mined Salt Caverns Used for Natural Gas Storage* (July 2015); and API Recommended Practice 1171, *Functional Integrity of Natural Gas Storage in Depleted Hydrocarbon Reservoirs and Aquifer Reservoirs* (September 2015). The two Recommended Practices are comprised of consensus safety measures for the construction, maintenance, risk-management, and integrity-management procedures for natural gas storage. SoCalGas began the process of implementing the recommendations of API 1171 prior to formal adoption by PHSMA and is developing the associated documents and procedures required to demonstrate compliance with the standards.

SB 380

In May 2016, SB 380 became law and requires, among other things:

- the continued prohibition against SoCalGas injecting any natural gas into the Aliso Canyon facility until a comprehensive review of the safety of the gas storage wells at the facility is completed in accordance with regulations adopted by DOGGR, the State Oil and Gas Supervisor has made a safety determination and other required findings, at least one public hearing has been held in the affected community, and the Executive Director of the CPUC has issued a concurring letter regarding the Supervisor's determination of safety;
- that all gas storage wells returning to service at the Aliso Canyon storage field inject or produce gas only through the interior metal tubing and not through the annulus between the tubing and the well casing, which allows SoCalGas wells to operate with two complete barriers to mitigate the potential for an uncontrolled release of natural gas; and
- a CPUC proceeding (which was opened in February 2017) to determine the feasibility of minimizing or eliminating use of the Aliso Canyon natural gas storage facility, while still maintaining energy and electric reliability for the region, and to consult with various

governmental agencies and other entities in making its determination. The scope of the proceeding does not include issues with respect to air quality, public health, causation, culpability, or cost responsibility regarding the Aliso Canyon natural gas leak.

SB 826

In June 2016, SB 826 (a state appropriations bill) became law. Among other things, SB 826 requires allocation of funding to the California Council on Science and Technology to conduct an independent study, under the direction of the CPUC in consultation with the State Energy Resources Conservation and Development Commission, the CARB, and DOGGR, of operational safety and potential health risks, methane emissions, supply reliability for gas and electricity demand in the state, and the role of natural gas storage facilities and infrastructure in the state's long-term greenhouse gas reduction strategies. The study is to be completed by December 31, 2017.

SB 887

In September 2016, SB 887 became law, which establishes a framework for revising state regulations over natural gas storage wells in California. Among other things, the statute directs:

- CARB, in consultation with any local air district and DOGGR, to develop a natural gas storage facility continuous air monitoring program;
- DOGGR, in consultation with CARB, to determine by regulation what constitutes a reportable leak from a gas storage well and the timeframe for reporting those leaks;
- DOGGR to perform random onsite inspections of some gas storage wells annually and post the results on its website; and
- the operator of each natural gas storage well to develop and maintain a risk management plan, a comprehensive well training and mentoring program for employees whose job duties involve the safety of operations and maintenance of gas storage wells and associated equipment, and a leak prevention and response plan.

SB 888

In September 2016, SB 888 became law, which requires that a penalty assessed against a gas corporation by the CPUC with regard to a natural gas storage facility leak must at least equal the amount necessary to fully offset the impact on the climate from the greenhouse gases emitted by the leak, as determined by CARB. The CPUC also must consider the extent to which the gas corporation has mitigated or is in the process of mitigating the impact on the climate from greenhouse gas emissions resulting from the leak.

Proposed Legislation – SB 57

As currently drafted, proposed legislation SB 57 would extend the moratorium on natural gas injections at the Aliso Canyon storage facility until the root cause analysis of the leak that started in October 2015 has been completed. It would further require the CPUC to complete by the end of 2017 its analysis regarding the feasibility of minimizing or eliminating the use of the Aliso Canyon storage facility. If adopted, this legislation could delay the resumption of injection operations at the Aliso Canyon facility, and natural gas reliability and electric generation could be jeopardized.

Additional Safety Enhancements

In February 2017, SoCalGas notified the CPUC that it is accelerating its well integrity assessments on the natural gas storage wells at its La Goleta, Honor Rancho and Playa del Rey natural gas storage fields consistent with the testing prescribed by SB 380 for Aliso Canyon, proposed new DOGGR regulations, and SoCalGas' Storage Risk Management Plan. All of SoCalGas' operating natural gas storage wells will be reconfigured such that natural gas will be injected or produced only through the interior metal tubing and not through the annulus between the tubing and the well casing to maintain a double barrier and additional layer of safety, which is consistent with the direction of federal and state regulations. SoCalGas anticipates that this work will reduce the injection and withdrawal capacity of each of these storage fields. Depending on the volume of natural gas in storage in each field at the time natural gas is injected or withdrawn, the reduction could be significant and could jeopardize natural gas reliability and associated dependencies, such as electric generation.

Higher operating costs and additional capital expenditures incurred by SoCalGas as a result of new laws, orders, rules and regulations arising out of this incident or our responses thereto could be significant and may not be recoverable in customer rates, and SoCalGas' and Sempra Energy's cash flows, financial condition and results of operations may be materially adversely affected by any such new laws, orders, rules and regulations.

CALIFORNIA UTILITIES – JOINT MATTERS

Natural Gas Pipeline Operations Safety Assessments

In August 2011, the California Utilities filed implementation plans with the CPUC to implement the CPUC's significant and urgent safety directive to test or replace natural gas transmission pipelines that have not been pressure tested and to reduce the time for valves to stop the flow of gas if a break in a pipeline occurs (Pipeline Safety Enhancement Plan or PSEP). In June 2014, the CPUC issued a final decision approving the utilities' model for implementing PSEP, and established the criteria to determine the amounts related to PSEP that may be recovered from ratepayers and the processes for recovery of such amounts, including providing that such costs are subject to a reasonableness review. The CPUC approved a decision tree process that SoCalGas and SDG&E have utilized to define and develop projects. While the decision tree provides the roadmap for this large scale testing or replacing of pipelines, the extensive scope of this project coupled with a very short time frame resulted in imprecise cost forecasts. As portions of PSEP have been completed, actual costs have generally been higher than original estimates, partially offset by changes in scope that have reduced estimated costs. Over time, cost estimate accuracy is improving, as well as efficiencies in executing the project work. We expect cost estimates for future work to be updated to reflect the development of more detailed estimates, actual cost experience as portions of the work are completed and additional refinement in scope. In addition, we anticipate that portions of the future work may be impacted by clarification of new safety regulations that could materially impact these projects' cost estimates.

The costs associated with our PSEP projects were outside the scope of the 2012 and 2016 GRC proceedings, and therefore recovery of these costs is subject to separate regulatory proceedings. However, a portion of future PSEP costs may be addressed in subsequent GRCs, as we discuss below. In addition, certain PSEP component projects and their corresponding cost estimates may be subject to future CPUC filings. We expect that addressing future PSEP projects in separate filings, including GRC filings, should help improve the certainty of cost recovery for the PSEP program.

In August 2016, the CPUC issued a final decision authorizing SoCalGas and SDG&E to recover, subject to refund pending reasonableness reviews:

- 50 percent of the revenue requirements associated with completed PSEP Phase 1 projects;
- authorized tracking of Phase 2 costs;
- file two reasonableness review applications for Phase 1 projects completed through 2017;
- file a Phase 2 revenue requirement forecast application for costs to be incurred in 2017 and 2018; and
- include all other PSEP costs not subject to prior applications in their 2019 GRC applications and any future GRCs.

In September 2016, SoCalGas and SDG&E filed a joint application with the CPUC for its second PSEP reasonableness review and rate recovery of costs of certain pipeline safety projects completed by June 30, 2015 and recorded in their authorized regulatory accounts. The total costs submitted for review are $195 million; $180 million for SoCalGas and $15 million for SDG&E. SoCalGas and SDG&E expect a decision from the CPUC in 2018. This proceeding has been challenged by consumer advocacy groups, including the ORA, TURN, and the Southern California Generation Coalition (SCGC). However, we believe these costs were prudent, were incurred in accordance with the program, and should be substantially approved for recovery.

As shown in the table below, SoCalGas and SDG&E have made significant pipeline safety investments under this program, and SoCalGas expects to continue making significant investments as approved through various regulatory proceedings. SDG&E's PSEP program is expected to be substantially complete in 2017, with the exception of the Pipeline Safety & Reliability Project that is currently under regulatory review.

PIPELINE SAFETY ENHANCEMENT PLAN – REASONABLENESS REVIEW SUMMARY

(Dollars in millions)

	2011 through 2016			
	Total invested(1)	CPUC review completed(2)	CPUC review pending(3)	2018 recovery filing(4)(5)
Sempra Energy Consolidated:				
Capital	$ 1,232	$ 8	$ 134	$ 1,090
Operation and maintenance	184	25	61	98
Total	$ 1,416	$ 33	$ 195	$ 1,188
SoCalGas:				
Capital	$ 938	$ 8	$ 120	$ 810
Operation and maintenance	176	25	60	91
Total	$ 1,114	$ 33	$ 180	$ 901
SDG&E:				
Capital	$ 294	$ —	$ 14	$ 280
Operation and maintenance	8	—	1	7
Total	$ 302	$ —	$ 15	$ 287

(1) Excludes disallowed costs through December 31, 2016 of $6 million at SoCalGas and $1 million at SDG&E for pressure testing or replacing pipelines installed between January 1, 1956 and July 1, 1961.

(2) Approved in December 2016; excludes $2 million of PSEP-specific insurance costs for which recovery may be requested in a future filing.

(3) Reasonableness Review Application filed in September 2016; decision pending.

(4) Reasonableness Review Application to be filed in late 2018 and expected to include substantially all of these costs. Remaining costs not included in the 2018 application are expected to be filed in a future GRC.

(5) Authorized to recover 50 percent of the revenue requirement when the projects are completed, subject to refund.

Cost of Capital Update

On February 7, 2017, SDG&E, SoCalGas, PG&E and Edison (collectively, the Joint Investor-Owned Utilities or Joint IOUs), along with the ORA and TURN, entered into a memorandum of understanding and filed a joint petition for modification (PFM) with the CPUC seeking a two-year extension for each of the Joint IOUs to file its next respective cost of capital application, extending the date to file the next cost of capital application from April 2017 to April 2019 for a 2020 test year. In addition to the two-year extension of the deadline to file the next cost of capital application, the memorandum of understanding contains provisions to reduce the Return on Equity (ROE) for SDG&E from 10.30 percent to 10.20 percent and for SoCalGas from 10.10 percent to 10.05 percent, effective from January 1, 2018 through December 31, 2019. SDG&E's and SoCalGas' ratemaking capital structures will remain at the current levels until modified, if at all, by a future cost of capital decision by the CPUC. Also, the Joint IOUs will update their cost of capital for actual cost of long-term debt through August 2017 and forecasted cost through 2018, and update preferred stock costs for anticipated issuances (if any) through 2018. The cost of capital adjustment mechanism (CCM) will be in effect to adjust 2019 cost of capital, if necessary. Unless changed by the operation of the CCM, the updated costs of long-term debt and preferred stock (if applicable) and new ROEs will remain in effect through December 31, 2019. The PFM is subject to final approval by the CPUC.

If and once adopted, the Joint IOUs would submit their individual updated cost of capital and corresponding revenue requirement impacts to the CPUC in September 2017 to become effective January 1, 2018. While the actual changes to the revenue requirements resulting from the PFM would not be known until the above-mentioned filing is submitted and the actual cost of debt through August 2017 and forecasted cost through 2018 is quantified in the third quarter of 2017, SDG&E and SoCalGas estimate that the reductions in their annual revenues requirements will be within a range of $16 million to $24 million and $44 million to $52 million, respectively, beginning in 2018. These revenue requirement impacts are primarily related to the estimated impact of resetting the cost of debt, which would also occur in the normal course of a litigated cost of capital proceeding if the PFM is not approved by the CPUC. We provide further detail regarding cost of capital in Note 14 of the Notes to Consolidated Financial Statements.

Regulatory Compliance and Safety Enforcement

The California Utilities are subject to various state and federal regulatory compliance requirements. At the state level, the CPUC has instituted gas and electric safety compliance programs that delegate citation authority to CPUC staff personnel under the direction of the CPUC Executive Director. In exercising the citation authority, the CPUC staff will take into account voluntary reporting of potential violations, voluntary resolution efforts undertaken, prior history of violations, the gravity of the violation and the degree of culpability.

Under each enforcement program, each day of an ongoing violation may be counted as an additional offense. The maximum penalty is $50,000 per offense, with an administrative limit of $8 million per citation.

In May 2016, the CPUC's Safety and Enforcement Division issued a citation to SoCalGas for violation of General Order 112, resulting in a $2 million penalty that was subsequently paid. The citation is associated with findings from two 2015 audits of SoCalGas' Southeast Region for failure to promptly remediate corrosion issues in accordance with federal regulations.

In October 2016, SoCalGas was fined $699,500 for alleged violations of certain environmental mitigation measures related to the Aliso Canyon Turbine Replacement Project. SoCalGas has appealed the citation, and a CPUC ruling on the appeal is expected in 2017.

Future Risk-Based GRC

In December 2014, the CPUC issued a decision incorporating a risk-based decision-making framework into all future GRC application filings for major natural gas and electric utilities in California. The framework is intended to assist the utilities, interested parties and the CPUC in evaluating energy utility proposals for assessing safety risks and the utilities' plans to manage, mitigate and minimize such risks. As a result, there will be two new proceedings, the Safety Model Assessment Proceeding and the Risk Assessment Mitigation Phase, both of which will occur prior to filing future GRC applications. In the Safety Model Assessment Proceeding, the California Utilities will demonstrate the models they use to prioritize and mitigate risks in order for the CPUC to establish guidelines and standards for these models. The California Utilities filed the first Risk Assessment Mitigation Phase report in November 2016, in advance of their next GRC, which is scheduled to be filed in 2017 and will address their operations and revenue requirements for 2019 through 2021. In the Risk Assessment Mitigation Phase, the California Utilities addressed 11 safety risks at SoCalGas and 17 safety risks at SDG&E potentially impacting the public, customers and employees. Each risk was addressed with a proposed mitigation plan that will be included by the California Utilities in their upcoming GRC applications, including the costs associated with these safety mitigation programs. In the future, both proceedings will precede and inform the California Utilities' GRC applications. The framework of both proceedings is still in the developing stages, therefore we are not able to determine whether the new framework will impact costs differently in the future or if risk mitigation costs will be sufficiently funded in rates.

SEMPRA SOUTH AMERICAN UTILITIES

Our utilities in South America have historically provided relatively stable earnings and liquidity, and their future performance will depend primarily on the ratemaking and regulatory process, environmental regulations, foreign currency rate fluctuations and economic conditions. They are also expected to provide earnings from construction projects when completed and from other investments, but will require substantial funding for these investments.

The National Energy Commission (Comisión Nacional de Energía, or CNE) in Chile and the Energy and Mining Investment Supervisory Body (Organismo Supervisor de la Inversión en Energía y Minería, or OSINERGMIN) in Peru set rates for our electric distribution utilities in South America, Chilquinta Energía and Luz del Sur, respectively.

For Chilquinta Energía, rates for four-year periods related to distribution and sub-transmission are reviewed separately on an alternating basis every two years. The most recent review process for distribution rates was completed in November 2016, covering the period from November 2016 through October 2020. We expect a final decree to be released during the first quarter of 2017 and to be retroactive from November 2016, which we do not expect to have a material impact on our results. We expect the next review process for sub-transmission rates to be completed by the end of 2017, covering the period from January 2018 through December 2019.

The components of tariffs for Luz del Sur are reviewed and adjusted every four years. The final distribution rate-setting resolution for the 2013-2017 period was published in October 2013 and went into effect on November 1, 2013. In December 2016, the Peruvian regulator issued a decree extending existing rates for Luz del Sur until November 2018. The next rate review is scheduled to be completed in 2018, covering the period from November 2018 to October 2022.

We discuss the impact of tax reform in Chile and Peru in "Results of Operations – Changes in Revenues, Costs and Earnings – Income Taxes."

SEMPRA MEXICO

Sempra Mexico is expected to provide earnings from infrastructure projects, joint venture investments and its natural gas distribution utility. We expect working capital and capital expenditure requirements, projects, joint venture investments and dividends in Mexico to be funded by cash generated from Mexico business operations, credit facilities, equity and debt issuances, project financing, interim funding from the parent, and partnering in joint ventures.

Energía Costa Azul LNG Terminal

In May 2015, Sempra LNG & Midstream, IEnova, and a subsidiary of PEMEX entered into a project development agreement for the joint development of the proposed natural gas liquefaction project at IEnova's existing regasification terminal at Energía Costa Azul. The agreement specifies how the parties will share costs, and establishes a framework for the parties to work jointly on permitting, design, engineering and commercial activities associated with exploring the development of the liquefaction project. We are sharing costs with PEMEX on the development efforts, and have started to apply for the primary governmental authorizations for the project. Energía Costa Azul has profitable long-term regasification contracts for 100 percent of the facility, making the decision to pursue a new liquefaction facility dependent in part on whether the investment in a new liquefaction facility would, over the long term, be more beneficial financially than continuing to supply regasification services under our existing contracts.

Development of this project is subject to numerous risks and uncertainties, including the receipt of a number of permits and regulatory approvals; finding suitable partners and customers; obtaining financing; negotiating and completing suitable commercial agreements, including joint venture agreements, tolling capacity agreements and construction contracts; reaching a final investment decision; and other factors associated with this potential investment. For a discussion of these risks, see "Risk Factors" in our 2016 Annual Report on Form 10-K.

Termoeléctrica de Mexicali

Our results related to our TdM power plant, currently held for sale, are affected by market conditions, as it is currently operating on a merchant basis. TdM sells its power into the California market based on market conditions at the time of sale.

Other Sempra Mexico Matters

In November 2015, a major U.S. credit rating agency revised PEMEX's global foreign currency and local currency credit ratings from A3 to Baa1 and changed the outlook for its credit ratings to negative. In March 2016, the same major credit rating agency further downgraded PEMEX's global foreign currency and local currency credit ratings from Baa1 to Baa3. In May, October and December 2016, in connection with debt offerings by PEMEX, the same major credit agency reaffirmed that the outlook on PEMEX's credit ratings remains negative. PEMEX is also subject to the control of the Mexican government, which could limit its ability to satisfy its external debt obligations. Although PEMEX is a State Productive Enterprise of Mexico, its financing obligations are not guaranteed by the Mexican government. As both a partner in the DEN joint venture and a customer with capacity contracts for transportation services on Sempra Mexico's ethane and LPG pipelines, if PEMEX were unable to meet any or all of its obligations to Sempra Mexico, it could have a material adverse effect on Sempra Energy's financial condition, results of operations and cash flows.

Sempra Mexico continues to monitor CFE project opportunities and carefully analyze CFE bids in order to participate in those that fit its overall growth strategy. There can be no assurance that IEnova will be successful in bidding for new CFE projects.

The ability to successfully complete pipeline projects, like other major construction projects, is subject to a number of risks and uncertainties. IEnova's completed acquisitions of the remaining equity interest in GdC and of the Ventika wind power facilities will subject IEnova to substantial integration challenges and risks. For a discussion of these risks and uncertainties, see "Risk Factors" in our 2016 Annual Report on Form 10-K.

SEMPRA RENEWABLES

Sempra Renewables' performance is primarily a function of the solar and wind power generated by its assets. Power generation from these assets depends on solar and wind resource levels, weather conditions, and Sempra Renewables' ability to maintain equipment performance.

Sempra Renewables' future performance and the demand for renewable energy is impacted by various market factors, most notably state mandated requirements for utilities to deliver a portion of total energy load from renewable energy sources. Additionally, the phase out or extension of U.S. federal income tax incentives, primarily investment tax credits and PTCs, and grant programs could significantly impact future renewable energy resource availability and investment decisions.

SEMPRA LNG & MIDSTREAM

Cameron LNG JV Three-Train Liquefaction Project

Large-scale construction projects like the design, development and construction of the Cameron LNG JV liquefaction facility involve numerous risks and uncertainties, including among others, the potential for unforeseen engineering challenges, substantial construction delays and increased costs. As noted above, Cameron LNG JV has a turnkey EPC contract, and if the contractor becomes unwilling or unable to perform according to the terms and timetable of the EPC contract, Cameron LNG JV could be required to

engage a substitute contractor, which would result in further project delays and potentially significantly increased costs. In addition, the EPC contractor has indicated that the project is facing delays, which will delay income anticipated in 2018 and 2019. For a discussion of these risks and other risks relating to the development of the Cameron LNG JV liquefaction project that could adversely affect our future performance, see “Risk Factors” in our 2016 Annual Report on Form 10-K.

Proposed Additional Cameron Liquefaction Expansion

Cameron LNG JV has received the major permits necessary to expand the current configuration from the current three liquefaction trains under construction. The proposed expansion project includes up to two additional liquefaction trains, capable of increasing LNG production capacity by approximately 9 Mtpa to 10 Mtpa, and up to two additional full containment LNG storage tanks (one of which was permitted with the original three-train project). Advancement of the project includes

- DOE FTA approval received in July 2015
- Non-FTA approval received in July 2016
- FERC permit received in May 2016

Under the Cameron LNG JV financing agreements, expansion of the Cameron LNG JV facilities beyond the first three trains is subject to certain restrictions and conditions, including among others, timing restrictions on expansion of the project unless appropriate prior consent is obtained from lenders. Under the Cameron LNG JV equity agreements, the expansion of the project requires the unanimous consent of all the partners, including with respect to the equity investment obligation of each partner. One of the partners indicated to Sempra Energy and the other partners that it does not intend to invest additional capital in Cameron LNG JV with respect to the expansion. As a result, discussions among the partners are taking place, and we are considering a variety of options to attempt to move this project forward. These activities have contributed to delays in developing firm pricing information and securing customer commitments. In light of these developments, we are unable to predict when we and/or Cameron LNG JV might receive the consents and approvals required to move forward on this project.

The expansion of the Cameron LNG JV facilities beyond the first three trains is subject to a number of risks and uncertainties, including amending the Cameron LNG JV agreement among the partners, obtaining customer commitments, completing the required commercial agreements, securing and maintaining all necessary permits, approvals and consents, obtaining financing, reaching a final investment decision among the Cameron LNG JV partners, and other factors associated with the potential investment. See “Risk Factors” in our 2016 Annual Report on Form 10-K.

Other LNG Liquefaction Development

Design, regulatory and commercial activities are ongoing for potential LNG liquefaction developments at our Port Arthur, Texas site and at Sempra Mexico’s Energía Costa Azul facility. For these development projects, we have met with potential customers and determined there is an interest in long-term contracts for LNG supplies beginning in the 2022 to 2025 time frame.

Port Arthur

In November 2016, Sempra LNG & Midstream submitted a request to the FERC seeking authorization to site, construct and operate the proposed Port Arthur LNG natural gas liquefaction and export facility in Port Arthur, Texas.

- The proposed project is designed to include
  - two natural gas liquefaction trains with production capability of approximately 13.5 Mtpa, or 698 Bcf per year;
  - three LNG storage tanks;
  - natural gas liquids and refrigerant storage;
  - feed gas pre-treatment facilities; and
  - two berths and associated marine and loading facilities.
- In June 2015, Sempra LNG & Midstream filed permit applications with the DOE for authorization to export the LNG produced from the proposed project to all current and future non-FTA countries.
- In August 2015, Sempra LNG & Midstream received authorization from the DOE to export the LNG produced from the proposed project to all current and future FTA countries.
- In February 2016, Sempra LNG & Midstream and Woodside Petroleum Ltd. entered into a project development agreement for the joint development of the proposed Port Arthur LNG liquefaction project. The agreement specifies how the parties will share costs, and establishes a framework for the parties to work jointly on permitting, design, engineering, commercial and marketing activities associated with developing the Port Arthur LNG liquefaction project.

Also in November 2016, Sempra LNG & Midstream filed a permit application with the FERC for a pipeline project that will provide natural gas transportation service for the liquefaction facility project.

Development of the Port Arthur LNG liquefaction project is subject to a number of risks and uncertainties, including completing the required commercial agreements, such as joint venture agreements, tolling capacity agreements or gas supply and LNG sales agreements; completing construction contracts; securing all necessary permits and approvals; obtaining financing and incentives; reaching a final investment decision; and other factors associated with the potential investment. See “Risk Factors” in our 2016 Annual Report on Form 10-K.

Energía Costa Azul

We further discuss Sempra LNG & Midstream’s participation in potential LNG liquefaction development at Sempra Mexico’s Energía Costa Azul facility above in “Sempra Mexico – Energía Costa Azul LNG Terminal.”

Natural Gas Storage Assets

The future performance of our natural gas storage assets could be impacted by changes in the U.S. natural gas market, which could lead to sustained diminished natural gas storage values.

The recorded value of our long-lived natural gas storage assets at December 31, 2016 is $1.5 billion. Historically, the value of natural gas storage services has positively correlated with the difference between the seasonal prices of natural gas, among other factors. In general, over the past several years, seasonal differences in natural gas prices have declined, which have contributed to lower prices for storage services. As our legacy (higher rate) sales contracts mature at our Bay Gas Storage Company, Ltd. and Mississippi Hub facilities, replacement sales contract rates have been and could continue to be lower than has historically been the case. Lower sales revenues may not be offset by cost reductions, which could lead to further depressed asset values. In addition, our LA Storage development project may be unable to attract cash flow commitments sufficient to support further investment or to extend its FERC construction permit beyond the current expiration date of June 2017. The LA Storage project also includes an existing 23.3-mile pipeline header system, the LA Storage pipeline, that is not currently contracted.

We perform recovery testing of our recorded asset values when market conditions indicate that such values may not be recoverable. In the event such values are not recoverable, we would consider the fair value of these assets relative to their recorded value. To the extent the recorded (carrying) value is in excess of the fair value, we would record a noncash impairment charge. A significant impairment charge related to our natural gas storage assets would have a material adverse effect on our results of operations in the period in which it is recorded.

RBS SEMPRA COMMODITIES

In three separate transactions in 2010 and one in early 2011, we and The Royal Bank of Scotland plc (RBS), our partner in the RBS Sempra Commodities joint venture, sold substantially all of the businesses and assets of our commodities-marketing partnership. The investment balance of $67 million at December 31, 2016 reflects remaining distributions expected to be received from the partnership as it is dissolved. The amount of distributions, if any, may be impacted by the matters we discuss related to RBS Sempra Commodities in “Other Litigation” in Note 15 of the Notes to Consolidated Financial Statements. In addition, amounts may be retained by the partnership for an extended period of time to help offset unanticipated future general and administrative costs necessary to complete the dissolution of the partnership.

OTHER SEMPRA ENERGY MATTERS

We may be further impacted by rapidly changing economic conditions. These conditions may also affect our counterparties. Moreover, the dollar may fluctuate significantly compared to some foreign currencies, especially in Mexico and South America where we have significant operations. We discuss these matters in “Management’s Discussion and Analysis – Impact of Foreign Currency and Inflation Rates on Results of Operations” above and in “Market Risk” below. North American natural gas prices, when in decline, negatively affect profitability at Sempra LNG & Midstream. Also, a reduction in projected global demand for LNG could result in increased competition among those working on projects in an environment of declining LNG demand, such as the Sempra Energy-sponsored export initiatives. For a discussion of these risks and other risks involving changing commodity prices, see “Risk Factors” in our 2016 Annual Report on Form 10-K.

There are currently various proposals to reform the U.S. federal tax code. Some of the provisions of potential reforms being considered include

- lowering the federal income tax rate,
- eliminating the deduction for interest expense,
- treating all capital expenditures as a current deduction,
- implementing a territorial tax system, allowing for future foreign earnings to be repatriated with reduced or no federal income tax expense, and

- adding a border adjustment tax where profits from exports are tax-exempt, while imports are taxed.

Due to the uncertainty as to whether or how these or other reforms would be formulated or enacted, and how they would be applied, it is difficult to predict how each of our individual businesses or Sempra Energy overall might be impacted. These reforms, or any others that may be enacted, could change the forecasted effective income rates that we discuss in "Changes in Revenues, Costs and Earnings – Income Taxes" above. Our businesses also may be impacted by changes currently under consideration at the federal level in foreign and domestic trade policies and laws, including border tariffs and revisions to international trade agreements and import and export policies. Any such changes could impact our ability to export or import materials, equipment and commodities, increase costs and reduce our competitiveness. For a discussion of these risks and other risks involving changing commodity prices, see "Risk Factors" in our 2016 Annual Report on Form 10-K.

In July 2010, federal legislation to reform financial markets was enacted that significantly alters how over-the-counter (OTC) derivatives are regulated, which may impact all of our businesses. The law increased regulatory oversight and transparency requirements of OTC energy derivatives, including

- requiring standardized OTC derivatives to be traded on registered exchanges regulated by the U.S. Commodity Futures Trading Commission (CFTC)
- imposing new and potentially higher capital and margin requirements and
- authorizing the establishment of commodity position limits, the latter of which is pending final approval.

The law gives the CFTC authority to exempt end users of energy commodities which could reduce, but not eliminate, the applicability of these measures to us and other end users. These requirements could cause our OTC transactions to be more costly but are not expected to have a material effect on our liquidity due to additional capital requirements. In addition, as these reforms aim to standardize OTC products, they could limit the effectiveness and extent of our hedging programs, because we would have less ability to tailor OTC derivatives to match the precise risk we are seeking to mitigate and may be restricted on the size of our hedging program.

LITIGATION

We describe legal proceedings that could adversely affect our future performance in Note 15 of the Notes to Consolidated Financial Statements.

MARKET RISK

Market risk is the risk of erosion of our cash flows, earnings, asset values and equity due to adverse changes in market prices, and interest and foreign currency rates.

RISK POLICIES

Sempra Energy has policies governing its market risk management and trading activities. Sempra Energy and the California Utilities maintain separate and independent risk management committees, organizations and processes for the California Utilities and for all non-CPUC regulated affiliates to provide oversight of these activities. The committees consist of senior officers who establish policy, oversee energy risk management activities, and monitor the results of trading and other activities to ensure compliance with our stated energy risk management and trading policies. These activities include, but are not limited to, daily monitoring of market positions that create credit, liquidity and market risk. The respective oversight organizations and committees are independent from the energy procurement departments.

Along with other tools, we use Value at Risk (VaR) and liquidity metrics to measure our exposure to market risk associated with the commodity portfolios. VaR is an estimate of the potential loss on a position or portfolio of positions over a specified holding period, based on normal market conditions and within a given statistical confidence interval. A liquidity metric is intended to monitor the amount of financial resources needed for meeting potential margin calls as forward market prices move. VaR and liquidity risk metrics are calculated independently by the respective risk management oversight organizations.

The California Utilities use power and natural gas derivatives to manage natural gas and electric price risk associated with servicing load requirements. The use of power and natural gas derivatives is subject to certain limitations imposed by company policy and is in compliance with risk management and trading activity plans that have been filed with and approved by the CPUC. Any costs or gains/losses associated with the use of power and natural gas derivatives are considered to be commodity costs. Commodity costs are

generally passed on to customers as incurred. However, SoCalGas is subject to incentive mechanisms that reward or penalize the utility for commodity costs below or above certain benchmarks.

We discuss revenue recognition in Note 1 and the additional market-risk information regarding derivative instruments in Note 9 of the Notes to Consolidated Financial Statements.

We have exposure to changes in commodity prices, interest rates and foreign currency rates and exposure to counterparty nonperformance. The following discussion of these primary market-risk exposures as of December 31, 2016 includes a discussion of how these exposures are managed.

COMMODITY PRICE RISK

Market risk related to physical commodities is created by volatility in the prices and basis of certain commodities. Our various subsidiaries are exposed, in varying degrees, to price risk, primarily to prices in the natural gas and electricity markets. Our policy is to manage this risk within a framework that considers the unique markets and operating and regulatory environments of each subsidiary.

Sempra Mexico, Sempra Renewables and Sempra LNG & Midstream are generally exposed to commodity price risk indirectly through their LNG, natural gas pipeline and storage, and power generating assets and their power purchase agreements. These segments may utilize commodity transactions in the course of optimizing these assets. These transactions are typically priced based on market indices, but may also include fixed price purchases and sales of commodities. Any residual exposure is monitored as described above. A hypothetical 10-percent unfavorable change in commodity prices would not have resulted in a material change in the fair value of our commodity-based financial derivatives for these segments at December 31, 2016 and 2015. The impact of a change in energy commodity prices on our commodity-based financial derivative instruments at a point in time is not necessarily representative of the results that will be realized when the contracts are ultimately settled. Also, the impact of a change in energy commodity prices on our commodity-based financial derivative instruments does not typically include the generally offsetting impact of our underlying asset positions.

The California Utilities' market-risk exposure is limited due to CPUC-authorized rate recovery of the costs of commodity purchases, interstate and intrastate transportation, and storage activity. However, SoCalGas may, at times, be exposed to market risk as a result of incentive mechanisms that reward or penalize the utility for commodity costs below or above certain benchmarks for SoCalGas' gas cost incentive mechanism. If commodity prices were to rise too rapidly, it is likely that volumes would decline. This decline would increase the per-unit fixed costs, which could lead to further volume declines. The California Utilities manage their risk within the parameters of their market risk management framework. As of and for the year ended December 31, 2016, the total VaR of the California Utilities' natural gas and electric positions was not material, and the procurement activities were in compliance with the procurement plans filed with and approved by the CPUC.

INTEREST RATE RISK

We are exposed to fluctuations in interest rates primarily as a result of our having issued short- and long-term debt. Subject to regulatory constraints, we periodically enter into interest rate swap agreements to moderate our exposure to interest rate changes and to lower our overall costs of borrowing.

The table below shows the nominal amount of long-term debt:

NOMINAL AMOUNT OF LONG-TERM DEBT(1)

(Dollars in millions)

	December 31, 2016			December 31, 2015		
	Sempra Energy Consolidated	SDG&E	SoCalGas	Sempra Energy Consolidated	SDG&E	SoCalGas
Utility fixed-rate	$ 7,218	$ 4,209	$ 3,009	$ 6,362	$ 3,849	$ 2,513
Utility variable-rate	445	445	—	455	455	—
Non-utility fixed-rate	6,703	—	—	6,780	—	—
Non-utility variable-rate	719	—	—	166	—	—

(1) Before the effects of interest rate swaps, reductions/increases for unamortized discount/premium and reduction for debt issuance costs, and excluding capital lease obligations and build-to-suit lease.

Interest rate risk sensitivity analysis measures interest rate risk by calculating the estimated changes in earnings that would result from a hypothetical change in market interest rates. If interest rates changed by ten percent on all of Sempra Energy's effective variable-rate, long-term debt at December 31, 2016, the change in earnings over the next 12 months would be $11 million for the period ending

December 31, 2017, including $8 million at SDG&E. These hypothetical changes in earnings are based on our long-term debt position after the effect of interest rate swaps.

We provide further information about interest rate swap transactions in Note 9 of the Notes to Consolidated Financial Statements.

We also are subject to the effect of interest rate fluctuations on the assets of our pension plans, other postretirement benefit plans, and SDG&E's nuclear decommissioning trusts. However, we expect the effects of these fluctuations, as they relate to the California Utilities, to be recovered in future rates.

CREDIT RISK

Credit risk is the risk of loss that would be incurred as a result of nonperformance of our counterparties' contractual obligations. We monitor credit risk through a credit-approval process and the assignment and monitoring of credit limits. We establish these credit limits based on risk and return considerations under terms customarily available in the industry.

As with market risk, we have policies governing the management of credit risk that are administered by the respective credit departments for each of the California Utilities and, on a combined basis, for all non-CPUC regulated affiliates and overseen by their separate risk management committees.

This oversight includes calculating current and potential credit risk on a daily basis and monitoring actual balances in comparison to approved limits. We avoid concentration of counterparties whenever possible, and we believe our credit policies significantly reduce overall credit risk. These policies include an evaluation of:

- prospective counterparties' financial condition (including credit ratings)
- collateral requirements
- the use of standardized agreements that allow for the netting of positive and negative exposures associated with a single counterparty
- downgrade triggers

We believe that we have provided adequate reserves for counterparty nonperformance.

When its development projects become operational, Sempra Infrastructure relies significantly on the ability of suppliers to perform under long-term agreements and on our ability to enforce contract terms in the event of nonperformance. Also, the factors that we consider in evaluating a development project include negotiating customer and supplier agreements and, therefore, we rely on these agreements for future performance. We also may base our decision to go forward on development projects on these agreements.

As noted above in "Interest Rate Risk," we periodically enter into interest rate swap agreements to moderate exposure to interest rate changes and to lower the overall cost of borrowing. We would be exposed to interest rate fluctuations on the underlying debt should a counterparty to the swap fail to perform.

CREDIT RATINGS

The credit ratings of Sempra Energy, SDG&E and SoCalGas remained at investment grade levels in 2016. At December 31, 2016, Sempra Energy's senior unsecured debt rating remained at Baa1 with a stable outlook and SDG&E's and SoCalGas' senior unsecured debt rating remained at A1 with a stable outlook.

Sempra Energy, SDG&E and SoCalGas have committed lines of credit to provide liquidity and to support commercial paper. Borrowings under these facilities bear interest at benchmark rates plus a margin that varies with market index rates and each borrower's credit rating. Each facility also requires a commitment fee on available unused credit that may be impacted by each borrower's credit rating.

Under these committed lines, if Sempra Energy were to experience a ratings downgrade from its current level, the rate at which borrowings bear interest would increase by 25 to 50 basis points, depending on the severity of the downgrade. The commitment fee on available unused credit would also increase 5 to 10 basis points, depending on the severity of the downgrade.

Under these committed lines, if SDG&E or SoCalGas were to experience a ratings downgrade from its current level, the rate at which borrowings bear interest would increase by 12.5 to 25 basis points, depending on the severity of the downgrade. The commitment fee on available unused credit would also increase 2.5 to 5 basis points, depending on the severity of the downgrade.

For Sempra Energy and SDG&E, their credit ratings may affect credit limits related to derivative instruments, as we discuss in Note 9 of the Notes to Consolidated Financial Statements.

FOREIGN CURRENCY AND INFLATION RATE RISK

We discuss our foreign currency and inflation exposure above in "Results of Operations – Impact of Foreign Currency and Inflation Rates on Results of Operations."

The hypothetical effect for every 10 percent appreciation in the U.S. dollar against the currencies of Mexico, Chile and Peru in which we have operations and investments are as follows:

HYPOTHETICAL EFFECTS FROM 10 PERCENT STRENGTHENING OF U.S. DOLLAR

(Dollars in millions)

	Hypothetical effects
Translation of 2016 earnings to U.S. dollars(1)	$ (15)
Transactional exposure, before the effects of foreign currency derivatives(2)	54
Translation of net assets of foreign subsidiaries and investment in foreign entities(3)	(168)

(1) Amount represents the impact to earnings, primarily at our South American businesses, for a change in the average exchange rate throughout the reporting period.

(2) Amount primarily represents the effects of currency exchange rate movement from December 31, 2016 on monetary assets and liabilities and translation of non-U.S. deferred income tax balances at our Mexican subsidiaries.

(3) Amount represents the effects of currency exchange rate movement from December 31, 2016 recorded to OCI at the end of each reporting period, primarily at our South American businesses.

Monetary assets and liabilities at our Mexican subsidiaries that are denominated in U.S. dollars may fluctuate significantly throughout the year. These monetary assets and liabilities and certain nonmonetary assets and liabilities are adjusted for Mexican inflation for Mexican income tax purposes. Historically, Mexican inflation has remained below five percent. Based on a net monetary liability position of $2.3 billion, including those related to our investments in joint ventures, at December 31, 2016, the hypothetical effect of a five-percent increase in the Mexican inflation rate is approximately $23 million lower earnings as a result of higher income tax expense for our consolidated subsidiaries, as well as lower equity earnings for our joint ventures.

Impacts Related to GdC and Ventika Acquisitions

Similar to our current Mexican operations, GdC and Ventika's functional currency is the U.S. dollar, and its assets are covered by long-term, U.S. dollar-based contracts. Due to the acquisitions of the remaining 50-percent interest in GdC and Ventika by Sempra Mexico, which we discuss in Note 3 of the Notes to Consolidated Financial Statements, our exposure to foreign currency rate risk has increased and could have a material impact on our Mexican income tax expense, particularly due to translation of deferred income tax balances.

CRITICAL ACCOUNTING POLICIES AND ESTIMATES, AND KEY NONCASH PERFORMANCE INDICATORS

Management views certain accounting policies as critical because their application is the most relevant, judgmental, and/or material to our financial position and results of operations, and/or because they require the use of material judgments and estimates.

We describe our significant accounting policies in Note 1 of the Notes to Consolidated Financial Statements. We discuss choices among alternative accounting policies that are material to our financial statements and information concerning significant estimates with the audit committee of the Sempra Energy board of directors.

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

SEMPRA ENERGY, SDG&E AND SOCALGAS

CONTINGENCIES

Assumptions & Approach Used	We accrue losses for the estimated impacts of various conditions, situations or circumstances involving uncertain outcomes. For loss contingencies, we accrue the loss if an event has occurred on or before the balance sheet date and: ▪ information available through the date we file our financial statements indicates it is probable that a loss has been incurred, given the likelihood of uncertain future events, and ▪ the amount of the loss can be reasonably estimated. We do not accrue contingencies that might result in gains. We continuously assess contingencies for litigation claims, environmental remediation and other events.
Effect if Different Assumptions Used	Details of our issues in this area are discussed in Note 15 of the Notes to Consolidated Financial Statements.

REGULATORY ACCOUNTING

Assumptions & Approach Used	As regulated entities, the California Utilities' rates, as set and monitored by regulators, are designed to recover the cost of providing service and provide the opportunity to earn a reasonable return on their investments. The California Utilities record regulatory assets, which are generally costs that would otherwise be charged to expense, if it is probable that, through the ratemaking process, the utility will recover that asset from customers in future rates. Similarly, regulatory liabilities are recorded for amounts recovered in rates in advance or in excess of costs incurred. The California Utilities assess probabilities of future rate recovery associated with regulatory account balances at the end of each reporting period and whenever new and/or unusual events occur, such as: ▪ changes in the regulatory and political environment or the utility's competitive position ▪ issuance of a regulatory commission order ▪ passage of new legislation To the extent that circumstances associated with regulatory balances change, the regulatory balances are evaluated and adjusted if appropriate.
Effect if Different Assumptions Used	Adverse legislative or regulatory actions could materially impact the amounts of our regulatory assets and liabilities and could materially adversely impact our financial statements. Details of the California Utilities' regulatory assets and liabilities and additional factors that management considers when assessing probabilities associated with regulatory balances are discussed in Notes 1, 13, 14 and 15 of the Notes to Consolidated Financial Statements.

SEMPRA ENERGY, SDG&E AND SOCALGAS (CONTINUED)

INCOME TAXES

Assumptions & Approach Used	Our income tax expense and related balance sheet amounts involve significant management estimates and judgments. Amounts of deferred income tax assets and liabilities, as well as current and noncurrent accruals, involve judgments and estimates of the timing and probability of recognition of income and deductions by taxing authorities. When we evaluate the anticipated resolution of income tax issues, we consider ▪ past resolutions of the same or similar issue ▪ the status of any income tax examination in progress ▪ positions taken by taxing authorities with other taxpayers with similar issues The likelihood of deferred tax recovery is based on analyses of the deferred tax assets and our expectation of future taxable income, based on our strategic planning.
Effect if Different Assumptions Used	Actual income taxes could vary from estimated amounts because of: ▪ future impacts of various items, including changes in tax laws, regulations, interpretations and rulings ▪ our financial condition in future periods ▪ the resolution of various income tax issues between us and taxing and regulatory authorities We discuss details of our issues in this area in Note 6 of the Notes to Consolidated Financial Statements.

Assumptions & Approach Used	For an uncertain position to qualify for benefit recognition, the position must have at least a “more likely than not” chance of being sustained (based on the position’s technical merits) upon challenge by the respective authorities. The term “more likely than not” means a likelihood of more than 50 percent. If we do not have a more likely than not position with respect to a tax position, then we do not recognize any of the potential tax benefit associated with the position. A tax position that meets the “more likely than not” recognition is measured as the largest amount of tax benefit that is greater than 50 percent likely of being realized upon the effective resolution of the tax position.
Effect if Different Assumptions Used	Unrecognized tax benefits involve management’s judgment regarding the likelihood of the benefit being sustained. The final resolution of uncertain tax positions could result in adjustments to recorded amounts and may affect our results of operations, financial position and cash flows. We discuss additional information related to accounting for uncertainty in income taxes in Note 6 of the Notes to Consolidated Financial Statements.

DERIVATIVES

Assumptions & Approach Used	We record derivative instruments at fair value on the balance sheet. Depending on the purpose for the contract and the applicability of hedge accounting, the impact of instruments may be offset in earnings, on the balance sheet, or in other comprehensive income. We also use normal purchase or sale accounting for certain contracts. As discussed elsewhere in this report, whenever possible, we use exchange quoted prices or other third-party pricing to estimate fair values; if no such data is available, we use internally developed models and other techniques. The assumed collectability of derivative assets and receivables considers ▪ events specific to a given counterparty ▪ the tenor of the transaction ▪ the credit-worthiness of the counterparty
Effect if Different Assumptions Used	The application of hedge accounting to certain derivatives and the normal purchase or sale accounting election are made on a contract-by-contract basis. Using hedge accounting or the normal purchase or sale election in a different manner could materially impact Sempra Energy’s results of operations. However, such alternatives would not have a significant impact on the California Utilities’ results of operations because regulatory accounting principles generally apply to their contracts. We provide details of our derivative financial instruments in Note 9 of the Notes to Consolidated Financial Statements.

SEMPRA ENERGY, SDG&E AND SOCALGAS (CONTINUED)

DEFINED BENEFIT PLANS

Assumptions & Approach Used	To measure our pension and other postretirement obligations, costs and liabilities, we rely on several assumptions. We consider current market conditions, including interest rates, in making these assumptions. We review these assumptions annually and update when appropriate. The critical assumptions used to develop the required estimates include the following key factors: ▪ discount rates ▪ expected return on plan assets ▪ health care cost trend rates ▪ mortality rates ▪ rate of compensation increases ▪ termination and retirement rates ▪ utilization of postretirement welfare benefits ▪ payout elections (lump sum or annuity) ▪ lump sum interest rates

Effect if Different Assumptions Used	The actuarial assumptions we use may differ materially from actual results due to: ▪ return on plan assets ▪ changing market and economic conditions ▪ higher or lower withdrawal rates ▪ longer or shorter participant life spans ▪ more or fewer lump sum versus annuity payout elections made by plan participants ▪ retirement rates These differences, other than those related to the California Utilities' plans, where rate recovery offsets the effects of the assumptions on earnings, may result in a significant impact to the amount of pension and postretirement benefit expense we record. For plans other than those at the California Utilities, the approximate annual effect on earnings of a 100 basis point increase or decrease in the assumed discount rate would be less than $2 million and the effect of a 100 basis point increase or decrease in the assumed rate of return on plan assets would be less than $2 million. We provide additional information, including the impact of increases and decreases in the health care cost trend rate, in Note 7 of the Notes to Consolidated Financial Statements.

SEMPRA ENERGY AND SDG&E

ASSET RETIREMENT OBLIGATIONS

Assumptions & Approach Used	SDG&E's legal asset retirement obligations (AROs) related to the decommissioning of SONGS are estimated based on a site specific study performed no less than every three years. The estimate of the obligations includes ▪ estimated decommissioning costs, including labor, equipment, material and other disposal costs ▪ inflation adjustment applied to estimated cash flows ▪ discount rate based on a credit-adjusted risk-free rate ▪ actual decommissioning costs, progress to date and expected duration of decommissioning activities
Effect if Different Assumptions Used	Changes in the estimated decommissioning costs, or in the assumptions and judgments made by management underlying these estimates, could cause revisions to the estimated total cost associated with retiring the assets. SDG&E's nuclear decommissioning expenses are subject to rate recovery and, therefore, rate-making accounting treatment is applied to SDG&E's nuclear decommissioning activities. SDG&E recognizes a regulatory asset, or liability, to the extent that its SONGS ARO exceeds, or is less than, the amount collected from customers and the amount earned in SDG&E's Nuclear Decommissioning Trusts. We provide additional detail in Notes 13 and 15 of the Notes to the Consolidated Financial Statements.

SEMPRA ENERGY

IMPAIRMENT TESTING OF LONG-LIVED ASSETS, INCLUDING INTANGIBLE ASSETS

Assumptions & Approach Used	Whenever events or changes in circumstances indicate that an asset's carrying amount may not be recoverable, we consider if the estimated future undiscounted cash flows are less than the carrying amount of the assets. If so, we estimate the fair value of these assets to determine the extent to which cost exceeds fair value. For these estimates, we may consider data from multiple valuation methods, including data from market participants. We exercise judgment to estimate the future cash flows and the useful lives of long-lived assets and to determine our intent to use the assets. Our intent to use or dispose of assets is subject to re-evaluation and can change over time.
Effect if Different Assumptions Used	If an impairment test is required, the fair value of long-lived assets can vary if differing estimates and assumptions are used in the valuation techniques applied as indicated by changing market or other conditions. We discuss impairment of long-lived assets in Note 1 of the Notes to Consolidated Financial Statements.

IMPAIRMENT TESTING OF GOODWILL

Assumptions & Approach Used	On an annual basis or whenever events or changes in circumstances necessitate an evaluation, we consider whether goodwill may be impaired. For our annual goodwill impairment testing, we have the option to first make a qualitative assessment of whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount before applying the two-step, quantitative goodwill impairment test. If we elect to perform the qualitative assessment, we evaluate relevant events and circumstances, including but not limited to, macroeconomic conditions, industry and market considerations, cost factors, changes in key personnel and the overall financial performance of the reporting unit. If, after assessing these qualitative factors, we determine that it is more likely than not that the fair value of a reporting unit is less than its carrying amount, then we perform the two-step goodwill impairment test. When we perform the two-step, quantitative goodwill impairment test, we exercise judgment to develop estimates of the fair value of the reporting unit and compare that to the carrying value. Our fair value estimates are developed from the perspective of a knowledgeable market participant. We consider observable transactions in the marketplace for similar investments, if available, as well as an income-based approach such as discounted cash flow analysis. A discounted cash flow analysis may be based directly on anticipated future revenues and expenses and may be performed based on free cash flows generated within the reporting unit. Critical assumptions that affect our estimates of fair value may include ▪ consideration of market transactions ▪ future cash flows ▪ the appropriate risk-adjusted discount rate ▪ country risk ▪ entity risk
Effect if Different Assumptions Used	When we choose to make a qualitative assessment as discussed above, the two-step, quantitative goodwill impairment test is not required if we determine that it is not more likely than not that the fair value of a reporting unit is less than its carrying amount. If we conclude that it is more likely than not that the fair value of a reporting unit is less than its carrying amount or when we choose to proceed directly to the two-step, quantitative goodwill impairment test, the test requires us to first determine if the carrying value of a reporting unit exceeds its fair value and if so, to measure the amount of goodwill impairment, if any. When determining if goodwill is impaired, the fair value of the reporting unit and goodwill can vary if differing estimates and assumptions are used in the valuation techniques applied as indicated by changing market or other conditions. As a result, recognizing a goodwill impairment may or may not be required. Based on our qualitative assessment, we determined that it is more likely than not that the estimated fair values of the reporting units to which goodwill was allocated exceeded their carrying values as of October 1, 2016, our most recent goodwill impairment testing date. We discuss goodwill in Note 1 of the Notes to Consolidated Financial Statements.

SEMPRA ENERGY (CONTINUED)

CARRYING VALUE OF EQUITY METHOD INVESTMENTS

Assumptions & Approach Used	We generally account for investments under the equity method when we have significant influence over, but do not have control of, the investee. We consider whether the fair value of each equity investment as a whole, not the underlying net assets, has declined and whether that decline is other than temporary. To help evaluate whether a decline in fair value below cost has occurred and if the decline is other than temporary, we may develop fair value estimates for the investment. Our fair value estimates are developed from the perspective of a knowledgeable market participant. In the absence of observable transactions in the marketplace for similar investments, we consider an income-based approach such as discounted cash flow analysis or, with less weighting, the replacement cost of the underlying net assets. A discounted cash flow analysis may be based directly on anticipated future distributions from the investment, or may be performed based on free cash flows generated within the entity and adjusted for our ownership share total. When calculating estimates of fair or realizable values, we also consider whether we intend to hold or sell the investment. For certain investments, critical assumptions may include ▪ equity sale offer price for the investment ▪ transportation rates for natural gas ▪ the appropriate risk-adjusted discount rate ▪ the availability and costs of natural gas and liquefied natural gas ▪ competing fuels (primarily propane) and electricity ▪ estimated future power generation and associated tax credits ▪ renewable power price expectations
Effect if Different Assumptions Used	The risk assumptions applied by other market participants to value the investments could vary significantly or the appropriate approaches could be weighted differently. These differences could impact whether or not the fair value of the investment is less than its cost, and if so, whether that condition is other than temporary. This could result in an impairment charge or a different amount of impairment charge, and, in cases where an impairment charge has been recorded, additional loss or gain upon sale. We provide additional details in Notes 4 and 10 of the Notes to Consolidated Financial Statements.

KEY NONCASH PERFORMANCE INDICATORS

A discussion of key noncash performance indicators related to each segment follows.

California Utilities

Key noncash performance indicators include number of customers, natural gas volumes transported and sold and electricity sold. Additional noncash performance indicators include goals related to safety, customer service, customer reputation, environmental considerations (including quantities of renewable energy purchases), on-time and on-budget completion of major projects and initiatives, and service reliability. We discuss natural gas volumes and electricity sold in "Results of Operations – Changes in Revenues, Costs and Earnings" above.

Sempra South American Utilities

Key noncash performance indicators for our South American distribution operations are customer count and consumption. Additional noncash performance indicators include goals related to safety, environmental considerations, electric reliability, and regulatory compliance.

Sempra Mexico

Key noncash performance indicators for Sempra Mexico include natural gas sales volume, facility availability, capacity utilization and, for its distribution operations, customer count and consumption. Additional noncash performance indicators include obtaining and completing major projects and goals related to safety, environmental considerations and regulatory performance.

Sempra LNG & Midstream

Key noncash performance indicators at Sempra LNG & Midstream include natural gas sales volume, facility availability and capacity utilization. Additional noncash performance indicators include goals related to safety, environmental considerations and regulatory compliance.

Electric Generation Facilities (Sempra Mexico and Sempra Renewables)

Key noncash performance indicators include capacity factors, plant availability and sales volume at our renewable energy facilities. For competitive reasons, we do not disclose capacity factors and plant availability. Additional noncash performance indicators include goals related to safety, environmental considerations, and compliance with reliability standards.

LNG Facilities (Sempra Mexico and Sempra LNG & Midstream)

Key noncash performance indicators include plant availability and capacity utilization. Additional noncash performance indicators include goals related to safety, environmental considerations, regulatory compliance, and on-time and on-budget completion of development projects.

NEW ACCOUNTING STANDARDS

We discuss the relevant pronouncements that have recently become effective and have had or may have a significant effect on our financial statements in Note 2 of the Notes to Consolidated Financial Statements.

INFORMATION REGARDING FORWARD-LOOKING STATEMENTS

We make statements in this report that are not historical fact and constitute forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements are based upon assumptions with respect to the future, involve risks and uncertainties, and are not guarantees of performance. These forward-looking statements represent our estimates and assumptions only as of the filing date of this report. We assume no obligation to update or revise any forward-looking statement as a result of new information, future events or other factors.

In this report, when we use words such as "believes," "expects," "anticipates," "plans," "estimates," "projects," "forecasts," "contemplates," "assumes," "depends," "should," "could," "would," "will," "confident," "may," "potential," "possible," "proposed," "target," "pursue," "outlook," "maintain," or similar expressions, or when we discuss our guidance, strategy, plans, goals, opportunities, projections, initiatives, objectives or intentions, we are making forward-looking statements.

Factors, among others, that could cause our actual results and future actions to differ materially from those described in forward-looking statements include

- actions and the timing of actions, including decisions, new regulations, and issuances of permits and other authorizations by the California Public Utilities Commission, U.S. Department of Energy, California Division of Oil, Gas, and Geothermal Resources, Federal Energy Regulatory Commission, U.S. Environmental Protection Agency, Pipeline and Hazardous Materials Safety

Administration, Los Angeles County Department of Public Health, states, cities and counties, and other regulatory and governmental bodies in the United States and other countries in which we operate;

- the timing and success of business development efforts and construction projects, including risks in obtaining or maintaining permits and other authorizations on a timely basis, risks in completing construction projects on schedule and on budget, and risks in obtaining the consent and participation of partners;
- the resolution of civil and criminal litigation and regulatory investigations;
- deviations from regulatory precedent or practice that result in a reallocation of benefits or burdens among shareholders and ratepayers; modifications of settlements; and delays in, or disallowance or denial of, regulatory agency authorizations to recover costs in rates from customers (including with respect to regulatory assets associated with the San Onofre Nuclear Generating Station facility and 2007 wildfires) or regulatory agency approval for projects required to enhance safety and reliability;
- the availability of electric power, natural gas and liquefied natural gas, and natural gas pipeline and storage capacity, including disruptions caused by failures in the transmission grid, moratoriums on the withdrawal or injection of natural gas from or into storage facilities, and equipment failures;
- changes in energy markets; volatility in commodity prices; moves to reduce or eliminate reliance on natural gas; and the impact on the value of our investment in natural gas storage and related assets from low natural gas prices, low volatility of natural gas prices and the inability to procure favorable long-term contracts for storage services;
- risks posed by actions of third parties who control the operations of our investments, and risks that our partners or counterparties will be unable or unwilling to fulfill their contractual commitments;
- weather conditions, natural disasters, accidents, equipment failures, explosions, terrorist attacks and other events that disrupt our operations, damage our facilities and systems, cause the release of greenhouse gases, radioactive materials and harmful emissions, cause wildfires and subject us to third-party liability for property damage or personal injuries, fines and penalties, some of which may not be covered by insurance (including costs in excess of applicable policy limits) or may be disputed by insurers;
- cybersecurity threats to the energy grid, storage and pipeline infrastructure, the information and systems used to operate our businesses and the confidentiality of our proprietary information and the personal information of our customers and employees;
- the ability to win competitively bid infrastructure projects against a number of strong and aggressive competitors;
- capital markets and economic conditions, including the availability of credit and the liquidity of our investments; fluctuations in inflation, interest and currency exchange rates and our ability to effectively hedge the risk of such fluctuations;
- changes in the tax code as a result of potential federal tax reform, such as the elimination of the deduction for interest and non-deductibility of all, or a portion of, the cost of imported materials, equipment and commodities;
- changes in foreign and domestic trade policies and laws, including border tariffs, revisions to favorable international trade agreements, and changes that make our exports less competitive or otherwise restrict our ability to export;
- expropriation of assets by foreign governments and title and other property disputes;
- the impact on reliability of San Diego Gas & Electric Company's (SDG&E) electric transmission and distribution system due to increased amount and variability of power supply from renewable energy sources;
- the impact on competitive customer rates due to the growth in distributed and local power generation and the corresponding decrease in demand for power delivered through SDG&E's electric transmission and distribution system and from possible departing retail load resulting from customers transferring to Direct Access and Community Choice Aggregation; and
- other uncertainties, some of which may be difficult to predict and are beyond our control.

We caution you not to rely unduly on any forward-looking statements. You should review and consider carefully the risks, uncertainties and other factors that affect our business as described herein and in our 2016 Annual Report on Form 10-K and other reports that we file with the Securities and Exchange Commission.

COMMON STOCK DATA

SEMPRA ENERGY COMMON STOCK

Our common stock is traded on the New York Stock Exchange. At February 21, 2017, there were approximately 28,367 record holders of our common stock.

The following table shows Sempra Energy quarterly common stock data:

QUARTERLY COMMON STOCK DATA

	First quarter	Second quarter	Third quarter	Fourth quarter
2016				
Market price				
High	$ 104.70	$ 114.03	$ 114.66	$ 109.42
Low	$ 86.72	$ 100.40	$ 102.15	$ 92.95
2015				
Market price				
High	$ 116.21	$ 111.09	$ 106.70	$ 105.78
Low	$ 104.64	$ 98.67	$ 89.44	$ 90.52

We declared dividends of $0.755 per share and $0.70 per share in each quarter of 2016 and 2015, respectively. On February 23, 2017, our board of directors approved an increase to our quarterly common stock dividend to $0.8225 per share ($3.29 annually), an increase of $0.0675 per share ($0.27 annually) from $0.755 per share ($3.02 annually) authorized in February 2016.

SOCALGAS AND SDG&E COMMON STOCK

PE, a wholly owned subsidiary of Sempra Energy, owns all of SoCalGas' outstanding common stock. Enova, a wholly owned subsidiary of Sempra Energy, owns all of SDG&E's issued and outstanding common stock.

Information concerning dividend declarations for SoCalGas and SDG&E is included in their Statements of Changes in Shareholders' Equity and Statements of Changes in Equity, respectively, set forth in the Consolidated Financial Statements.

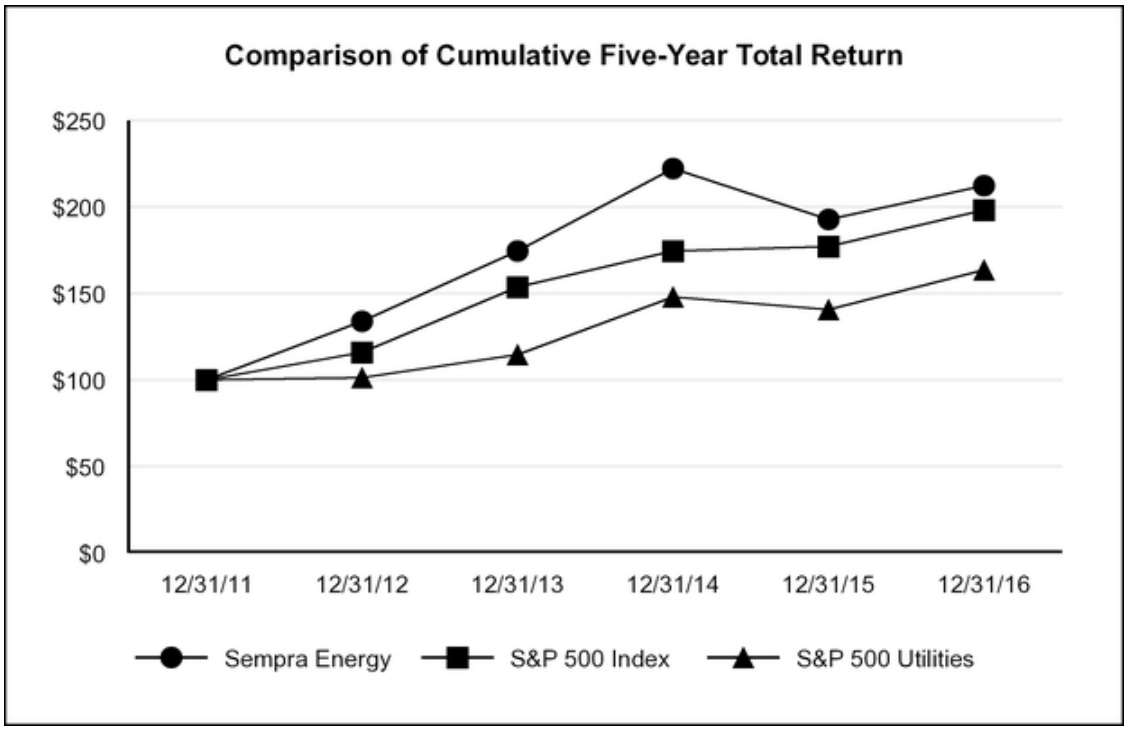
DIVIDEND RESTRICTIONS

The payment and the amount of future dividends for Sempra Energy, SDG&E, and SoCalGas are within the discretion of their boards of directors. The CPUC's regulation of the California Utilities' capital structures limits the amounts that the California Utilities can pay us in the form of loans and dividends. We discuss these matters in Note 1 of the Notes to the Consolidated Financial Statements in "Restricted Net Assets" and in "Management's Discussion and Analysis of Financial Condition and Results of Operations – Capital Resources and Liquidity – Dividends."

PERFORMANCE GRAPH – COMPARATIVE TOTAL SHAREHOLDER RETURNS

The following graph compares the percentage change in the cumulative total shareholder return on Sempra Energy common stock for the five-year period ended December 31, 2016, with the performance over the same period of the Standard & Poor's (S&P) 500 Index and the Standard & Poor's 500 Utilities Index.

These returns were calculated assuming an initial investment of $100 in our common stock, the S&P 500 Index and the S&P 500 Utilities Index on December 31, 2011, and the reinvestment of all dividends.



FIVE-YEAR SUMMARIES

The following tables present selected financial data of Sempra Energy, SDG&E and SoCalGas for the five years ended December 31, 2016. The data is derived from the audited consolidated financial statements of each company. You should read this information in conjunction with “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and the consolidated financial statements and notes contained in this Annual Report.

FIVE-YEAR SUMMARY OF SELECTED FINANCIAL DATA – SEMPRA ENERGY CONSOLIDATED

(In millions, except per share amounts)

	At December 31 or for the years then ended				
	2016	2015	2014	2013	2012
Revenues					
Utilities:					
Electric	$ 5,211	$ 5,158	$ 5,209	$ 4,911	$ 4,568
Natural gas	4,050	4,096	4,549	4,398	3,873
Energy-related businesses	922	977	1,277	1,248	1,206
Total revenues	$ 10,183	$ 10,231	$ 11,035	$ 10,557	$ 9,647
Income from continuing operations	$ 1,519	$ 1,448	$ 1,262	$ 1,088	$ 920
Earnings from continuing operations attributable to noncontrolling interests	(148)	(98)	(100)	(79)	(55)
Call premium on preferred stock of subsidiary	—	—	—	(3)	—
Preferred dividends of subsidiaries	(1)	(1)	(1)	(5)	(6)
Earnings/Income from continuing operations attributable to common shares	$ 1,370	$ 1,349	$ 1,161	$ 1,001	$ 859
Attributable to common shares:					
Earnings/Income from continuing operations					
Basic	$ 5.48	$ 5.43	$ 4.72	$ 4.10	$ 3.56
Diluted	$ 5.46	$ 5.37	$ 4.63	$ 4.01	$ 3.48
Dividends declared per common share	$ 3.02	$ 2.80	$ 2.64	$ 2.52	$ 2.40
Return on common equity	11.1%	11.7%	10.4%	9.4%	8.6%
Effective income tax rate	21%	20%	20%	26%	6%
Price range of common shares:					
High	$ 114.66	$ 116.21	$ 116.30	$ 93.00	$ 72.87
Low	$ 86.72	$ 89.44	$ 86.73	$ 70.61	$ 54.70
Weighted average rate base:					
SDG&E	$ 8,019	$ 7,671	$ 7,253	$ 7,244	$ 6,295
SoCalGas	$ 4,775	$ 4,269	$ 3,879	$ 3,499	$ 3,178
AT DECEMBER 31					
Current assets	$ 3,110	$ 2,891	$ 4,184	$ 3,997	$ 3,695
Total assets	$ 47,786	$ 41,150	$ 39,651	$ 37,165	$ 36,412
Current liabilities	$ 5,927	$ 4,612	$ 5,069	$ 4,369	$ 4,258
Long-term debt (excludes current portion)(1)	$ 14,429	$ 13,134	$ 12,086	$ 11,174	$ 11,534
Short-term debt(2)	$ 2,692	$ 1,529	$ 2,202	$ 1,692	$ 1,271
Contingently redeemable preferred stock of subsidiary(3)	$ —	$ —	$ —	$ —	$ 79
Sempra Energy shareholders' equity	$ 12,951	$ 11,809	$ 11,326	$ 11,008	$ 10,282
Common shares outstanding	250.2	248.3	246.3	244.5	242.4
Book value per share	$ 51.77	$ 47.56	$ 45.98	$ 45.03	$ 42.43

(1) Includes capital lease obligations.

(2) Includes long-term debt due within one year and current portion of capital lease obligations.

(3) SDG&E redeemed all series of its outstanding shares of contingently redeemable stock in 2013.

In September 2016, Sempra Mexico recorded a $350 million noncash gain associated with the remeasurement of our equity interest in GdC.

In 2016 and 2013, a Sempra Energy subsidiary, IEnova, completed private offerings in the U.S. and outside of Mexico and a concurrent public offering in Mexico of common stock. We discuss IEnova further in Note 1 of the Notes to Consolidated Financial Statements.

In October 2014, Cameron LNG JV, a joint venture between Sempra LNG & Midstream and its partners in the Cameron LNG liquefaction project, became effective. Sempra LNG & Midstream accounts for its investment in the joint venture under the equity method. We discuss Cameron LNG JV further in "Our Business" and "Factors Influencing Future Performance" in "Management's

Discussion and Analysis of Financial Condition and Results of Operations" above and in Notes 3 and 4 of the Notes to Consolidated Financial Statements.

In 2013, we recorded a $119 million loss from plant closure related to SDG&E's investment in SONGS. We discuss SONGS further in Note 13 of the Notes to Consolidated Financial Statements.

In 2012, we recorded $239 million in impairment charges related to our investment in the Rockies Express joint venture. We discuss Rockies Express further in Notes 4 and 10 of the Notes to Consolidated Financial Statements.

We discuss litigation and other contingencies in Note 15 of the Notes to Consolidated Financial Statements.

FIVE-YEAR SUMMARIES OF SELECTED FINANCIAL DATA – SDG&E AND SOCALGAS

(Dollars in millions)

	At December 31 or for the years then ended				
	2016	2015	2014	2013	2012
SDG&E:					
Statement of Operations Data:					
Operating revenues	$ 4,253	$ 4,219	$ 4,329	$ 4,066	$ 3,694
Operating income	990	1,058	959	782	809
Dividends on preferred stock	—	—	—	4	5
Earnings attributable to common shares	570	587	507	404	484
Balance Sheet Data:					
Total assets	$ 17,719	$ 16,515	$ 16,260	$ 15,337	$ 14,705
Long-term debt (excludes current portion)(1)	4,658	4,455	4,283	4,485	4,253
Short-term debt(2)	191	218	611	88	16
Contingently redeemable preferred stock(3)	—	—	—	—	79
SDG&E shareholder's equity	5,641	5,223	4,932	4,628	4,222
SoCalGas:					
Statement of Operations Data:					
Operating revenues	$ 3,471	$ 3,489	$ 3,855	$ 3,736	$ 3,282
Operating income	557	608	521	539	420
Dividends on preferred stock	1	1	1	1	1
Earnings attributable to common shares	349	419	332	364	289
Balance Sheet Data:					
Total assets	$ 13,424	$ 12,104	$ 10,446	$ 9,138	$ 9,062
Long-term debt (excludes current portion)(1)	2,982	2,481	1,891	1,150	1,400
Short-term debt(2)	62	9	50	294	4
SoCalGas shareholders' equity	3,510	3,149	2,781	2,549	2,235

(1) Includes capital lease obligations.
(2) Includes long-term debt due within one year and current portion of capital lease obligations.
(3) SDG&E redeemed all series of its outstanding shares of contingently redeemable stock in 2013.

In 2013, SDG&E recorded a $119 million loss from plant closure related to its investment in SONGS.

We discuss litigation and other contingencies in Note 15 of the Notes to Consolidated Financial Statements.

CONTROLS AND PROCEDURES

EVALUATION OF DISCLOSURE CONTROLS AND PROCEDURES

SEMPRA ENERGY, SDG&E, SOCALGAS

Sempra Energy, SDG&E and SoCalGas have designed and maintain disclosure controls and procedures to ensure that information required to be disclosed in their respective reports is recorded, processed, summarized and reported within the time periods specified in the rules and forms of the Securities and Exchange Commission and is accumulated and communicated to the management of each

company, including each respective Chief Executive Officer and Chief Financial Officer, to allow timely decisions regarding required disclosure. In designing and evaluating these controls and procedures, the management of each company recognizes that any system of controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives; therefore, the management of each company applies judgment in evaluating the cost-benefit relationship of other possible controls and procedures.

Under the supervision and with the participation of management, including the Chief Executive Officers and Chief Financial Officers of Sempra Energy, SDG&E and SoCalGas, each company evaluated the effectiveness of the design and operation of its disclosure controls and procedures as of December 31, 2016, the end of the period covered by this report. As discussed below, we excluded Ventika, S.A.P.I. de C.V. and Ventika II, S.A.P.I. de C.V. (collectively, Ventika), and Gasoductos de Chihuahua S. de R.L. de C.V. (GdC) from our evaluation of Sempra Energy's disclosure controls and procedures, to the extent subsumed by Ventika's and GdC's internal control over financial reporting. Based on these evaluations, the Chief Executive Officers and Chief Financial Officers of Sempra Energy, SDG&E and SoCalGas concluded that their respective company's disclosure controls and procedures were effective at the reasonable assurance level.

MANAGEMENT'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

SEMPRA ENERGY, SDG&E, SOCALGAS

The respective management of each company is responsible for establishing and maintaining adequate internal control over financial reporting, as defined in Exchange Act Rules 13a-15(f). Under the supervision and with the participation of the management of each company, including each company's principal executive officer and principal financial officer, the effectiveness of each company's internal control over financial reporting was evaluated based on the framework in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on the evaluations, each company concluded that its internal control over financial reporting was effective as of December 31, 2016. Deloitte & Touche LLP audited the effectiveness of each company's internal control over financial reporting as of December 31, 2016, as stated in their reports, which are included in this Annual Report.

Other than the changes which may be associated with the acquisitions described below (which did not impact SDG&E or SoCalGas), there have been no changes in the companies' internal control over financial reporting during the most recent fiscal quarter that have materially affected, or are reasonably likely to materially affect, the companies' internal control over financial reporting.

As we discuss in Note 3 of the Notes to Consolidated Financial Statements, we acquired Ventika, S.A.P.I. de C.V. and Ventika II, S.A.P.I. de C.V. (collectively, Ventika) in December 2016 and the remaining 50-percent interest in Gasoductos de Chihuahua S. de R.L. de C.V. (GdC), in September 2016. The carrying value of Ventika's net assets was $314 million or 2.1 percent of Sempra Energy's net assets at December 31, 2016. Ventika's earnings from the date of acquisition through December 31, 2016 were $3 million or 0.2 percent of total Sempra Energy earnings for the year ended December 31, 2016. The carrying value of GdC's net assets was $2.4 billion or 15.6 percent of Sempra Energy's net assets at December 31, 2016. GdC's earnings from the date of acquisition through December 31, 2016 were $33 million or 2.4 percent of total Sempra Energy earnings for the year ended December 31, 2016. We are in the process of integrating Ventika and GdC. Our management is analyzing, evaluating and, where necessary, will implement changes in, Ventika's and GdC's controls and procedures. Due to the limited period of time since the acquisition dates, we have not had sufficient time to assess the internal controls of Ventika and GdC for the year ended December 31, 2016. Therefore, we excluded Ventika and GdC from our evaluation of internal control over financial reporting contained in this annual report and from our evaluation of disclosure controls and procedures above, to the extent subsumed by Ventika's and GdC's internal control over financial reporting. We intend to include Ventika and GdC in the overall assessment of, and report on, internal control over financial reporting as soon as practicable, but in no event later than one year from the respective acquisition dates.

CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

SEMPRA ENERGY

To the Board of Directors and Shareholders of Sempra Energy:

We have audited the internal control over financial reporting of Sempra Energy and subsidiaries (the "Company") as of December 31, 2016, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. As described in Management's Report on Internal Control over Financial Reporting, management excluded from its assessment the internal control over financial reporting at Gasoductos de Chihuahua S. de R.L. de C.V. (GdC), and Ventika, S.A.P.I. de C.V. and Ventika II, S.A.P.I. de C.V. (collectively, Ventika), which were acquired in September 2016, and December 2016, respectively. The carrying value of GdC's net assets was $2.4 billion or 15.6 percent of Sempra Energy's net assets at December 31, 2016. GdC's earnings from the date of acquisition through December 31, 2016 were $33 million or 2.4 percent of total Sempra Energy earnings for the year ended December 31, 2016. The carrying value of Ventika's net assets was $314 million or 2.1 percent of Sempra Energy's net assets at December 31, 2016. Ventika's earnings from the date of acquisition through December 31, 2016 were $3 million or 0.2 percent of total Sempra Energy earnings for the year ended December 31, 2016. Accordingly, our audit did not include the internal control over financial reporting at GdC and Ventika. The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed by, or under the supervision of, the company's principal executive and principal financial officers, or persons performing similar functions, and effected by the company's board of directors, management, and other personnel to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of the inherent limitations of internal control over financial reporting, including the possibility of collusion or improper management override of controls, material misstatements due to error or fraud may not be prevented or detected on a timely basis. Also, projections of any evaluation of the effectiveness of the internal control over financial reporting to future periods are subject to the risk that the controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2016, based on the criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated financial statements as of and for the year ended December 31, 2016 of the Company and our report dated February 28, 2017 expressed an unqualified opinion on those financial statements.

/s/ DELOITTE & TOUCHE LLP

San Diego, California
February 28, 2017

To the Board of Directors and Shareholders of Sempra Energy:

We have audited the accompanying consolidated balance sheets of Sempra Energy and subsidiaries (the "Company") as of December 31, 2016 and 2015, and the related consolidated statements of operations, comprehensive income (loss), changes in equity, and cash flows for each of the three years in the period ended December 31, 2016. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, such consolidated financial statements present fairly, in all material respects, the financial position of Sempra Energy and subsidiaries as of December 31, 2016 and 2015, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2016, in conformity with accounting principles generally accepted in the United States of America.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the Company's internal control over financial reporting as of December 31, 2016, based on the criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated February 28, 2017 expressed an unqualified opinion on the Company's internal control over financial reporting.

/s/ DELOITTE & TOUCHE LLP

San Diego, California
February 28, 2017

SAN DIEGO GAS & ELECTRIC COMPANY

To the Board of Directors and Shareholder of San Diego Gas & Electric Company:

We have audited the internal control over financial reporting of San Diego Gas & Electric Company (the "Company") as of December 31, 2016, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed by, or under the supervision of, the company's principal executive and principal financial officers, or persons performing similar functions, and effected by the company's board of directors, management, and other personnel to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of the inherent limitations of internal control over financial reporting, including the possibility of collusion or improper management override of controls, material misstatements due to error or fraud may not be prevented or detected on a timely basis. Also, projections of any evaluation of the effectiveness of the internal control over financial reporting to future periods are subject to the risk that the controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2016, based on the criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated financial statements as of and for the year ended December 31, 2016 of the Company and our report dated February 28, 2017 expressed an unqualified opinion on those financial statements.

/s/ DELOITTE & TOUCHE LLP

San Diego, California
February 28, 2017

To the Board of Directors and Shareholder of San Diego Gas & Electric Company:

We have audited the accompanying consolidated balance sheets of San Diego Gas & Electric Company (the "Company") as of December 31, 2016 and 2015, and the related consolidated statements of operations, comprehensive income (loss), changes in equity, and cash flows for each of the three years in the period ended December 31, 2016. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, such consolidated financial statements present fairly, in all material respects, the financial position of San Diego Gas & Electric Company as of December 31, 2016 and 2015, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2016, in conformity with accounting principles generally accepted in the United States of America.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the Company's internal control over financial reporting as of December 31, 2016, based on the criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated February 28, 2017 expressed an unqualified opinion on the Company's internal control over financial reporting.

/s/ DELOITTE & TOUCHE LLP

San Diego, California
February 28, 2017

SOUTHERN CALIFORNIA GAS COMPANY

To the Board of Directors and Shareholders of Southern California Gas Company:

We have audited the internal control over financial reporting of Southern California Gas Company (the "Company") as of December 31, 2016, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed by, or under the supervision of, the company's principal executive and principal financial officers, or persons performing similar functions, and effected by the company's board of directors, management, and other personnel to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of the inherent limitations of internal control over financial reporting, including the possibility of collusion or improper management override of controls, material misstatements due to error or fraud may not be prevented or detected on a timely basis. Also, projections of any evaluation of the effectiveness of the internal control over financial reporting to future periods are subject to the risk that the controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2016, based on the criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the financial statements as of and for the year ended December 31, 2016 of the Company and our report dated February 28, 2017 expressed an unqualified opinion on those financial statements.

/s/ DELOITTE & TOUCHE LLP

San Diego, California
February 28, 2017

To the Board of Directors and Shareholders of Southern California Gas Company:

We have audited the accompanying balance sheets of Southern California Gas Company (the "Company") as of December 31, 2016 and 2015, and the related statements of operations, comprehensive income (loss), changes in shareholders' equity, and cash flows for each of the three years in the period ended December 31, 2016. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, such financial statements present fairly, in all material respects, the financial position of Southern California Gas Company as of December 31, 2016 and 2015, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2016, in conformity with accounting principles generally accepted in the United States of America.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the Company's internal control over financial reporting as of December 31, 2016, based on the criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated February 28, 2017 expressed an unqualified opinion on the Company's internal control over financial reporting.

/s/ DELOITTE & TOUCHE LLP

San Diego, California
February 28, 2017

SEMPRA ENERGY
CONSOLIDATED STATEMENTS OF OPERATIONS
(Dollars in millions, except per share amounts)

	Years ended December 31,		
	2016	2015	2014
REVENUES			
Utilities	$ 9,261	$ 9,254	$ 9,758
Energy-related businesses	922	977	1,277
Total revenues	10,183	10,231	11,035
EXPENSES AND OTHER INCOME			
Utilities:			
Cost of electric fuel and purchased power	(2,188)	(2,136)	(2,281)
Cost of natural gas	(1,067)	(1,134)	(1,758)
Energy-related businesses:			
Cost of natural gas, electric fuel and purchased power	(277)	(335)	(552)
Other cost of sales	(322)	(148)	(163)
Operation and maintenance	(2,970)	(2,886)	(2,935)
Depreciation and amortization	(1,312)	(1,250)	(1,156)
Franchise fees and other taxes	(426)	(423)	(408)
Impairment losses	(153)	(9)	—
Plant closure adjustment (loss)	—	26	(6)
Gain on sale of assets	134	70	62
Equity earnings, before income tax	6	104	81
Remeasurement of equity method investment	617	—	—
Other income, net	132	126	137
Interest income	26	29	22
Interest expense	(553)	(561)	(554)
Income before income taxes and equity earnings of certain unconsolidated subsidiaries	1,830	1,704	1,524
Income tax expense	(389)	(341)	(300)
Equity earnings, net of income tax	78	85	38
Net income	1,519	1,448	1,262
Earnings attributable to noncontrolling interests	(148)	(98)	(100)
Preferred dividends of subsidiary	(1)	(1)	(1)
Earnings	$ 1,370	$ 1,349	$ 1,161
Basic earnings per common share	$ 5.48	$ 5.43	$ 4.72
Weighted-average number of shares outstanding, basic (thousands)	250,217	248,249	245,891
Diluted earnings per common share	$ 5.46	$ 5.37	$ 4.63
Weighted-average number of shares outstanding, diluted (thousands)	251,155	250,923	250,655

See Notes to Consolidated Financial Statements.

SEMPRA ENERGY

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)

(Dollars in millions)

	Years ended December 31, 2016, 2015 and 2014				
	Sempra Energy shareholders' equity				
	Pretax amount	Income tax (expense) benefit	Net-of-tax amount	Noncontrolling interests (after-tax)	Total
2016:					
Net income	$ 1,760	$ (389)	$ 1,371	$ 148	$ 1,519
Other comprehensive income (loss):					
Foreign currency translation adjustments	42	—	42	(3)	39
Financial instruments	(6)	11	5	17	22
Pension and other postretirement benefits	(13)	4	(9)	—	(9)
Total other comprehensive income	23	15	38	14	52
Comprehensive income	1,783	(374)	1,409	162	1,571
Preferred dividends of subsidiary	(1)	—	(1)	—	(1)
Comprehensive income, after preferred dividends of subsidiary	$ 1,782	$ (374)	$ 1,408	$ 162	$ 1,570
2015:					
Net income	$ 1,691	$ (341)	$ 1,350	$ 98	$ 1,448
Other comprehensive income (loss):					
Foreign currency translation adjustments	(260)	—	(260)	(30)	(290)
Financial instruments	(80)	33	(47)	5	(42)
Pension and other postretirement benefits	(3)	1	(2)	—	(2)
Total other comprehensive loss	(343)	34	(309)	(25)	(334)
Comprehensive income	1,348	(307)	1,041	73	1,114
Preferred dividends of subsidiary	(1)	—	(1)	—	(1)
Comprehensive income, after preferred dividends of subsidiary	$ 1,347	$ (307)	$ 1,040	$ 73	$ 1,113
2014:					
Net income	$ 1,462	$ (300)	$ 1,162	$ 100	$ 1,262
Other comprehensive income (loss):					
Foreign currency translation adjustments	(193)	—	(193)	(20)	(213)
Financial instruments	(106)	42	(64)	(1)	(65)
Pension and other postretirement benefits	(20)	8	(12)	—	(12)
Total other comprehensive loss	(319)	50	(269)	(21)	(290)
Comprehensive income	1,143	(250)	893	79	972
Preferred dividends of subsidiary	(1)	—	(1)	—	(1)
Comprehensive income, after preferred dividends of subsidiary	$ 1,142	$ (250)	$ 892	$ 79	$ 971

See Notes to Consolidated Financial Statements.

SEMPRA ENERGY
CONSOLIDATED BALANCE SHEETS
(Dollars in millions)

	December 31, 2016	December 31, 2015
ASSETS		
Current assets:		
Cash and cash equivalents	$ 349	$ 403
Restricted cash	66	27
Accounts receivable – trade, net	1,390	1,283
Accounts receivable – other, net	164	190
Due from unconsolidated affiliates	26	6
Income taxes receivable	43	30
Inventories	258	298
Regulatory balancing accounts – undercollected	259	307
Fixed-price contracts and other derivatives	83	80
Assets held for sale	201	—
Other	271	267
Total current assets	3,110	2,891
Other assets:		
Restricted cash	10	20
Due from unconsolidated affiliates	201	186
Regulatory assets	3,414	3,273
Nuclear decommissioning trusts	1,026	1,063
Investments	2,097	2,905
Goodwill	2,364	819
Other intangible assets	548	404
Dedicated assets in support of certain benefit plans	430	464
Insurance receivable for Aliso Canyon costs	606	325
Deferred income taxes	234	120
Sundry	815	641
Total other assets	11,745	10,220
Property, plant and equipment:		
Property, plant and equipment	43,624	38,200
Less accumulated depreciation and amortization	(10,693)	(10,161)
Property, plant and equipment, net ($354 and $383 at December 31, 2016 and 2015, respectively, related to VIE)	32,931	28,039
Total assets	$ 47,786	$ 41,150

See Notes to Consolidated Financial Statements.

SEMPRA ENERGY
CONSOLIDATED BALANCE SHEETS (CONTINUED)
(Dollars in millions)

	December 31, 2016	December 31, 2015
LIABILITIES AND EQUITY		
Current liabilities:		
Short-term debt	$ 1,779	$ 622
Accounts payable – trade	1,346	1,133
Accounts payable – other	130	142
Due to unconsolidated affiliates	11	14
Dividends and interest payable	319	303
Accrued compensation and benefits	409	423
Regulatory balancing accounts – overcollected	122	34
Current portion of long-term debt	913	907
Fixed-price contracts and other derivatives	83	56
Customer deposits	158	153
Reserve for Aliso Canyon costs	53	274
Liabilities held for sale	47	—
Other	557	551
Total current liabilities	5,927	4,612
Long-term debt ($293 and $303 at December 31, 2016 and 2015, respectively, related to VIE)	14,429	13,134
Deferred credits and other liabilities:		
Customer advances for construction	152	149
Pension and other postretirement benefit plan obligations, net of plan assets	1,208	1,152
Deferred income taxes	3,745	3,157
Deferred investment tax credits	28	32
Regulatory liabilities arising from removal obligations	2,697	2,793
Asset retirement obligations	2,431	2,126
Fixed-price contracts and other derivatives	405	240
Deferred credits and other	1,523	1,176
Total deferred credits and other liabilities	12,189	10,825
Commitments and contingencies (Note 15)		
Equity:		
Preferred stock (50 million shares authorized; none issued)	—	—
Common stock (750 million shares authorized; 250 million and 248 million shares outstanding at December 31, 2016 and 2015, respectively; no par value)	2,982	2,621
Retained earnings	10,717	9,994
Accumulated other comprehensive income (loss)	(748)	(806)
Total Sempra Energy shareholders' equity	12,951	11,809
Preferred stock of subsidiary	20	20
Other noncontrolling interests	2,270	750
Total equity	15,241	12,579
Total liabilities and equity	$ 47,786	$ 41,150

See Notes to Consolidated Financial Statements.

SEMPRA ENERGY
CONSOLIDATED STATEMENTS OF CASH FLOWS
(Dollars in millions)

	Years ended December 31,		
	2016	2015	2014
CASH FLOWS FROM OPERATING ACTIVITIES			
Net income	$ 1,519	$ 1,448	$ 1,262
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	1,312	1,250	1,156
Deferred income taxes and investment tax credits	217	239	146
Impairment losses	153	9	—
Plant closure (adjustment) loss	—	(26)	6
Gain on sale of assets	(134)	(70)	(62)
Equity earnings	(84)	(189)	(119)
Remeasurement of equity method investment	(617)	—	—
Fixed-price contracts and other derivatives	21	(10)	(25)
Other	63	66	108
Net change in other working capital components	(59)	699	(375)
Insurance receivable for Aliso Canyon costs	(281)	(325)	—
Changes in other assets	56	(162)	19
Changes in other liabilities	153	(24)	45
Net cash provided by operating activities	2,319	2,905	2,161
CASH FLOWS FROM INVESTING ACTIVITIES			
Expenditures for property, plant and equipment	(4,214)	(3,156)	(3,123)
Expenditures for investments and acquisition of businesses, net of cash and cash equivalents acquired	(1,582)	(200)	(240)
Proceeds from sale of assets, net of cash sold	763	373	149
Distributions from investments	25	15	13
Purchases of nuclear decommissioning and other trust assets	(1,034)	(531)	(613)
Proceeds from sales by nuclear decommissioning and other trusts	1,134	577	601
Increases in restricted cash	(139)	(100)	(152)
Decreases in restricted cash	175	93	155
Advances to unconsolidated affiliates	(25)	(31)	(185)
Repayments of advances to unconsolidated affiliates	11	74	18
Other	—	1	35
Net cash used in investing activities	(4,886)	(2,885)	(3,342)
CASH FLOWS FROM FINANCING ACTIVITIES			
Common dividends paid	(686)	(628)	(598)
Preferred dividends paid by subsidiary	(1)	(1)	(1)
Issuances of common stock	51	52	56
Repurchases of common stock	(56)	(74)	(38)
Issuances of debt (maturities greater than 90 days)	2,951	2,992	3,272
Payments on debt (maturities greater than 90 days)	(2,057)	(1,854)	(2,034)
Increase (decrease) in short-term debt, net	692	(622)	412
Proceeds from sale of noncontrolling interests, net of $40 in offering costs	1,692	—	—
Purchase of noncontrolling interests	—	—	(74)
Net distributions to noncontrolling interests	(63)	(73)	(104)
Tax benefit related to share-based compensation	—	52	—
Other	(10)	(17)	(37)
Net cash provided by (used in) financing activities	2,513	(173)	854
Effect of exchange rate changes on cash and cash equivalents	—	(14)	(7)
Decrease in cash and cash equivalents	(54)	(167)	(334)
Cash and cash equivalents, January 1	403	570	904
Cash and cash equivalents, December 31	$ 349	$ 403	$ 570

See Notes to Consolidated Financial Statements.

SEMPRA ENERGY
CONSOLIDATED STATEMENTS OF CASH FLOWS (CONTINUED)
(Dollars in millions)

	Years ended December 31,		
	2016	2015	2014
CHANGES IN OTHER WORKING CAPITAL COMPONENTS			
(Excluding cash and cash equivalents, and debt due within one year)			
Accounts receivable	$ (42)	$ (99)	$ 44
Income taxes receivable, net	3	39	62
Inventories	(20)	65	(133)
Regulatory balancing accounts	198	586	(317)
Regulatory assets and liabilities	(3)	(4)	8
Other current assets	(41)	(18)	(10)
Accounts payable	122	(157)	109
Reserve for Aliso Canyon costs	(221)	274	—
Other current liabilities	(55)	13	(138)
Net change in other working capital components	$ (59)	$ 699	$ (375)
SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION			
Interest payments, net of amounts capitalized	$ 532	$ 537	$ 536
Income tax payments, net of refunds	160	67	102
SUPPLEMENTAL DISCLOSURE OF NONCASH INVESTING AND FINANCING ACTIVITIES			
Acquisition of businesses:			
Assets acquired, net of cash and cash equivalents	$ 3,876	$ 10	$ —
Fair value of equity method investment immediately prior to acquisition	(1,144)	—	—
Liabilities assumed	(1,322)	(2)	—
Accrued purchase price	—	(5)	—
Cash paid, net of cash and cash equivalents acquired	$ 1,410	$ 3	$ —
Accrued capital expenditures	$ 626	$ 566	$ 433
Increase in capital lease obligations for investment in property, plant and equipment	—	24	60
Financing of build-to-suit property	—	61	61
Redemption of industrial development bonds	—	79	—
Common dividends issued in stock	53	55	42
Dividends declared but not paid	196	180	166

See Notes to Consolidated Financial Statements.

SEMPRA ENERGY
CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY
(Dollars in millions)

	Years ended December 31, 2016, 2015 and 2014					
	Common stock	Retained earnings	Accumulated other comprehensive income (loss)	**Sempra Energy shareholders' equity**	Non-controlling interests	**Total equity**
Balance at December 31, 2013	$ 2,409	$ 8,827	$ (228)	**$ 11,008**	$ 842	**$ 11,850**
Net income		1,162		**1,162**	100	**1,262**
Other comprehensive loss			(269)	**(269)**	(21)	**(290)**
Share-based compensation expense	48			**48**		**48**
Common stock dividends declared		(649)		**(649)**		**(649)**
Preferred dividends of subsidiary		(1)		**(1)**		**(1)**
Issuances of common stock	97			**97**		**97**
Repurchases of common stock	(38)			**(38)**		**(38)**
Distributions to noncontrolling interests					(107)	**(107)**
Equity contributed by noncontrolling interests					1	**1**
Purchase of noncontrolling interests in subsidiary	(32)			**(32)**	(41)	**(73)**
Balance at December 31, 2014	2,484	9,339	(497)	**11,326**	774	**12,100**
Net income		1,350		**1,350**	98	**1,448**
Other comprehensive loss			(309)	**(309)**	(25)	**(334)**
Share-based compensation expense	52			**52**		**52**
Common stock dividends declared		(694)		**(694)**		**(694)**
Preferred dividends of subsidiary		(1)		**(1)**		**(1)**
Issuances of common stock	107			**107**		**107**
Repurchases of common stock	(74)			**(74)**		**(74)**
Tax benefit related to share-based compensation	52			**52**		**52**
Distributions to noncontrolling interests					(80)	**(80)**
Equity contributed by noncontrolling interests					3	**3**
Balance at December 31, 2015	2,621	9,994	(806)	**11,809**	770	**12,579**
Cumulative-effect adjustment from change in accounting principle		107		**107**		**107**
Net income		1,371		**1,371**	148	**1,519**
Other comprehensive income			38	**38**	14	**52**
Share-based compensation expense	52			**52**		**52**
Common stock dividends declared		(754)		**(754)**		**(754)**
Preferred dividends of subsidiary		(1)		**(1)**		**(1)**
Issuances of common stock	104			**104**		**104**
Repurchases of common stock	(56)			**(56)**		**(56)**
Sale of noncontrolling interests, net of offering costs	261		20	**281**	1,420	**1,701**
Distributions to noncontrolling interests					(65)	**(65)**
Equity contributed by noncontrolling interests					3	**3**
Balance at December 31, 2016	$ 2,982	$ 10,717	$ (748)	**$ 12,951**	$ 2,290	**$ 15,241**

See Notes to Consolidated Financial Statements.

SAN DIEGO GAS & ELECTRIC COMPANY
CONSOLIDATED STATEMENTS OF OPERATIONS
(Dollars in millions)

	Years ended December 31,		
	2016	2015	2014
Operating revenues			
Electric	$ 3,754	$ 3,719	$ 3,785
Natural gas	499	500	544
Total operating revenues	4,253	4,219	4,329
Operating expenses			
Cost of electric fuel and purchased power	1,187	1,151	1,309
Cost of natural gas	127	153	208
Operation and maintenance	1,048	1,017	1,076
Depreciation and amortization	646	604	530
Franchise fees and other taxes	255	262	241
Plant closure (adjustment) loss	—	(26)	6
Total operating expenses	3,263	3,161	3,370
Operating income	990	1,058	959
Other income, net	50	36	40
Interest expense	(195)	(204)	(202)
Income before income taxes	845	890	797
Income tax expense	(280)	(284)	(270)
Net income	565	606	527
Losses (earnings) attributable to noncontrolling interest	5	(19)	(20)
Earnings attributable to common shares	$ 570	$ 587	$ 507

See Notes to Consolidated Financial Statements.

SAN DIEGO GAS & ELECTRIC COMPANY
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)
(Dollars in millions)

	Years ended December 31, 2016, 2015 and 2014				
	SDG&E shareholder's equity				
	Pretax amount	Income tax (expense) benefit	Net-of-tax amount	Noncontrolling interest (after-tax)	Total
2016:					
Net income	$ 850	$ (280)	$ 570	$ (5)	$ 565
Other comprehensive income (loss):					
Financial instruments	—	—	—	10	10
Total other comprehensive income	—	—	—	10	10
Comprehensive income	$ 850	$ (280)	$ 570	$ 5	$ 575
2015:					
Net income	$ 871	$ (284)	$ 587	$ 19	$ 606
Other comprehensive income (loss):					
Financial instruments	—	—	—	6	6
Pension and other postretirement benefits	7	(3)	4	—	4
Total other comprehensive income	7	(3)	4	6	10
Comprehensive income	$ 878	$ (287)	$ 591	$ 25	$ 616
2014:					
Net income	$ 777	$ (270)	$ 507	$ 20	$ 527
Other comprehensive income (loss):					
Financial instruments	—	—	—	2	2
Pension and other postretirement benefits	(5)	2	(3)	—	(3)
Total other comprehensive (loss) income	(5)	2	(3)	2	(1)
Comprehensive income	$ 772	$ (268)	$ 504	$ 22	$ 526

See Notes to Consolidated Financial Statements.

SAN DIEGO GAS & ELECTRIC COMPANY
CONSOLIDATED BALANCE SHEETS
(Dollars in millions)

	December 31, 2016	December 31, 2015
ASSETS		
Current assets:		
Cash and cash equivalents	$ 8	$ 20
Restricted cash	11	23
Accounts receivable – trade, net	354	331
Accounts receivable – other, net	17	17
Due from unconsolidated affiliates	4	1
Income taxes receivable	122	1
Inventories	80	75
Prepaid expenses	59	49
Regulatory balancing accounts – net undercollected	259	307
Regulatory assets	81	107
Fixed-price contracts and other derivatives	58	53
Other	19	20
Total current assets	1,072	1,004
Other assets:		
Restricted cash	1	—
Deferred taxes recoverable in rates	1,014	914
Other regulatory assets	998	977
Nuclear decommissioning trusts	1,026	1,063
Sundry	358	301
Total other assets	3,397	3,255
Property, plant and equipment:		
Property, plant and equipment	17,844	16,458
Less accumulated depreciation and amortization	(4,594)	(4,202)
Property, plant and equipment, net ($354 and $383 at December 31, 2016 and 2015, respectively, related to VIE)	13,250	12,256
Total assets	$ 17,719	$ 16,515

See Notes to Consolidated Financial Statements.

SAN DIEGO GAS & ELECTRIC COMPANY
CONSOLIDATED BALANCE SHEETS (CONTINUED)
(Dollars in millions)

	December 31, 2016	December 31, 2015
LIABILITIES AND EQUITY		
Current liabilities:		
Short-term debt	$ —	$ 168
Accounts payable	460	377
Due to unconsolidated affiliates	15	55
Interest payable	40	39
Accrued compensation and benefits	121	129
Accrued franchise fees	43	66
Current portion of long-term debt	191	50
Asset retirement obligations	79	99
Fixed-price contracts and other derivatives	61	51
Customer deposits	76	72
Other	82	101
Total current liabilities	1,168	1,207
Long-term debt ($293 and $303 at December 31, 2016 and 2015, respectively, related to VIE)	4,658	4,455
Deferred credits and other liabilities:		
Customer advances for construction	52	46
Pension and other postretirement benefit plan obligations, net of plan assets	232	212
Deferred income taxes	2,829	2,472
Deferred investment tax credits	16	19
Regulatory liabilities arising from removal obligations	1,725	1,629
Asset retirement obligations	751	729
Fixed-price contracts and other derivatives	189	106
Deferred credits and other	421	364
Total deferred credits and other liabilities	6,215	5,577
Commitments and contingencies (Note 15)		
Equity:		
Preferred stock (45 million shares authorized; none issued)	—	—
Common stock (255 million shares authorized; 117 million shares outstanding; no par value)	1,338	1,338
Retained earnings	4,311	3,893
Accumulated other comprehensive income (loss)	(8)	(8)
Total SDG&E shareholder's equity	5,641	5,223
Noncontrolling interest	37	53
Total equity	5,678	5,276
Total liabilities and equity	$ 17,719	$ 16,515

See Notes to Consolidated Financial Statements.

SAN DIEGO GAS & ELECTRIC COMPANY
CONSOLIDATED STATEMENTS OF CASH FLOWS
(Dollars in millions)

	Years ended December 31,		
	2016	2015	2014
CASH FLOWS FROM OPERATING ACTIVITIES			
Net income	$ 565	$ 606	$ 527
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	646	604	530
Deferred income taxes and investment tax credits	258	195	223
Plant closure (adjustment) loss	—	(26)	6
Fixed-price contracts and other derivatives	(3)	(4)	(6)
Other	(35)	(16)	(23)
Changes in other assets	(16)	(122)	191
Changes in other liabilities	11	13	18
Changes in working capital components:			
Accounts receivable	(31)	(10)	(47)
Due to/from affiliates, net	(19)	21	(10)
Inventories	(5)	(2)	4
Other current assets	25	(24)	(16)
Income taxes	(115)	—	35
Accounts payable	39	(28)	(23)
Regulatory balancing accounts	35	474	(208)
Other current liabilities	(28)	(17)	(104)
Net cash provided by operating activities	1,327	1,664	1,097
CASH FLOWS FROM INVESTING ACTIVITIES			
Expenditures for property, plant and equipment	(1,399)	(1,133)	(1,100)
Purchases of nuclear decommissioning trust assets	(1,034)	(526)	(609)
Proceeds from sales by nuclear decommissioning trusts	1,134	577	601
Increases in restricted cash	(49)	(39)	(84)
Decreases in restricted cash	60	35	96
Increase in loans to affiliate, net	(31)	—	—
Expenditures related to long-term service agreement	—	—	(30)
Net cash used in investing activities	(1,319)	(1,086)	(1,126)
CASH FLOWS FROM FINANCING ACTIVITIES			
Common dividends paid	(175)	(300)	(200)
Issuances of debt (maturities greater than 90 days)	498	444	100
Payments on debt (maturities greater than 90 days)	(204)	(547)	(24)
(Decrease) increase in short-term debt, net	(114)	(131)	187
Capital distributions made by VIE, net	(21)	(30)	(53)
Debt issuance costs	(4)	(2)	—
Net cash (used in) provided by financing activities	(20)	(566)	10
(Decrease) increase in cash and cash equivalents	(12)	12	(19)
Cash and cash equivalents, January 1	20	8	27
Cash and cash equivalents, December 31	$ 8	$ 20	$ 8

See Notes to Consolidated Financial Statements.

SAN DIEGO GAS & ELECTRIC COMPANY
CONSOLIDATED STATEMENTS OF CASH FLOWS (CONTINUED)
(Dollars in millions)

	Years ended December 31,		
	2016	2015	2014
SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION			
Interest payments, net of amounts capitalized	$ 187	$ 199	$ 196
Income tax payments (refunds), net	137	88	(4)
SUPPLEMENTAL DISCLOSURE OF NONCASH INVESTING AND FINANCING ACTIVITIES			
Accrued capital expenditures	$ 227	$ 191	$ 217
Increase in capital lease obligations for investment in property, plant and equipment	—	15	60

See Notes to Consolidated Financial Statements.

SAN DIEGO GAS & ELECTRIC COMPANY
CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY
(Dollars in millions)

	Years ended December 31, 2016, 2015 and 2014					
	Common stock	Retained earnings	Accumulated other comprehensive income (loss)	**SDG&E shareholder's equity**	Noncontrolling interest	**Total equity**
Balance at December 31, 2013	$ 1,338	$ 3,299	$ (9)	**$ 4,628**	$ 91	**$ 4,719**
Net income		507		**507**	20	**527**
Other comprehensive (loss) income			(3)	**(3)**	2	**(1)**
Common stock dividends declared		(200)		**(200)**		**(200)**
Distributions to noncontrolling interest					(53)	**(53)**
Balance at December 31, 2014	1,338	3,606	(12)	**4,932**	60	**4,992**
Net income		587		**587**	19	**606**
Other comprehensive income			4	**4**	6	**10**
Common stock dividends declared		(300)		**(300)**		**(300)**
Distributions to noncontrolling interest					(32)	**(32)**
Balance at December 31, 2015	1,338	3,893	(8)	**5,223**	53	**5,276**
Cumulative-effect adjustment from change in accounting principle		23		**23**		**23**
Net income (loss)		570		**570**	(5)	**565**
Other comprehensive income					10	**10**
Common stock dividends declared		(175)		**(175)**		**(175)**
Distributions to noncontrolling interest					(23)	**(23)**
Equity contributed by noncontrolling interest					2	**2**
Balance at December 31, 2016	$ 1,338	$ 4,311	$ (8)	**$ 5,641**	$ 37	**$ 5,678**

See Notes to Consolidated Financial Statements.

SOUTHERN CALIFORNIA GAS COMPANY
STATEMENTS OF OPERATIONS
(Dollars in millions)

	Years ended December 31,		
	2016	2015	2014
Operating revenues	$ 3,471	$ 3,489	$ 3,855
Operating expenses			
Cost of natural gas	891	921	1,449
Operation and maintenance	1,385	1,361	1,321
Depreciation and amortization	476	461	431
Franchise fees and other taxes	140	129	133
Impairment losses	22	9	—
Total operating expenses	2,914	2,881	3,334
Operating income	557	608	521
Other income, net	32	30	20
Interest income	1	4	—
Interest expense	(97)	(84)	(69)
Income before income taxes	493	558	472
Income tax expense	(143)	(138)	(139)
Net income	350	420	333
Preferred dividend requirements	(1)	(1)	(1)
Earnings attributable to common shares	$ 349	$ 419	$ 332

See Notes to Financial Statements.

SOUTHERN CALIFORNIA GAS COMPANY
STATEMENTS OF COMPREHENSIVE INCOME (LOSS)
(Dollars in millions)

	Years ended December 31, 2016, 2015 and 2014		
	Pretax amount	Income tax (expense) benefit	Net-of-tax amount
2016:			
Net income	$ 493	$ (143)	$ 350
Other comprehensive income (loss):			
Financial instruments	1	—	1
Pension and other postretirement benefits	(6)	2	(4)
Total other comprehensive loss	(5)	2	(3)
Comprehensive income	$ 488	$ (141)	$ 347
2015:			
Net income	$ 558	$ (138)	$ 420
Other comprehensive income (loss):			
Financial instruments	1	(1)	—
Pension and other postretirement benefits	(2)	1	(1)
Total other comprehensive loss	(1)	—	(1)
Comprehensive income	$ 557	$ (138)	$ 419
2014:			
Net income/Comprehensive income	$ 472	$ (139)	$ 333

See Notes to Financial Statements.

SOUTHERN CALIFORNIA GAS COMPANY
BALANCE SHEETS
(Dollars in millions)

	December 31, 2016	December 31, 2015
ASSETS		
Current assets:		
Cash and cash equivalents	$ 12	$ 58
Accounts receivable – trade, net	608	635
Accounts receivable – other, net	77	99
Due from unconsolidated affiliates	8	48
Income taxes receivable	2	—
Inventories	58	79
Regulatory assets	8	7
Other	63	40
Total current assets	836	966
Other assets:		
Regulatory assets arising from pension obligations	742	699
Other regulatory assets	589	636
Insurance receivable for Aliso Canyon costs	606	325
Sundry	399	207
Total other assets	2,336	1,867
Property, plant and equipment:		
Property, plant and equipment	15,344	14,171
Less accumulated depreciation and amortization	(5,092)	(4,900)
Property, plant and equipment, net	10,252	9,271
Total assets	$ 13,424	$ 12,104

See Notes to Financial Statements.

SOUTHERN CALIFORNIA GAS COMPANY
BALANCE SHEETS (CONTINUED)
(Dollars in millions)

	December 31, 2016	December 31, 2015
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current liabilities:		
Short-term debt	$ 62	$ —
Accounts payable – trade	481	422
Accounts payable – other	74	76
Due to unconsolidated affiliates	28	—
Income taxes payable	—	3
Accrued compensation and benefits	150	160
Regulatory balancing accounts – net overcollected	122	34
Current portion of long-term debt	—	9
Customer deposits	76	76
Reserve for Aliso Canyon costs	53	274
Other	195	184
Total current liabilities	1,241	1,238
Long-term debt	2,982	2,481
Deferred credits and other liabilities:		
Customer advances for construction	99	103
Pension obligation, net of plan assets	762	716
Deferred income taxes	1,709	1,532
Deferred investment tax credits	12	14
Regulatory liabilities arising from removal obligations	972	1,145
Asset retirement obligations	1,616	1,354
Deferred credits and other	521	372
Total deferred credits and other liabilities	5,691	5,236
Commitments and contingencies (Note 15)		
Shareholders' equity:		
Preferred stock (11 million shares authorized; 1 million shares outstanding)	22	22
Common stock (100 million shares authorized; 91 million shares outstanding; no par value)	866	866
Retained earnings	2,644	2,280
Accumulated other comprehensive income (loss)	(22)	(19)
Total shareholders' equity	3,510	3,149
Total liabilities and shareholders' equity	$ 13,424	$ 12,104

See Notes to Financial Statements.

SOUTHERN CALIFORNIA GAS COMPANY
STATEMENTS OF CASH FLOWS
(Dollars in millions)

	Years ended December 31,		
	2016	2015	2014
CASH FLOWS FROM OPERATING ACTIVITIES			
Net income	$ 350	$ 420	$ 333
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	476	461	431
Deferred income taxes and investment tax credits	103	127	130
Impairment losses	22	9	—
Other	(26)	(20)	(7)
Insurance receivable for Aliso Canyon costs	(281)	(325)	—
Changes in other assets	35	(91)	(131)
Changes in other liabilities	7	(7)	29
Changes in working capital components:			
Accounts receivable	37	(90)	30
Inventories	4	102	(113)
Other current assets	(13)	8	(3)
Accounts payable	36	(143)	156
Income taxes	(2)	8	17
Due to/from affiliates, net	6	(11)	(1)
Regulatory balancing accounts	163	112	(109)
Reserve for Aliso Canyon costs	(221)	274	—
Other current liabilities	(25)	46	3
Net cash provided by operating activities	671	880	765
CASH FLOWS FROM INVESTING ACTIVITIES			
Expenditures for property, plant and equipment	(1,319)	(1,352)	(1,104)
Decrease (increase) in loans to affiliate, net	50	(50)	—
Net cash used in investing activities	(1,269)	(1,402)	(1,104)
CASH FLOWS FROM FINANCING ACTIVITIES			
Common dividends paid	—	(50)	(100)
Preferred dividends paid	(1)	(1)	(1)
Issuances of long-term debt	499	599	747
Payments on long-term debt	(3)	—	(250)
Increase (decrease) in short-term debt, net	62	(50)	8
Debt issuance costs	(5)	(3)	(7)
Net cash provided by financing activities	552	495	397
(Decrease) increase in cash and cash equivalents	(46)	(27)	58
Cash and cash equivalents, January 1	58	85	27
Cash and cash equivalents, December 31	$ 12	$ 58	$ 85
SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION			
Interest payments, net of amounts capitalized	$ 92	$ 79	$ 62
Income tax payments (refunds), net	41	1	(10)
SUPPLEMENTAL DISCLOSURE OF NONCASH INVESTING ACTIVITY			
Accrued capital expenditures	$ 207	$ 189	$ 168

See Notes to Financial Statements.

SOUTHERN CALIFORNIA GAS COMPANY
STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY
(Dollars in millions)

	Years ended December 31, 2016, 2015 and 2014				
	Preferred stock	Common stock	Retained earnings	Accumulated other comprehensive income (loss)	**Total shareholders' equity**
Balance at December 31, 2013	$ 22	$ 866	$ 1,679	$ (18)	**$ 2,549**
Net income			333		**333**
Preferred stock dividends declared			(1)		**(1)**
Common stock dividends declared			(100)		**(100)**
Balance at December 31, 2014	22	866	1,911	(18)	**2,781**
Net income			420		**420**
Other comprehensive loss				(1)	**(1)**
Preferred stock dividends declared			(1)		**(1)**
Common stock dividends declared			(50)		**(50)**
Balance at December 31, 2015	22	866	2,280	(19)	**3,149**
Cumulative-effect adjustment from change in accounting principle			15		**15**
Net income			350		**350**
Other comprehensive loss				(3)	**(3)**
Preferred stock dividends declared			(1)		**(1)**
Balance at December 31, 2016	$ 22	$ 866	$ 2,644	$ (22)	**$ 3,510**

See Notes to Financial Statements.

NOTE 1. SIGNIFICANT ACCOUNTING POLICIES AND OTHER FINANCIAL DATA

PRINCIPLES OF CONSOLIDATION

Sempra Energy

Sempra Energy's Consolidated Financial Statements include the accounts of Sempra Energy, a California-based Fortune 500 energy-services holding company, and its consolidated subsidiaries and variable interest entities (VIEs). Sempra Energy's principal operating units are

- Sempra Utilities, which includes our San Diego Gas & Electric Company (SDG&E), Southern California Gas Company (SoCalGas) and Sempra South American Utilities reportable segments; and
- Sempra Infrastructure, which includes our Sempra Mexico, Sempra Renewables and Sempra LNG & Midstream reportable segments.

Prior to December 31, 2016, our reportable segments were grouped under the following operating units:

- California Utilities (which included the SDG&E and SoCalGas segments)
- Sempra International (which included the Sempra South American Utilities and Sempra Mexico segments)
- Sempra U.S. Gas & Power (which included the Sempra Renewables and Sempra Natural Gas segments)

The grouping of our segments within our operating units as of December 31, 2016 reflects a realignment of management oversight of our operations. As part of this realignment, we changed the name of our "Sempra Natural Gas" segment to "Sempra LNG & Midstream." This name change and the realignment of our segments within our new operating units had no impact on our historical financial position, results of operations, cash flows or segment results previously reported.

We provide descriptions of each of our segments in Note 16.

We refer to SDG&E and SoCalGas collectively as the California Utilities, which do not include our South American utilities or the utilities in our Sempra Infrastructure operating unit. Sempra Global is the holding company for most of our subsidiaries that are not subject to California utility regulation. All references in these Notes to "Sempra Utilities," "Sempra Infrastructure" and their respective reportable segments are not intended to refer to any legal entity with the same or similar name.

Our Sempra Mexico segment includes the operating companies of our subsidiary, Infraestructura Energética Nova, S.A.B. de C.V. (IEnova), as well as certain holding companies and risk management activity. IEnova is a separate legal entity comprised of Sempra Energy's operations in Mexico. IEnova is included within our Sempra Mexico reportable segment, but is not the same in its entirety as the reportable segment. IEnova's financial results are reported in Mexico under International Financial Reporting Standards, as required by the Mexican Stock Exchange (La Bolsa Mexicana de Valores, S.A.B. de C.V., or BMV) where the shares are traded under the symbol IENOVA.

Sempra Energy uses the equity method to account for investments in affiliated companies over which we have the ability to exercise significant influence, but not control. We discuss our investments in unconsolidated entities in Notes 3, 4 and 10.

SDG&E

SDG&E's Consolidated Financial Statements include its accounts and the accounts of a VIE of which SDG&E is the primary beneficiary, as we discuss below in "Variable Interest Entities." SDG&E's common stock is wholly owned by Enova Corporation, which is a wholly owned subsidiary of Sempra Energy.

SoCalGas

SoCalGas' common stock is wholly owned by Pacific Enterprises, which is a wholly owned subsidiary of Sempra Energy.

BASIS OF PRESENTATION

This is a combined report of Sempra Energy, SDG&E and SoCalGas. We provide separate information for SDG&E and SoCalGas as required. References in this report to "we," "our" and "Sempra Energy Consolidated" are to Sempra Energy and its consolidated

entities, unless otherwise indicated by the context. We have eliminated intercompany accounts and transactions within the consolidated financial statements of each reporting entity.

Throughout this report, we refer to the following as Consolidated Financial Statements and Notes to Consolidated Financial Statements when discussed together or collectively:

- the Consolidated Financial Statements and related Notes of Sempra Energy and its subsidiaries and VIEs,
- the Consolidated Financial Statements and related Notes of SDG&E and its VIE, and
- the Financial Statements and related Notes of SoCalGas.

Regulated Operations

The California Utilities and Sempra Mexico's natural gas distribution utility, Ecogas México, S. de R.L. de C.V. (Ecogas), prepare their financial statements in accordance with the provisions of accounting principles generally accepted in the United States of America (U.S. GAAP) governing rate-regulated operations, as we discuss below in "Effects of Regulation."

Sempra South American Utilities has controlling interests in two electric distribution utilities in South America, Chilquinta Energía S.A. (Chilquinta Energía) in Chile and Luz del Sur S.A.A. (Luz del Sur) in Peru, and their subsidiaries. Revenues are based on tariffs that are set by government agencies in their respective countries based on an efficient model distribution company defined by those agencies. Because the tariffs are based on a model and are intended to cover the costs of the model company, but are not based on the costs of the specific utility and may not result in full cost recovery, these utilities do not meet the requirements necessary for, and therefore do not apply, regulatory accounting treatment under U.S. GAAP.

Certain business activities at IEnova are regulated by the Comisión Reguladora de Energía (or CRE, the Energy Regulatory Commission) and meet the regulatory accounting requirements of U.S. GAAP. Pipeline projects currently under construction by IEnova that meet the regulatory accounting requirements of U.S. GAAP record the impact of allowance for funds used during construction (AFUDC) related to equity. We discuss AFUDC below in "Property, Plant and Equipment."

Sempra LNG & Midstream owned Mobile Gas Service Corporation (Mobile Gas) in southwest Alabama and Willmut Gas Company (Willmut Gas) in Mississippi until they were sold in September 2016, as we discuss in Note 3. Mobile Gas and Willmut Gas also prepared their financial statements in accordance with the provisions of U.S. GAAP governing rate-regulated operations. We discuss revenue recognition at our utilities in "Revenues" below.

Use of Estimates in the Preparation of the Financial Statements

We have prepared our Consolidated Financial Statements in conformity with U.S. GAAP. This requires us to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes, including the disclosure of contingent assets and liabilities at the date of the financial statements. Although we believe the estimates and assumptions are reasonable, actual amounts ultimately may differ significantly from those estimates.

Subsequent Events

We evaluated events and transactions that occurred after December 31, 2016 through the date the financial statements were issued, and in the opinion of management, the accompanying statements reflect all adjustments and disclosures necessary for a fair presentation.

EFFECTS OF REGULATION

The accounting policies of the California Utilities conform with U.S. GAAP for rate-regulated enterprises and reflect the policies of the California Public Utilities Commission (CPUC) and the Federal Energy Regulatory Commission (FERC).

The California Utilities prepare their financial statements in accordance with U.S. GAAP provisions governing rate-regulated operations. Under these provisions, a regulated utility records regulatory assets, which are generally costs that would otherwise be charged to expense, if it is probable that, through the ratemaking process, the utility will recover those assets from customers. To the extent that recovery is no longer probable, the related regulatory assets are written off. Regulatory liabilities generally represent amounts collected from customers in advance of the actual expenditure by the utility. If the actual expenditures are less than amounts previously collected from ratepayers, the excess would be refunded to customers, generally by reducing future rates. Regulatory liabilities may also arise from other transactions such as unrealized gains on fixed price contracts and other derivatives or certain deferred income tax benefits that are passed through to customers in future rates. In addition, the California Utilities record regulatory liabilities when the CPUC or the FERC requires a refund to be made to customers or has required that a gain or other transaction of net allowable costs be given to customers over future periods.

Determining probability of recovery requires significant judgment by management and may include, but is not limited to, consideration of:

- the nature of the event giving rise to the assessment;
- existing statutes and regulatory code;
- legal precedents;
- regulatory principles and analogous regulatory actions;
- testimony presented in regulatory hearings;
- proposed regulatory decisions;
- final regulatory orders;
- a commission-authorized mechanism established for the accumulation of costs;
- status of applications for rehearings or state court appeals;
- specific approval from a commission; and
- historical experience.

Ecogas also applies U.S. GAAP for rate-regulated utilities to its operations, including the same evaluation of probability of recovery of regulatory assets described above.

We provide information concerning regulatory assets and liabilities in Notes 13 and 14.

FAIR VALUE MEASUREMENTS

We measure certain assets and liabilities at fair value on a recurring basis, primarily nuclear decommissioning and benefit plan trust assets and derivatives. We also measure certain assets at fair value on a non-recurring basis in certain circumstances. These assets can include goodwill, intangible assets, equity method investments and other long-lived assets.

“Fair value” is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date (exit price).

A fair value measurement reflects the assumptions market participants would use in pricing an asset or liability based on the best available information. These assumptions include the risk inherent in a particular valuation technique (such as a pricing model) and the risks inherent in the inputs to the model. Also, we consider an issuer’s credit standing when measuring its liabilities at fair value.

We establish a fair value hierarchy that prioritizes the inputs used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurement) and the lowest priority to unobservable inputs (Level 3 measurement). The three levels of the fair value hierarchy are as follows:

Level 1 – Quoted prices are available in active markets for identical assets or liabilities as of the reporting date. Active markets are those in which transactions for the asset or liability occur in sufficient frequency and volume to provide pricing information on an ongoing basis. Our Level 1 financial instruments primarily consist of listed equities, U.S. government treasury securities, primarily in the nuclear decommissioning and benefit plan trusts, and exchange-traded derivatives.

Level 2 – Pricing inputs are other than quoted prices in active markets included in Level 1, which are either directly or indirectly observable as of the reporting date. Level 2 includes those financial instruments that are valued using models or other valuation methodologies. These models are primarily industry-standard models that consider various assumptions, including:

- quoted forward prices for commodities
- time value
- current market and contractual prices for the underlying instruments
- volatility factors
- other relevant economic measures

Substantially all of these assumptions are observable in the marketplace throughout the full term of the instrument, can be derived from observable data or are supported by observable levels at which transactions are executed in the marketplace. Our financial instruments in this category include domestic corporate bonds, municipal bonds and other foreign bonds, primarily in the Nuclear Decommissioning Trusts and in our pension and postretirement benefit plans, and non-exchange-traded derivatives such as interest rate instruments and over-the-counter forwards and options.

Level 3 – Pricing inputs include significant inputs that are generally less observable from objective sources. These inputs may be used with internally developed methodologies that result in management’s best estimate of fair value from the perspective of a market participant. Our Level 3 financial instruments consist of congestion revenue rights (CRRs) and fixed-price electricity positions at SDG&E.

CASH AND CASH EQUIVALENTS

Cash equivalents are highly liquid investments with maturities of three months or less at the date of purchase.

RESTRICTED CASH

Restricted cash at Sempra Energy, including amounts at SDG&E discussed below, was $76 million and $47 million at December 31, 2016 and 2015, respectively. Of this, $66 million and $27 million was classified as current and $10 million and $20 million was classified as noncurrent at December 31, 2016 and 2015, respectively.

SDG&E had $12 million and $23 million of restricted cash at December 31, 2016 and 2015, respectively, which represents funds held by a trustee for a VIE (see "Variable Interest Entities – SDG&E – Otay Mesa VIE" below) to pay certain operating costs. In 2016, $11 million of restricted cash was classified as current and $1 million as noncurrent. In 2015, all restricted cash was classified as current.

Sempra Mexico had restricted cash of $52 million classified as current at December 31, 2016 and $9 million and $20 million classified as noncurrent at December 31, 2016 and 2015, respectively, primarily denominated in Mexican Pesos. These balances represent funds to pay for rights of way, license fees, permits, topographic surveys and other costs pursuant to trust and debt agreements related to pipeline projects.

Sempra Renewables had restricted cash of $3 million and $4 million classified as current at December 31, 2016 and 2015, respectively, primarily representing funds held in accordance with debt agreements at our wholly owned solar project.

COLLECTION ALLOWANCES

We record allowances for the collection of trade and other accounts and notes receivable, which include allowances for doubtful customer accounts and for other receivables. We show the changes in these allowances in the table below:

COLLECTION ALLOWANCES
(Dollars in millions)

	Years ended December 31,		
	2016	2015	2014
Sempra Energy Consolidated:			
Allowances for collection of receivables at January 1	$ 32	$ 34	$ 29
Provisions for uncollectible accounts	23	20	25
Write-offs of uncollectible accounts	(20)	(22)	(20)
Allowances for collection of receivables at December 31	$ 35	$ 32	$ 34
SDG&E:			
Allowances for collection of receivables at January 1	$ 9	$ 7	$ 5
Provisions for uncollectible accounts	6	7	7
Write-offs of uncollectible accounts	(7)	(5)	(5)
Allowances for collection of receivables at December 31	$ 8	$ 9	$ 7
SoCalGas:			
Allowances for collection of receivables at January 1	$ 17	$ 17	$ 12
Provisions for uncollectible accounts	14	11	15
Write-offs of uncollectible accounts	(10)	(11)	(10)
Allowances for collection of receivables at December 31	$ 21	$ 17	$ 17

We evaluate accounts receivable collectability using a combination of factors, including past due status based on contractual terms, trends in write-offs, the age of the receivable, counterparty creditworthiness, economic conditions and specific events, such as bankruptcies. Adjustments to the allowance for doubtful accounts are made when necessary based on the results of analysis, the aging of receivables, and historical and industry trends.

We write off accounts receivable in the period in which we deem the receivable to be uncollectible. We record recoveries of accounts receivable previously written off when it is known that they will be received.

INVENTORIES

The California Utilities value natural gas inventory using the last-in first-out (LIFO) method. As inventories are sold, differences between the LIFO valuation and the estimated replacement cost are reflected in customer rates. These differences are generally temporary, but may become permanent if the natural gas inventory withdrawn from storage during the year is not replaced by year end. At December 31, 2016, SoCalGas recognized a permanent LIFO liquidation of $33 million. The California Utilities generally value materials and supplies at the lower of average cost or net realizable value.

Sempra South American Utilities, Sempra Mexico, Sempra Renewables and Sempra LNG & Midstream value natural gas inventory and materials and supplies at the lower of average cost or net realizable value. Sempra Mexico and Sempra LNG & Midstream value liquefied natural gas (LNG) inventory using the first-in first-out method.

The components of inventories by segment are as follows:

INVENTORY BALANCES AT DECEMBER 31

(Dollars in millions)

	Natural gas		LNG		Materials and supplies		Total	
	2016	2015	2016	2015	2016	2015	2016	2015
SDG&E	$ 2	$ 6	$ —	$ —	$ 78	$ 69	$ 80	$ 75
SoCalGas(1)	11	49	—	—	47	30	58	79
Sempra South American Utilities	—	—	—	—	27	30	27	30
Sempra Mexico	—	—	6	3	1	10	7	13
Sempra Renewables	—	—	—	—	4	3	4	3
Sempra LNG & Midstream	79	94	3	3	—	1	82	98
Sempra Energy Consolidated	$ 92	$ 149	$ 9	$ 6	$ 157	$ 143	$ 258	$ 298

(1) At December 31, 2016 and 2015, SoCalGas' natural gas inventory for core customers is net of an inventory loss related to the Aliso Canyon natural gas leak, which we discuss in Note 15.

INCOME TAXES

Income tax expense includes current and deferred income taxes from operations during the year. We record deferred income taxes for temporary differences between the book and the tax basis of assets and liabilities. Investment tax credits from prior years are amortized to income by the California Utilities over the estimated service lives of the properties as required by the CPUC. At our other businesses, we reduce the book basis of the related asset by the amount of investment tax credit earned. At Sempra Renewables, production tax credits are recognized in income tax expense as earned.

Under the regulatory accounting treatment required for flow-through temporary differences, as discussed in Note 6, the California Utilities and Sempra Mexico recognize

- regulatory assets to offset deferred tax liabilities if it is probable that the amounts will be recovered from customers; and
- regulatory liabilities to offset deferred tax assets if it is probable that the amounts will be returned to customers.

We currently do not record deferred income taxes for basis differences between financial statement and income tax investment amounts in non-U.S. subsidiaries and non-U.S. joint ventures because the related cumulative undistributed earnings are indefinitely reinvested.

When there are uncertainties related to potential income tax benefits, in order to qualify for recognition, the position we take has to have at least a "more likely than not" chance of being sustained (based on the position's technical merits) upon challenge by the respective authorities. The term "more likely than not" means a likelihood of more than 50 percent. Otherwise, we may not recognize any of the potential tax benefit associated with the position. We recognize a benefit for a tax position that meets the "more likely than not" criterion at the largest amount of tax benefit that is greater than 50 percent likely of being realized upon its effective resolution.

Unrecognized tax benefits involve management's judgment regarding the likelihood of the benefit being sustained. The final resolution of uncertain tax positions could result in adjustments to recorded amounts and may affect our effective tax rate.

We provide additional information about income taxes in Note 6.

GREENHOUSE GAS (GHG) ALLOWANCES

The California Utilities, Sempra Mexico and Sempra LNG & Midstream are required by California Assembly Bill 32 to acquire GHG allowances for every metric ton of carbon dioxide equivalent emitted into the atmosphere during electric generation and natural gas transportation. At the California Utilities, many GHG allowances are allocated to us at no cost on behalf of our customers. We record

purchased and allocated GHG allowances at the lower of weighted average cost or market, and include them in Other Current Assets and in Sundry on the Consolidated Balance Sheets based on the dates on which they are required to be surrendered. We measure the compliance obligation, which is based on emissions, at the carrying value of allowances held plus the fair value of additional allowances necessary to satisfy the obligation. The California Utilities balance costs and revenues associated with the GHG program through regulatory balancing accounts on the Consolidated Balance Sheets. Sempra Mexico and Sempra LNG & Midstream record the cost of GHG obligations in cost of sales. We include the obligation in Other Current Liabilities and Deferred Credits and Other on the Consolidated Balance Sheets based on the dates on which the allowances will be surrendered. We remove the assets and liabilities from the balance sheets as the allowances are surrendered.

GHG allowances and obligations on our Consolidated Balance Sheets are as follows:

GHG ALLOWANCES AND OBLIGATIONS AT DECEMBER 31

(Dollars in millions)

	Sempra Energy Consolidated		SDG&E		SoCalGas	
	2016	2015	2016	2015	2016	2015
Assets:						
Current	$ 40	$ 42	$ 16	$ 17	$ 24	$ 19
Noncurrent	295	201	182	141	109	43
Total assets	$ 335	$ 243	$ 198	$ 158	$ 133	$ 62
Liabilities:						
Current	$ 40	$ 41	$ 16	$ 17	$ 24	$ 18
Noncurrent	171	91	72	34	96	41
Total liabilities	$ 211	$ 132	$ 88	$ 51	$ 120	$ 59

RENEWABLE ENERGY CERTIFICATES (RECs)

RECs are energy rights established by governmental agencies for the environmental and social promotion of renewable electricity generation. A REC, and its associated attributes and benefits, can be sold separately from the underlying physical electricity associated with a renewable-based generation source in certain markets.

Retail sellers of electricity obtain RECs through renewable power purchase agreements, internal generation or separate purchases in the market to comply with renewable portfolio standards established by the governmental agencies. RECs provide documentation for the generation of a unit of renewable energy that is used to verify compliance with renewable portfolio standards. The cost of RECs at SDG&E is recorded in Cost of Electric Fuel and Purchased Power, which is recoverable in rates, on the Consolidated Statements of Operations.

PROPERTY, PLANT AND EQUIPMENT (PP&E)

PP&E primarily represents the buildings, equipment and other facilities used by the Sempra Utilities to provide natural gas and electric utility services, and by Sempra Infrastructure in their operations, including construction work in progress at these operating units. PP&E also includes lease improvements and other equipment at Parent and Other, as well as property acquired under a build-to-suit lease, which we discuss further in Note 15.

Our plant costs include

- labor
- materials and contract services
- expenditures for replacement parts incurred during a major maintenance outage of a generating plant

In addition, the cost of utility plant at our rate-regulated businesses and non-utility regulated projects that meet the regulatory accounting requirements of U.S. GAAP at Sempra Mexico and Sempra LNG & Midstream includes AFUDC. We discuss AFUDC below. The cost of non-utility plant includes capitalized interest.

Maintenance costs are expensed as incurred. The cost of most retired depreciable utility plant assets less salvage value is charged to accumulated depreciation.

We discuss collateralized assets as security for loans in Note 5.

PROPERTY, PLANT AND EQUIPMENT BY MAJOR FUNCTIONAL CATEGORY

(Dollars in millions)

	Property, plant and equipment at December 31,		Depreciation rates for years ended December 31,		
	2016	2015	2016	2015	2014
SDG&E:					
Natural gas operations	$ 1,897	$ 1,642	2.40%	2.52%	2.72%
Electric distribution	6,497	6,151	3.86	3.79	3.79
Electric transmission(1)	5,152	4,870	2.66	2.62	2.59
Electric generation(2)	1,932	1,891	4.00	3.89	3.86
Other electric(3)	1,059	981	5.66	5.73	7.09
Construction work in progress(1)	1,307	923	NA	NA	NA
Total SDG&E	17,844	16,458			
SoCalGas:					
Natural gas operations(4)	14,428	13,241	3.64	3.83	3.89
Other non-utility	34	110	6.55	3.95	2.88
Construction work in progress	882	820	NA	NA	NA
Total SoCalGas	15,344	14,171			

			Estimated	Weighted average
Other operating units and parent(5)**:**			useful lives	useful life
Land and land rights	381	289	20 to 55 years(7)	33
Machinery and equipment:				
Utility electric distribution operations	1,519	1,362	12 to 60 years	52
Generating plants	1,874	782	3 to 100 years	32
LNG terminals	1,129	1,124	5 to 43 years	43
Pipelines and storage	3,242	2,311	3 to 55 years	43
Other	235	233	1 to 50 years	12
Construction work in progress	1,488	1,022	NA	NA
Other(6)	568	448	1 to 80 years	32
	10,436	7,571		
Total Sempra Energy Consolidated	$ 43,624	$ 38,200		

(1) At December 31, 2016, includes $388 million in electric transmission assets and $46 million in construction work in progress related to SDG&E's 91-percent interest in the Southwest Powerlink (SWPL) transmission line, jointly owned by SDG&E with other utilities. SDG&E, and each of the other owners, holds its undivided interest as a tenant in common in the property. Each owner is responsible for its share of the project and participates in decisions concerning operations and capital expenditures.

(2) Includes capital lease assets of $258 million at both December 31, 2016 and 2015, primarily related to variable interest entities of which SDG&E is not the primary beneficiary.

(3) Includes capital lease assets of $21 million and $20 million at December 31, 2016 and 2015, respectively.

(4) Includes capital lease assets of $32 million and $30 million at December 31, 2016 and 2015, respectively.

(5) Includes $128 million and $142 million at December 31, 2016 and 2015, respectively, of utility plant, primarily pipelines and other distribution assets, at Ecogas. Includes $204 million and $28 million at December 31, 2015 of utility plant, primarily pipelines and other distribution assets, at Mobile Gas and Willmut Gas, respectively.

(6) Includes capital lease assets of $136 million at both December 31, 2016 and 2015, related to a build-to-suit lease.

(7) Estimated useful lives are for land rights.

Depreciation expense is computed using the straight-line method over the asset's estimated original composite useful life, the CPUC-prescribed period for the California Utilities, or the remaining term of the site leases, whichever is shortest.

Depreciation expense on our Consolidated Statements of Operations is as follows:

DEPRECIATION EXPENSE

(Dollars in millions)

	Years ended December 31,		
	2016	2015	2014
Sempra Energy Consolidated	$ 1,236	$ 1,178	$ 1,126
SDG&E	583	544	512
SoCalGas	474	459	429

Accumulated depreciation on our Consolidated Balance Sheets is as follows:

ACCUMULATED DEPRECIATION
(Dollars in millions)

	December 31, 2016	December 31, 2015
SDG&E:		
Accumulated depreciation:		
Electric(1)	$ 3,873	$ 3,512
Natural gas	721	690
Total SDG&E	4,594	4,202
SoCalGas:		
Accumulated depreciation of natural gas utility plant in service(2)	5,079	4,810
Accumulated depreciation – other non-utility	13	90
Total SoCalGas	5,092	4,900
Other operating units and parent and other:		
Accumulated depreciation – other(3)	755	860
Accumulated depreciation of utility electric distribution operations	252	199
	1,007	1,059
Total Sempra Energy Consolidated	$ 10,693	$ 10,161

(1) Includes accumulated depreciation for assets under capital lease of $39 million and $34 million at December 31, 2016 and 2015, respectively. Includes $229 million at December 31, 2016 related to SDG&E's 91-percent interest in the SWPL transmission line, jointly owned by SDG&E and other utilities.

(2) Includes accumulated depreciation for assets under capital lease of $31 million and $29 million at December 31, 2016 and 2015, respectively.

(3) Includes $33 million and $36 million at December 31, 2016 and 2015, respectively, of accumulated depreciation for utility plant at Ecogas. Includes $35 million and $3 million at December 31, 2015 of accumulated depreciation for utility plant at Mobile Gas and Willmut Gas, respectively.

The California Utilities finance their construction projects with debt and equity funds. The CPUC and the FERC allow the recovery of the cost of these funds by the capitalization of AFUDC, calculated using rates authorized by the CPUC and the FERC, as a cost component of PP&E. The California Utilities earn a return on the capitalized AFUDC after the utility property is placed in service and recover the AFUDC from their customers over the expected useful lives of the assets.

Pipeline projects currently under construction by Sempra Mexico and Sempra LNG & Midstream that are both subject to certain regulation and meet U.S. GAAP regulatory accounting requirements record the impact of AFUDC related to equity.

Sempra South American Utilities, Sempra Mexico, Sempra Renewables and Sempra LNG & Midstream capitalize interest costs incurred to finance capital projects and interest on equity method investments that have not commenced planned principal operations. The California Utilities also capitalize certain interest costs.

Interest capitalized and AFUDC are as follows:

CAPITALIZED FINANCING COSTS
(Dollars in millions)

	Years ended December 31, 2016	2015	2014
Sempra Energy Consolidated	$ 236	$ 201	$ 167
SDG&E	62	51	52
SoCalGas	55	49	34

GOODWILL AND OTHER INTANGIBLE ASSETS

Goodwill

Goodwill is the excess of the purchase price over the fair value of the identifiable net assets of acquired companies measured at the time of acquisition. Goodwill is not amortized, but we test it for impairment annually on October 1 or whenever events or changes in circumstances necessitate an evaluation. If the carrying value of the reporting unit, including goodwill, exceeds its fair value, and the book value of goodwill is greater than its fair value on the test date, we record a goodwill impairment loss.

For our annual goodwill impairment testing, under current U.S. GAAP guidance we have the option to first make a qualitative assessment of whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount before applying

the two-step, quantitative goodwill impairment test. If we elect to perform the qualitative assessment, we evaluate relevant events and circumstances, including but not limited to, macroeconomic conditions, industry and market considerations, cost factors, changes in key personnel and the overall financial performance of the reporting unit. If, after assessing these qualitative factors, we determine that it is more likely than not that the fair value of a reporting unit is less than its carrying amount, then we perform the two-step goodwill impairment test. When we perform the two-step, quantitative goodwill impairment test, we exercise judgment to develop estimates of the fair value of the reporting unit and the corresponding goodwill. Our fair value estimates are developed from the perspective of a knowledgeable market participant. We consider observable transactions in the marketplace for similar investments, if available, as well as an income-based approach such as discounted cash flow analysis. A discounted cash flow analysis may be based directly on anticipated future revenues and expenses and may be performed based on free cash flows generated within the reporting unit. Critical assumptions that affect our estimates of fair value may include

- consideration of market transactions
- future cash flows
- the appropriate risk-adjusted discount rate
- country risk
- entity risk

Changes in the carrying amount of goodwill on the Sempra Energy Consolidated Balance Sheets are as follows:

GOODWILL

(Dollars in millions)

	Sempra South American Utilities	Sempra Mexico	Sempra LNG & Midstream	Total
Balance at December 31, 2014	$ 834	$ 25	$ 72	$ 931
Foreign currency translation(1)	(112)	—	—	(112)
Balance at December 31, 2015	722	25	72	819
Acquisition of businesses	—	1,590	—	1,590
Sale of business	—	—	(72)	(72)
Foreign currency translation(1)	27	—	—	27
Balance at December 31, 2016	$ 749	$ 1,615	$ —	$ 2,364

(1) We record the offset of this fluctuation to Other Comprehensive Income (Loss).

In 2016, Sempra Mexico recorded goodwill of $1,590 million in connection with the acquisitions of Gasoductos de Chihuahua S. de R.L. de C.V. (GdC) and Ventika, S.A.P.I. de C.V. and Ventika II, S.A.P.I. de C.V. (collectively, Ventika) wind power generation facilities. Sempra LNG & Midstream reduced goodwill by $72 million in connection with the sale of EnergySouth Inc. (EnergySouth). We discuss these acquisitions and the divestiture in Note 3.

Other Intangible Assets

Other Intangible Assets included on the Sempra Energy Consolidated Balance Sheets are as follows:

OTHER INTANGIBLE ASSETS

(Dollars in millions)

	Amortization period (years)	December 31, 2016	December 31, 2015
Development rights	50	$ 322	$ 322
Renewable energy transmission and consumption permit	20	154	—
Storage rights	46	138	138
Other	10 years to indefinite	18	17
		632	477
Less accumulated amortization:			
Development rights		(53)	(47)
Storage rights		(25)	(22)
Other		(6)	(4)
		(84)	(73)
		$ 548	$ 404

Other Intangible Assets primarily represent storage and development rights related to the natural gas storage facilities of Bay Gas Storage Company, Ltd. (Bay Gas) and Mississippi Hub, LLC (Mississippi Hub), which are being amortized over their estimated useful lives as shown in the table above.

In December 2016, Sempra Mexico recorded an intangible asset of $154 million, representing a renewable energy transmission and consumption permit previously granted by the CRE that was acquired in connection with the acquisition of the Ventika wind power generation facilities, which we discuss in Note 3.

Amortization expense for intangible assets was $11 million in 2016 and $10 million in each of 2015 and 2014. We estimate the amortization expense for the next five years to be $18 million per year.

LONG-LIVED ASSETS

We test long-lived assets for recoverability whenever events or changes in circumstances have occurred that may affect the recoverability or the estimated useful lives of long-lived assets. Long-lived assets include intangible assets subject to amortization, but do not include investments in unconsolidated subsidiaries. Events or changes in circumstances that indicate that the carrying amount of a long-lived asset may not be recoverable may include

- significant decreases in the market price of an asset
- a significant adverse change in the extent or manner in which we use an asset or in its physical condition
- a significant adverse change in legal or regulatory factors or in the business climate that could affect the value of an asset
- a current period operating or cash flow loss combined with a history of operating or cash flow losses or a projection of continuing losses associated with the use of a long-lived asset
- a current expectation that, more likely than not, a long-lived asset will be sold or otherwise disposed of significantly before the end of its previously estimated useful life

A long-lived asset may be impaired when the estimated future undiscounted cash flows are less than the carrying amount of the asset. If that comparison indicates that the asset's carrying value may not be recoverable, the impairment is measured based on the difference between the carrying amount and the fair value of the asset. This evaluation is performed at the lowest level for which separately identifiable cash flows exist.

VARIABLE INTEREST ENTITIES (VIE)

We consolidate a VIE if we are the primary beneficiary of the VIE. Our determination of whether we are the primary beneficiary is based upon qualitative and quantitative analyses, which assess

- the purpose and design of the VIE;
- the nature of the VIE's risks and the risks we absorb;
- the power to direct activities that most significantly impact the economic performance of the VIE; and
- the obligation to absorb losses or right to receive benefits that could be significant to the VIE.

SDG&E

SDG&E's power procurement is subject to reliability requirements that may require SDG&E to enter into various power purchase arrangements which include variable interests. SDG&E evaluates the respective entities to determine if variable interests exist and, based on the qualitative and quantitative analyses described above, if SDG&E, and thereby Sempra Energy, is the primary beneficiary.

Tolling Agreements

SDG&E has agreements under which it purchases power generated by facilities for which it supplies all of the natural gas to fuel the power plant (i.e., tolling agreements). SDG&E's obligation to absorb natural gas costs may be a significant variable interest. In addition, SDG&E has the power to direct the dispatch of electricity generated by these facilities. Based upon our analysis, the ability to direct the dispatch of electricity may have the most significant impact on the economic performance of the entity owning the generating facility because of the associated exposure to the cost of natural gas, which fuels the plants, and the value of electricity produced. To the extent that SDG&E (1) is obligated to purchase and provide fuel to operate the facility, (2) has the power to direct the dispatch, and (3) purchases all of the output from the facility for a substantial portion of the facility's useful life, SDG&E may be the primary beneficiary of the entity owning the generating facility. SDG&E determines if it is the primary beneficiary in these cases based on a qualitative approach in which we consider the operational characteristics of the facility, including its expected power generation output relative to its capacity to generate and the financial structure of the entity, among other factors. If we determine that SDG&E is the primary beneficiary, SDG&E and Sempra Energy consolidate the entity that owns the facility as a VIE.

Otay Mesa VIE

SDG&E has an agreement to purchase power generated at the Otay Mesa Energy Center (OMEC), a 605-megawatt (MW) generating facility. In addition to tolling, the agreement provides SDG&E with the option to purchase OMEC at the end of the contract term in 2019, or upon earlier termination of the purchased-power agreement, at a predetermined price subject to adjustments based on performance of the facility. If SDG&E does not exercise its option, under certain circumstances, it may be required to purchase the power plant for $280 million, which we refer to as the put option.

The facility owner, Otay Mesa Energy Center LLC (OMEC LLC), is a VIE (Otay Mesa VIE), of which SDG&E is the primary beneficiary. SDG&E has no OMEC LLC voting rights, holds no equity in OMEC LLC and does not operate OMEC. In addition to the risks absorbed under the tolling agreement, SDG&E absorbs separately through the put option a significant portion of the risk that the value of Otay Mesa VIE could decline. Accordingly, SDG&E and Sempra Energy consolidate Otay Mesa VIE. Otay Mesa VIE's equity of $37 million at December 31, 2016 and $53 million at December 31, 2015 is included on the Consolidated Balance Sheets in Other Noncontrolling Interests for Sempra Energy and in Noncontrolling Interest for SDG&E.

OMEC LLC has a loan outstanding of $305 million at December 31, 2016, the proceeds of which were used for the construction of OMEC. The loan is with third party lenders and is collateralized by OMEC's PP&E. SDG&E is not a party to the loan agreement and does not have any additional implicit or explicit financial responsibility to OMEC LLC. The loan fully matures in April 2019 and bears interest at rates varying with market rates. In addition, OMEC LLC has entered into interest rate swap agreements to moderate its exposure to interest rate changes. We provide additional information concerning the interest rate swaps in Note 9.

The Consolidated Financial Statements of Sempra Energy and SDG&E include the following amounts associated with Otay Mesa VIE. The amounts are net of eliminations of transactions between SDG&E and Otay Mesa VIE. The captions in the tables below correspond to SDG&E's Consolidated Balance Sheets and Consolidated Statements of Operations.

AMOUNTS ASSOCIATED WITH OTAY MESA VIE

(Dollars in millions)

	December 31,	
	2016	2015
Cash and cash equivalents	$ 6	$ 5
Restricted cash	11	23
Inventories	3	3
Other	2	—
Total current assets	22	31
Restricted cash	1	—
Property, plant and equipment, net	354	383
Total assets	$ 377	$ 414
Current portion of long-term debt	$ 10	$ 10
Fixed-price contracts and other derivatives	13	14
Other	5	5
Total current liabilities	28	29
Long-term debt	293	303
Fixed-price contracts and other derivatives	12	23
Deferred credits and other	7	6
Other noncontrolling interest	37	53
Total liabilities and equity	$ 377	$ 414

	Years ended December 31,		
	2016	2015	2014
Operating expenses			
Cost of electric fuel and purchased power	$ (79)	$ (83)	$ (83)
Operation and maintenance	29	19	19
Depreciation and amortization	35	26	27
Total operating expenses	(15)	(38)	(37)
Operating income	15	38	37
Interest expense	(20)	(19)	(17)
(Loss) income before income taxes/Net (loss) income	(5)	19	20
Losses (earnings) attributable to noncontrolling interest	5	(19)	(20)
Earnings attributable to common shares	$ —	$ —	$ —

SDG&E has determined that no contracts, other than the one relating to Otay Mesa VIE mentioned above, result in SDG&E being the primary beneficiary of a variable interest entity at December 31, 2016. In addition to the tolling agreements described above, other variable interests involve various elements of fuel and power costs, and other components of cash flow expected to be paid to or received by our counterparties. In most of these cases, the expectation of variability is not substantial, and SDG&E generally does not have the power to direct activities that most significantly impact the economic performance of the other VIEs. If our ongoing evaluation of these VIEs were to conclude that SDG&E becomes the primary beneficiary and consolidation by SDG&E becomes necessary, the effects are not expected to significantly affect the financial position, results of operations, or liquidity of SDG&E. In addition, SDG&E is not exposed to losses or gains as a result of these other VIEs, because all such variability would be recovered in rates. We provide additional information about power purchase agreements with peaker plant facilities that are VIEs of which SDG&E is not the primary beneficiary in Note 15.

Sempra Renewables

Effective December 2016, certain of Sempra Renewables' wind and solar power generation projects are held by limited liability companies whose members are Sempra Renewables and financial institutions. The financial institutions are noncontrolling tax equity investors to which earnings, tax attributes and cash flows are allocated in accordance with the respective limited liability company agreements. These entities are VIEs and Sempra Energy is the primary beneficiary, generally due to Sempra Energy's power to direct activities that most significantly impact the economic performance of these VIEs as the operator of the renewable energy projects.

The Consolidated Financial Statements of Sempra Energy include the following amounts associated with these entities. The captions in the tables below correspond to Sempra Energy's Consolidated Balance Sheet.

AMOUNTS ASSOCIATED WITH TAX EQUITY ARRANGEMENTS
(Dollars in millions)

	December 31, 2016
Cash and cash equivalents	$ 88
Accounts receivable	3
Total current assets	91
Property, plant and equipment, net	926
Total assets	1,017
Accounts payable	68
Other	7
Total current liabilities	75
Asset retirement obligations	27
Total liabilities	102
Other noncontrolling interests	468
Net assets less other noncontrolling interests	$ 447

As the primary beneficiary of these tax equity limited liability companies, we consolidate them; however, their results of operations for the year ended December 31, 2016 were not material to the Consolidated Statement of Operations of Sempra Energy.

Sempra LNG & Midstream

Sempra Energy's equity method investment in Cameron LNG Holdings, LLC (Cameron LNG JV) is considered to be a VIE principally due to contractual provisions that transfer certain risks to customers. Sempra Energy is not the primary beneficiary because we do not have the power to direct the most significant activities of Cameron LNG JV. We will continue to evaluate Cameron LNG JV for any changes that may impact our determination of the primary beneficiary. The carrying value of our investment in Cameron LNG JV, including amounts recognized in Accumulated Other Comprehensive Income (Loss) (AOCI) related to interest-rate cash flow hedges at Cameron LNG JV, was $997 million at December 31, 2016 and $983 million at December 31, 2015, as we discuss in Note 4. Our maximum exposure to loss includes the carrying value of our investment and the guarantees discussed in Note 4.

Other Variable Interest Entities

Sempra Energy's other operating units also enter into arrangements which could include variable interests. We evaluate these arrangements and applicable entities based upon the qualitative and quantitative analyses described above. Certain of these entities are service companies that are VIEs. As the primary beneficiary of these service companies, we consolidate them; however, their financial statements are not material to the financial statements of Sempra Energy. In all other cases, we have determined that these contracts are not variable interests in a VIE and therefore are not subject to the U.S. GAAP requirements concerning the consolidation of VIEs.

ASSET RETIREMENT OBLIGATIONS

For tangible long-lived assets, we record asset retirement obligations for the present value of liabilities of future costs expected to be incurred when assets are retired from service, if the retirement process is legally required and if a reasonable estimate of fair value can be made. We also record a liability if a legal obligation to perform an asset retirement exists and can be reasonably estimated, but performance is conditional upon a future event. We record the estimated retirement cost over the life of the related asset by depreciating the asset retirement cost (measured as the present value of the obligation at the time of the asset's acquisition), and accreting the obligation until the liability is settled. Rate-regulated entities, including the California Utilities, record regulatory assets or liabilities as a result of the timing difference between the recognition of costs in accordance with U.S. GAAP and costs recovered through the rate-making process.

We have recorded asset retirement obligations related to various assets, including:

SDG&E and SoCalGas

- fuel and storage tanks
- natural gas transmission systems
- natural gas distribution systems
- hazardous waste storage facilities
- asbestos-containing construction materials

SDG&E

- decommissioning of nuclear power facilities
- electric distribution and transmission systems
- site restoration of a former power plant
- power generation plant (natural gas)

SoCalGas

- underground natural gas storage facilities and wells

Sempra South American Utilities

- electric distribution and transmission systems

Sempra Mexico

- power generation plant (natural gas) (classified as held for sale at December 31, 2016)
- natural gas distribution and transportation systems
- LNG terminal
- wind farm

Sempra Renewables

- certain power generation plants (solar and wind)

Sempra LNG & Midstream

- natural gas distribution systems (sold in September 2016)
- natural gas transportation systems
- underground natural gas storage facilities

The changes in asset retirement obligations are as follows:

CHANGES IN ASSET RETIREMENT OBLIGATIONS

(Dollars in millions)

	Sempra Energy Consolidated		SDG&E		SoCalGas	
	2016	2015	2016	2015	2016	2015
Balance as of January 1(1)	$ 2,255	$ 2,190	$ 828	$ 873	$ 1,383	$ 1,276
Accretion expense	101	92	38	40	61	49
Liabilities incurred and acquired	35	1	—	—	—	—
Deconsolidation and reclassification(2)	(16)	—	—	—	—	—
Payments	(47)	(80)	(46)	(79)	—	—
Revisions(3)	225	52	10	(6)	215	58
Balance at December 31(1)	$ 2,553	$ 2,255	$ 830	$ 828	$ 1,659	$ 1,383

(1) The current portions of the obligations are included in Other Current Liabilities on the Consolidated Balance Sheets.

(2) Deconsolidated $12 million due to the September 2016 sale of EnergySouth and reclassified $4 million to Liabilities Held for Sale on the Sempra Energy Consolidated Balance Sheet at December 31, 2016, as we discuss in Note 3.

(3) The revisions are primarily related to revised estimates of cash flows and, additionally in 2016, to changes in the cost of removal rates primarily for natural gas assets based on updated cost studies approved in the final decision in the 2016 General Rate Case. We discuss the 2016 General Rate Case in Note 14.

CONTINGENCIES

We accrue losses for the estimated impacts of various conditions, situations or circumstances involving uncertain outcomes. For loss contingencies, we accrue the loss if an event has occurred on or before the balance sheet date and:

- information available through the date we file our financial statements indicates it is probable that a loss has been incurred, given the likelihood of uncertain future events; and
- the amount of the loss can be reasonably estimated.

We do not accrue contingencies that might result in gains. We continuously assess contingencies for litigation claims, environmental remediation and other events.

LEGAL FEES

Legal fees that are associated with a past event for which a liability has been recorded are accrued when it is probable that fees also will be incurred and amounts are estimable.

COMPREHENSIVE INCOME

Comprehensive income includes all changes in the equity of a business enterprise (except those resulting from investments by owners and distributions to owners), including:

- foreign currency translation adjustments
- certain hedging activities
- changes in unamortized net actuarial gain or loss and prior service cost related to pension and other postretirement benefits plans
- unrealized gains or losses on available-for-sale securities

The Consolidated Statements of Comprehensive Income show the changes in the components of other comprehensive income (loss) (OCI), including the amounts attributable to noncontrolling interests. The following tables present the changes in AOCI by component and amounts reclassified out of AOCI to net income, excluding amounts attributable to noncontrolling interests, for the years ended December 31:

CHANGES IN ACCUMULATED OTHER COMPREHENSIVE INCOME (LOSS) BY COMPONENT(1)

(Dollars in millions)

	Foreign currency translation adjustments	Financial instruments	Pension and other postretirement benefits	Total accumulated other comprehensive income (loss)
Sempra Energy Consolidated:				
Balance as of December 31, 2013	$ (129)	$ (26)	$ (73)	$ (228)
OCI before reclassifications	(193)	(70)	(26)	(289)
Amounts reclassified from AOCI	—	6	14	20
Net OCI	(193)	(64)	(12)	(269)
Balance as of December 31, 2014	(322)	(90)	(85)	(497)
OCI before reclassifications	(260)	(57)	(10)	(327)
Amounts reclassified from AOCI	—	10	8	18
Net OCI	(260)	(47)	(2)	(309)
Balance as of December 31, 2015	(582)	(137)	(87)	(806)
OCI before reclassifications	42	(7)	(15)	20
Amounts reclassified from AOCI(2)	13	19	6	38
Net OCI	55	12	(9)	58
Balance as of December 31, 2016	$ (527)	$ (125)	$ (96)	$ (748)
SDG&E:				
Balance as of December 31, 2013			$ (9)	$ (9)
OCI before reclassifications			(5)	(5)
Amounts reclassified from AOCI			2	2
Net OCI			(3)	(3)
Balance as of December 31, 2014			(12)	(12)
OCI before reclassifications			3	3
Amounts reclassified from AOCI			1	1
Net OCI			4	4
Balance as of December 31, 2015			(8)	(8)
OCI before reclassifications			(1)	(1)
Amounts reclassified from AOCI			1	1
Net OCI			—	—
Balance as of December 31, 2016			$ (8)	$ (8)
SoCalGas:				
Balance as of December 31, 2013		$ (14)	$ (4)	$ (18)
OCI before reclassifications		—	(3)	(3)
Amounts reclassified from AOCI		—	3	3
Net OCI		—	—	—
Balance as of December 31, 2014		(14)	(4)	(18)
OCI before reclassifications		—	(1)	(1)
Net OCI		—	(1)	(1)
Balance as of December 31, 2015		(14)	(5)	(19)
OCI before reclassifications		—	(4)	(4)
Amounts reclassified from AOCI		1	—	1
Net OCI		1	(4)	(3)
Balance as of December 31, 2016		$ (13)	$ (9)	$ (22)

(1) All amounts are net of income tax, if subject to tax, and exclude noncontrolling interests.

(2) Total AOCI includes $20 million associated with the sale of noncontrolling interests, discussed below in "Sale of Noncontrolling Interests – Sempra Mexico – Follow-On Offerings," which does not impact the Consolidated Statement of Comprehensive Income.

RECLASSIFICATIONS OUT OF ACCUMULATED OTHER COMPREHENSIVE INCOME (LOSS)

(Dollars in millions)

Details about accumulated other comprehensive income (loss) components	Amounts reclassified from accumulated other comprehensive income (loss)			Affected line item on Consolidated Statements of Operations
	Years ended December 31,			
	2016	2015	2014	
Sempra Energy Consolidated:				
Financial instruments:				
Interest rate and foreign exchange instruments	$ 17	$ 18	$ 21	Interest Expense
Interest rate instruments	—	—	(3)	Gain on Sale of Assets
Interest rate instruments	10	12	10	Equity Earnings, Before Income Tax
Interest rate and foreign exchange instruments	7	—	—	Remeasurement of Equity Method Investment
Interest rate and foreign exchange instruments	5	13	—	Equity Earnings, Net of Income Tax
Commodity contracts not subject to rate recovery	(6)	(14)	(8)	Revenues: Energy-Related Businesses
Total before income tax	33	29	20	
	(6)	(4)	(3)	Income Tax Expense
Net of income tax	27	25	17	
	(15)	(15)	(11)	Earnings Attributable to Noncontrolling Interests
	$ 12	$ 10	$ 6	
Pension and other postretirement benefits:				
Amortization of actuarial loss	$ 10	$ 14	$ 23	See note (1) below
Prior service credit	1	—	—	
Total before income tax	11	14	23	
	(5)	(6)	(9)	Income Tax Expense
Net of income tax	$ 6	$ 8	$ 14	
Total reclassifications for the period, net of tax	$ 18	$ 18	$ 20	
SDG&E:				
Financial instruments:				
Interest rate instruments	$ 12	$ 12	$ 11	Interest Expense
	(12)	(12)	(11)	Earnings Attributable to Noncontrolling Interest
	$ —	$ —	$ —	
Pension and other postretirement benefits:				
Amortization of actuarial loss	$ 1	$ 1	$ 3	See note (1) below
	—	—	(1)	Income Tax Expense
Net of income tax	$ 1	$ 1	$ 2	
Total reclassifications for the period, net of tax	$ 1	$ 1	$ 2	
SoCalGas:				
Financial instruments:				
Interest rate instruments	$ 1	$ 1	$ 1	Interest Expense
	—	(1)	(1)	Income Tax Expense
Net of income tax	$ 1	$ —	$ —	
Pension and other postretirement benefits:				
Amortization of actuarial loss	$ —	$ —	$ 5	See note (1) below
	—	—	(2)	Income Tax Expense
Net of income tax	$ —	$ —	$ 3	
Total reclassifications for the period, net of tax	$ 1	$ —	$ 3	

(1) Amounts are included in the computation of net periodic benefit cost (see "Net Periodic Benefit Cost" in Note 7).

NONCONTROLLING INTERESTS

Ownership interests that are held by owners other than Sempra Energy and SDG&E in subsidiaries or entities consolidated by them are accounted for and reported as noncontrolling interests. Noncontrolling interests are reported as a separate component of equity on the Consolidated Balance Sheets. Earnings/losses attributable to the noncontrolling interests are separately identified on the Consolidated Statements of Operations, and net income/loss and comprehensive income/loss attributable to noncontrolling interests

are separately identified on the Consolidated Statements of Comprehensive Income (Loss) and Consolidated Statements of Changes in Equity.

Sale of Noncontrolling Interests

Sempra Mexico – Follow-On Offerings

On October 13, 2016, IEnova priced a private follow-on offering of its common stock (which trades under the symbol IENOVA on the Mexican Stock Exchange) in the U.S. and outside of Mexico (the International Offering) and a concurrent public common stock offering in Mexico (the Mexican Offering) at 80.00 Mexican pesos per share. The initial purchasers in the International Offering and the underwriters in the Mexican Offering were granted a 30-day option to purchase additional common shares at the global offering price, less the underwriting discount, to cover overallotments. These options were exercised on October 17, 2016. Sempra Energy also participated in the Mexican Offering by purchasing 83,125,000 shares of common stock for approximately $351 million. After the offerings, including the issuance of shares pursuant to the exercise of the overallotment options, the aggregate shares of common stock sold in the offerings totaled 380,000,000.

The net proceeds of the offerings were approximately $1.57 billion in U.S. dollars or 29.86 billion Mexican pesos. IEnova used the net proceeds of the offerings to repay debt financing, including the $1.15 billion bridge loan from Sempra Global that was used to finance the GdC acquisition, $100 million in loans from its parent and $250 million of funding from its revolving credit facility. Additionally, $50 million of net proceeds was used to partially fund the Ventika acquisition. Remaining proceeds were used to fund capital expenditures and for general corporate purposes. We discuss these acquisitions in Note 3.

All U.S. dollar equivalents presented here are based on an exchange rate of 18.96 Mexican pesos to 1.00 U.S. dollar as of October 13, 2016, the pricing date for the offerings. Net proceeds are after reduction for underwriting discounts and commissions and offering expenses. Upon completion of the offerings on October 19, 2016 (including the issuance of shares pursuant to the exercise of the overallotment options), Sempra Energy's beneficial ownership of IEnova decreased from approximately 81.1 percent to 66.4 percent, which did not result in a change in control. When there are changes in noncontrolling interests of a subsidiary that do not result in a change of control, any difference between carrying value and fair value related to the change in ownership is recorded as an adjustment to shareholders' equity. As a result of the offerings, we recorded an increase in Sempra Energy's shareholders' equity of $281 million, net of $351 million for our participation in the Mexican Offering, and a $948 million increase in Other Noncontrolling Interests for the sale of IEnova shares to third parties.

The International Offering was exempt from registration under the U.S. Securities Act of 1933, as amended (the Securities Act), and shares in the International Offering were offered and sold only to qualified institutional buyers pursuant to Rule 144A under the Securities Act and to persons outside of the United States, in accordance with Regulation S under the Securities Act. The shares were not registered under the Securities Act or any state securities laws, and may not be offered or sold in the United States absent registration or an applicable exemption from the registration requirements of the Securities Act and applicable securities laws.

Sempra Renewables – Tax Equity Arrangements

In December 2016, Sempra Renewables closed a transaction with a financial institution to form a portfolio tax equity limited liability company that includes certain Sempra Renewables solar power generation projects. Also in December 2016, Sempra Renewables closed another transaction with two financial institutions to form a tax equity limited liability company involving a Sempra Renewables wind power generation project. Sempra Renewables received cash proceeds of $472 million, net of offering costs, for the sale of noncontrolling interests relating to these transactions. Sempra Renewables consolidates the entities and reports noncontrolling interests representing the financial institutions' respective membership interests in the tax equity arrangements.

The financial institutions that are noncontrolling, tax equity investors are allocated earnings, tax attributes and cash flows in accordance with the respective limited liability company agreements. Sempra Renewables has determined that these tax equity arrangements represent substantive profit-sharing arrangements. Sempra Renewables has further determined that the appropriate method for attributing income and loss to the noncontrolling interests each period is a balance sheet approach referred to as the hypothetical liquidation at book value (HLBV) method. Under the HLBV method, the amounts of income and loss attributable to the noncontrolling interests in Sempra Energy's Consolidated Statements of Operations reflect changes in the amounts the members would hypothetically receive at each balance sheet date under the liquidation provisions of the respective limited liability company agreements, assuming the net assets of these entities were liquidated at recorded amounts, after taking into account any capital transactions, such as contributions or distributions, between the entities and the members.

Purchase of Noncontrolling Interests

In December 2014, we purchased 18,625,594 Luz del Sur shares for $74 million, increasing Sempra South American Utilities' ownership from 79.8 percent to 83.6 percent.

Preferred Stock

The preferred stock at SoCalGas is presented at Sempra Energy as a noncontrolling interest at December 31, 2016 and 2015. Sempra Energy records charges against income related to noncontrolling interests for preferred stock dividends declared by SoCalGas. We provide additional information regarding preferred stock in Note 11.

Other Noncontrolling Interests

At December 31, 2016 and 2015, we reported the following noncontrolling ownership interests held by others (not including preferred shareholders) recorded in Other Noncontrolling Interests in Total Equity on Sempra Energy's Consolidated Balance Sheets:

OTHER NONCONTROLLING INTERESTS

(Dollars in millions)

	Percent ownership held by others		Equity held by noncontrolling interests	
	December 31,		December 31,	
	2016	2015	2016	2015
SDG&E:				
Otay Mesa VIE	100%	100%	$ 37	$ 53
Sempra South American Utilities:				
Chilquinta Energía subsidiaries(1)	23.1 - 43.4	23.5 - 43.4	22	21
Luz del Sur	16.4	16.4	173	164
Tecsur	9.8	9.8	4	4
Sempra Mexico:				
IEnova, S.A.B. de C.V.	33.6	18.9	1,524	468
Sempra Renewables:				
Tax equity arrangement – wind(2)	NA	—	92	—
Tax equity arrangement – solar(2)	NA	—	376	—
Sempra LNG & Midstream:				
Bay Gas Storage Company, Ltd.	9.1	9.1	27	25
Liberty Gas Storage, LLC	23.3	23.2	14	14
Southern Gas Transmission Company	49.0	49.0	1	1
Total Sempra Energy			$ 2,270	$ 750

(1) Chilquinta Energía has four subsidiaries with noncontrolling interests held by others. Percentage range reflects the highest and lowest ownership percentages among these subsidiaries.

(2) Net income or loss attributable to the noncontrolling interests is computed using the HLBV method and is not based on ownership percentages.

REVENUES

California Utilities

Our California Utilities generate revenues primarily from deliveries to their customers of electricity by SDG&E and natural gas by both SoCalGas and SDG&E and from related services. We record these revenues following the accrual method and recognize them upon delivery and performance. As described below, recorded revenues include those authorized by the CPUC to support our operations ("decoupled revenue"), as well as commodity costs that are passed through to core gas customers and electric customers:

- Decoupled revenue – The regulatory framework permits the California Utilities to recover authorized revenue based on estimated annual demand forecasts approved in regular proceedings before the CPUC. Any difference between actual demand and the annual demand approved in the proceedings is recovered or refunded in authorized revenue in the subsequent year. This design, commonly known as "decoupling," is intended to minimize any impact on earnings due to variability in volumetric demand for electricity and natural gas.
- Commodity costs – The regulatory framework authorizes the California Utilities to recover the actual cost of natural gas procured and delivered to its core customers in rates substantially as incurred. Actual electricity procurement costs are recovered as power is delivered, or to the extent actual amounts vary from forecasts, generally recovered or refunded within the subsequent year. The California Utilities may also record revenue from CPUC-approved incentive awards, some of which require approval by the CPUC prior to being recognized. SDG&E bids and self-schedules its generation into the California Independent System Operator (ISO) energy market on a day-ahead and real-time basis and self-schedules power to serve the demand of its customers. Generally, SDG&E is a net purchaser of power. The California ISO settles SDG&E costs and revenues on an hourly and real-time net basis.

On a monthly basis, SoCalGas accrues natural gas storage contract revenues, which consist of storage reservation and variable charges based on negotiated agreements with terms of up to 15 years.

Sempra South American Utilities

Our electric distribution utilities in South America, Chilquinta Energía and Luz del Sur, serve primarily regulated customers, and their revenues are based on tariffs that are set by the National Energy Commission (Comisión Nacional de Energía, or CNE) in Chile and the Energy and Mining Investment Supervisory Body (Organismo Supervisor de la Inversión en Energía y Minería, or OSINERGMIN) in Peru.

The tariffs charged are based on an efficient model distribution company defined by Chilean law in the case of Chilquinta Energía, and OSINERGMIN in the case of Luz del Sur. The tariffs include operation and maintenance costs, an internal rate of return on the new replacement value of depreciable assets, charges for the use of transmission systems, and a component for the value added by the distributor. Tariffs are designed to provide for a pass-through to customers of the main noncontrollable cost items (mainly power purchases and transmission charges), recovery of reasonable operating and administrative costs, incentives to reduce costs and make needed capital investments and a regulated rate of return on the distributor's regulated asset base.

Sempra Infrastructure

Our natural gas utilities outside of California apply U.S. GAAP for revenue recognition consistent with the California Utilities, namely Ecogas, our natural gas utility in Mexico, and Mobile Gas and Willmut Gas, our natural gas utilities in Alabama and Mississippi, respectively, that were sold in September 2016.

The table below shows the total utilities revenues in Sempra Energy's Consolidated Statements of Operations for each of the last three years. The revenues include amounts for services rendered but unbilled (approximately one-half month's deliveries) at the end of each year.

TOTAL UTILITIES REVENUES AT SEMPRA ENERGY CONSOLIDATED(1)

(Dollars in millions)

	Years ended December 31,		
	2016	2015	2014
Electric revenues	$ 5,211	$ 5,158	$ 5,209
Natural gas revenues	4,050	4,096	4,549
Total	$ 9,261	$ 9,254	$ 9,758

(1) Excludes intercompany revenues.

We provide additional information concerning utility revenue recognition in "Effects of Regulation" above.

Energy-Related Businesses

Sempra South American Utilities

Sempra South American Utilities generates revenues from energy-services companies that provide electric construction services and recognizes these revenues when services are provided in accordance with contractual agreements. The energy-services company in Chile also generates revenue from selling electricity to non-regulated customers.

Sempra Mexico

Sempra Mexico recognizes revenues from:

- pipeline transportation and storage of natural gas, liquid petroleum gas and ethane as capacity is provided;
- sale of natural gas as deliveries are made;
- an LNG regasification terminal that generates revenues from reservation and usage fees under terminal capacity agreements and nitrogen injection service agreements as capacity is provided;
- wind power generation facilities that generate revenues from selling electricity as the power is delivered at the interconnection point; and
- a natural gas-fired power plant that generates revenues from selling electricity and/or capacity to the California ISO and to governmental, public utility and wholesale power marketing entities as the power is delivered at the interconnection point. In February 2016, management approved a plan to market and sell Termoeléctrica de Mexicali (TdM). As a result, we classified it as held for sale. We discuss TdM further in Note 3.

Sempra Mexico reports revenue net of value added taxes in Mexico. Sempra Mexico's revenues also include net realized gains and losses on settlements of energy derivatives and net unrealized gains and losses from the change in fair values of energy derivatives.

Sempra Renewables

For consolidated entities, Sempra Renewables generates revenues from the sale of solar and wind power pursuant to power purchase agreements, and recognizes these revenues when the power is delivered. It also generates revenues for managing certain of its solar and wind project joint ventures.

Sempra LNG & Midstream

Sempra LNG & Midstream records revenues from contractual counterparty obligations for non-delivery of LNG cargoes, as well as revenues from the sale of LNG and natural gas as deliveries are made to counterparties. Sempra LNG & Midstream also recognizes revenues from natural gas storage and transportation operations when services are provided in accordance with contractual agreements for the storage and transportation services. Sempra LNG & Midstream revenues also include net realized gains and losses on settlements of energy derivatives and net unrealized gains and losses from the change in fair values of energy derivatives. Prior to April 2015, Sempra LNG & Midstream generated revenues from selling electricity and/or capacity from its Mesquite Power facility (see Note 3) to the California ISO and to governmental, public utility and wholesale power marketing entities. Sempra LNG & Midstream recognized these revenues as the electricity was delivered and capacity was provided. Related to its LNG terminal, prior to October 1, 2014, the effective date of Cameron LNG JV, Sempra LNG & Midstream recognized revenues from reservation and usage fees. We discuss the deconsolidation of Cameron LNG, LLC and related assets further in Note 3.

OTHER COST OF SALES

Other Cost of Sales primarily includes

- pipeline capacity costs, and pipeline transportation and natural gas marketing costs at Sempra LNG & Midstream;
- electric construction services costs at Sempra South American Utilities' energy-services companies; and
- energy management service fees and costs associated with construction at Sempra Mexico.

OPERATION AND MAINTENANCE EXPENSES

Operation and Maintenance includes operating and maintenance costs, and general and administrative costs, consisting primarily of personnel costs, purchased materials and services, litigation expense and rent.

FOREIGN CURRENCY TRANSLATION

Our operations in South America and our natural gas distribution utility in Mexico use their local currency as their functional currency. The assets and liabilities of their foreign operations are translated into U.S. dollars at current exchange rates at the end of the reporting period, and revenues and expenses are translated at average exchange rates for the year. The resulting noncash translation adjustments do not enter into the calculation of earnings or retained earnings (unless the operation is being discontinued), but are reflected in Other Comprehensive Income (Loss) and in Accumulated Other Comprehensive Income (Loss).

Cash flows of these consolidated foreign subsidiaries are translated into U.S. dollars using average exchange rates for the period. We report the effect of exchange rate changes on cash balances held in foreign currencies in "Effect of Exchange Rate Changes on Cash and Cash Equivalents" on the Sempra Energy Consolidated Statements of Cash Flows.

Currency transaction losses in a currency other than the entity's functional currency were $1 million, $7 million and $15 million for the years ended December 31, 2016, 2015 and 2014, respectively, and are included in Other Income, Net, on the Sempra Energy Consolidated Statements of Operations.

TRANSACTIONS WITH AFFILIATES

Amounts due from and to unconsolidated affiliates at Sempra Energy Consolidated, SDG&E and SoCalGas are as follows:

AMOUNTS DUE FROM (TO) UNCONSOLIDATED AFFILIATES

(Dollars in millions)

	December 31, 2016	December 31, 2015
Sempra Energy Consolidated:		
Total due from various unconsolidated affiliates – current	$ 26	$ 6
Sempra South American Utilities(1):		
Eletrans S.A. and Eletrans II S.A. – 4% Note(2)	$ 96	$ 72
Other related party receivables	1	—
Sempra Mexico(1):		
Affiliate of joint venture with Ductos y Energéticos del Norte:		
Note due November 14, 2018(3)	2	3
Note due November 14, 2018(3)	44	42
Note due November 14, 2018(3)	35	34
Note due November 14, 2018(3)	9	8
Energía Sierra Juárez – Note due June 15, 2018(4)	14	24
Sempra LNG & Midstream – Cameron LNG JV	—	3
Total due from unconsolidated affiliates – noncurrent	$ 201	$ 186
Total due to various unconsolidated affiliates – current	$ (11)	$ (14)
SDG&E:		
Sempra Energy(5)	$ 3	$ —
Various affiliates	1	1
Total due from various unconsolidated affiliates – current	$ 4	$ 1
Sempra Energy	$ —	$ (34)
SoCalGas	(8)	(13)
Various affiliates	(7)	(8)
Total due to unconsolidated affiliates – current	$ (15)	$ (55)
Income taxes due from Sempra Energy(6)	$ 159	$ 28
SoCalGas:		
Sempra Energy(7)	$ —	$ 35
SDG&E	8	13
Total due from unconsolidated affiliates – current	$ 8	$ 48
Sempra Energy	$ (28)	$ —
Total due to unconsolidated affiliates – current	$ (28)	$ —
Income taxes due from Sempra Energy(6)	$ 5	$ 1

(1) Amounts include principal balances plus accumulated interest outstanding.

(2) U.S. dollar-denominated loan, at a fixed interest rate with no stated maturity date, to provide project financing for the construction of transmission lines at Eletrans S.A. and Eletrans II S.A. (collectively, Eletrans), which is a joint venture of Chilquinta Energía.

(3) U.S. dollar-denominated loan, at a variable interest rate based on the 30-day LIBOR plus 450 basis points (5.27 percent at December 31, 2016), to finance the Los Ramones Norte pipeline project.

(4) U.S. dollar-denominated loan, at a variable interest rate based on the 30-day LIBOR plus 637.5 basis points (7.15 percent at December 31, 2016), to finance the first phase of the Energía Sierra Juárez wind project, which is a joint venture of IEnova.

(5) At December 31, 2016, net receivable included outstanding advances to Sempra Energy of $31 million at an interest rate of 0.68%.

(6) SDG&E and SoCalGas are included in the consolidated income tax return of Sempra Energy and are allocated income tax expense from Sempra Energy in an amount equal to that which would result from each company having always filed a separate return.

(7) At December 31, 2015, net receivable included outstanding advances to Sempra Energy of $50 million at an interest rate of 0.11%.

Revenues and cost of sales from unconsolidated affiliates are as follows:

REVENUES AND COST OF SALES FROM UNCONSOLIDATED AFFILIATES
(Dollars in millions)

	Years ended December 31,		
	2016	2015	2014
Revenues:			
Sempra Energy Consolidated	$ 25	$ 26	$ 13
SDG&E	7	10	13
SoCalGas	76	75	69
Cost of Sales:			
Sempra Energy Consolidated	$ 72	$ 107	$ 78
SDG&E	64	49	17

California Utilities

Sempra Energy, SDG&E and SoCalGas provide certain services to each other and are charged an allocable share of the cost of such services. Also, from time-to-time, SDG&E and SoCalGas may make short-term advances of surplus cash to Sempra Energy at interest rates based on the federal funds rate plus a margin of 13 to 20 basis points, depending on the loan balance.

SoCalGas provides natural gas transportation and storage services for SDG&E and charges SDG&E for such services monthly. SoCalGas records revenues and SDG&E records a corresponding amount to cost of sales.

SDG&E and SoCalGas charge one another, as well as other Sempra Energy affiliates, for shared asset depreciation. SoCalGas and SDG&E record revenues and the affiliates record corresponding amounts to operation and maintenance expense.

The natural gas supply for SDG&E's and SoCalGas' core natural gas customers is purchased by SoCalGas as a combined procurement portfolio managed by SoCalGas. Core customers are primarily residential and small commercial and industrial customers. This core gas procurement function is considered a shared service, therefore revenues and costs related to SDG&E are not included in SoCalGas' Statements of Operations.

SDG&E has a 20-year contract for up to 155 MW of renewable power supplied from the Energía Sierra Juárez wind power generation facility. Energía Sierra Juárez is a 50-percent owned and unconsolidated joint venture of Sempra Mexico that commenced operations in June 2015.

Sempra Renewables

Sempra Renewables, through its wholly owned subsidiary, Sempra Global Services, Inc. (SGS), provides project administration and operating and maintenance services to certain of its renewable energy unconsolidated joint ventures.

Sempra LNG & Midstream

Sempra LNG & Midstream provides project administration and operating and maintenance services to Cameron LNG JV, as well as providing personnel on an employee leasing basis.

Sempra LNG & Midstream has an agreement with Rockies Express Pipeline LLC (Rockies Express) for capacity on the Rockies Express pipeline (REX). In the second quarter of 2016, Sempra LNG & Midstream permanently released certain pipeline capacity with Rockies Express and others, as we discuss in Note 15.

Guarantees

Sempra Energy has provided guarantees to certain of its solar and wind farm joint ventures and entered into guarantees related to the financing of the Cameron LNG JV project, as we discuss in Note 4.

RESTRICTED NET ASSETS

Sempra Energy Consolidated

As we discuss below, the California Utilities have restrictions on the amount of funds that can be transferred to Sempra Energy by dividend, advance or loan as a result of conditions imposed by various regulators. Additionally, certain other Sempra Energy subsidiaries are subject to various financial and other covenants and other restrictions contained in debt and credit agreements

(described in Note 5) and in other agreements that limit the amount of funds that can be transferred to Sempra Energy. At December 31, 2016, Sempra Energy was in compliance with all covenants related to its debt agreements.

At December 31, 2016, the amount of restricted net assets of consolidated entities of Sempra Energy, including the California Utilities discussed below, that may not be distributed to Sempra Energy in the form of a loan or dividend is $8.6 billion. Additionally, the amount of restricted net assets of our unconsolidated entities is $5.9 billion. Although the restrictions cap the amount of funding that the various operating subsidiaries can provide to Sempra Energy, we do not believe these restrictions will have a significant impact on our ability to access cash to pay dividends and fund operating needs.

As we discuss in Note 4, $44 million of Sempra Energy's consolidated retained earnings balance represents undistributed earnings of equity method investments at December 31, 2016.

Sempra Utilities

The CPUC's regulation of the California Utilities' capital structures limits the amounts available for dividends and loans to Sempra Energy. At December 31, 2016, Sempra Energy could have received combined loans and dividends of approximately $579 million, funded by long-term debt issuance, from SDG&E and approximately $340 million from SoCalGas.

The payment and amount of future dividends by SDG&E and SoCalGas are at the discretion of their respective boards of directors. The following restrictions limit the amount of retained earnings that may be paid as common stock dividends or loaned to Sempra Energy from either utility:

- The CPUC requires that SDG&E's and SoCalGas' common equity ratios be no lower than one percentage point below the CPUC-authorized percentage of each entity's authorized capital structure. The authorized percentage at December 31, 2016 is 52 percent at both SDG&E and SoCalGas.
- The FERC requires SDG&E to maintain a common equity ratio of 30 percent or above.
- The California Utilities have a combined revolving credit line that requires each utility to maintain a ratio of consolidated indebtedness to consolidated capitalization (as defined in the agreement) of no more than 65 percent, as we discuss in Note 5.

Based on these restrictions, at December 31, 2016, SDG&E's restricted net assets were $5.1 billion and SoCalGas' restricted net assets were $3.2 billion, which could not be transferred to Sempra Energy.

At Sempra South American Utilities, Peru requires domestic corporations to maintain minimum legal reserves as a percentage of capital stock, resulting in restricted net assets of $35 million at Luz del Sur at December 31, 2016.

Sempra Infrastructure

Significant restrictions of Sempra Infrastructure subsidiaries include

- Mexico requires domestic corporations to maintain minimum legal reserves as a percentage of capital stock, resulting in restricted net assets of $152 million at Sempra Energy's consolidated Mexican subsidiaries at December 31, 2016.
- Wholly owned GdC has a long-term debt agreement (see Note 5) that requires it to maintain a reserve account to pay the projects' debt. Under this restriction, net assets totaling $14 million are restricted at December 31, 2016.
- Wholly owned Ventika has long-term debt agreements (see Note 5) that require it to maintain reserve accounts to pay the projects' debt. The debt agreements may limit the project companies' ability to incur liens, incur additional indebtedness, make investments, pay cash dividends and undertake certain additional actions. Under these restrictions, net assets totaling $38 million are restricted at December 31, 2016.
- Energía Sierra Juárez, a 50-percent owned and unconsolidated joint venture of Sempra Mexico (see Notes 3 and 4), has long-term debt agreements that require the establishment and funding of project and reserve accounts to which the proceeds of loans, letter of credit draws, project revenues and other amounts are deposited and applied in accordance with the debt agreements. The long-term debt agreements also limit the joint venture's ability to incur liens, incur additional indebtedness, make acquisitions and undertake certain actions. Under these restrictions, net assets totaling $10 million are restricted as of December 31, 2016.
- Ductos y Energéticos del Norte, S. de R.L. de C.V. (DEN), a 50-percent owned and unconsolidated joint venture of Sempra Mexico (see Notes 3 and 4), has a 50-percent owned and unconsolidated joint venture with a long-term debt agreement that requires it to maintain a reserve account to pay projects' debt. Under these restrictions, net assets totaling $130 million are restricted at December 31, 2016.
- Wholly owned solar project has a long-term debt agreement that requires the establishment and funding of project accounts to which the proceeds of loans, project revenues and other amounts are deposited and applied in accordance with the debt agreement. This long-term debt agreement also limits the solar project's ability to incur liens, incur additional indebtedness, make acquisitions and undertake certain actions, while also requiring maintenance of certain debt ratios. Under these restrictions, net assets totaling $9 million are restricted at December 31, 2016.
- Tax equity limited liability companies at Sempra Renewables are required to maintain completion reserve depository accounts to be used to pay for trailing construction costs that become due subsequent to the tax equity transaction closing. At December 31, 2016,

as a result of these requirements, there were total restricted net assets at these tax equity limited liability companies of approximately $78 million.

- 50- and 25-percent owned and unconsolidated joint ventures at Sempra Renewables have debt agreements that require each joint venture to maintain reserve accounts in order to pay the projects' debt service and operation and maintenance requirements. We discuss Sempra Energy guarantees associated with these requirements in Note 4. At December 31, 2016, as a result of these requirements, there were total restricted net assets at these joint ventures of approximately $265 million.
- 91-percent owned Bay Gas has long-term debt instruments containing restrictions relating to the payment of dividends and other distributions if Bay Gas does not maintain a specified debt service coverage ratio. Bay Gas had no restricted net assets at December 31, 2016.
- Sempra LNG & Midstream has an equity method investment in Cameron LNG JV, which has debt agreements that require the establishment and funding of project accounts to which the proceeds of loans, project revenues and other amounts are deposited and applied in accordance with the debt agreements. The debt agreements require the joint venture to maintain reserve accounts in order to pay the project debt service, and also contain restrictions related to the payment of dividends and other distributions to the members of the joint venture. We discuss Sempra Energy guarantees associated with Cameron LNG JV's debt agreements in Note 4. Under these restrictions, net assets of Cameron LNG JV of approximately $5.5 billion are restricted at December 31, 2016.

OTHER INCOME, NET

Other Income, Net on the Consolidated Statements of Operations consists of the following:

OTHER INCOME, NET
(Dollars in millions)

	Years ended December 31,		
	2016	2015	2014
Sempra Energy Consolidated:			
Allowance for equity funds used during construction	$ 116	$ 107	$ 106
Investment gains(1)	23	3	27
Losses on interest rate and foreign exchange instruments, net	(32)	(4)	(15)
Foreign currency transaction losses	(1)	(7)	(15)
Sale of other investments	5	11	2
Electrical infrastructure relocation income(2)	10	7	21
Regulatory interest, net(3)	4	3	6
Sundry, net	7	6	5
Total	$ 132	$ 126	$ 137
SDG&E:			
Allowance for equity funds used during construction	$ 46	$ 37	$ 37
Regulatory interest, net(3)	3	3	6
Sundry, net	1	(4)	(3)
Total	$ 50	$ 36	$ 40
SoCalGas:			
Allowance for equity funds used during construction	$ 40	$ 36	$ 26
Regulatory interest, net(3)	1	—	—
Sundry, net	(9)	(6)	(6)
Total	$ 32	$ 30	$ 20

(1) Represents investment gains on dedicated assets in support of our executive retirement and deferred compensation plans. These amounts are partially offset by corresponding changes in compensation expense related to the plans, recorded in Operation and Maintenance on the Consolidated Statements of Operations.
(2) Income at Luz del Sur associated with the relocation of electrical infrastructure.
(3) Interest on regulatory balancing accounts.

NOTE 2. NEW ACCOUNTING STANDARDS

We describe below recent pronouncements that have had or may have a significant effect on our financial condition, results of operations, cash flows or disclosures.

Accounting Standards Update (ASU) 2014-09, "Revenue from Contracts with Customers," ASU 2015-14, "Deferral of the Effective Date," ASU 2016-08, "Principal versus Agent Considerations (Reporting Revenue Gross versus Net)," ASU 2016-10, "Identifying Performance Obligations and Licensing" and ASU 2016-12, "Narrow-Scope Improvements and Practical Expedients": ASU 2014-09 provides accounting guidance for the recognition of revenue from contracts with customers and affects all entities that enter into contracts to provide goods or services to their customers. The guidance also provides a model for the measurement and recognition of gains and losses on the sale of certain nonfinancial assets, such as property and equipment, including real estate. This guidance must be adopted using either a full retrospective approach for all periods presented in the period of adoption or a modified retrospective approach. Amending ASU 2014-09, ASU 2016-08 clarifies the implementation guidance on principal versus agent considerations, ASU 2016-10 clarifies the determination of whether a good or service is separately identifiable from other promises and revenue recognition related to licenses of intellectual property, and ASU 2016-12 provides guidance on transition, collectability, noncash consideration, and the presentation of sales and other similar taxes.

ASU 2015-14 defers the effective date of ASU 2014-09 by one year for all entities and permits early adoption on a limited basis. For public entities, ASU 2014-09 is effective for fiscal years beginning after December 15, 2017, with early adoption permitted for fiscal years beginning after December 15, 2016, and is effective for interim periods in the year of adoption. We plan to adopt ASU 2014-09 on January 1, 2018 using the modified retrospective transition method and are currently evaluating the effect on our ongoing financial reporting. As part of our evaluation, we formed multiple working groups with oversight from a steering committee comprised of members from relevant Sempra Energy business units. We separated our various revenue streams into high-level categories, which will serve as the basis for accounting analysis and documentation of the impact of ASU 2014-09 on our revenue recognition. In addition, we continue to actively monitor outstanding issues currently being addressed by the American Institute of Certified Public Accountants' Revenue Recognition Working Group and the Financial Accounting Standards Board's Transition Resource Group, since conclusions reached by these groups may impact our application of these ASU's.

ASU 2015-07, "Disclosures for Investments in Certain Entities That Calculate Net Asset Value per Share (or Its Equivalent)": ASU 2015-07 removes the requirement to categorize within the fair value hierarchy investments for which fair value is measured at net asset value (NAV), as well as the requirement to make specific disclosures for all investments for which the entity has elected to measure the fair value using the NAV practical expedient. We retrospectively adopted ASU 2015-07 on January 1, 2016, and it did not affect our financial condition, results of operations or cash flows. The required changes to our disclosure are reflected in Note 7.

ASU 2016-01, "Recognition and Measurement of Financial Assets and Financial Liabilities": In addition to the presentation and disclosure requirements for financial instruments, ASU 2016-01 requires entities to measure equity investments, other than those accounted for under the equity method, at fair value and recognize changes in fair value in net income. Entities will no longer be able to use the cost method of accounting for equity securities. However, for equity investments without readily determinable fair values, entities may elect a measurement alternative that will allow those investments to be recorded at cost, less impairment, and adjusted for subsequent observable price changes. Upon adoption, entities must record a cumulative-effect adjustment to the balance sheet as of the beginning of the first reporting period in which the standard is adopted. The guidance on equity securities without readily determinable fair values will be applied prospectively to all equity investments that exist as of the date of adoption of the standard.

For public entities, ASU 2016-01 is effective for fiscal years beginning after December 15, 2017. We will adopt ASU 2016-01 on January 1, 2018 as required and do not expect it to materially affect our financial condition, results of operations or cash flows. We will make the required changes to our disclosures upon adoption.

ASU 2016-02, "Leases": ASU 2016-02 requires entities to include substantially all leases on the balance sheet by requiring the recognition of right-of-use assets and lease liabilities for all leases. Entities may elect to exclude from the balance sheet those leases with a maximum possible term of less than 12 months. For lessees, a lease is classified as finance or operating, and the asset and liability are initially measured at the present value of the lease payments. For lessors, accounting for leases is largely unchanged from previous provisions of U.S. GAAP, other than certain changes to align lessor accounting to specific changes made to lessee accounting and ASU 2014-09. ASU 2016-02 also requires new qualitative and quantitative disclosures for both lessees and lessors.

For public entities, ASU 2016-02 is effective for fiscal years beginning after December 15, 2018, with early adoption permitted, and is effective for interim periods in the year of adoption. The standard requires lessees and lessors to recognize and measure leases at the beginning of the earliest period presented using a modified retrospective approach. The modified retrospective approach includes optional practical expedients that may be elected, which would allow entities to continue to account for leases that commence before the effective date of the standard in accordance with previous U.S. GAAP unless the lease is modified, except for the lessee requirement to begin recognizing right-of-use assets and lease liabilities for all operating leases on the balance sheet at the reporting date. We are currently evaluating the effect of the standard on our ongoing financial reporting and have not yet selected the year in which we will adopt the standard. As part of our evaluation, we formed a steering committee comprised of members from relevant Sempra Energy business units. Based on our assessment to date, we have determined that we will adopt ASU 2016-02 using the modified retrospective approach and will elect the practical expedients available under the transition guidance.

ASU 2016-05, "Effect of Derivative Contract Novations on Existing Hedge Accounting Relationships": ASU 2016-05 provides clarification that a change in the counterparty to a derivative instrument that has been designated as a hedging instrument does not, in and of itself, require dedesignation of that hedging relationship provided that all other hedge accounting criteria continue to be met. ASU 2016-05 may be adopted prospectively or using a modified retrospective approach. We prospectively adopted ASU 2016-05 on January 1, 2016, and it did not affect our financial condition, results of operations or cash flows.

ASU 2016-09, "Improvements to Employee Share-Based Payment Accounting": ASU 2016-09 is intended to simplify several aspects of the accounting for employee share-based payment transactions. Under ASU 2016-09, excess tax benefits and tax deficiencies are required to be recorded in earnings, and the requirement to reclassify excess tax benefits from operating to financing activities on the statement of cash flows has been eliminated. ASU 2016-09 also allows entities to withhold taxes up to the maximum individual statutory tax rate without resulting in liability classification of the award and clarifies that cash payments made to taxing authorities in connection with withheld shares should be classified as financing activities in the statement of cash flows. Additionally, the standard provides for an accounting policy election to either continue to estimate forfeitures or account for them as they occur. For public entities, ASU 2016-09 is effective for fiscal years beginning after December 15, 2016, with early adoption permitted, and is effective for interim periods in the year of adoption.

We early adopted the provisions of ASU 2016-09 during the three months ended September 30, 2016, with an effective date of January 1, 2016. Upon adoption:

- Sempra Energy, SDG&E and SoCalGas recognized a cumulative-effect adjustment to retained earnings and a deferred tax asset as of January 1, 2016 of $107 million, $23 million and $15 million, respectively, for previously unrecognized excess tax benefits from share-based compensation.
- Sempra Energy, SDG&E and SoCalGas recognized earnings consisting of excess tax benefits on the Consolidated Statements of Operations of $34 million, $7 million and $4 million, respectively, in the year ended December 31, 2016, all of which related to the three months ended March 31, 2016. The $34 million was previously recorded in Sempra Energy Shareholders' Equity in Common Stock prior to adoption of ASU 2016-09.
- The excess tax benefits from share-based compensation for Sempra Energy were previously classified as a financing activity on Sempra Energy's Consolidated Statement of Cash Flows. As now required, the excess tax benefits for Sempra Energy, SDG&E and SoCalGas are included in Cash Flows From Operating Activities on the Consolidated Statements of Cash Flows for the year ended December 31, 2016. This amendment was adopted prospectively, and therefore, we have not adjusted the Consolidated Statements of Cash Flows for the prior periods presented.
- As a result of the provision to recognize excess tax benefits in earnings, these benefits are no longer included in the calculation of diluted earnings per share (EPS) effective January 1, 2016. The weighted-average number of common shares outstanding for diluted EPS increased by 75 thousand shares for the three months ended March 31, 2016 and 98 thousand shares and 89 thousand shares for the three months and six months ended June 30, 2016, respectively. We discuss the impact further in Note 12.

Upon adoption of ASU 2016-09, we elected to continue estimating the number of awards expected to be forfeited and adjusting our estimate on an ongoing basis. All other provisions of ASU 2016-09 did not impact our financial condition, results of operations or cash flows.

ASU 2016-13, "Measurement of Credit Losses on Financial Instruments": ASU 2016-13 changes how entities will measure credit losses for most financial assets and certain other instruments. The standard introduces an "expected credit loss" impairment model that requires immediate recognition of estimated credit losses expected to occur over the remaining life of most financial assets measured at amortized cost, including trade and other receivables, loan commitments and financial guarantees. ASU 2016-13 also requires use of an allowance to record estimated credit losses on available-for-sale debt securities and expands disclosure requirements regarding an entity's assumptions, models and methods for estimating the credit losses.

For public entities, ASU 2016-13 is effective for fiscal years beginning after December 15, 2019, with early adoption permitted for fiscal years beginning after December 15, 2018. We are currently evaluating the effect of the standard on our ongoing financial reporting and have not yet selected the year in which we will adopt the standard.

ASU 2016-15, "Classification of Certain Cash Receipts and Cash Payments": ASU 2016-15 provides guidance on how certain cash receipts and cash payments are to be presented and classified in the statement of cash flows in order to reduce diversity in practice.

For public entities, ASU 2016-15 is effective for fiscal years beginning after December 15, 2017, with early adoption permitted, and is effective for interim periods in the year of adoption. An entity that elects early adoption must adopt all of the amendments in the same period. Entities must apply the guidance retrospectively to all periods presented, but may apply it prospectively if retrospective application would be impracticable. We are currently evaluating the effect of the standard on our ongoing financial reporting and have not yet selected the year in which we will adopt the standard.

ASU 2016-18, "Restricted Cash": ASU 2016-18 requires amounts described as restricted cash and restricted cash equivalents to be included with cash and cash equivalents when reconciling the beginning-of-period and end-of-period total amounts shown on the

statement of cash flows. A reconciliation between the balance sheet and the statement of cash flows must be disclosed when the balance sheet includes more than one line item for cash, cash equivalents, restricted cash and restricted cash equivalents.

For public entities, ASU 2016-18 is effective for fiscal years beginning after December 15, 2017, and interim periods within those fiscal years, with early adoption permitted. We are currently evaluating the effect of the standard on our ongoing financial reporting and have not yet selected the year in which we will adopt the standard.

ASU 2017-04, "Simplifying the Test for Goodwill Impairment": ASU 2017-04 removes the second step of the goodwill impairment test, which requires a hypothetical purchase price allocation. An entity will be required to apply a one-step quantitative test and record the amount of goodwill impairment as the excess of a reporting unit's carrying amount over its fair value, not to exceed the carrying amount of goodwill. For public entities, ASU 2017-04 is effective for annual or interim goodwill impairment tests in fiscal years beginning after December 15, 2019, with early adoption permitted. The amendments should be applied on a prospective basis. We are currently evaluating the effect of the standard on our ongoing financial reporting and have not yet selected the year in which we will adopt the standard.

ASU 2017-05, "Clarifying the Scope of Asset Derecognition Guidance and Accounting for Partial Sales of Nonfinancial Assets": ASU 2017-05 clarifies the scope of accounting for the derecognition or partial sale of nonfinancial assets to exclude all businesses and nonprofit activities. ASU 2017-05 also provides a definition for in-substance nonfinancial assets and additional guidance on partial sales of nonfinancial assets. For public entities, ASU 2017-05 is effective for annual reporting periods beginning after December 15, 2017, including interim periods within that reporting period, with early adoption permitted. An entity may elect to apply the amendments under a retrospective or modified retrospective approach. We are currently evaluating the effect of the standard on our ongoing financial reporting and plan to adopt in conjunction with ASU 2014-09 on January 1, 2018, but have not yet selected the method of adoption.

NOTE 3. ACQUISITION AND DIVESTITURE ACTIVITY

We consolidate assets acquired and liabilities assumed as of the purchase date and include earnings from acquisitions in consolidated earnings after the purchase date.

ACQUISITIONS

Sempra Mexico

The following table summarizes the total fair value of the 2016 business combinations at Sempra Mexico described below and the values of the assets acquired and liabilities assumed at the dates of acquisition:

PURCHASE PRICE ALLOCATIONS

(Dollars in millions)

	GdC	Ventika
	At September 26, 2016(1)	At December 14, 2016
Fair value of business combination:		
Cash consideration (fair value of total consideration)	$ 1,144	$ 310
Fair value of equity interest in GdC immediately prior to acquisition	1,144	—
Total fair value of business combination	$ 2,288	$ 310
Recognized amounts of identifiable assets acquired and liabilities assumed:		
Cash and cash equivalents	$ 66	$ —
Restricted cash	—	68
Accounts receivable(2)	39	14
Other current assets	6	1
Other intangible assets	—	154
Deferred income taxes	—	23
Regulatory assets	33	—
Property, plant and equipment	1,248	673
Other noncurrent assets	1	3
Short-term debt	—	(125)
Accounts payable	(11)	(1)
Due to unconsolidated affiliates	(3)	—
Current portion of long-term debt	(49)	(7)
Fixed-price contracts and other derivatives, current	(6)	(4)
Other current liabilities	(20)	(8)
Long-term debt	(315)	(478)
Asset retirement obligations	(5)	(2)
Deferred income taxes	(127)	(120)
Fixed-price contracts and other derivatives, noncurrent	(19)	(10)
Other noncurrent liabilities	(11)	—
Total identifiable net assets	827	181
Goodwill	1,461	129
Total fair value of business combination	$ 2,288	$ 310

(1) During the fourth quarter of 2016, we received additional information regarding GdC's deferred income taxes as of the acquisition date, primarily related to basis differences in GdC's property, plant and equipment. As a result, we recorded measurement period adjustments that resulted in a net increase to goodwill of $86 million, an increase in deferred income tax liabilities of $119 million and $33 million of regulatory assets related to deferred income taxes on AFUDC.

(2) We expect acquired accounts receivable to be substantially realizable in cash. Accounts receivable are net of negligible collection allowances.

At December 31, 2016, the purchase price allocations for the acquisitions were preliminary and subject to completion. Adjustments to the current fair value estimates in the above table may occur as the process conducted for various valuations and assessments is finalized primarily related to tax assets, liabilities and other attributes. During the measurement periods, which may be up to one year from the respective acquisition dates, we may record adjustments to the assets acquired and liabilities assumed with a corresponding offset to goodwill. Upon conclusion of the measurement periods or final determination of the values of assets acquired or liabilities assumed, whichever comes first, any subsequent adjustments are recorded through earnings in the periods in which they occur.

Gasoductos de Chihuahua S. de R.L. de C.V.

Background and Financing. In July 2015, IEnova entered into an agreement to purchase Petróleos Mexicanos' (or PEMEX, the Mexican state-owned oil company) 50-percent interest in GdC. GdC develops and operates energy infrastructure in Mexico. On September 21, 2016, IEnova received approval for the acquisition from Mexico's Comisión Federal de Competencia Económica. On September 26, 2016, IEnova completed the acquisition of PEMEX's 50-percent interest in GdC for a purchase price of $1.144 billion (exclusive of $66 million of cash and cash equivalents acquired), plus the assumption of $364 million of long-term debt, increasing IEnova's ownership interest in GdC to 100 percent. GdC became a consolidated subsidiary of IEnova on this date. Prior to the acquisition date, IEnova owned 50 percent of GdC and accounted for its interest as an equity method investment.

The assets involved in the acquisition include three natural gas pipelines, an ethane pipeline, and a liquid petroleum gas pipeline and associated storage terminal. The transaction excludes the Los Ramones Norte pipeline, in which IEnova will continue holding an indirect 25-percent ownership interest through GdC's interest in DEN. As of the acquisition date, IEnova continues to hold a 50-

percent interest in DEN through GdC and accounts for it as an equity method investment. PEMEX continues to hold its 50-percent interest in DEN, which enables us to have an ongoing relationship with PEMEX for joint development of new projects in the future.

We paid $1.078 billion in cash ($1.144 billion purchase price less $66 million of cash and cash equivalents acquired), which was funded using interim financing provided by Sempra Global through a $1.15 billion bridge loan to IEnova. Sempra Global funded the majority of the transaction using commercial paper borrowings. As we discuss in Note 1, in October 2016, IEnova completed a private follow-on offering of its common stock in the U.S. and outside of Mexico and a concurrent public common stock offering in Mexico. IEnova used a portion of the proceeds from the offerings to fully repay the Sempra Global bridge loan.

Purchase Price Allocation. We accounted for this business combination using the acquisition method of accounting whereby the total fair value of the business acquired is allocated to identifiable assets acquired and liabilities assumed based on their respective fair values, with any excess recognized as goodwill at the Sempra Mexico reportable segment. We expect the GdC acquisition to have strategic benefits, including opportunities for expansion into areas such as the transportation and storage of refined products; and a larger platform and presence in Mexico to participate in energy sector reform, reflecting the value of goodwill recognized. None of the goodwill is expected to be deductible in Mexico or the United States for income tax purposes.

Gain on Remeasurement of Equity Method Investment. In the year ended December 31, 2016, we recorded a pretax gain of $617 million ($432 million after-tax) for the excess of the acquisition-date fair value of Sempra Mexico's previously held equity interest in GdC over the carrying value of that interest, included as Remeasurement of Equity Method Investment on the Sempra Energy Consolidated Statement of Operations. We used a market approach to measure the acquisition-date fair value of IEnova's equity interest in GdC immediately prior to the business acquisition. We discuss non-recurring fair value measures and the associated accounting impact of the GdC acquisition in Note 10.

Valuation of GdC's Assets and Liabilities. Based on the nature of the Mexico regulatory environment and the oversight surrounding the establishment and maintenance of rates that GdC charges for services on its assets, GdC applies the guidance under the provisions of U.S. GAAP governing rate-regulated operations. Therefore, when determining the fair value of the acquired assets and liabilities assumed, we considered the effect of regulation on a market participant's view of the highest and best use of the assets, in particular for the fair value of GdC's PP&E. Under U.S. GAAP, regulation is viewed as being a characteristic (restriction) of a regulated entity's PP&E, and the impact of regulation is considered a fundamental input to measuring the fair value of PP&E in a business combination involving a regulated business. As a regulated business will generally earn a return of its costs and a reasonable return on its invested capital, but nothing more, the value of a regulated business is the value of its invested capital.

Under this premise, the fair value of the PP&E of a regulated business is generally assumed to be equivalent to carrying value for financial reporting purposes. Management has concluded that the carrying value of GdC's PP&E is representative of fair value.

We applied an income approach, specifically the discounted cash flow method, to measure the fair value of debt and derivatives. We valued debt by discounting future debt payments by a market yield and we valued derivatives by discounting the future interest payments under the fixed and floating rates using current market data.

For substantially all other assets and liabilities, our analysis indicates that historical carrying value approximates fair value due to their short-term nature.

Impact on Operating Results. We incurred acquisition costs of $4 million and $1 million in the years ended December 31, 2016 and 2015, respectively. These costs are included in Operation and Maintenance Expense on the Sempra Energy Consolidated Statements of Operations.

For the year ended December 31, 2016, the Sempra Energy Consolidated Statement of Operations includes $82 million of revenues and $33 million of earnings (after noncontrolling interest) from GdC since the September 26, 2016 date of acquisition.

Ventika, S.A.P.I. de C.V. and Ventika II, S.A.P.I. de C.V.

Background and Financing. On December 14, 2016, IEnova acquired 100 percent of the equity interests in the Ventika wind power generation facilities for cash consideration of $310 million and the assumption of $610 million of existing debt. Ventika is a 252-MW wind farm located in Nuevo Leon, Mexico, that began commercial operations in April 2016. All of Ventika's generation capacity is contracted under 20-year, U.S. dollar-denominated power purchase agreements with five private off-takers. The acquisition was funded through $50 million of net proceeds from the IEnova equity offerings that we discuss in Note 1, $250 million of borrowings against Sempra Mexico's revolving credit facility, and $10 million of available cash at IEnova. The acquisition also included $68 million of restricted cash that represents funds set aside for servicing debt, operations, and other costs pursuant to the long-term debt agreements.

Purchase Price Allocation. We accounted for this business combination using the acquisition method of accounting whereby the total fair value of the business acquired is allocated to identifiable assets acquired and liabilities assumed based on their respective fair values, with any excess recognized as goodwill at the Sempra Mexico reportable segment. The factors contributing to the recognition

of goodwill include the opportunity for us to secure a strategic position in Mexico's emerging renewable energy market and the potential to further expand the existing wind power generation facilities. None of the goodwill is expected to be deductible in Mexico or in the United States for income tax purposes.

Valuation of Ventika's Assets and Liabilities. The fair values of the tangible and intangible assets acquired and liabilities assumed have been recognized based on their preliminary values at the acquisition date. Significant inputs used to measure the fair values of the acquired PP&E, intangible asset, debt, and derivatives are as follows:

- PP&E – We applied an income approach utilizing market based discounted cash flows. We utilized the pricing included in the existing power purchase agreements, which was determined to reflect current market rates in the Mexican renewable energy market.
- Intangible asset – Ventika is the holder of a renewable energy transmission and consumption permit that allows it to transmit its generated power to various locations within Mexico at beneficial rates and reduces the administrative burden to manage transmitting power to off-takers. With recent renewable energy market reforms in Mexico, these transmission and consumption permits are no longer available, resulting in higher tariffs for generators. We applied an income approach based on a cash flow differential approach that measures the fair value of the transmission rights by comparing the operating expenses under the transmission and consumption permit as compared to under the new, higher tariffs. This acquired intangible asset has an amortization period of 20 years, reflecting the life of the transmission and consumption transmission permit.
- Debt – Utilizing an income approach, we valued debt by discounting future debt payments by a market yield commensurate with the remaining term of the loans.
- Derivatives – Utilizing an income approach, we valued derivatives by discounting the future interest payments under the fixed and floating rates using current market data.

Additionally, we recognized deferred income taxes on Ventika's existing net operating losses, and for the difference between the fair values and tax bases of the net assets acquired using the Mexican statutory rate.

For substantially all other assets and liabilities, our analysis indicates that historical carrying value approximates fair value due to their short-term nature.

Impact on Operating Results. We incurred acquisition costs of $1 million in the year ended December 31, 2016, which are included in Operation and Maintenance Expense on the Sempra Energy Consolidated Statement of Operations.

For the year ended December 31, 2016, the Sempra Energy Consolidated Statement of Operations includes $4 million of revenues and $3 million of earnings (after noncontrolling interest) from Ventika since the December 14, 2016 date of acquisition.

Unaudited Pro Forma Information

The following table presents unaudited pro forma information for the years ended December 31, 2016 and 2015, combining the historical results of operations of Sempra Energy, GdC and Ventika as though the acquisitions occurred on January 1, 2015. The pro forma information is not necessarily indicative of results that would have been achieved had the businesses been combined during the periods presented or the results that we will experience going forward.

UNAUDITED PRO FORMA INFORMATION – SEMPRA ENERGY CONSOLIDATED

(Dollars in millions)

	Years ended December 31,	
	2016	2015
Revenues	$ 10,463	$ 10,473
Net income	1,145	1,938
Earnings	1,058	1,641

The unaudited pro forma information above assumes:

- the related IEnova equity offerings, discussed above and in Note 1, occurred on January 1, 2015, which results in a change in Sempra Energy's noncontrolling interest in IEnova from 18.9 percent to 33.6 percent for all periods presented;
- the proceeds from the IEnova equity offerings were used to fund the acquisitions, instead of the bridge loan that was provided by Sempra Global to IEnova for the GdC acquisition, therefore interest expense on the commercial paper borrowings supporting the bridge loan is excluded for all periods presented;
- interest expense on the borrowings against Sempra Mexico's revolving credit facility began when Ventika's commercial operations commenced in April 2016;
- equity earnings, net of income tax, from GdC that were previously included in Sempra Energy's results have been excluded for both periods presented;
- the gain related to the remeasurement of our previously held equity interest in GdC has been included in the year ended December 31, 2015, and accordingly, the year ended December 31, 2016 was adjusted to exclude the gain; and

- acquisition-related transaction costs have been included in the year ended December 31, 2015, and accordingly, the year ended December 31, 2016 was adjusted to exclude them.

Most of Sempra Mexico's operations, including GdC and Ventika, use the U.S. dollar as their functional currency.

Sempra Renewables

In July 2016, Sempra Renewables acquired a 100-percent interest in a 100-MW wind development project currently under construction in Huron County, Michigan, for a total purchase price of $22 million. The wind farm has a 15-year power purchase agreement with a load serving entity that will commence upon commercial operation, expected in late 2017.

In March 2015, Sempra Renewables invested $8 million to acquire a 100-percent interest in a 78-MW wind development project in Stearns County, Minnesota. The wind farm has a 20-year power purchase agreement with a load serving entity and began commercial operation in December 2016.

In May 2014, Sempra Renewables invested $121 million to become a 50-percent partner with Consolidated Edison Development (Con Edison Development) in four fully operating solar facilities totaling 110 MW in Tulare County and Kings County, California (collectively, the California solar partnership). The renewable power from all of the projects has been sold under long-term contracts with a load serving entity. We account for our investment in the California solar partnership under the equity method.

ASSETS HELD FOR SALE

We classify assets as held for sale when management approves and commits to a formal plan to actively market an asset for sale and we expect the sale to close within the next 12 months. Upon classifying an asset as held for sale, we record the asset at the lower of its carrying value or its estimated fair value reduced for selling costs.

Sempra Mexico

In February 2016, management approved a plan to market and sell Sempra Mexico's TdM, a 625-MW natural gas-fired power plant located in Mexicali, Baja California, Mexico. As a result, we stopped depreciating the plant and classified it as held for sale.

In connection with the sales process, in September 2016, Sempra Mexico obtained market information indicating that the fair value of TdM may be less than its carrying value. After performing an analysis of the information, Sempra Mexico reduced the carrying value of TdM by recognizing a noncash impairment charge of $131 million ($111 million after-tax) in Impairment Losses on Sempra Energy's Consolidated Statement of Operations. We discuss non-recurring fair value measures and the associated accounting impact on TdM in Note 10.

In connection with classifying TdM as held for sale, we recognized $8 million in income tax expense in 2016 for a deferred Mexican income tax liability related to the excess of carrying value over the tax basis. As the Mexican income tax on this basis difference is based on current carrying value, foreign exchange rates and inflation, such amount could change in future periods until the date of sale. We are actively pursuing the sale of TdM, which we expect to be completed in the second half of 2017.

At December 31, 2016, the carrying amounts of the major classes of assets and related liabilities held for sale associated with TdM are as follows:

ASSETS HELD FOR SALE AT DECEMBER 31, 2016
(Dollars in millions)

	Termoeléctrica de Mexicali
Inventories	$ 9
Other current assets	30
Deferred income taxes	21
Property, plant and equipment, net	120
Other noncurrent assets	21
Total assets held for sale	$ 201
Accounts payable	$ 2
Other current liabilities	5
Deferred income taxes	14
Asset retirement obligations	4
Other noncurrent liabilities	22
Total liabilities held for sale	$ 47

DIVESTITURES

Sempra Mexico

Sale of Equity Interest

In July 2014, Sempra Mexico completed the sale of a 50-percent interest in the 155-MW first phase of its Energía Sierra Juárez wind project to a wholly owned subsidiary of InterGen N.V. for cash proceeds of $24 million, net of $2 million cash sold. Sempra Mexico recognized a pretax gain on the sale of $19 million ($14 million after-tax). Included in the deconsolidation was net PP&E of $137 million and long-term debt, including current portion, of $82 million. The gain on sale included a $7 million after-tax gain attributable to the remeasurement of the retained investment to fair value. Our remaining 50-percent interest in Energía Sierra Juárez is accounted for under the equity method.

Sempra Renewables

Rosamond Solar

In December 2015, Sempra Renewables sold its 100-percent interest in Rosamond Solar, a development project located in Antelope Valley, California for $26 million in cash. Upon completion of the sale that was comprised of $18 million of net PP&E, Sempra Renewables recognized a pretax gain of $8 million ($5 million after-tax), which is included in Gain on Sale of Assets on our Consolidated Statement of Operations.

Sale of Equity Interests

In November 2014, Sempra Renewables formed a joint venture with Con Edison Development, by selling a 50-percent interest in the 75-MW Broken Bow 2 Wind project for $58 million in cash. Included in the deconsolidation was net PP&E of $151 million and long-term debt, including current portion, of $72 million. Sempra Renewables recognized a pretax gain on the sale of $14 million ($8 million after-tax).

In March 2014, Sempra Renewables formed a joint venture with Con Edison Development, by selling a 50-percent interest in its 250-MW Copper Mountain Solar 3 solar power facility for $66 million in cash, net of $2 million cash sold. Included in the deconsolidation was net PP&E of $247 million and long-term debt, including current portion, of $97 million. Sempra Renewables recognized a pretax gain on the sale of $27 million ($16 million after-tax).

Our remaining 50-percent interests in these investments are accounted for under the equity method. Based on the nature of the underlying assets, these investments are considered in-substance real estate. Therefore, in accordance with applicable U.S. GAAP, for each of these investment transactions, the equity method investments were measured at their historical cost and no portion of the gains was attributable to a remeasurement of the retained investments to fair value. Pretax gains from the sale of our interests in these investments are included in Gain on Sale of Assets on our Consolidated Statement of Operations in 2014.

Sempra LNG & Midstream

EnergySouth Inc.

In September 2016, Sempra LNG & Midstream sold 100 percent of the outstanding equity of EnergySouth Inc. (EnergySouth), the parent company of Mobile Gas and Willmut Gas, to Spire Inc., formerly known as The Laclede Group, Inc. Sempra LNG & Midstream received cash proceeds of $318 million, net of $2 million cash sold, with the buyer assuming debt of $67 million. We recognized a pretax gain on the sale of $130 million ($78 million after-tax). As we discuss in Note 15, litigation and any associated liabilities and insurance receivable at Mobile Gas were retained by Mobile Gas at the close of the transaction.

Investment in Rockies Express

In March 2016, Sempra LNG & Midstream entered into an agreement to sell its 25-percent interest in Rockies Express to a subsidiary of Tallgrass Development, LP for cash consideration of $440 million, subject to adjustment at closing. The transaction closed in May 2016 for total cash proceeds of $443 million.

At the date of the agreement, the carrying value of Sempra LNG & Midstream’s investment in Rockies Express was $484 million. Following the execution of the agreement, Sempra LNG & Midstream measured the fair value of its equity method investment at $440 million, and recognized a $44 million ($27 million after-tax) impairment in Equity Earnings, Before Income Tax, on the Sempra Energy Consolidated Statement of Operations. We discuss non-recurring fair value measures and the associated accounting impact on our investment in Rockies Express in Note 10.

In the second quarter of 2016, Sempra LNG & Midstream permanently released pipeline capacity that it held with Rockies Express and others, as we discuss in Note 15.

Mesquite Power Plant

In April 2015, Sempra LNG & Midstream sold the remaining 625-MW block of the Mesquite Power plant that was classified as held for sale at December 31, 2014, together with a related power sales contract, for net cash proceeds of $347 million. We recognized a pretax gain on the sale of $61 million ($36 million after-tax), included in Gain on Sale of Assets on our Consolidated Statement of Operations.

Cameron LNG JV

On August 6, 2014, Sempra LNG & Midstream and its project partners, comprised of affiliates of ENGIE S.A., Mitsui & Co., Ltd., and Mitsubishi Corporation (through a related company jointly established with Nippon Yusen Kabushiki Kaisha), provided their respective final investment decision with regard to the investment in the development, construction and operation of the natural gas liquefaction export facility at the terminal in Hackberry, Louisiana, owned by Cameron LNG, LLC. The effective date of Cameron LNG JV among Sempra Energy and its project partners occurred on October 1, 2014.

Our equity in Cameron LNG JV was derived from our contribution of Cameron LNG, LLC to the joint venture at its historical carrying value. Included in the deconsolidation was net PP&E of approximately $1.0 billion. The other partners were issued equity interests in Cameron LNG JV in an aggregate of 49.8 percent. Cameron LNG, LLC thereby ceased to be wholly owned by Sempra LNG & Midstream, which retained a 50.2-percent interest in Cameron LNG JV. As of the October 1, 2014 effective date, Sempra LNG & Midstream began to account for its investment in Cameron LNG JV under the equity method. Sempra Energy did not recognize a gain or loss related to the contribution of Cameron LNG, LLC. We provide additional information concerning the Cameron LNG JV in Note 4.

The following table summarizes the deconsolidation of the following previously wholly owned subsidiaries:

2016:

- EnergySouth

2014:

- Energía Sierra Juárez
- Broken Bow 2 Wind
- Copper Mountain Solar 3
- Cameron LNG, LLC

DECONSOLIDATION OF SUBSIDIARIES

(Dollars in millions)

	Years ended December 31,	
	2016	2014
Proceeds, net of transaction costs	$ 304	$ 152
Cash	(2)	(10)
Restricted cash	—	(5)
Inventory	(3)	—
Other current assets	(14)	(23)
Regulatory assets	(12)	—
Goodwill	(72)	—
Property, plant and equipment, net	(199)	(1,557)
Other noncurrent assets	(53)	(65)
Accounts payable and accrued expenses	12	188
Due to affiliates	—	39
Other current liabilities	13	—
Long-term debt, including current portion	67	251
Deferred income taxes	36	—
Regulatory liabilities	23	—
Asset retirement obligations	12	—
Other noncurrent liabilities	18	12
Accumulated other comprehensive income	—	(7)
Gain on sale of business and equity interests(1)	(130)	(60)
(Increase) in equity method investments upon deconsolidation	$ —	$ (1,085)

(1) Included in Gain on Sale of Assets on our Consolidated Statements of Operations.

NOTE 4. INVESTMENTS IN UNCONSOLIDATED ENTITIES

We generally account for investments under the equity method when we have significant influence over, but do not have control of, these entities. In these cases, our pro rata shares of the entities' net assets are included in Investments on the Consolidated Balance Sheets. We adjust each investment for our share of each investee's earnings or losses, dividends, and other comprehensive income or loss. We evaluate the carrying value of unconsolidated entities for impairment under the U.S. GAAP provisions for equity method investments.

We provide the carrying value of our investments and earnings (losses) on these investments below:

EQUITY METHOD AND OTHER INVESTMENT BALANCES

(Dollars in millions)

	December 31,	
	2016	2015
Sempra South American Utilities:		
Eletrans(1)	$ (8)	$ (12)
Sempra Mexico:		
Ductos y Energéticos del Norte	42	—
Energía Sierra Juárez(2)	38	30
Gasoductos de Chihuahua(3)	—	489
Infraestructura Marina del Golfo	100	—
Sempra Renewables:		
Wind:		
Auwahi Wind	41	44
Broken Bow 2 Wind	35	41
Cedar Creek 2 Wind	75	75
Flat Ridge 2 Wind	271	275
Fowler Ridge 2 Wind	43	46
Mehoopany Wind	92	92
Solar:		
California solar partnership	113	120
Copper Mountain Solar 2	33	32
Copper Mountain Solar 3	42	44
Mesquite Solar 1	86	86
Other	13	—
Sempra LNG & Midstream:		
Cameron LNG JV(4)	997	983
Rockies Express Pipeline LLC(5)	—	477
Parent and other:		
RBS Sempra Commodities LLP	67	67
Total equity method investments	2,080	2,889
Other	17	16
Total	$ 2,097	$ 2,905

(1) Includes losses on forward exchange contracts entered into to manage the foreign currency exchange rate risk of the Chilean Unidad de Fomento (CLF) relative to the U.S. dollar, related to certain construction commitments that are denominated in CLF. The contracts settle based on anticipated payments to vendors, generally monthly, ending in July 2018.

(2) The carrying value of our equity method investment is $12 million higher than the underlying equity in the net assets of the investee due to the remeasurement of our retained investment to fair value.

(3) The carrying value of our equity method investment was $65 million higher than the underlying equity in the net assets of the investee due to equity method goodwill at December 31, 2015.

(4) The carrying value of our equity method investment is $190 million and $143 million higher than the underlying equity in the net assets of the investee at December 31, 2016 and 2015, respectively, primarily due to guarantees, which we discuss below, and interest capitalized on the investment, as the joint venture has not commenced its planned principal operations.

(5) The carrying value of our equity method investment at December 31, 2015 was $357 million lower than the underlying equity in the net assets of the investee due to an impairment charge recorded in 2012.

EARNINGS (LOSSES) FROM EQUITY METHOD INVESTMENTS

(Dollars in millions)

	Years ended December 31,		
	2016	2015	2014
Earnings (losses) recorded before income tax:			
Sempra Renewables:			
Wind:			
Auwahi Wind	$ 4	$ 4	$ 4
Broken Bow 2 Wind	(2)	(2)	—
Cedar Creek 2 Wind	(2)	(6)	(3)
Flat Ridge 2 Wind	(7)	(12)	(7)
Fowler Ridge 2 Wind	4	4	2
Mehoopany Wind	—	(1)	(1)
Solar:			
California solar partnership	7	6	6
Copper Mountain Solar 2	6	7	3
Copper Mountain Solar 3	8	8	2
Mesquite Solar 1	17	16	14
Other	(1)	—	—
Sempra LNG & Midstream:			
Cameron LNG JV	(2)	5	2
Rockies Express Pipeline LLC	(26)	79	60
Parent and other:			
RBS Sempra Commodities LLP	—	(4)	(2)
Other	—	—	1
	$ 6	$ 104	$ 81
Earnings (losses) recorded net of income tax(1):			
Sempra South American Utilities:			
Eletrans	$ 3	$ (4)	$ (4)
Sempra Mexico:			
Ductos y Energéticos del Norte	5	—	—
Energía Sierra Juárez	6	6	3
Gasoductos de Chihuahua	64	83	39
	$ 78	$ 85	$ 38

(1) As the earnings (losses) from these investments are recorded net of income tax, they are presented below the income tax expense line, so as not to impact our effective income tax rate.

Our share of the undistributed earnings of equity method investments was $44 million and $299 million at December 31, 2016 and 2015, respectively. The December 31, 2016 and 2015 balances do not include remaining distributions of $67 million associated with our investment in RBS Sempra Commodities LLP (RBS Sempra Commodities) and expected to be received from the partnership as it is dissolved, as we discuss below.

SEMPRA MEXICO

GdC and DEN

As we discuss in Note 3, on September 26, 2016, IEnova completed the acquisition of the remaining 50-percent interest in GdC and GdC became a consolidated subsidiary. Prior to the acquisition date, IEnova owned 50 percent of GdC and accounted for its interest as an equity method investment. As of the acquisition date, IEnova accounts for GdC's 50-percent interest in DEN as an equity method investment.

Infraestructura Marina del Golfo (IMG)

In June 2016, IMG, a joint venture between IEnova and a subsidiary of TransCanada Corporation, was awarded the right to build, own and operate the Sur de Texas – Tuxpan natural gas marine pipeline by the Federal Electricity Commission (Comisión Federal de Electricidad, or CFE). IEnova has a 40-percent interest in the project and accounts for its interest as an equity method investment, and TransCanada Corporation owns the remaining 60-percent interest. The project is expected to be completed in the second half of 2018 and is fully contracted under a 25-year natural gas transportation service contract with the CFE. During the year ended December 31, 2016, Sempra Mexico invested cash of $100 million in the IMG joint venture.

Energía Sierra Juárez

In July 2014, Sempra Mexico completed the sale of a 50-percent interest in the 155-MW first phase of its Energía Sierra Juárez wind project to a wholly owned subsidiary of InterGen N.V., as we discuss further in Note 3.

SEMPRA RENEWABLES

Sempra Renewables has 50-percent interests in wind and solar energy generation facilities in operation in the U.S. The generating capacities of the facilities are contracted under long-term power purchase agreements. These facilities are accounted for under the equity method.

SEMPRA LNG & MIDSTREAM

Rockies Express

As we discuss in Note 3, in May 2016, Sempra LNG & Midstream sold its 25-percent interest in Rockies Express, a partnership that operates a natural gas pipeline, REX, that links the Rocky Mountain region to the upper Midwest and the eastern United States. In April 2015, Sempra LNG & Midstream invested $113 million of cash in Rockies Express to repay project debt that matured in early 2015.

Cameron LNG JV

The Cameron LNG JV is a joint venture partnership that was formed effective October 1, 2014 among Sempra Energy and three project partners, as we discuss in Note 3. The Cameron LNG existing regasification terminal contributed to the joint venture includes two marine berths and three LNG storage tanks, and is capable of processing 1.5 billion cubic feet (Bcf) of natural gas per day. The current liquefaction project, which is utilizing Cameron LNG JV's existing facilities, is comprised of three liquefaction trains and is being designed to a nameplate capacity of 13.9 million tonnes per annum (Mtpa) of LNG, with an expected export capability of 12 Mtpa of LNG, or approximately 1.7 Bcf per day. As of October 1, 2014, Sempra LNG & Midstream began accounting for its investment in Cameron LNG JV under the equity method.

During the years ended December 31, 2016 and 2015, Sempra LNG & Midstream capitalized $47 million and $49 million, respectively, of interest related to this equity method investment that has not commenced planned principal operations. During the year ended December 31, 2015, Sempra LNG & Midstream invested $10 million of cash in Cameron LNG JV.

Cameron LNG JV Financing

General. On August 6, 2014, Cameron LNG JV entered into finance documents (collectively, Loan Facility Agreements) for senior secured financing in an initial aggregate principal amount of up to $7.4 billion under three debt facilities provided by the Japan Bank for International Cooperation (JBIC) and 29 international commercial banks, some of which will benefit from insurance coverage provided by Nippon Export and Investment Insurance (NEXI).

The Cameron LNG JV Loan Facility Agreements and related finance documents provide senior secured term loans with a maturity date of July 15, 2030. The proceeds of the loans will be used for financing the cost of development and construction of the three-train Cameron LNG project. The Loan Facility Agreements and related finance documents contain customary representations and affirmative and negative covenants for project finance facilities of this kind with the lenders of the type participating in the Cameron LNG JV financing.

On August 6, 2014, Sempra Energy entered into agreements for the benefit of all of Cameron LNG JV's creditors under the Loan Facility Agreements and related finance documents. Pursuant to these agreements, Sempra Energy has severally guaranteed 50.2 percent of Cameron LNG JV's obligations under the Loan Facility Agreements and related finance documents, or a maximum amount of $3.9 billion. Guarantees for the remaining 49.8 percent of Cameron LNG JV's senior secured financing have been provided by the other project partners. The occurrence of the effectiveness of the joint venture on October 1, 2014 was a condition precedent to first disbursement of funds under the Loan Facility Agreements. The Sempra Energy guarantee of 50.2 percent of Cameron LNG JV financing also became effective upon effectiveness of the joint venture. Sempra Energy's agreements and guarantees will terminate upon financial completion of the three-train Cameron LNG project, which is subject to satisfaction of certain conditions, including all three trains achieving commercial operations and meeting certain operational performance tests. We expect the project to achieve financial completion and the guarantees to be terminated approximately nine months after all three trains achieve commercial operation. Sempra Energy recorded a liability of $82 million on October 1, 2014, with an associated carrying value of $43 million at December 31, 2016, for the fair value of its obligations associated with the Loan Facility Agreements and related finance documents, which constitute guarantees. This liability is being reduced on a straight-line basis over the duration of the guarantees by recognizing equity earnings from Cameron LNG JV, included in Equity Earnings, Before Income Tax.

On August 6, 2014, Sempra Energy and the other project partners entered into a transfer restrictions agreement with Société Générale, as intercreditor agent for the lenders under the Loan Facility Agreements. Pursuant to the transfer restriction agreement, Sempra Energy agreed to certain restrictions on its ability to dispose of Sempra Energy's indirect fully diluted economic and beneficial ownership interests in Cameron LNG JV. These restrictions vary over time. Prior to financial completion of the three-train Cameron LNG project, Sempra Energy must retain 37.65 percent of such interest in Cameron LNG JV. Starting six months after financial completion of the three-train Cameron LNG project, Sempra Energy must retain at least 10 percent of the indirect fully diluted economic and beneficial ownership interest in Cameron LNG JV. In addition, at all times, a Sempra Energy controlled (but not necessarily wholly owned) subsidiary must directly own 50.2 percent of the membership interests of the Cameron LNG JV.

Interest. The weighted average all-in cost of the loans outstanding under all the Loan Facility Agreements (and based on certain assumptions as to timing of drawdown) is 1.59 percent per annum over LIBOR prior to financial completion of the project and 1.78 percent per annum over LIBOR following financial completion of the project. The Loan Facility Agreements require Cameron LNG JV to hedge 50 percent of outstanding borrowings to fix the interest rate, beginning in 2016. The hedges are to remain in place until the debt principal has been amortized by 50 percent. In November 2014, Cameron LNG JV entered into floating-to-fixed interest rate swaps for approximately $3.7 billion notional amount, resulting in an effective fixed rate of 3.19 percent for the LIBOR component of the interest rate on the loans. In June 2015, Cameron LNG JV entered into additional floating-to-fixed interest rate swaps effective starting in 2020, for approximately $1.5 billion notional amount, resulting in an effective fixed rate of 3.32 percent for the LIBOR component of the interest rate on the loans.

Mandatory Prepayments. Cameron LNG JV must make mandatory prepayments of all loans made under the Loan Facility Agreements under certain circumstances, including: upon receipt of certain insurance proceeds and expropriation compensation; upon receipt of certain performance liquidated damages under Cameron LNG JV's engineering, procurement and construction contract for the liquefaction terminal; in connection with the loss of its tolling agreements or export permits that result in a reduction of Cameron LNG JV's debt service coverage ratios below a specified threshold; if it becomes unlawful in any applicable jurisdiction for a lender to fund or maintain its loans; or in connection with any mandatory prepayment of senior notes outstanding (if any).

The loans under the NEXI Covered Loan Facility Agreement and the loans held by JBIC under the JBIC Loan Facility Agreement are subject to certain additional mandatory prepayments that would be triggered if the Japanese sponsors fail to maintain certain ownership interests in Cameron LNG JV, if Cameron LNG JV's Japanese tolling customers do not hold commitments for a certain quantum of nameplate capacity at the liquefaction terminal or if the aggregate annual contracted LNG commitments by Cameron LNG JV's tolling customers to Japanese LNG buyers fall below a certain minimum threshold under certain circumstances.

Events of Default. Cameron LNG JV's Loan Facility Agreements and related finance documents also contain events of default customary for such financings, including events of default for: failure to pay principal and interest on the due date; insolvency of Cameron LNG JV; abandonment of the project; expropriation; unenforceability or termination of the finance documents; and a failure to achieve financial completion of the project by a financial completion deadline date of September 30, 2021 (with up to an additional 365 days extension beyond such date permitted in cases of force majeure). A delay in construction that results in a failure to achieve financial completion of the project by this financial completion deadline date would therefore result in an event of default under Cameron LNG JV's financing and a potential demand on Sempra Energy's guarantees.

Security. To support Cameron LNG JV's obligations under the Loan Facility Agreements and related finance documents, Cameron LNG JV has granted security over all of its assets, subject to customary exceptions, and all equity interests in Cameron LNG JV have been pledged to HSBC Bank USA, National Association, as security trustee for the benefit of all Cameron LNG JV's creditors. As a result, an enforcement action by the lenders taken in accordance with the finance documents could result in the exercise of such security interests by the lenders and the loss of ownership interests in Cameron LNG JV by Sempra Energy and the other project partners.

The security trustee under Cameron LNG JV's financing can demand that a payment be made by Sempra Energy under its guarantees of Sempra Energy's 50.2-percent share of senior debt obligations due and payable either on the date such amounts were due from Cameron LNG JV (taking into account cure periods) in the event of a failure by Cameron LNG JV to pay such senior debt obligations when they become due or within 10 business days in the event of an acceleration of senior debt obligations under the terms of the finance documents. If an event of default occurs under the Sempra Energy completion agreement, the security trustee can demand that Sempra Energy purchase its 50.2-percent share of all then outstanding senior debt obligations within five business days (other than in the case of a bankruptcy default, which is automatic).

RBS SEMPRA COMMODITIES

RBS Sempra Commodities is a United Kingdom limited liability partnership formed by Sempra Energy and The Royal Bank of Scotland plc (RBS) in 2008 to own and operate the commodities-marketing businesses previously operated through wholly owned subsidiaries of Sempra Energy. We and RBS sold substantially all of the partnership's businesses and assets in four separate

transactions completed in 2010 and 2011. We account for our investment in RBS Sempra Commodities under the equity method, and report miscellaneous costs since the sale of the business in Parent and Other.

In April 2011, we and RBS entered into a letter agreement (Letter Agreement) which amended certain provisions of the agreements that formed RBS Sempra Commodities. The Letter Agreement addresses the wind-down of the partnership and the distribution of the partnership's remaining assets. The investment balance of $67 million at December 31, 2016 reflects remaining distributions expected to be received from the partnership in accordance with the Letter Agreement. The timing and amount of distributions, if any, may be impacted by the matters we discuss related to RBS Sempra Commodities in Note 15 in "Legal Proceedings – Other Litigation." In addition, amounts may be retained by the partnership for an extended period of time to help offset unanticipated future general and administrative costs necessary to complete the dissolution of the partnership.

In connection with the Letter Agreement described above, we also released RBS from its indemnification obligations with respect to items for which J.P. Morgan Chase & Co. (JP Morgan), one of the buyers of the partnership's businesses, has agreed to indemnify us.

SUMMARIZED FINANCIAL INFORMATION

We present summarized financial information below, aggregated for all of our equity method investments for the periods in which we were invested in the entity. The amounts below represent the aggregate financial position and results of operations of 100 percent of each of Sempra Energy's equity method investments.

SUMMARIZED FINANCIAL INFORMATION
(Dollars in millions)

	Years ended December 31,		
	2016(1)	2015	2014
Gross revenues	$ 1,079	$ 1,533	$ 1,296
Operating expense	(726)	(845)	(749)
Income from operations	353	688	547
Interest expense	(127)	(312)	(298)
Net income/Earnings(2)	252	440	291

	At December 31,	
	2016(1)	2015
Current assets	$ 704	$ 750
Noncurrent assets	9,970	15,112
Current liabilities	629	859
Noncurrent liabilities	6,627	7,862

(1) On September 26, 2016, IEnova completed the acquisition of PEMEX's 50-percent interest in GdC, increasing its ownership percentage to 100 percent, and on May 9, 2016, Sempra LNG & Midstream sold its 25-percent interest in Rockies Express. At December 31, 2016, GdC and Rockies Express are no longer equity method investments.
(2) Except for our investments in South America and Mexico, there was no income tax recorded by the entities, as they are primarily domestic partnerships.

GUARANTEES

Project financing at our solar and wind joint ventures generally requires the joint venture partners, for each partner's interest, to return cash to the projects in the event that the projects do not meet certain cash flow criteria or in the event that the projects' debt service, operation and maintenance, and firm transmission and production tax credits reserve accounts are not maintained at specific thresholds. In some cases, the joint venture partners have provided guarantees to the lenders in lieu of the projects funding the reserve account requirements. We recorded liabilities for the fair value of certain of our obligations associated with these guarantees and the liabilities are being amortized over their expected lives. The outstanding loans at our solar and wind joint ventures are not guaranteed by the partners, but are secured by project assets.

At December 31, 2016, we provided guarantees aggregating a maximum of $332 million with an associated aggregated carrying value of $8 million for guarantees related to project financing. In addition, at December 31, 2016, we provided guarantees to solar and wind farm joint ventures aggregating a maximum of $164 million with an associated aggregated carrying value of $2 million, primarily related to purchased-power agreements and engineering, procurement and construction contracts.

NOTE 5. DEBT AND CREDIT FACILITIES

LINES OF CREDIT

At December 31, 2016, Sempra Energy Consolidated had an aggregate of $4.3 billion in three primary committed lines of credit for Sempra Energy, Sempra Global and the California Utilities to provide liquidity and to support commercial paper, the principal terms of which we describe below. Available unused credit on these lines at December 31, 2016 was approximately $3 billion. Our foreign operations have additional general purpose credit facilities aggregating $1.7 billion at December 31, 2016. Available unused credit on these lines totaled $1 billion at December 31, 2016.

PRIMARY U.S. COMMITTED LINES OF CREDIT

(Dollars in millions)

	At December 31, 2016			
	Total facility	Commercial paper outstanding	Letters of credit outstanding	Available unused credit
Sempra Energy(1)	$ 1,000	$ —	$ 65	$ 935
Sempra Global(2)	2,335	1,181	—	1,154
California Utilities(3):				
SDG&E	750	—	—	750
SoCalGas	750	62	—	688
Less: subject to a combined limit of $1 billion for both utilities	(500)	—	—	(500)
	1,000	62	—	938
Total	$ 4,335	$ 1,243	$ 65	$ 3,027

(1) The facility also provides for issuance of up to $400 million of letters of credit on behalf of Sempra Energy with the amount of borrowings otherwise available under the facility reduced by the amount of outstanding letters of credit.

(2) Sempra Energy guarantees Sempra Global's obligations under the credit facility.

(3) The facility also provides for the issuance of letters of credit on behalf of each utility subject to a combined letter of credit commitment of $250 million for both utilities. The amount of borrowings otherwise available under the facility is reduced by the amount of outstanding letters of credit.

Related to the committed lines of credit in the table above:

- Each is a 5-year syndicated revolving credit agreement expiring in October 2020.
- Citibank N.A. serves as administrative agent for the Sempra Energy and Sempra Global facilities and JPMorgan Chase Bank, N.A. serves as administrative agent for the California Utilities combined facility.
- Each facility has a syndicate of 21 lenders. No single lender has greater than a 7-percent share in any facility.
- Sempra Energy, SDG&E and SoCalGas must maintain a ratio of indebtedness to total capitalization (as defined in each agreement) of no more than 65 percent at the end of each quarter. Each entity is in compliance with this and all other financial covenants under its respective credit facility at December 31, 2016.
- Borrowings bear interest at benchmark rates plus a margin that varies with Sempra Energy's credit ratings in the case of the Sempra Energy and Sempra Global lines of credit, and with the borrowing utility's credit rating in the case of the California Utilities line of credit.
- The California Utilities' obligations under their agreement are individual obligations, and a default by one utility would not constitute a default by the other utility or preclude borrowings by, or the issuance of letters of credit on behalf of, the other utility.

CREDIT FACILITIES IN SOUTH AMERICA AND MEXICO

(U.S. dollar equivalent in millions)

		At December 31, 2016		
	Denominated in	Total facility	Amount outstanding	Available unused credit
Sempra South American Utilities(1):				
Peru(2)	Peruvian sol	$ 392	$ 179 (3)	$ 213
Chile	Chilean peso	113	—	113
Sempra Mexico:				
5-year revolver expiring in August 2020 with a syndicate of eight lenders	U.S. dollar	1,170	446	724
Total		$ 1,675	$ 625	$ 1,050

(1) The credit facilities were entered into to finance working capital and for general corporate purposes and expire between 2017 and 2019.

(2) The Peruvian facilities require a debt to equity ratio of no more than 170 percent, with which Peru is in compliance at December 31, 2016.

(3) Includes bank guarantees of $18 million.

WEIGHTED AVERAGE INTEREST RATES

The weighted average interest rates on the total short-term debt at Sempra Energy Consolidated were 1.51 percent and 1.09 percent at December 31, 2016 and 2015, respectively. At December 31, 2016, the weighted average interest rate on total short-term debt at SoCalGas was 0.75 percent. At December 31, 2015, the weighted average interest rate on total short-term debt at SDG&E was 1.01 percent.

LONG-TERM DEBT

The following tables show the detail and maturities of long-term debt outstanding:

LONG-TERM DEBT

(Dollars in millions)

	December 31,	
	2016	2015
SDG&E		
First mortgage bonds (collateralized by plant assets):		
Bonds at variable rates (1.151% at December 31, 2016) March 9, 2017	$ 140	$ 140
1.65% July 1, 2018(1)	161	161
3% August 15, 2021	350	350
1.914% payable 2015 through February 2022	197	232
3.6% September 1, 2023	450	450
2.5% May 15, 2026	500	—
6% June 1, 2026	250	250
5% payable 2015 through December 2027(2)	—	105
5.875% January and February 2034(1)	176	176
5.35% May 15, 2035	250	250
6.125% September 15, 2037	250	250
4% May 1, 2039(1)	75	75
6% June 1, 2039	300	300
5.35% May 15, 2040	250	250
4.5% August 15, 2040	500	500
3.95% November 15, 2041	250	250
4.3% April 1, 2042	250	250
	4,349	3,989
Other long-term debt:		
OMEC LLC variable-rate loan (5.2925% after floating-to-fixed rate swaps effective 2007), payable 2013 through April 2019 (collateralized by OMEC plant assets)	305	315
Capital lease obligations:		
Purchased-power agreements	239	243
Other	1	1
	545	559

	4,894	4,548
Current portion of long-term debt	(191)	(50)
Unamortized discount on long-term debt	(11)	(10)
Unamortized debt issuance costs	(34)	(33)
Total SDG&E	4,658	4,455
SoCalGas		
First mortgage bonds (collateralized by plant assets):		
5.45% April 15, 2018	250	250
1.55% June 15, 2018	250	250
3.15% September 15, 2024	500	500
3.2% June 15, 2025	350	350
2.6% June 15, 2026	500	—
5.75% November 15, 2035	250	250
5.125% November 15, 2040	300	300
3.75% September 15, 2042	350	350
4.45% March 15, 2044	250	250
	3,000	2,500
Other long-term debt (uncollateralized):		
1.875% Notes payable 2016 through May 2026(1)	4	8
5.67% Notes January 18, 2028	5	5
Capital lease obligations	—	1
	9	14
	3,009	2,514
Current portion of long-term debt	—	(9)
Unamortized discount on long-term debt	(7)	(7)
Unamortized debt issuance costs	(20)	(17)
Total SoCalGas	2,982	2,481

LONG-TERM DEBT (CONTINUED)

(Dollars in millions)

	December 31, 2016	December 31, 2015
Sempra Energy		
Other long-term debt (uncollateralized):		
6.5% Notes June 1, 2016, including $300 at variable rates after fixed-to-floating rate swaps effective 2011 (4.77% at December 31, 2015)	$ —	$ 750
2.3% Notes April 1, 2017	600	600
6.15% Notes June 15, 2018	500	500
9.8% Notes February 15, 2019	500	500
1.625% Notes October 7, 2019	500	—
2.4% Notes March 15, 2020	500	500
2.85% Notes November 15, 2020	400	400
2.875% Notes October 1, 2022	500	500
4.05% Notes December 1, 2023	500	500
3.55% Notes June 15, 2024	500	500
3.75% Notes November 15, 2025	350	350
6% Notes October 15, 2039	750	750
Market value adjustments for interest rate swaps, net	(3)	(2)
Build-to-suit lease(3)	137	136
Sempra South American Utilities		
Other long-term debt (uncollateralized):		
Chilquinta Energía – 4.25% Series B Bonds October 30, 2030	185	170
Luz del Sur		
Bank loans 5.05% to 6.7% payable 2016 through December 2018	75	136
Corporate bonds at 4.75% to 8.75% payable 2014 through September 2029	346	292
Other bonds at 3.77% to 4.61% payable 2020 through May 2022	7	8
Capital lease obligations	6	6
Sempra Mexico		
Other long-term debt (uncollateralized unless otherwise noted):		
Notes February 8, 2018 at variable rates (2.66% after floating-to-fixed rate cross-currency swaps effective 2013)	63	75
6.3% Notes February 2, 2023 (4.12% after cross-currency swap)	189	227
Notes at variable rates (4.63% after floating-to-fixed rate swaps effective 2014), payable 2016 through December 2026, collateralized by plant assets	352	—
Bank loans including $254 at a weighted-average fixed rate of 6.67%, $187 at variable rates (weighted-average rate of 6.29% after floating-to-fixed rate swaps effective 2014) and $40 at variable rates (3.99% at December 31, 2016), payable 2016 through March 2032, collateralized by plant assets	481	—
Sempra Renewables		
Other long-term debt (collateralized by project assets):		
Loan at variable rates (2.625% at December 31, 2016) payable 2012 through December 2028 except for $64 at 3.668% after floating-to-fixed rate swaps effective June 2012(1)	84	91
Sempra LNG & Midstream		
First mortgage bonds (Mobile Gas, collateralized by plant assets):		
4.14% September 30, 2021(2)	—	20
5% September 30, 2031(2)	—	42
Other long-term debt (uncollateralized unless otherwise noted):		
Notes at 2.87% to 3.51% October 1, 2026(1)	20	19
8.45% Notes payable 2012 through December 2017, collateralized by parent guarantee	6	11
3.1% Notes December 30, 2018, collateralized by plant assets(1)(2)	—	5
	7,548	7,086
Current portion of long-term debt	(722)	(848)
Unamortized discount on long-term debt	(10)	(10)
Unamortized premium on long-term debt	4	5
Unamortized debt issuance costs	(31)	(35)
Total other Sempra Energy	6,789	6,198
Total Sempra Energy Consolidated	$ 14,429	$ 13,134

(1) Callable long-term debt not subject to make-whole provisions.
(2) Early redemption or deconsolidated in 2016.
(3) We discuss this lease in Note 15.

MATURITIES OF LONG-TERM DEBT(1)

(Dollars in millions)

	SDG&E	SoCalGas	Other Sempra Energy	Total Sempra Energy Consolidated
2017	$ 186	$ —	$ 719	$ 905
2018	207	500	707	1,414
2019	321	—	1,096	1,417
2020	36	—	996	1,032
2021	385	—	113	498
Thereafter	3,519	2,509	3,777	9,805
Total	$ 4,654	$ 3,009	$ 7,408	$ 15,071

(1) Excludes capital lease obligations, build-to-suit lease, market value adjustments for interest rate swaps, discounts, premiums and debt issuance costs.

Various long-term obligations totaling $6.5 billion at Sempra Energy at December 31, 2016 are unsecured. This includes unsecured long-term obligations totaling $9 million at SoCalGas. There were no unsecured long-term obligations at SDG&E.

CALLABLE LONG-TERM DEBT

At the option of Sempra Energy, SDG&E and SoCalGas, certain debt at December 31, 2016 is callable subject to premiums:

CALLABLE LONG-TERM DEBT

(Dollars in millions)

	SDG&E	SoCalGas	Other Sempra Energy	Total Sempra Energy Consolidated
Not subject to make-whole provisions	$ 412	$ 4	$ 104	$ 520
Subject to make-whole provisions	3,797	3,005	6,042	12,844

In addition, the OMEC LLC project financing loan discussed in Note 1, with $305 million of outstanding borrowings at December 31, 2016, may be prepaid at the borrowers' option.

FIRST MORTGAGE BONDS

The California Utilities issue first mortgage bonds secured by a lien on utility plant. The California Utilities may issue additional first mortgage bonds if in compliance with the provisions of their bond agreements (indentures). These indentures require, among other things, the satisfaction of pro forma earnings-coverage tests on first mortgage bond interest and the availability of sufficient mortgaged property to support the additional bonds, after giving effect to prior bond redemptions. The most restrictive of these tests (the property test) would permit the issuance, subject to CPUC authorization, of an additional $4.5 billion of first mortgage bonds at SDG&E and $0.7 billion at SoCalGas at December 31, 2016.

In May 2016, SDG&E publicly offered and sold $500 million of 2.50-percent first mortgage bonds maturing in 2026. SDG&E used the proceeds from the offering to redeem, prior to a scheduled maturity in 2027, $105 million aggregate principal amount of 5-percent, tax-exempt industrial development revenue bonds, to repay outstanding commercial paper and for other general corporate purposes.

In June 2016, SoCalGas publicly offered and sold $500 million of 2.60-percent first mortgage bonds maturing in 2026. SoCalGas used the proceeds from the offering to repay outstanding commercial paper and for other general corporate purposes.

OTHER LONG-TERM DEBT

Sempra Energy

In October 2016, Sempra Energy publicly offered and sold $500 million of 1.625-percent, fixed-rate notes maturing in 2019. Sempra Energy used the proceeds from this offering to repay outstanding commercial paper.

Sempra South American Utilities

Luz del Sur has outstanding corporate bonds and bank loans that are denominated in the local currency. In July 2016, Luz del Sur publicly offered and sold $50 million of corporate bonds at 6.50 percent maturing in 2025. In January 2017, Luz del Sur also publicly issued and sold $50 million of corporate bonds at 6.375 percent, maturing in 2023.

Sempra Mexico

In September 2016, IEnova completed the acquisition of PEMEX's 50-percent interest in GdC, as we discuss in Note 3. Pursuant to the agreement, IEnova assumed $364 million of long-term debt, including $49 million classified as current at the acquisition date. Principal and interest payments are due quarterly each year, and the loan fully matures in December 2026. The loan bears interest equal to LIBOR plus a spread of 2 percent to 2.75 percent, which varies over the term of the loan. To moderate exposure to interest rate and associated cash flow variability, GdC entered into floating-to-fixed interest rate swaps of the LIBOR component for the full loan amount, resulting in an all-in fixed rate of 2.63 percent plus the corresponding spread. The loan is collateralized by the TDF S. de R.L. de C.V. liquid petroleum gas pipeline and the San Fernando natural gas pipeline, which are wholly owned by GdC. The loan agreement contains various covenants, including maintaining a certain interest coverage ratio and a minimum members' equity during the term of the loan. At December 31, 2016, GdC was in compliance with these and all other financial covenants.

In December 2016, IEnova completed the acquisition of Ventika, as we discuss in Note 3. Pursuant to the agreement, IEnova assumed $485 million of long-term debt, including $7 million classified as current at the acquisition date, of which $113 million fully matures in March 2024 and $372 million fully matures in March 2032. Principal and interest payments are due quarterly each year.

The long-term debt bears interest as follows:

INTEREST RATES ON VENTIKA LOANS AT DECEMBER 31, 2016

(Dollars in millions)

			Weighted-average		
	Amount outstanding	Stated rate		Margin(1)	Total rate
Fixed rate loans	$ 254	3.64%		3.03%	6.67%
Variable rate loans, hedged	187	3.26%	(2)	3.03%	6.29%
Variable rate loans, unhedged	40	LIBOR		3.03%	3.99%
Total variable rate loans	227				
Total long-term debt	$ 481				6.30%

(1) Margin varies between 3.03 percent to 3.93 percent over the term of the loan.
(2) Fixed LIBOR component after floating-to-fixed interest rate swap.

The loans are collateralized by project assets. The loan agreements contain various affirmative, negative and informational covenants. At December 31, 2016, Ventika was in compliance with all the covenants.

Sempra LNG & Midstream

In September 2016, Sempra LNG & Midstream completed the sale of EnergySouth, the parent company of Mobile Gas and Willmut Gas. Sempra LNG & Midstream received $318 million, net of $2 million cash sold, in cash proceeds, and the buyer assumed debt of $67 million, which included $20 million of 4.14 percent first mortgage bonds and $42 million of 5 percent first mortgage bonds at Mobile Gas, and $5 million of 3.1 percent notes at Willmut Gas. We discuss the sale of EnergySouth in Note 3.

INTEREST RATE SWAPS

We discuss our fair value and cash flow hedging interest rate swaps in Note 9.

NOTE 6. INCOME TAXES

Reconciliation of net U.S. statutory federal income tax rates to the effective income tax rates is as follows:

RECONCILIATION OF FEDERAL INCOME TAX RATES TO EFFECTIVE INCOME TAX RATES

	Years ended December 31,		
	2016	2015	2014
Sempra Energy Consolidated:			
U.S. federal statutory income tax rate	35 %	35 %	35 %
Utility depreciation	4	5	5
U.S. tax on repatriation of foreign earnings	(1)	1	2
State income taxes, net of federal income tax benefit	1	1	—
Utility repairs expenditures	(4)	(5)	(5)
Tax credits	(3)	(4)	(4)
Self-developed software expenditures	(3)	(3)	(3)
Resolution of prior years' income tax items	—	(3)	(1)
Non-U.S. earnings taxed at lower statutory income tax rates	(3)	(2)	(2)
Allowance for equity funds used during construction	(2)	(2)	(2)
Foreign exchange and inflation effects	(2)	(2)	(2)
Share-based compensation	(2)	—	—
International tax reform	1	—	(1)
Other, net	—	(1)	(2)
Effective income tax rate	21 %	20 %	20 %
SDG&E:			
U.S. federal statutory income tax rate	35 %	35 %	35 %
State income taxes, net of federal income tax benefit	5	5	5
Depreciation	5	4	4
SONGS tax regulatory asset write-off	—	—	2
Repairs expenditures	(4)	(4)	(4)
Self-developed software expenditures	(3)	(3)	(3)
Allowance for equity funds used during construction	(2)	(2)	(2)
Resolution of prior years' income tax items	(1)	(2)	(2)
Variable interest entity	—	(1)	(1)
Share-based compensation	(1)	—	—
Other, net	(1)	—	—
Effective income tax rate	33 %	32 %	34 %
SoCalGas:			
U.S. federal statutory income tax rate	35 %	35 %	35 %
Depreciation	9	8	8
State income taxes, net of federal income tax benefit	2	4	4
Repairs expenditures	(9)	(10)	(9)
Self-developed software expenditures	(6)	(6)	(5)
Resolution of prior years' income tax items	2	(3)	(2)
Allowance for equity funds used during construction	(2)	(2)	(2)
Share-based compensation	(1)	—	—
Other, net	(1)	(1)	—
Effective income tax rate	29 %	25 %	29 %

In 2016, 2015 and 2014, non-U.S. earnings taxed at lower statutory income tax rates than the U.S. are primarily related to operations in Mexico, Chile and Peru.

Foreign exchange and inflation effects for Sempra Energy Consolidated in 2016, 2015 and 2014 are primarily due to significant devaluation of the Mexican peso against the U.S. dollar.

Furthermore, our effective income tax rate was affected by international tax reform in Peru in 2016 and in both Peru and Chile in 2014.

We no longer plan to repatriate undistributed non-U.S. earnings and accordingly, in 2016, we reversed $20 million of U.S. income tax expense accrued on these earnings in 2015. We intend to indefinitely reinvest cumulative undistributed earnings from all of our non-U.S. subsidiaries and non-U.S. corporate joint ventures and use such earnings to support non-U.S operations. Therefore, we do not intend to use these cumulative undistributed earnings as a source of funding for U.S. operations. In 2014, we made distributions of approximately $288 million from our non-U.S. subsidiaries, $100 million of which was from previously taxed income and therefore not subject to additional U.S. federal income tax.

In 2016, we prospectively adopted ASU 2016-09 with an effective date of January 1, 2016. ASU 2016-09 requires excess tax benefits and tax deficiencies related to employee share-based payment transactions to be recorded in earnings, instead of in shareholders' equity. We discuss the impact of adopting the provisions of this standard in Note 2.

In 2014, our effective income tax rate was affected by a $25 million state tax benefit due to the release of Louisiana state valuation allowance against a deferred tax asset associated with Cameron LNG developments. This benefit is included in "State Income Taxes, Net of Federal Income Tax Benefit" in the Sempra Energy Consolidated table above.

Also in 2014, the effective income tax rates for Sempra Energy Consolidated and SDG&E were impacted by a $17 million charge to reduce certain tax regulatory assets attributed to SDG&E's investment in SONGS that we discuss in Note 13. This charge is included in "Resolution of Prior Years' Income Tax Items" in the Sempra Energy Consolidated table above.

For SDG&E and SoCalGas, the CPUC requires flow-through rate-making treatment for the current income tax benefit or expense arising from certain property-related and other temporary differences between the treatment for financial reporting and income tax, which will reverse over time. Under the regulatory accounting treatment required for these flow-through temporary differences, deferred income tax assets and liabilities are not recorded to deferred income tax expense, but rather to a regulatory asset or liability, which impacts the current effective income tax rate. As a result, changes in the relative size of these items compared to pretax income, from period to period, can cause variations in the effective income tax rate. The following items are subject to flow-through treatment:

- repairs expenditures related to a certain portion of utility plant fixed assets
- the equity portion of AFUDC
- a portion of the cost of removal of utility plant assets
- utility self-developed software expenditures
- depreciation on a certain portion of utility plant assets
- state income taxes

The AFUDC related to equity recorded for regulated construction projects at Sempra Mexico has similar flow-through treatment.

The final decision in the 2016 General Rate Case (2016 GRC FD) issued by the CPUC in June 2016 affecting the California Utilities requires the establishment of a two-way income tax expense memorandum account for SDG&E and SoCalGas to track any revenue variances resulting from certain differences arising between the income tax expense forecasted in the 2016 GRC and the income tax expense incurred from 2016 through 2018. The variances to be tracked include tax expense differences relating to:

- net revenue changes;
- mandatory tax law, tax accounting, tax procedural, or tax policy changes; and
- elective tax law, tax accounting, tax procedural, or tax policy changes.

The account will remain open, and the balance in the account will be reviewed in subsequent general rate case (GRC) proceedings, until the CPUC decides to close the account. We believe the future disposition of these tracked balances may result in refunds being directed to ratepayers to the extent tax expense incurred is lower than forecasted tax expense in the GRC process as a result of certain flow-through item deductions, as described above, or other items. We discuss the memo account further in Note 14.

Differences arising from the forecasted amounts will be tracked in the two-way income tax expense tracking account, except for the equity portion of AFUDC, which is not subject to taxation. We expect that certain amounts recorded in the tracking account may give rise to regulatory assets or liabilities until the CPUC disposes with the account. The CPUC tracking account does not affect the recovery of income tax expense in FERC formulaic rates.

The geographic components of Income Before Income Taxes and Equity Earnings of Certain Unconsolidated Subsidiaries at Sempra Energy Consolidated are as follows:

GEOGRAPHIC COMPONENTS

(Dollars in millions)

	Pretax book income		
	Years ended December 31,		
	2016(1)	2015	2014
U.S.	$ 773	$ 1,189	$ 1,014
Non-U.S.	1,057	515	510
Total	$ 1,830	$ 1,704	$ 1,524

(1) U.S. pretax book income decreased in 2016 at the California Utilities primarily due to the reallocation of prior years' income tax benefits generated from income tax repairs deductions to ratepayers pursuant to the 2016 GRC FD, as we discuss in Note 14; at Sempra LNG & Midstream for the loss on permanent release of pipeline capacity, as we discuss in Note 15; and the impairment charge related to the investment in Rockies Express, as we discuss in Note 3. Non-U.S. pretax book income increased in 2016 primarily due to the noncash gain associated with the remeasurement of our equity interest in GdC, as we discuss in Note 3.

The components of income tax expense are as follows:

INCOME TAX EXPENSE (BENEFIT)
(Dollars in millions)

	Years ended December 31,		
	2016	2015	2014
Sempra Energy Consolidated:			
Current:			
U.S. federal	$ —	$ 3	$ (10)
U.S. state	1	(24)	(7)
Non-U.S.	171	123	171
Total	172	102	154
Deferred:			
U.S. federal	78	242	237
U.S. state	9	34	4
Non-U.S.	135	(32)	(91)
Total	222	244	150
Deferred investment tax credits	(5)	(5)	(4)
Total income tax expense	$ 389	$ 341	$ 300
SDG&E:			
Current:			
U.S. federal	$ —	$ 12	$ (5)
U.S. state	22	77	52
Total	22	89	47
Deferred:			
U.S. federal	223	233	220
U.S. state	38	(35)	5
Total	261	198	225
Deferred investment tax credits	(3)	(3)	(2)
Total income tax expense	$ 280	$ 284	$ 270
SoCalGas:			
Current:			
U.S. federal	$ —	$ (1)	$ 2
U.S. state	40	12	7
Total	40	11	9
Deferred:			
U.S. federal	123	122	117
U.S. state	(18)	7	15
Total	105	129	132
Deferred investment tax credits	(2)	(2)	(2)
Total income tax expense	$ 143	$ 138	$ 139

We show the components of deferred income taxes at December 31 for Sempra Energy Consolidated, SDG&E and SoCalGas in the tables below:

DEFERRED INCOME TAXES – SEMPRA ENERGY CONSOLIDATED

(Dollars in millions)

	December 31, 2016	December 31, 2015
Deferred income tax liabilities:		
Differences in financial and tax bases of fixed assets, investments and other assets(1)	$ 6,111	$ 5,283
Regulatory balancing accounts	783	745
Property taxes	63	61
Other deferred income tax liabilities	143	100
Total deferred income tax liabilities	7,100	6,189
Deferred income tax assets:		
Tax credits	431	381
Net operating losses	2,304	1,856
Compensation-related items	252	252
Postretirement benefits	434	446
Other deferred income tax assets	87	179
Accrued expenses not yet deductible	112	72
Deferred income tax assets before valuation allowances	3,620	3,186
Less: valuation allowances	31	34
Total deferred income tax assets	3,589	3,152
Net deferred income tax liability(2)	$ 3,511	$ 3,037

(1) In addition to the financial over tax basis differences in fixed assets, the amount also includes financial over tax basis differences in various interests in partnerships and certain subsidiaries.

(2) At December 31, 2016 and 2015, includes $234 million and $120 million, respectively, recorded as a noncurrent asset and $3,745 million and $3,157 million, respectively, recorded as a noncurrent liability on the Consolidated Balance Sheets.

DEFERRED INCOME TAXES – SDG&E AND SOCALGAS

(Dollars in millions)

	SDG&E		SoCalGas	
	December 31,		December 31,	
	2016	2015	2016	2015
Deferred income tax liabilities:				
Differences in financial and tax bases of utility plant and other assets	$ 2,549	$ 2,392	$ 1,699	$ 1,473
Regulatory balancing accounts	379	234	411	515
Property taxes	42	42	21	20
Other	10	5	4	5
Total deferred income tax liabilities	2,980	2,673	2,135	2,013
Deferred income tax assets:				
Net operating losses	—	—	83	110
Tax credits	27	9	17	16
Postretirement benefits	98	90	244	268
Compensation-related items	8	11	32	42
State income taxes	—	46	19	13
Accrued expenses not yet deductible	7	36	20	20
Other	11	9	11	12
Total deferred income tax assets	151	201	426	481
Net deferred income tax liability	$ 2,829	$ 2,472	$ 1,709	$ 1,532

The following table summarizes our unused net operating losses (NOL) and tax credit carryforwards at December 31, 2016.

NET OPERATING LOSSES AND TAX CREDIT CARRYFORWARDS
(Dollars in millions)

	Unused amount at December 31, 2016	Year expiration begins
Sempra Energy Consolidated:		
U.S. federal(1):		
NOLs	$ 5,514	2031
General business tax credits	329	2032
Foreign tax credits	62	2024
U.S. state(2):		
NOLs	2,836	2017
General business tax credits	44	2017
Non-U.S.(2)	843	2017
SDG&E:		
U.S. federal(1):		
NOLs	$ 39	2032
General business tax credits	19	2031
SoCalGas:		
U.S. federal(1):		
NOLs	$ 289	2032
General business tax credits	12	2031

(1) We have recorded deferred income tax benefits on these NOLs and tax credits, in total, because we currently believe they will be realized on a more-likely-than-not-basis.
(2) We have not recorded deferred income tax benefits on a portion of these NOLs and tax credits because we currently believe they will not be realized on a more-likely-than-not-basis, as discussed below.

At December 31, 2016, Sempra Energy recorded a valuation allowance against a portion of its total deferred income tax assets, as shown above in the "Deferred Income Taxes – Sempra Energy Consolidated" table. A valuation allowance is recorded when, based on more-likely-than-not criteria, negative evidence outweighs positive evidence with regard to our ability to realize a deferred income tax asset in the future. Of the valuation allowances recorded to date, the negative evidence outweighs the positive evidence primarily due to cumulative pretax losses in various U.S. state and non-U.S. jurisdictions resulting in a deferred income tax asset related to NOLs, as discussed in the "Net Operating Losses and Tax Credit Carryforwards" table above, that we currently do not believe will be realized on a more-likely-than-not basis. Of Sempra Energy's total valuation allowance of $31 million at December 31, 2016, $1 million is related to non-U.S. NOLs and $30 million to U.S. state NOLs and tax credits. Of Sempra Energy's total valuation allowance of $34 million at December 31, 2015, $6 million was related to non-U.S. NOLs and $28 million to U.S. state NOLs and tax credits.

At December 31, 2016, Sempra Energy had not recognized a U.S. deferred income tax liability related to a $4.6 billion basis difference between its financial statement and income tax investment amount in its non-U.S. subsidiaries and non-U.S. corporate joint ventures. This basis difference consists of cumulative undistributed earnings that we expect to reinvest indefinitely outside of the U.S. These cumulative undistributed earnings have previously been reinvested or will be reinvested in active non-U.S. operations, thus we do not intend to use these earnings as a source of funding for U.S. operations. It is not practical to determine the hypothetical unrecognized amount of U.S. deferred income taxes that might be payable if the cumulative undistributed earnings were eventually distributed or the investments were sold.

Following is a summary of unrecognized income tax benefits:

SUMMARY OF UNRECOGNIZED INCOME TAX BENEFITS
(Dollars in millions)

	Years ended December 31,		
	2016	2015	2014
Sempra Energy Consolidated:			
Total	$ 90	$ 87	$ 117
Of the total, amounts related to tax positions that, if recognized in future years, would			
decrease the effective tax rate(1)	$ (87)	$ (83)	$ (114)
increase the effective tax rate(1)	36	32	21
SDG&E:			
Total	$ 22	$ 20	$ 14
Of the total, amounts related to tax positions that, if recognized in future years, would			
decrease the effective tax rate(1)	$ (19)	$ (16)	$ (11)
increase the effective tax rate(1)	13	11	6
SoCalGas:			
Total	$ 29	$ 27	$ 19
Of the total, amounts related to tax positions that, if recognized in future years, would			
decrease the effective tax rate(1)	$ (29)	$ (27)	$ (19)
increase the effective tax rate(1)	24	21	15

(1) Includes temporary book and tax differences that are treated as flow-through for ratemaking purposes, as discussed above.

Following is a reconciliation of the changes in unrecognized income tax benefits for the years ended December 31:

RECONCILIATION OF UNRECOGNIZED INCOME TAX BENEFITS
(Dollars in millions)

	2016	2015	2014
Sempra Energy Consolidated:			
Balance as of January 1	$ 87	$ 117	$ 90
Increase in prior period tax positions	2	10	37
Decrease in prior period tax positions	(2)	—	—
Increase in current period tax positions	6	8	5
Settlements with taxing authorities	(3)	(48)	(15)
Balance as of December 31	$ 90	$ 87	$ 117
SDG&E:			
Balance as of January 1	$ 20	$ 14	$ 17
Increase in prior period tax positions	—	5	2
Increase in current period tax positions	2	2	—
Settlements with taxing authorities	—	(1)	(5)
Balance as of December 31	$ 22	$ 20	$ 14
SoCalGas:			
Balance as of January 1	$ 27	$ 19	$ 13
Increase in prior period tax positions	—	2	2
Decrease in prior period tax positions	(2)	—	—
Increase in current period tax positions	4	6	4
Balance as of December 31	$ 29	$ 27	$ 19

It is reasonably possible that within the next 12 months, unrecognized income tax benefits could decrease due to the following:

POSSIBLE DECREASES IN UNRECOGNIZED INCOME TAX BENEFITS WITHIN 12 MONTHS
(Dollars in millions)

	At December 31,		
	2016	2015	2014
Sempra Energy Consolidated:			
Expiration of statutes of limitations on tax assessments	$ (2)	$ (2)	$ —
Potential resolution of audit issues with various			
U.S. federal, state and local and non-U.S. taxing authorities	(36)	(32)	(61)
	$ (38)	$ (34)	$ (61)
SDG&E:			
Expiration of statutes of limitations on tax assessments	$ (1)	$ (1)	$ —
Potential resolution of audit issues with various			
U.S. federal, state and local taxing authorities	(10)	(8)	(9)
	$ (11)	$ (9)	$ (9)
SoCalGas:			
Potential resolution of audit issues with various			
U.S. federal, state and local taxing authorities	$ (25)	$ (22)	$ (15)

Amounts accrued for interest and penalties associated with unrecognized income tax benefits are included in income tax expense on the Consolidated Statements of Operations. We summarize the amounts accrued at December 31 on the Consolidated Balance Sheets for interest and penalties associated with unrecognized income tax benefits and the related expense in the table below.

INTEREST AND PENALTIES ASSOCIATED WITH UNRECOGNIZED INCOME TAX BENEFITS
(Dollars in millions)

	Interest and penalties			Accrued interest and penalties	
	Years ended December 31,			December 31,	
	2016	2015	2014	2016	2015
Sempra Energy Consolidated:					
Interest (income) expense	$ —	$ (2)	$ (4)	$ 1	$ 1
Penalties	—	—	(3)	—	—
SDG&E:					
Interest income	$ —	$ —	$ (1)	$ —	$ —

Penalties accrued and expensed at SDG&E and interest and penalties accrued and expensed at SoCalGas in all periods presented were zero or negligible.

INCOME TAX AUDITS

Sempra Energy is subject to U.S. federal income tax as well as income tax of multiple state and non-U.S. jurisdictions. We remain subject to examination for U.S. federal tax years after 2010. We are subject to examination by major state tax jurisdictions for tax years after 2008. Certain major non-U.S. income tax returns for tax years 2008 through the present are open to examination. We are also open to examination for non-U.S. income tax returns related to our prior interest in our commodities business, which we divested in 2010, for years 1996 through 2010.

In addition, we have filed federal refund claims for the 2009 and 2010 tax years; however, no additional tax may be assessed by the Internal Revenue Service (IRS) for pre-2011 tax years. We have also filed state refund claims for tax years back to 2006. The pre-2009 tax years for our major state tax jurisdictions are closed to new issues, therefore, no additional tax may be assessed by the taxing authorities for these tax years.

SDG&E and SoCalGas are subject to U.S. federal income tax as well as income tax of state jurisdictions. They remain subject to examination for U.S. federal tax years after 2010 and by state tax jurisdictions for tax years after 2008.

NOTE 7. EMPLOYEE BENEFIT PLANS

We are required by applicable U.S. GAAP to:

- recognize an asset for a plan's overfunded status or a liability for a plan's underfunded status in the statement of financial position;
- measure a plan's assets and its obligations that determine its funded status as of the end of the fiscal year (with limited exceptions); and
- recognize changes in the funded status of pension and other postretirement benefit plans in the year in which the changes occur. Generally, those changes are reported in other comprehensive income and as a separate component of shareholders' equity.

The detailed information presented below covers the employee benefit plans of Sempra Energy and its principal subsidiaries.

Sempra Energy has funded and unfunded noncontributory traditional defined benefit and cash balance plans, including separate plans for SDG&E and SoCalGas, which collectively cover all eligible employees, including members of the Sempra Energy board of directors who were participants in a predecessor plan on or before June 1, 1998. Pension benefits under the traditional defined benefit plans are based on service and final average earnings, while the cash balance plans provide benefits using a career average earnings methodology.

IEnova has an unfunded noncontributory defined benefit plan covering all employees. Chilquinta Energía has an unfunded noncontributory defined benefit plan covering all employees hired before October 1, 1981 and an unfunded noncontributory termination indemnity plan covering represented employees. The plans generally provide defined benefits to retirees based on date of hire, years of service and final average earnings.

Sempra Energy also has other postretirement benefit plans (PBOP), including separate plans for SDG&E and SoCalGas, which collectively cover all domestic and certain foreign employees. The life insurance plans are both contributory and noncontributory, and the health care plans are contributory. Participants' contributions are adjusted annually. Other postretirement benefits include medical benefits for retirees' spouses.

Chilquinta Energía also has two noncontributory postretirement benefit plans which cover represented employees – a health care plan and an energy subsidy plan that provides for reduced energy rates. The health care plan includes benefits for retirees' spouses and dependents.

Pension and other postretirement benefits costs and obligations are dependent on assumptions used in calculating such amounts. We review these assumptions on an annual basis and update them as appropriate. We consider current market conditions, including interest rates, in making these assumptions. We use a December 31 measurement date for all of our plans.

RABBI TRUST

In support of its Supplemental Executive Retirement, Cash Balance Restoration and Deferred Compensation Plans, Sempra Energy maintains dedicated assets, including a Rabbi Trust and investments in life insurance contracts, which totaled $430 million and $464 million at December 31, 2016 and 2015, respectively.

PENSION AND OTHER POSTRETIREMENT BENEFIT PLANS

Divestiture Affecting 2016

On September 12, 2016, Sempra LNG & Midstream completed the sale of EnergySouth, the parent company of Mobile Gas and Willmut Gas, as we discuss in Note 3. The benefit obligations and plan assets of the benefit plans that covered employees of Mobile Gas and Willmut Gas were transferred to the buyer on the date of sale. This resulted in decreases to the recorded pension liability and other postretirement benefit plan liability of $61 million and $6 million, respectively, and decreases to pension plan assets and other postretirement benefit plan assets of $44 million and $4 million, respectively, for Sempra Energy Consolidated.

Special Termination Benefits Affecting 2016

In 2016, certain nonrepresented employees age 62 or older with 5 years of service or age 55 to 61 with 10 years of service that retired under the Voluntary Retirement Enhancement Program offered in that year received an additional postretirement health benefit in the form of a $100,000 Health Reimbursement Account. We treated the benefit obligation attributable to the Health Reimbursement Account as a special termination benefit. This resulted in increases to the recorded liability for other postretirement benefits of $26 million for Sempra Energy Consolidated, $14 million for SDG&E and $11 million for SoCalGas.

The Voluntary Retirement Enhancement Program resulted in a higher than expected number of retirements in December 2016. As a result, the total lump sum benefits paid from the SDG&E qualified pension plan in 2016 exceeded the settlement threshold, which

triggered settlement accounting and a resulting reduction of the recorded pension liability and pension plan assets of $75 million and a settlement charge of $16 million at each of Sempra Energy Consolidated and SDG&E. This settlement charge was recorded as a regulatory asset on the Consolidated Balance Sheets. A measurement date of December 31, 2016 was used for the settlement accounting, as the year-to-date lump sum benefit payments first exceeded the settlement threshold in December 2016.

Benefit Plan Amendments Affecting 2015

In 2015, executive participants in a company nonqualified pension plan became eligible in this same plan for Supplemental Executive Retirement Plan benefits. Consistent with past practice, this was treated as a plan amendment and increased the recorded pension liability by $5 million at Sempra Energy Consolidated and $3 million at SoCalGas.

Effective January 1, 2016, the point of service medical benefit provided to retirees under the age of 65 at our domestic companies, except the represented retirees at SDG&E and retirees enrolled in one of the high deductible medical plans at SoCalGas, is no longer provided by the PBOP plans of the respective companies. This change resulted in a decrease in other postretirement benefit obligations of $9 million at each of Sempra Energy Consolidated and SoCalGas, and by a negligible amount at SDG&E.

Benefit Obligations and Assets

The following three tables provide a reconciliation of the changes in the plans' projected benefit obligations and the fair value of assets during 2016 and 2015, and a statement of the funded status at December 31, 2016 and 2015:

PROJECTED BENEFIT OBLIGATION, FAIR VALUE OF ASSETS AND FUNDED STATUS
SEMPRA ENERGY CONSOLIDATED
(Dollars in millions)

	Pension benefits		Other postretirement benefits	
	2016	2015	2016	2015
CHANGE IN PROJECTED BENEFIT OBLIGATION				
Net obligation at January 1	$ 3,649	$ 3,839	$ 963	$ 1,115
Service cost	107	114	20	26
Interest cost	160	154	42	44
Contributions from plan participants	—	—	20	19
Actuarial loss (gain)	116	(180)	(81)	(172)
Benefit payments	(217)	(273)	(61)	(60)
Divestiture of EnergySouth	(61)	—	(6)	—
Plan amendments	—	5	—	(9)
Special termination benefits	—	—	26	—
Settlements	(75)	(10)	(1)	—
Net obligation at December 31	3,679	3,649	922	963
CHANGE IN PLAN ASSETS				
Fair value of plan assets at January 1	2,484	2,807	1,003	1,054
Actual return on plan assets	207	(73)	94	(21)
Employer contributions	104	33	6	11
Contributions from plan participants	—	—	20	19
Benefit payments	(217)	(273)	(61)	(60)
Divestiture of EnergySouth	(44)	—	(4)	—
Settlements	(75)	(10)	(1)	—
Fair value of plan assets at December 31	2,459	2,484	1,057	1,003
Funded status at December 31	$ (1,220)	$ (1,165)	$ 135	$ 40
Net recorded (liability) asset at December 31	$ (1,220)	$ (1,165)	$ 135	$ 40

PROJECTED BENEFIT OBLIGATION, FAIR VALUE OF ASSETS AND FUNDED STATUS
SAN DIEGO GAS & ELECTRIC COMPANY
(Dollars in millions)

	Pension benefits		Other postretirement benefits	
	2016	2015	2016	2015
CHANGE IN PROJECTED BENEFIT OBLIGATION				
Net obligation at January 1	$ 965	$ 1,011	$ 165	$ 200
Service cost	29	29	5	7
Interest cost	41	39	7	8
Contributions from plan participants	—	—	7	7
Actuarial loss (gain)	7	(52)	6	(43)
Benefit payments	(25)	(56)	(14)	(14)
Special termination benefits	—	—	14	—
Settlements	(75)	—	—	—
Transfer of liability to other plans	(7)	(6)	—	—
Net obligation at December 31	935	965	190	165
CHANGE IN PLAN ASSETS				
Fair value of plan assets at January 1	752	828	161	164
Actual return on plan assets	59	(24)	13	(3)
Employer contributions	3	2	2	7
Contributions from plan participants	—	—	7	7
Benefit payments	(25)	(56)	(14)	(14)
Settlements	(75)	—	—	—
Transfer of assets from other plans	—	2	—	—
Fair value of plan assets at December 31	714	752	169	161
Funded status at December 31	$ (221)	$ (213)	$ (21)	$ (4)
Net recorded liability at December 31	$ (221)	$ (213)	$ (21)	$ (4)

PROJECTED BENEFIT OBLIGATION, FAIR VALUE OF ASSETS AND FUNDED STATUS
SOUTHERN CALIFORNIA GAS COMPANY
(Dollars in millions)

	Pension benefits		Other postretirement benefits	
	2016	2015	2016	2015
CHANGE IN PROJECTED BENEFIT OBLIGATION				
Net obligation at January 1	$ 2,255	$ 2,398	$ 752	$ 866
Service cost	67	74	14	17
Interest cost	101	98	32	34
Contributions from plan participants	—	—	13	12
Actuarial loss (gain)	77	(131)	(86)	(125)
Benefit payments	(158)	(187)	(45)	(43)
Plan amendments	—	3	—	(9)
Special termination benefits	—	—	11	—
Transfer of liability from other plans	1	—	—	—
Net obligation at December 31	2,343	2,255	691	752
CHANGE IN PLAN ASSETS				
Fair value of plan assets at January 1	1,537	1,763	822	870
Actual return on plan assets	128	(45)	79	(18)
Employer contributions	72	6	1	1
Contributions from plan participants	—	—	13	12
Benefit payments	(158)	(187)	(45)	(43)
Fair value of plan assets at December 31	1,579	1,537	870	822
Funded status at December 31	$ (764)	$ (718)	$ 179	$ 70
Net recorded (liability) asset at December 31	$ (764)	$ (718)	$ 179	$ 70

Actuarial losses (gains) fluctuate based on changes in assumptions that we describe below in “Assumptions for Pension and Other Postretirement Benefit Plans” and updates to census data. In 2015 and 2016, the Society of Actuaries released updated mortality improvement projection scales, reflecting observed longevity improvements in its mortality tables. We have incorporated these assumptions, adjusted for the Sempra Energy companies’ actual mortality experience, in our calculations for each of those years. Actuarial losses in pension plans at Sempra Energy Consolidated in 2016 were driven primarily by losses at SoCalGas due to a decrease in discount rate. Actuarial gains in other postretirement benefit plans at Sempra Energy Consolidated in 2016 were driven primarily by gains at SoCalGas due to a lower increase in health care costs than expected.

Net Assets and Liabilities

The assets and liabilities of the pension and other postretirement benefit plans are affected by changing market conditions as well as when actual plan experience is different than assumed. Such events result in investment gains and losses, which we defer and recognize in pension and other postretirement benefit costs over a period of years. Our funded pension and other postretirement benefit plans use the asset smoothing method, except for those at SDG&E and the other postretirement benefit plan at Mobile Gas (until the date of sale). This method develops an asset value that recognizes realized and unrealized investment gains and losses over a three-year period. This adjusted asset value, known as the market-related value of assets, is used in conjunction with an expected long-term rate of return to determine the expected return-on-assets component of net periodic cost. SDG&E does not use the asset smoothing method, but rather recognizes realized and unrealized investment gains and losses during the current year.

The 10-percent corridor accounting method is used at Sempra Energy Consolidated, SDG&E and SoCalGas. Under the corridor accounting method, if as of the beginning of a year unrecognized net gain or loss exceeds 10 percent of the greater of the projected benefit obligation or the market-related value of plan assets, the excess is amortized over the average remaining service period of active participants. The asset smoothing and 10-percent corridor accounting methods help mitigate volatility of net periodic costs from year to year.

We recognize the overfunded or underfunded status of defined benefit pension and other postretirement plans as assets or liabilities, respectively; unrecognized changes in these assets and/or liabilities are normally recorded in Accumulated Other Comprehensive Income (Loss) on the balance sheet. The California Utilities and Mobile Gas (until the date of sale) record regulatory assets and liabilities that offset the funded pension and other postretirement plans’ assets or liabilities, as these costs are expected to be recovered in future utility rates based on agreements with regulatory agencies. At Willmut Gas (until the date of sale), pension contributions were recovered in rates on a prospective basis, but were not recorded as a regulatory asset pending recovery.

The California Utilities record annual pension and other postretirement net periodic benefit costs equal to the contributions to their plans as authorized by the CPUC. The annual contributions to the pension plans are limited to a minimum required funding amount as determined by the IRS. The annual contributions to the other postretirement plans are equal to the lesser of the maximum tax deductible amount or the net periodic cost calculated in accordance with U.S. GAAP for pension and other postretirement benefit plans. Until the date of sale, Mobile Gas recorded annual pension and other postretirement net periodic benefit costs based on an estimate of the net periodic cost at the beginning of the year calculated in accordance with U.S. GAAP for pension and other postretirement benefit plans, as authorized by the Alabama Public Service Commission. Any differences between booked net periodic benefit cost and amounts contributed to the pension and other postretirement plans for the California Utilities are disclosed as regulatory adjustments in accordance with U.S. GAAP for rate-regulated entities.

The net (liability) asset is included in the following categories on the Consolidated Balance Sheets at December 31:

PENSION AND OTHER POSTRETIREMENT BENEFIT OBLIGATIONS, NET OF PLAN ASSETS AT DECEMBER 31

(Dollars in millions)

	Pension benefits		Other postretirement benefits	
	2016	2015	2016	2015
Sempra Energy Consolidated:				
Noncurrent assets	$ —	$ —	$ 179	$ 70
Current liabilities	(56)	(43)	—	—
Noncurrent liabilities	(1,164)	(1,122)	(44)	(30)
Net recorded (liability) asset	$ (1,220)	$ (1,165)	$ 135	$ 40
SDG&E:				
Current liabilities	$ (10)	$ (5)	$ —	$ —
Noncurrent liabilities	(211)	(208)	(21)	(4)
Net recorded liability	$ (221)	$ (213)	$ (21)	$ (4)
SoCalGas:				
Noncurrent assets	$ —	$ —	$ 179	$ 70
Current liabilities	(2)	(2)	—	—
Noncurrent liabilities	(762)	(716)	—	—
Net recorded (liability) asset	$ (764)	$ (718)	$ 179	$ 70

Amounts recorded in Accumulated Other Comprehensive Income (Loss) at December 31, 2016 and 2015, net of income tax effects and amounts recorded as regulatory assets, are as follows:

AMOUNTS IN ACCUMULATED OTHER COMPREHENSIVE INCOME (LOSS)

(Dollars in millions)

	Pension benefits		Other postretirement benefits	
	2016	2015	2016	2015
Sempra Energy Consolidated:				
Net actuarial (loss) gain	$ (95)	$ (84)	$ 3	$ 2
Prior service cost	(4)	(5)	—	—
Total	$ (99)	$ (89)	$ 3	$ 2
SDG&E:				
Net actuarial loss	$ (8)	$ (8)		
Prior service cost	—	—		
Total	$ (8)	$ (8)		
SoCalGas:				
Net actuarial loss	$ (6)	$ (4)		
Prior service cost	(3)	(1)		
Total	$ (9)	$ (5)		

The accumulated benefit obligation for defined benefit pension plans at December 31, 2016 and 2015 was as follows:

ACCUMULATED BENEFIT OBLIGATION

(Dollars in millions)

	Sempra Energy Consolidated		SDG&E		SoCalGas	
	2016	2015	2016	2015	2016	2015
Accumulated benefit obligation	$ 3,465	$ 3,397	$ 904	$ 939	$ 2,167	$ 2,056

Sempra Energy, SDG&E and SoCalGas each have a funded pension plan. Mobile Gas had a funded pension plan until it was sold in September 2016. We also have unfunded pension plans at Sempra Energy, SDG&E, SoCalGas, IEnova and Chilquinta Energía. The following table shows the obligations of funded pension plans with benefit obligations in excess of plan assets at December 31:

OBLIGATIONS OF FUNDED PENSION PLANS
(Dollars in millions)

	2016	2015
Sempra Energy Consolidated:		
Projected benefit obligation	$ 3,431	$ 3,410
Accumulated benefit obligation	3,227	3,183
Fair value of plan assets	2,459	2,484
SDG&E:		
Projected benefit obligation	$ 902	$ 927
Accumulated benefit obligation	874	906
Fair value of plan assets	714	752
SoCalGas:		
Projected benefit obligation	$ 2,320	$ 2,236
Accumulated benefit obligation	2,148	2,039
Fair value of plan assets	1,579	1,537

Net Periodic Benefit Cost

The following three tables provide the components of net periodic benefit cost and pretax amounts recognized in Other Comprehensive Income (Loss) for the years ended December 31:

NET PERIODIC BENEFIT COST AND AMOUNTS RECOGNIZED IN OTHER COMPREHENSIVE INCOME (LOSS)
SEMPRA ENERGY CONSOLIDATED
(Dollars in millions)

	Pension benefits			Other postretirement benefits		
	2016	2015	2014	2016	2015	2014
NET PERIODIC BENEFIT COST						
Service cost	$ 107	$ 114	$ 101	$ 20	$ 26	$ 24
Interest cost	160	154	161	42	44	49
Expected return on assets	(166)	(173)	(171)	(69)	(68)	(63)
Amortization of:						
Prior service cost (credit)	11	11	11	—	(4)	(5)
Actuarial loss (gain)	30	38	18	(1)	—	—
Settlement and curtailment charges	16	4	31	—	—	(1)
Special termination benefits	—	—	—	26	—	5
Regulatory adjustment	(57)	(110)	(31)	(11)	12	6
Total net periodic benefit cost	101	38	120	7	10	15
CHANGES IN PLAN ASSETS AND BENEFIT OBLIGATIONS RECOGNIZED IN OTHER COMPREHENSIVE INCOME (LOSS)						
Net loss (gain)	26	17	38	(2)	(4)	1
Prior service (credit) cost	(1)	4	4	—	—	—
Amortization of actuarial loss	(10)	(14)	(23)	—	—	—
Total recognized in other comprehensive income (loss)	15	7	19	(2)	(4)	1
Total recognized in net periodic benefit cost and other comprehensive income (loss)	$ 116	$ 45	$ 139	$ 5	$ 6	$ 16

NET PERIODIC BENEFIT COST AND AMOUNTS RECOGNIZED IN OTHER COMPREHENSIVE INCOME (LOSS)
SAN DIEGO GAS & ELECTRIC COMPANY
(Dollars in millions)

	Pension benefits			Other postretirement benefits		
	2016	2015	2014	2016	2015	2014
NET PERIODIC BENEFIT COST						
Service cost	$ 29	$ 29	$ 30	$ 5	$ 7	$ 7
Interest cost	41	39	43	7	8	9
Expected return on assets	(49)	(54)	(55)	(12)	(11)	(10)
Amortization of:						
Prior service cost	1	8	2	3	3	2
Actuarial loss (gain)	10	2	4	(1)	—	—
Settlement charge	16	—	19	—	—	—
Special termination benefits	—	—	—	14	—	5
Regulatory adjustment	(45)	(20)	12	(14)	—	1
Total net periodic benefit cost	3	4	55	2	7	14
CHANGES IN PLAN ASSETS AND BENEFIT OBLIGATIONS RECOGNIZED IN OTHER COMPREHENSIVE INCOME (LOSS)						
Net loss (gain)	1	(6)	8	—	—	—
Amortization of actuarial loss	(1)	(1)	(3)	—	—	—
Total recognized in other comprehensive (loss) income	—	(7)	5	—	—	—
Total recognized in net periodic benefit cost and other comprehensive (loss) income	$ 3	$ (3)	$ 60	$ 2	$ 7	$ 14

NET PERIODIC BENEFIT COST AND AMOUNTS RECOGNIZED IN OTHER COMPREHENSIVE INCOME (LOSS)
SOUTHERN CALIFORNIA GAS COMPANY
(Dollars in millions)

	Pension benefits			Other postretirement benefits		
	2016	2015	2014	2016	2015	2014
NET PERIODIC BENEFIT COST						
Service cost	$ 67	$ 74	$ 60	$ 14	$ 17	$ 16
Interest cost	101	98	100	32	34	38
Expected return on assets	(103)	(106)	(104)	(56)	(56)	(51)
Amortization of:						
Prior service cost (credit)	9	9	9	(4)	(7)	(8)
Actuarial loss	11	21	6	—	—	—
Settlement charge	—	—	4	—	—	—
Special termination benefits	—	—	—	11	—	—
Regulatory adjustment	(12)	(90)	(43)	3	12	5
Total net periodic benefit cost	73	6	32	—	—	—
CHANGES IN PLAN ASSETS AND BENEFIT OBLIGATIONS RECOGNIZED IN OTHER COMPREHENSIVE INCOME (LOSS)						
Net loss	4	—	5	—	—	—
Prior service cost	2	2	—	—	—	—
Amortization of actuarial loss	—	—	(5)	—	—	—
Total recognized in other comprehensive income	6	2	—	—	—	—
Total recognized in net periodic benefit cost and other comprehensive income	$ 79	$ 8	$ 32	$ —	$ —	$ —

The estimated net loss for the pension and other postretirement benefit plans that will be amortized from Accumulated Other Comprehensive Income (Loss) into net periodic benefit cost in 2017 is $10 million for Sempra Energy Consolidated and $1 million for each of SDG&E and SoCalGas. The estimated prior service cost that will be similarly amortized in 2017 is $1 million for each of Sempra Energy Consolidated and SoCalGas and a negligible amount for SDG&E.

Assumptions for Pension and Other Postretirement Benefit Plans

Benefit Obligation and Net Periodic Benefit Cost

Except for the IEnova and Chilquinta Energía plans, we develop the discount rate assumptions based on the results of a third party modeling tool that matches each plan's expected cash flows to interest rates and expected maturity values of individually selected bonds in a hypothetical portfolio. The model controls the level of accumulated surplus that may result from the selection of bonds based solely on their premium yields by limiting the number of years to look back for selection to 3 years for pre-30-year and 6 years for post-30-year benefit payments. Additionally, the model ensures that an adequate number of bonds are selected in the portfolio by limiting the amount of the plan's benefit payments that can be met by a single bond to 7.5 percent.

We selected individual bonds from a universe of Bloomberg AA-rated bonds which:

- have an outstanding issue of at least $50 million;
- are non-callable (or callable with make-whole provisions);
- exclude collateralized bonds; and
- exclude the top and bottom 10 percent of yields to avoid relying on bonds which might be mispriced or misgraded.

This selection methodology also mitigates the impact of market volatility on the portfolio by excluding bonds with the following characteristics:

- The issuer is on review for downgrade by a major rating agency if the downgrade would eliminate the issuer from the portfolio.
- Recent events have caused significant price volatility to which rating agencies have not reacted.
- Lack of liquidity is causing price quotes to vary significantly from broker to broker.

We believe that this bond selection approach provides the best estimate of discount rates to estimate settlement values for our plans' benefit obligations as required by applicable U.S. GAAP.

We develop the discount rate assumptions for the plans at IEnova by constructing a synthetic government zero coupon bond yield curve from the available market data, based on duration matching, and we add a risk spread to allow for the yields of high-quality corporate bonds. We develop the discount rate assumptions for the plans at Chilquinta Energía based on 10-year Chilean government bond yields and the expected local long-term rate of inflation. These methods for developing the discount rate are required when there is no deep market for high quality corporate bonds.

Long-term return on assets is based on the weighted-average of the plans' investment allocation as of the measurement date and the expected returns for those asset types.

We amortize prior service cost using straight line amortization over average future service (or average expected lifetime for plans where participants are substantially inactive employees), which is an alternative method allowed under U.S. GAAP.

The significant assumptions affecting benefit obligation and net periodic benefit cost are as follows:

WEIGHTED-AVERAGE ASSUMPTIONS USED TO DETERMINE BENEFIT OBLIGATION AT DECEMBER 31

	Pension benefits		Other postretirement benefits	
	2016	2015	2016	2015
Sempra Energy Consolidated:				
Discount rate	4.08%	4.46%	4.19%	4.49%
Rate of compensation increase	2.00-10.00	2.00-10.00	2.00-10.00	2.00-10.00
SDG&E:				
Discount rate	4.08%	4.35%	4.15%	4.50%
Rate of compensation increase	2.00-10.00	2.00-10.00	2.00-10.00	2.00-10.00
SoCalGas:				
Discount rate	4.10%	4.50%	4.20%	4.50%
Rate of compensation increase	2.00-10.00	2.00-10.00	2.00-10.00	2.00-10.00

WEIGHTED-AVERAGE ASSUMPTIONS USED TO DETERMINE NET PERIODIC BENEFIT COST
YEARS ENDED DECEMBER 31

	Pension benefits			Other postretirement benefits		
	2016	2015	2014	2016	2015	2014
Sempra Energy Consolidated:						
Discount rate	4.46%	4.09%	4.85%	4.49%	4.15%	4.95%
Expected return on plan assets	7.00	7.00	7.00	6.98	6.98	6.97
Rate of compensation increase	2.00-10.00	2.00-10.00	3.50-10.00	2.00-10.00	2.00-10.00	3.50-10.00
SDG&E:						
Discount rate	4.35%	4.00%	4.69%	4.50%	4.15%	5.00%
Expected return on plan assets	7.00	7.00	7.00	6.90	6.91	6.88
Rate of compensation increase	2.00-10.00	2.00-10.00	3.50-10.00	2.00-10.00	2.00-10.00	3.50-10.00
SoCalGas:						
Discount rate	4.50%	4.15%	4.94%	4.50%	4.15%	4.95%
Expected return on plan assets	7.00	7.00	7.00	7.00	7.00	7.00
Rate of compensation increase	2.00-10.00	2.00-10.00	3.50-10.00	2.00-10.00	2.00-10.00	3.50-10.00

Health Care Cost Trend Rates

Assumed health care cost trend rates have a significant effect on the amounts that we report for the health care plan costs. Following are the health care cost trend rates applicable to our postretirement benefit plans:

ASSUMED HEALTH CARE COST TREND RATES
AT DECEMBER 31

	Other postretirement benefit plans(1)					
	Pre-65 retirees			Retirees aged 65 years and older		
	2016	2015	2014	2016	2015	2014
Health care cost trend rate assumed for next year	8.00%	8.10%	7.75%	5.50%	5.50%	5.25%
Rate to which the cost trend rate is assumed to decline (the ultimate trend)	5.00%	5.00%	5.00%	4.50%	4.50%	4.50%
Year the rate reaches the ultimate trend	2022	2022	2020	2022	2022	2020

(1) Excludes Mobile Gas plan. For Mobile Gas, which we deconsolidated on September 12, 2016, the health care cost trend rate assumed for next year for all retirees was 8.10 percent and 7.75 percent in 2015 and 2014, respectively; the ultimate trend was 5.00 percent in 2015 and 2014; and the year the rate reaches the ultimate trend was 2022 and 2020 in 2015 and 2014, respectively. For Chilquinta Energía, the health care cost trend rate assumed for next year, and the ultimate trend, was 3.00 percent in each of 2016, 2015 and 2014.

A one-percent change in assumed health care cost trend rates would have had the following effects in 2016:

EFFECT OF ONE-PERCENT CHANGE IN ASSUMED HEALTH CARE COST TREND RATES
(Dollars in millions)

	Sempra Energy Consolidated		SDG&E		SoCalGas	
	1% increase	1% decrease	1% increase	1% decrease	1% increase	1% decrease
Effect on total of service and interest cost components of net periodic postretirement health care benefit cost	$ 5	$ (4)	$ 1	$ (1)	$ 4	$ (3)
Effect on the health care component of the accumulated other postretirement benefit obligations	62	(52)	6	(5)	55	(46)

Plan Assets

Investment Allocation Strategy for Sempra Energy's Pension Master Trust

Sempra Energy's pension master trust holds the investments for our pension plans and a portion of the investments for our other postretirement benefit plans. We maintain additional trusts as we discuss below for certain of the California Utilities' other postretirement benefit plans. Other than through indexing strategies, the trusts do not invest in securities of Sempra Energy.

The current asset allocation objective for the pension master trust is to protect the funded status of the plans while generating sufficient returns to cover future benefit payments and accruals. We assess the portfolio performance by comparing actual returns with relevant benchmarks. Currently, the pension plans' target asset allocations are

- 38 percent domestic equity
- 26 percent international equity
- 18 percent long credit
- 8 percent ultra-long duration government securities
- 5 percent global high yield credit
- 5 percent real assets

The asset allocation of the plans is reviewed by our Plan Funding Committee and our Pension and Benefits Investment Committee (the Committees) on a regular basis. When evaluating strategic asset allocations, the Committees consider many variables, including:

- long-term cost
- variability and level of contributions
- funded status
- a range of expected outcomes over varying confidence levels

We maintain allocations at strategic levels with reasonable bands of variance.

In accordance with the Sempra Energy pension investment guidelines, derivative financial instruments may be used by the pension master trust's equity and fixed income portfolio investment managers to equitize cash, hedge certain exposures, and as substitutes for certain types of fixed income securities.

Rate of Return Assumption

The expected return on assets in our pension and other postretirement benefit plans is based on the weighted-average of the plans' investment allocations to specific asset classes as of the measurement date. We arrive at a 7-percent expected return on assets by considering both the historical and forecasted long-term rates of return on those asset classes. We expect a return of between 7 percent and 9 percent on return-seeking assets and between 3 percent and 5 percent for risk-mitigating assets. Certain trusts that hold assets for the SDG&E other postretirement benefit plan are subject to taxation, which impacts the expected after-tax return on assets in the plan.

Concentration of Risk

Plan assets are diversified across global equity and bond markets, and concentration of risk in any one economic, industry, maturity or geographic sector is limited.

Investment Strategy for SDG&E's and SoCalGas' Other Postretirement Benefit Plans

SDG&E's and SoCalGas' other postretirement benefit plans are funded by cash contributions from SDG&E and SoCalGas and their current retirees. The assets of these plans are placed into the pension master trust and other Voluntary Employee Beneficiary Association trusts. The assets in the Voluntary Employee Beneficiary Association trusts are invested at an allocation similar to the pension master trust, with 75 percent invested in return-seeking and 25 percent invested in risk-mitigating assets. This allocation is periodically reviewed to ensure that plan assets are best positioned to meet plan obligations.

Fair Value of Pension and Other Postretirement Benefit Plan Assets

We classify the investments in Sempra Energy's pension master trust and the trusts for the California Utilities' other postretirement benefit plans based on the fair value hierarchy, except for certain investments measured at net asset value (NAV).

The following are descriptions of the valuation methods and assumptions we use to estimate the fair values of investments held by pension and other postretirement benefit plan trusts.

Equity Securities – Equity securities are valued using quoted prices listed on nationally recognized securities exchanges.

Fixed Income Securities – Certain fixed income securities are valued at the closing price reported in the active market in which the security is traded. Other fixed income securities are valued based on yields currently available on comparable securities of issuers with similar credit ratings. When quoted prices are not available for identical or similar securities, the security is valued under a discounted cash flows approach that maximizes observable inputs, such as current yields of similar instruments, but includes adjustments for certain risks that may not be observable, such as credit and liquidity risks. Certain high yield fixed-income securities are valued by applying a price adjustment to the bid side to calculate a mean and ask value. Adjustments can

vary based on maturity, credit standing, and reported trade frequencies. The bid to ask spread is determined by the investment manager based on the review of the available market information.

Registered Investment Companies – Investments in mutual funds sponsored by a registered investment company are valued based on exchange listed prices for equity and certain fixed income securities or are valued under a discounted cash flows approach that maximizes observable inputs, such as current yields of similar instruments, but includes adjustments for certain risks that may not be observable, such as credit and liquidity risks for the remaining fixed income securities. Where the value is a quoted price in an active market, the investment is classified within Level 1 of the fair value hierarchy.

Common/Collective Trusts – Investments in common/collective trust funds are valued based on the NAV of units owned, which is based on the current fair value of the funds' underlying assets.

Venture Capital Funds – These funds consist of investments in private equities that are held by limited partnerships following various strategies, including venture capital and corporate finance. The partnerships generally have limited lives of 10 years, after which liquidating distributions will be received. The value is determined based on the NAV of the proportionate share of an ownership interest in partners' capital.

Real Estate Funds – Investments in real estate funds are valued at NAV per share, based on the fair value of the underlying investments.

Derivative Financial Instruments – Forward currency contracts are valued at the prevailing forward exchange rate of the underlying currencies, and unrealized gain (loss) is recorded daily. Fixed income futures and options are marked to market daily. Equity index future contracts are valued at the last sales price quoted on the exchange on which they primarily trade.

The methods described are intended to produce a fair value calculation that is indicative of net realizable value or reflective of fair values. However, while management believes the valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different fair value measurement at the reporting date.

We provide more discussion of fair value measurements in Notes 1 and 10. The following tables set forth by level within the fair value hierarchy a summary of the investments in our pension and other postretirement benefit plan trusts measured at fair value on a recurring basis.

There were no transfers into or out of Level 1, Level 2 or Level 3 for Sempra Energy Consolidated, SDG&E or SoCalGas during the periods presented, except for investments measured at NAV as required by ASU 2015-07, which we adopted retrospectively as of January 1, 2016 and discuss in Note 2. There were no changes in the valuation techniques used in recurring fair value measurement.

SDG&E and SoCalGas each hold a proportionate share of investment assets in the pension master trust at Sempra Energy Consolidated. The fair values of our pension plan assets by asset category are as follows:

FAIR VALUE MEASUREMENTS – INVESTMENT ASSETS OF PENSION PLANS

(Dollars in millions)

	Fair value at December 31, 2016		
	Level 1	Level 2	Total
Sempra Energy Consolidated:			
Equity securities:			
Domestic	$ 884	$ —	$ 884
International	522	—	522
Registered investment companies	127	—	127
Fixed income securities:			
Domestic government bonds	214	32	246
International government bonds	—	9	9
Domestic corporate bonds	—	346	346
International corporate bonds	—	94	94
Registered investment companies	—	14	14
Total investment assets in the fair value hierarchy	$ 1,747	$ 495	2,242
Investments measured at NAV (1):			
Common/collective trusts			223
Venture capital funds and real estate funds			4
Total investment assets(2)			$ 2,469
SDG&E's proportionate share of investment assets			$ 717
SoCalGas' proportionate share of investment assets			$ 1,585

	Fair value at December 31, 2015		
	Level 1	Level 2	Total
Sempra Energy Consolidated:			
Equity securities:			
Domestic	$ 893	$ 7	$ 900
International	543	1	544
Registered investment companies	124	—	124
Fixed income securities:			
Domestic government bonds	124	31	155
International government bonds	—	10	10
Domestic corporate bonds	—	338	338
International corporate bonds	—	100	100
Registered investment companies	—	7	7
Other	1	—	1
Total investment assets in the fair value hierarchy	$ 1,685	$ 494	2,179
Investments measured at NAV (1):			
Common/collective trusts			312
Venture capital funds and real estate funds			4
Total investment assets(3)			$ 2,495
SDG&E's proportionate share of investment assets(4)			$ 753
SoCalGas' proportionate share of investment assets			$ 1,544

(1) Reflects the retrospective adoption of ASU 2015-07 as of January 1, 2016, as we discuss in Note 2. Prior to adoption, we included investments measured at NAV within the fair value hierarchy.

(2) Excludes cash and cash equivalents of $14 million and accounts payable of $24 million.

(3) Excludes cash and cash equivalents of $14 million and accounts payable of $25 million.

(4) Excludes transfers receivable from other plans of $2 million at SDG&E.

The fair values by asset category of the other postretirement benefit plan assets held in the pension master trust and in the additional trusts for SoCalGas' other postretirement benefit plans and SDG&E's other postretirement benefit plan (PBOP plan trusts) are as follows:

FAIR VALUE MEASUREMENTS – INVESTMENT ASSETS OF OTHER POSTRETIREMENT BENEFIT PLANS

(Dollars in millions)

	Fair value at December 31, 2016		
	Level 1	Level 2	Total
SDG&E:			
Equity securities:			
Domestic	$ 41	$ —	$ 41
International	24	—	24
Registered investment companies	46	—	46
Fixed income securities:			
Domestic government bonds	10	1	11
Domestic corporate bonds	—	16	16
International corporate bonds	—	3	3
Registered investment companies	—	17	17
Total investment assets in the fair value hierarchy	121	37	158
Investments measured at NAV – Common/collective trusts(1)			11
Total investment assets(2)			169
SoCalGas:			
Equity securities:			
Domestic	130	—	130
International	77	—	77
Registered investment companies	46	—	46
Fixed income securities:			
Domestic government bonds	52	8	60
International government bonds	—	2	2
Domestic corporate bonds	—	94	94
International corporate bonds	—	28	28
Registered investment companies	—	47	47
Total investment assets in the fair value hierarchy	305	179	484
Investments measured at NAV – Common/collective trusts(1)			386
Total investment assets(3)			870
Other Sempra Energy:			
Equity securities:			
Domestic	6	—	6
International	3	—	3
Fixed income securities:			
Domestic government bonds	1	—	1
International government bonds	—	1	1
Domestic corporate bonds	—	2	2
International corporate bonds	—	1	1
Registered investment companies	—	1	1
Total investment assets in the fair value hierarchy	10	5	15
Investments measured at NAV – Common/collective trusts(1)			3
Total other Sempra Energy investment assets			18
Total Sempra Energy Consolidated investment assets in the fair value hierarchy	$ 436	$ 221	
Total Sempra Energy Consolidated investment assets(4)			$ 1,057

(1) Reflects the retrospective adoption of ASU 2015-07 as of January 1, 2016, as we discuss in Note 2. Prior to adoption, we included investments measured at NAV within the fair value hierarchy.

(2) Excludes cash and cash equivalents of $1 million and accounts payable of $1 million held in SDG&E PBOP plan trusts.

(3) Excludes cash and cash equivalents of $4 million and accounts payable of $4 million held in SoCalGas PBOP plan trusts.

(4) Excludes cash and cash equivalents of $5 million and accounts payable of $5 million at Sempra Energy Consolidated.

FAIR VALUE MEASUREMENTS – INVESTMENT ASSETS OF OTHER POSTRETIREMENT BENEFIT PLANS

(Dollars in millions)

	Fair value at December 31, 2015		
	Level 1	Level 2	Total
SDG&E:			
Equity securities:			
Domestic	$ 39	$ —	$ 39
International	24	—	24
Registered investment companies	41	—	41
Fixed income securities:			
Domestic government bonds	5	3	8
Domestic corporate bonds	—	15	15
International corporate bonds	—	4	4
Registered investment companies	—	16	16
Total investment assets in the fair value hierarchy	109	38	147
Investments measured at NAV – Common/collective trusts(1)			14
Total investment assets(2)			161
SoCalGas:			
Equity securities:			
Domestic	123	1	124
International	74	—	74
Registered investment companies	43	—	43
Fixed income securities:			
Domestic government bonds	42	7	49
International government bonds	—	2	2
Domestic corporate bonds	—	87	87
International corporate bonds	—	28	28
Registered investment companies	—	49	49
Total investment assets in the fair value hierarchy	282	174	456
Investments measured at NAV – Common/collective trusts(1)			367
Total investment assets(3)			823
Other Sempra Energy:			
Equity securities:			
Domestic	5	1	6
International	3	—	3
Registered investment companies	4	—	4
Fixed income securities:			
Domestic government bonds	2	—	2
International government bonds	—	1	1
Domestic corporate bonds	—	1	1
International corporate bonds	—	1	1
Registered investment companies	—	1	1
Total investment assets in the fair value hierarchy	14	5	19
Investments measured at NAV – Common/collective trusts(1)			1
Total other Sempra Energy investment assets			20
Total Sempra Energy Consolidated investment assets in the fair value hierarchy	$ 405	$ 217	
Total Sempra Energy Consolidated investment assets(4)			$ 1,004

(1) Reflects the retrospective adoption of ASU 2015-07 as of January 1, 2016, as we discuss in Note 2. Prior to adoption, we included investments measured at NAV within the fair value hierarchy.

(2) Excludes cash and cash equivalents of $1 million and accounts payable of $1 million held in SDG&E PBOP plan trusts.

(3) Excludes cash and cash equivalents of $3 million and accounts payable of $4 million held in SoCalGas PBOP plan trusts.

(4) Excludes cash and cash equivalents of $4 million and accounts payable of $5 million at Sempra Energy Consolidated.

Future Payments

We expect to contribute the following amounts to our pension and other postretirement benefit plans in 2017:

EXPECTED CONTRIBUTIONS

(Dollars in millions)

	Sempra Energy Consolidated	SDG&E	SoCalGas
Pension plans	$ 180	$ 38	$ 90
Other postretirement benefit plans	8	5	1

The following table shows the total benefits we expect to pay for the next 10 years to current employees and retirees from the plans or from company assets.

EXPECTED BENEFIT PAYMENTS

(Dollars in millions)

	Sempra Energy Consolidated		SDG&E		SoCalGas	
	Pension benefits	Other postretirement benefits	Pension benefits	Other postretirement benefits	Pension benefits	Other postretirement benefits
2017	$ 347	$ 47	$ 94	$ 10	$ 194	$ 35
2018	317	51	84	11	189	37
2019	304	53	81	11	184	38
2020	291	56	77	12	175	39
2021	295	55	73	12	177	40
2022-2026	1,254	277	322	61	804	203

PROFIT SHARING PLANS

Under Chilean law, Chilquinta Energía is required to pay all employees either (1) 30 percent of Chilquinta Energía's taxable income after deducting a 10-percent return on equity, allocated in proportion to the annual salary of each employee or (2) 25 percent of each employee's annual salary, with a maximum mandatory profit sharing of 4.75 months of Chile's legal minimum salary. Chilquinta Energía has elected the second option but calculates the profit sharing amounts with actual employee salaries instead of the legal minimum salary, resulting in a higher cost. The amounts are paid out each pay period. Chilquinta Energía recorded annual profit sharing expense of $5 million for 2016, $3 million for 2015 and $4 million for 2014 related to this plan.

Under Peruvian law, Luz del Sur is required to pay their employees 5 percent of Luz del Sur's taxable income, paid once a year and allocated as follows: 50 percent based on each employee's annual hours worked and 50 percent based on each employee's annual salary. Luz del Sur recorded annual profit sharing expense of $10 million in each of 2016, 2015 and 2014 related to this plan.

SAVINGS PLANS

Sempra Energy offers trusteed savings plans to all domestic employees and to employees in Mexico. Participation in the plans is immediate for salary deferrals for all employees except for the represented employees at SoCalGas, who are eligible upon completion of one year of service. Subject to plan provisions, domestic employees may contribute from one percent to 50 percent of their eligible earnings, subject to annual IRS limits. In Mexico, employees may contribute up to 2 percent of the portion of their base salary that is less than 25 times the minimum wage and may contribute up to 5 percent of any portion of their base salary that is greater than 25 times the minimum wage.

Through March 27, 2015, Sempra Energy made matching contributions for all domestic employees after one year of the employee's completed service. Beginning March 28, 2015, Sempra Energy makes matching contributions for domestic employees immediately as of the date of hire, except for represented employees at SoCalGas, who continue to receive matching contributions after one year of the employee's completed service. Sempra Energy continues to make matching contributions immediately for employees in Mexico.

Also beginning March 28, 2015, employer contribution amounts for domestic employees, except for the represented employees at SoCalGas and employees at Mobile Gas (until the date of sale), are equal to 50 percent of the first 6 percent, plus 20 percent of the next 5 percent, of eligible earnings contributed by employees. Prior to that, employer contribution amounts for these employees were 50 percent of the first 6 percent of eligible earnings contributed by the employees and, if certain company goals were met, an additional amount related to incentive compensation payments. Employer contribution amounts for represented employees at SoCalGas and employees at Mobile Gas (until the date of sale) remain generally equal to 50 percent of the first 6 percent of eligible earnings contributed by employees. Employees at Mobile Gas also continued to receive an additional amount related to incentive compensation payments if certain company goals were met. Employer contributions for employees in Mexico remain equal to the contributions made by the employee.

Contributions to the savings plans were as follows:

CONTRIBUTIONS TO SAVINGS PLANS
(Dollars in millions)

	2016	2015	2014
Sempra Energy Consolidated	$ 42	$ 43	$ 38
SDG&E	15	17	15
SoCalGas	22	21	18

The market value of Sempra Energy common stock held by the savings plans was $1.1 billion at both December 31, 2016 and 2015.

NOTE 8. SHARE-BASED COMPENSATION

SEMPRA ENERGY EQUITY COMPENSATION PLANS

Sempra Energy has share-based compensation plans intended to align employee and shareholder objectives related to the long-term growth of Sempra Energy. The plans permit a wide variety of share-based awards, including:

- non-qualified stock options
- incentive stock options
- restricted stock awards (RSAs)
- restricted stock units (RSUs)
- stock appreciation rights
- performance awards
- stock payments
- dividend equivalents

Eligible employees, including those from the California Utilities, participate in Sempra Energy's share-based compensation plans as a component of their compensation package.

In the three years ended December 31, 2016, Sempra Energy had the following types of equity awards outstanding:

- *Non-Qualified Stock Options:* Options have an exercise price equal to the market price of the common stock at the date of grant, are service-based, become exercisable over a four-year period, and expire 10 years from the date of grant. Vesting and/or the ability to exercise may be accelerated upon a change in control, in accordance with severance pay agreements, in accordance with the terms of the grant, or upon eligibility for retirement. Options are subject to forfeiture or earlier expiration when an employee terminates employment.
- *Performance-Based Restricted Stock Units:* These RSU awards generally vest in Sempra Energy common stock at the end of three-year (for awards granted during or after 2015) or four-year performance periods based on Sempra Energy's total return to shareholders relative to that of specified market indices or based on the compound annual growth rate of Sempra Energy's EPS. The comparative market indices for the awards that vest based on total return to shareholders are the Standard & Poor's (S&P) 500 Utilities Index and the S&P 500 Index. We primarily use long-term analyst consensus growth estimates for S&P 500 Utilities Index peer companies to develop our targets for awards that vest based on EPS growth.
  - For awards granted in 2013 or earlier, if Sempra Energy's total return to shareholders exceeds target levels, up to an additional 50 percent of the number of granted RSUs may be issued.
  - For awards granted during or after 2014, up to an additional 100 percent of the granted RSUs may be issued if total return to shareholders or EPS growth exceeds target levels.
  - For awards granted during or after 2015 that vest based on Sempra Energy's total return to shareholders, a modifier adds 20 percent to the award's payout (as initially calculated based on total return to shareholders relative to that of specified market indices) for total shareholder return performance in the top quartile relative to historical benchmark data for Sempra Energy and reduces the award's payout by 20 percent for performance in the bottom quartile. However, in no event will more than an additional 100 percent of the granted RSUs be issued. If performance falls within the second or third quartiles, the modifier is not triggered, and the payout is based solely on total return to shareholders relative to that of specified market indices.

If Sempra Energy's total return to shareholders or EPS growth is below the target levels but above threshold performance levels, shares are subject to partial vesting on a pro rata basis.

- *Other Performance-Based Restricted Stock Units:* RSUs were granted in 2014 and 2015 in connection with the creation of Cameron LNG JV.
  - The 2014 awards vest to the extent that the Compensation Committee of Sempra Energy's Board of Directors determines that the objectives of the joint venture are continuing to be achieved. These awards vest on the anniversary of the grant date over a period of either two or three years.
  - The 2015 awards vest to the extent that the Compensation Committee of Sempra Energy's Board of Directors determines that Sempra Energy has achieved positive cumulative net income for fiscal years 2015 through 2017 and Cameron LNG JV has commenced commercial operations of the first train.
- *Service-Based Restricted Stock Units:* RSUs may also be service-based; these generally vest at the end of three-year (for awards granted during or after 2015) or four-year service periods.
- *Restricted Stock Awards:* RSAs are solely service-based and are generally exercisable at the end of four years of service. Accelerated vesting of RSAs may occur upon eligibility for retirement. Holders of RSAs have full voting rights.

For RSA and RSU awards, vesting may be subject to earlier forfeiture upon termination of employment and accelerated vesting upon a change in control under the applicable long-term incentive plan, in accordance with severance pay agreements, or at the discretion of the Compensation Committee of Sempra Energy's Board of Directors. Dividend equivalents on shares subject to RSAs and RSUs are reinvested to purchase additional shares that become subject to the same vesting conditions as the RSAs and RSUs to which the dividends relate.

In April 2013, the IEnova board of directors approved the IEnova 2013 Long-Term Incentive Plan. The purpose of this plan is to align the interests of employees and directors of IEnova with its shareholders. All awards issued from this plan and any related dividend equivalents will settle in cash at vesting based on the price of IEnova common stock. In 2016, 2015 and 2014, IEnova issued 378,367 RSUs, 278,538 RSUs and 468,339 RSUs, respectively, from this plan, 698,838 of which remain outstanding at December 31, 2016. During 2016, 2015 and 2014, IEnova paid cash of $1 million, $4 million and $3 million, respectively, to settle vested awards.

SHARE-BASED AWARDS AND COMPENSATION EXPENSE

At December 31, 2016, 5,627,118 shares were authorized and available for future grants of share-based awards. Our practice is to satisfy share-based awards by issuing new shares rather than by open-market purchases.

We measure and recognize compensation expense for all share-based payment awards made to our employees and directors based on estimated fair values on the date of grant. We recognize compensation costs net of an estimated forfeiture rate (based on historical experience) and recognize the compensation costs for non-qualified stock options and RSAs and RSUs on a straight-line basis over the requisite service period of the award, which is generally three or four years. However, in the year that an employee becomes eligible for retirement, the remaining expense related to the employee's awards is recognized immediately. Substantially all awards outstanding are classified as equity instruments; therefore, we recognize additional paid in capital as we recognize the compensation expense associated with the awards.

As we discuss in Note 2, we prospectively adopted ASU 2016-09 effective January 1, 2016, which requires that we recognize in earnings the tax benefits (or deficiencies) resulting from tax deductions that are in excess of (or less than) tax benefits related to compensation cost recognized for share-based payments. Prior to adoption, we recorded excess tax benefits from share-based compensation within Sempra Energy's Shareholders' Equity. In 2016, we recognized $34 million in excess tax benefits in earnings. In 2015, $52 million in excess tax benefits was recorded within Sempra Energy's Shareholders' Equity. In 2014, there were no realized excess tax benefits.

Total share-based compensation expense for all of Sempra Energy's share-based awards was comprised as follows:

SHARE-BASED COMPENSATION EXPENSE – SEMPRA ENERGY CONSOLIDATED
(Dollars in millions, except per share amounts)

	Years ended December 31,		
	2016	2015	2014
Share-based compensation expense, before income taxes	$ 46	$ 48	$ 46
Income tax benefit	(18)	(19)	(18)
	$ 28	$ 29	$ 28
Excess income tax benefit	$ (34)	$ —	$ —

Sempra Energy Consolidated's capitalized share-based compensation cost was $7 million in 2016, $6 million in 2015 and $5 million in 2014.

Sempra Energy subsidiaries record an expense for the plans to the extent that subsidiary employees participate in the plans and/or the subsidiaries are allocated a portion of the Sempra Energy plans' corporate staff costs. Expenses and capitalized compensation costs recorded by SDG&E and SoCalGas were as follows:

SHARE-BASED COMPENSATION EXPENSE – SDG&E AND SOCALGAS
(Dollars in millions)

	Years ended December 31,		
	2016	2015	2014
SDG&E:			
Share-based compensation expense, before income taxes	$ 7	$ 8	$ 8
Income tax benefit	(3)	(3)	(3)
	$ 4	$ 5	$ 5
Capitalized share-based compensation cost	$ 4	$ 4	$ 3
SoCalGas:			
Share-based compensation expense, before income taxes	$ 8	$ 10	$ 8
Income tax benefit	(3)	(4)	(3)
	$ 5	$ 6	$ 5
Capitalized share-based compensation cost	$ 3	$ 2	$ 2

SEMPRA ENERGY NON-QUALIFIED STOCK OPTIONS

We use a Black-Scholes option-pricing model to estimate the fair value of each non-qualified stock option grant. The use of a valuation model requires us to make certain assumptions about selected model inputs. Expected volatility is calculated based on the historical volatility of Sempra Energy's stock price. We base the average expected life for options on the contractual term of the option and expected employee exercise and post-termination behavior. The risk-free interest rate is based on U.S. Treasury zero-coupon issues with a remaining term equal to the expected life assumed at the date of the grant.

The following table shows a summary of non-qualified stock options at December 31, 2016 and activity for the year then ended:

NON-QUALIFIED STOCK OPTIONS

	Shares under option	Weighted- average exercise price	Weighted- average remaining contractual term (in years)	Aggregate intrinsic value (in millions)
Outstanding at January 1, 2016	527,997	$ 53.62		
Exercised	(167,742)	$ 56.11		
Outstanding at December 31, 2016	360,255	$ 52.46	2.0	$ 17
Vested at December 31, 2016	360,255	$ 52.46	2.0	$ 17
Exercisable at December 31, 2016	360,255	$ 52.46	2.0	$ 17

The aggregate intrinsic value at December 31, 2016 is the total of the difference between Sempra Energy's closing stock price and the exercise price for all in-the-money options. The aggregate intrinsic value for non-qualified stock options exercised in the last three years was

- $8 million in 2016
- $12 million in 2015
- $33 million in 2014

No stock options were granted in 2016, 2015 or 2014. All outstanding stock options were fully vested and all compensation cost related to stock options had been recognized as of December 31, 2014. The total fair value of shares vested in 2014 was $1 million.

We received cash of $9 million from stock option exercises during 2016.

SEMPRA ENERGY RESTRICTED STOCK AWARDS AND UNITS

We use a Monte-Carlo simulation model to estimate the fair value of our RSAs and RSUs. Our determination of fair value is affected by the historical volatility of the stock price for Sempra Energy and its peer group companies. The valuation also is affected by the risk-free rates of return, and a number of other variables. Below are key assumptions for awards granted in 2016, 2015 and 2014 for Sempra Energy:

KEY ASSUMPTIONS FOR AWARDS GRANTED

	Years ended December 31,		
	2016	2015	2014
Risk-free rate of return	1.3%	1.1%	1.2%
Stock price volatility	16	14	16

Restricted Stock Awards

We provide below a summary of Sempra Energy's RSAs at December 31, 2016 and the activity during the year.

RESTRICTED STOCK AWARDS

	Shares	Weighted-average grant-date fair value
Nonvested at January 1, 2016	1,537	$ 75.87
Vested	(1,537)	$ 75.87
Nonvested at December 31, 2016	—	$ —

No RSAs were granted in 2016, 2015 or 2014. All outstanding RSAs were fully vested and all compensation cost related to RSAs has been recognized as of December 31, 2016. The total fair value of shares vested during the year was a negligible amount in 2016 and $1 million in each of 2015 and 2014.

Restricted Stock Units

We provide below a summary of Sempra Energy's RSUs as of December 31, 2016 and the activity during the year.

RESTRICTED STOCK UNITS

	Performance-based restricted stock units		Service-based restricted stock units	
	Units	Weighted-average grant-date fair value	Units	Weighted-average grant-date fair value
Nonvested at January 1, 2016	2,271,675	$ 73.28	348,806	$ 80.14
Granted	467,830	$ 100.37	95,876	$ 93.59
Vested	(761,042)	$ 49.28	(135,456)	$ 65.20
Forfeited	(24,141)	$ 115.73	(3,490)	$ 90.58
Nonvested at December 31, 2016(1)	1,954,322	$ 88.58	305,736	$ 94.68
Expected to vest at December 31, 2016	1,883,636	$ 88.07	293,822	$ 90.58

(1) Each RSU represents the right to receive one share of our common stock if applicable performance conditions are satisfied. For all performance-based RSUs, except for those issued in connection with the creation of Cameron LNG JV, up to an additional 50 percent (100 percent for awards granted during or after 2014) of the shares represented by the RSUs may be issued if Sempra Energy exceeds target performance conditions.

The total fair value of shares vested during the year was $46 million in each of 2016 and 2015 and $33 million in 2014.

The $34 million of total compensation cost related to nonvested RSUs not yet recognized as of December 31, 2016 is expected to be recognized over a weighted-average period of 1.5 years. The weighted-average per-share fair values for performance-based RSUs

granted were $123.30 and $88.01 in 2015 and 2014, respectively. The weighted-average per-share fair values for service-based RSUs granted were $111.43 and $91.54 in 2015 and 2014, respectively.

NOTE 9. DERIVATIVE FINANCIAL INSTRUMENTS

We use derivative instruments primarily to manage exposures arising in the normal course of business. Our principal exposures are commodity market risk, benchmark interest rate risk and foreign exchange rate exposures. Our use of derivatives for these risks is integrated into the economic management of our anticipated revenues, anticipated expenses, assets and liabilities. Derivatives may be effective in mitigating these risks (1) that could lead to declines in anticipated revenues or increases in anticipated expenses, or (2) that our asset values may fall or our liabilities increase. Accordingly, our derivative activity summarized below generally represents an impact that is intended to offset associated revenues, expenses, assets or liabilities that are not included in the tables below.

In certain cases, we apply the normal purchase or sale exception to derivative instruments and have other commodity contracts that are not derivatives. These contracts are not recorded at fair value and are therefore excluded from the disclosures below.

In all other cases, we record derivatives at fair value on the Consolidated Balance Sheets. We designate each derivative as (1) a cash flow hedge, (2) a fair value hedge, or (3) undesignated. Depending on the applicability of hedge accounting and, for the California Utilities and other operations subject to regulatory accounting, the requirement to pass impacts through to customers, the impact of derivative instruments may be offset in other comprehensive income (loss) (cash flow hedge), on the balance sheet (fair value hedges and regulatory offsets), or recognized in earnings. We classify cash flows from the settlements of derivative instruments as operating activities on the Consolidated Statements of Cash Flows.

HEDGE ACCOUNTING

We may designate a derivative as a cash flow hedging instrument if it effectively converts anticipated cash flows associated with revenues or expenses to a fixed dollar amount. We may utilize cash flow hedge accounting for derivative commodity instruments, foreign currency instruments and interest rate instruments. Designating cash flow hedges is dependent on the business context in which the instrument is being used, the effectiveness of the instrument in offsetting the risk that the future cash flows of a given revenue or expense item may vary, and other criteria.

We may designate an interest rate derivative as a fair value hedging instrument if it effectively converts our own debt from a fixed interest rate to a variable rate. The combination of the derivative and debt instrument results in fixing that portion of the fair value of the debt that is related to benchmark interest rates. Designating fair value hedges is dependent on the instrument being used, the effectiveness of the instrument in offsetting changes in the fair value of our debt instruments, and other criteria.

ENERGY DERIVATIVES

Our market risk is primarily related to natural gas and electricity price volatility and the specific physical locations where we transact. We use energy derivatives to manage these risks. The use of energy derivatives in our various businesses depends on the particular energy market, and the operating and regulatory environments applicable to the business, as follows:

- The California Utilities use natural gas and electricity derivatives, for the benefit of customers, with the objective of managing price risk and basis risks, and stabilizing and lowering natural gas and electricity costs. These derivatives include fixed price natural gas and electricity positions, options, and basis risk instruments, which are either exchange-traded or over-the-counter financial instruments, or bilateral physical transactions. This activity is governed by risk management and transacting activity plans that have been filed with and approved by the CPUC. Natural gas and electricity derivative activities are recorded as commodity costs that are offset by regulatory account balances and are recovered in rates. Net commodity cost impacts on the Consolidated Statements of Operations are reflected in Cost of Electric Fuel and Purchased Power or in Cost of Natural Gas.
- SDG&E is allocated and may purchase congestion revenue rights (CRRs), which serve to reduce the regional electricity price volatility risk that may result from local transmission capacity constraints. Unrealized gains and losses do not impact earnings, as they are offset by regulatory account balances. Realized gains and losses associated with CRRs, which are recoverable in rates, are recorded in Cost of Electric Fuel and Purchased Power on the Consolidated Statements of Operations.
- Sempra Mexico, Sempra LNG & Midstream and Sempra Renewables may use natural gas and electricity derivatives, as appropriate, to optimize the earnings of their assets which support the following businesses: LNG, natural gas transportation and storage, and power generation. Gains and losses associated with undesignated derivatives are recognized in Energy-Related Businesses Revenues or in Cost of Natural Gas, Electric Fuel and Purchased Power on the Consolidated Statements of Operations. Certain of these derivatives may also be designated as cash flow hedges. Sempra Mexico also uses natural gas energy derivatives with the objective of managing price risk and lowering natural gas prices at its Mexican distribution operations. These derivatives, which are

recorded as commodity costs that are offset by regulatory account balances and recovered in rates, are recognized in Cost of Natural Gas on the Consolidated Statements of Operations.

- From time to time, our various businesses, including the California Utilities, may use other energy derivatives to hedge exposures such as the price of vehicle fuel.

We summarize net energy derivative volumes at December 31, 2016 and 2015 as follows:

NET ENERGY DERIVATIVE VOLUMES
(Quantities in millions)

		December 31,	
Commodity	Unit of measure	2016	2015
California Utilities:			
SDG&E:			
Natural gas	MMBtu(1)	48	70
Electricity	MWh(2)	4	1
Congestion revenue rights	MWh	48	36
SoCalGas – natural gas	MMBtu	1	1
Energy-Related Businesses:			
Sempra LNG & Midstream – natural gas	MMBtu	31	43

(1) Million British thermal units
(2) Megawatt hours

In addition to the amounts noted above, we frequently use commodity derivatives to manage risks associated with the physical locations of contractual obligations and assets, such as natural gas purchases and sales.

INTEREST RATE DERIVATIVES

We are exposed to interest rates primarily as a result of our current and expected use of financing. The California Utilities, as well as other Sempra Energy subsidiaries and joint ventures, periodically enter into interest rate derivative agreements intended to moderate our exposure to interest rates and to lower our overall costs of borrowing. We utilize interest rate swaps typically designated as fair value hedges, as a means to achieve our targeted level of variable rate debt as a percent of total debt. In addition, we may utilize interest rate swaps, typically designated as cash flow hedges, to lock in interest rates on outstanding debt or in anticipation of future financings. Separately, Otay Mesa VIE has entered into interest rate swap agreements, designated as cash flow hedges, to moderate its exposure to interest rate changes.

At December 31, 2016 and 2015, the net notional amounts of our interest rate derivatives, excluding joint ventures, were:

INTEREST RATE DERIVATIVES
(Dollars in millions)

	December 31, 2016		December 31, 2015	
	Notional debt	Maturities	Notional debt	Maturities
Sempra Energy Consolidated:				
Cash flow hedges(1)(2)	$ 924	2017-2032	$ 384	2016-2028
Fair value hedges	—	—	300	2016
SDG&E:				
Cash flow hedge(1)	305	2017-2019	315	2016-2019

(1) Includes Otay Mesa VIE. All of SDG&E's interest rate derivatives relate to Otay Mesa VIE.
(2) At December 31, 2016, includes GdC, which was previously a joint venture and excluded from this table until we acquired the remaining 50-percent interest in September 2016.

FOREIGN CURRENCY DERIVATIVES

We utilize cross-currency swaps to hedge exposure related to Mexican peso-denominated debt at our Mexican subsidiaries and joint ventures. These cash flow hedges exchange our Mexican-peso denominated principal and interest payments into the U.S. dollar and swap Mexican variable interest rates for U.S. fixed interest rates. From time to time, Sempra Mexico and its joint ventures may use other foreign currency derivatives to hedge exposures related to cash flows associated with revenues from contracts denominated in Mexican pesos that are indexed to the U.S. dollar.

We are also exposed to exchange rate movements at our Mexican subsidiaries and joint ventures, which have U.S. dollar denominated cash balances, receivables, payables and debt (monetary assets and liabilities) that give rise to Mexican currency exchange rate movements for Mexican income tax purposes. They also have deferred income tax assets and liabilities denominated in the Mexican peso, which must be translated to U.S. dollars for financial reporting purposes. In addition, monetary assets and liabilities and certain nonmonetary assets and liabilities are adjusted for Mexican inflation for Mexican income tax purposes. We utilize foreign currency derivatives as a means to manage the risk of exposure to significant fluctuations in our income tax expense and equity earnings from these impacts, however we generally do not hedge our deferred income tax assets and liabilities. In January 2017, we entered into foreign currency derivatives with a notional amount totaling $750 million.

In addition, Sempra South American Utilities and its joint ventures use foreign currency derivatives to manage foreign currency rate risk. We discuss these derivatives at Chilquinta Energía's Eletrans joint venture investment in Note 4.

At December 31, 2016 and 2015, the net notional amounts of our foreign currency derivatives, excluding joint ventures, were:

FOREIGN CURRENCY DERIVATIVES
(Dollars in millions)

	December 31, 2016		December 31, 2015	
	Notional amount	Maturities	Notional amount	Maturities
Sempra Energy Consolidated:				
Cross-currency swaps	$ 408	2017-2023	$ 408	2016-2023
Other foreign currency derivatives(1)	86	2017-2018	—	—

(1) At December 31, 2016, includes GdC, which was previously a joint venture and excluded from this table until we acquired the remaining 50-percent interest in September 2016.

FINANCIAL STATEMENT PRESENTATION

The Consolidated Balance Sheets reflect the offsetting of net derivative positions and cash collateral with the same counterparty when a legal right of offset exists. The following tables provide the fair values of derivative instruments on the Consolidated Balance Sheets at December 31, 2016 and 2015, including the amount of cash collateral receivables that were not offset, as the cash collateral is in excess of liability positions.

DERIVATIVE INSTRUMENTS ON THE CONSOLIDATED BALANCE SHEETS

(Dollars in millions)

	December 31, 2016			
	Current assets: Fixed-price contracts and other derivatives(1)	Other assets: Sundry	Current liabilities: Fixed-price contracts and other derivatives(2)	Deferred credits and other liabilities: Fixed-price contracts and other derivatives
Sempra Energy Consolidated:				
Derivatives designated as hedging instruments:				
Interest rate and foreign exchange instruments(3)	$ 7	$ 2	$ (24)	$ (228)
Commodity contracts not subject to rate recovery	—	—	(14)	—
Derivatives not designated as hedging instruments:				
Commodity contracts not subject to rate recovery	248	36	(254)	(28)
Associated offsetting commodity contracts	(242)	(27)	242	27
Associated offsetting cash collateral	—	(1)	16	1
Commodity contracts subject to rate recovery	37	73	(57)	(150)
Associated offsetting commodity contracts	(9)	(1)	9	1
Associated offsetting cash collateral	—	—	5	13
Net amounts presented on the balance sheet	41	82	(77)	(364)
Additional cash collateral for commodity contracts not subject to rate recovery	10	—	—	—
Additional cash collateral for commodity contracts subject to rate recovery	32	—	—	—
Total(4)	$ 83	$ 82	$ (77)	$ (364)
SDG&E:				
Derivatives designated as hedging instruments:				
Interest rate instruments(3)	$ —	$ —	$ (13)	$ (12)
Derivatives not designated as hedging instruments:				
Commodity contracts subject to rate recovery	33	73	(51)	(150)
Associated offsetting commodity contracts	(6)	(1)	6	1
Associated offsetting cash collateral	—	—	3	13
Net amounts presented on the balance sheet	27	72	(55)	(148)
Additional cash collateral for commodity contracts not subject to rate recovery	1	—	—	—
Additional cash collateral for commodity contracts subject to rate recovery	30	—	—	—
Total(4)	$ 58	$ 72	$ (55)	$ (148)
SoCalGas:				
Derivatives not designated as hedging instruments:				
Commodity contracts subject to rate recovery	$ 4	$ —	$ (6)	$ —
Associated offsetting commodity contracts	(3)	—	3	—
Associated offsetting cash collateral	—	—	2	—
Net amounts presented on the balance sheet	1	—	(1)	—
Additional cash collateral for commodity contracts not subject to rate recovery	1	—	—	—
Additional cash collateral for commodity contracts subject to rate recovery	2	—	—	—
Total	$ 4	$ —	$ (1)	$ —

(1) Included in Current Assets: Other for SoCalGas.

(2) Included in Current Liabilities: Other for SoCalGas.

(3) Includes Otay Mesa VIE. All of SDG&E's amounts relate to Otay Mesa VIE.

(4) Normal purchase contracts previously measured at fair value are excluded.

DERIVATIVE INSTRUMENTS ON THE CONSOLIDATED BALANCE SHEETS

(Dollars in millions)

	December 31, 2015			
	Current assets: Fixed-price contracts and other derivatives(1)	Other assets: Sundry	Current liabilities: Fixed-price contracts and other derivatives(2)	Deferred credits and other liabilities: Fixed-price contracts and other derivatives
Sempra Energy Consolidated:				
Derivatives designated as hedging instruments:				
Interest rate and foreign exchange instruments(3)	$ 4	$ 1	$ (15)	$ (156)
Commodity contracts not subject to rate recovery	13	—	—	—
Derivatives not designated as hedging instruments:				
Commodity contracts not subject to rate recovery	245	32	(239)	(21)
Associated offsetting commodity contracts	(232)	(20)	232	20
Associated offsetting cash collateral	(6)	—	4	—
Commodity contracts subject to rate recovery	28	49	(61)	(64)
Associated offsetting commodity contracts	(2)	(2)	2	2
Associated offsetting cash collateral	—	—	28	26
Net amounts presented on the balance sheet	50	60	(49)	(193)
Additional cash collateral for commodity contracts not subject to rate recovery	2	—	—	—
Additional cash collateral for commodity contracts subject to rate recovery	28	—	—	—
Total(4)	$ 80	$ 60	$ (49)	$ (193)
SDG&E:				
Derivatives designated as hedging instruments:				
Interest rate instruments(3)	$ —	$ —	$ (14)	$ (23)
Derivatives not designated as hedging instruments:				
Commodity contracts not subject to rate recovery	—	—	(1)	—
Associated offsetting cash collateral	—	—	1	—
Commodity contracts subject to rate recovery	27	49	(60)	(64)
Associated offsetting commodity contracts	(2)	(2)	2	2
Associated offsetting cash collateral	—	—	28	26
Net amounts presented on the balance sheet	25	47	(44)	(59)
Additional cash collateral for commodity contracts not subject to rate recovery	1	—	—	—
Additional cash collateral for commodity contracts subject to rate recovery	27	—	—	—
Total(4)	$ 53	$ 47	$ (44)	$ (59)
SoCalGas:				
Derivatives not designated as hedging instruments:				
Commodity contracts not subject to rate recovery	$ —	$ —	$ (1)	$ —
Associated offsetting cash collateral	—	—	1	—
Commodity contracts subject to rate recovery	1	—	(1)	—
Net amounts presented on the balance sheet	1	—	(1)	—
Additional cash collateral for commodity contracts subject to rate recovery	1	—	—	—
Total	$ 2	$ —	$ (1)	$ —

(1) Included in Current Assets: Other for SoCalGas.

(2) Included in Current Liabilities: Other for SoCalGas.

(3) Includes Otay Mesa VIE. All of SDG&E's amounts relate to Otay Mesa VIE.

(4) Normal purchase contracts previously measured at fair value are excluded.

The effects of derivative instruments designated as hedges on the Consolidated Statements of Operations and in OCI and AOCI for the years ended December 31 were:

FAIR VALUE HEDGE IMPACTS

(Dollars in millions)

		Pretax gain (loss) on derivatives recognized in earnings		
		Years ended December 31,		
	Location	2016	2015	2014
Sempra Energy Consolidated:				
Interest rate instruments	Interest Expense	$ 3	$ 6	$ 8
Interest rate instruments	Other Income, Net	(2)	(5)	(3)
Total(1)		$ 1	$ 1	$ 5

(1) There was no hedge ineffectiveness in 2016 or 2015. There were gains of $9 million from hedge ineffectiveness in 2014. All other changes in the fair value of the interest rate swap agreements are exactly offset by changes in the fair value of the underlying long-term debt and recorded in Other Income, Net.

CASH FLOW HEDGE IMPACTS

(Dollars in millions)

	Pretax (loss) gain recognized in OCI				Pretax (loss) gain reclassified from AOCI into earnings		
	Years ended December 31,				Years ended December 31,		
	2016	2015	2014	Location	2016	2015	2014
Sempra Energy Consolidated:							
Interest rate and foreign exchange instruments(1)	$ (8)	$ (18)	$ (24)	Interest Expense	$ (17)	$ (18)	$ (21)
Interest rate instruments	—	—	3	Gain on Sale of Assets	—	—	3
Interest rate instruments	(9)	(80)	(127)	Equity Earnings, Before Income Tax	(10)	(12)	(10)
Interest rate and foreign exchange instruments	—	—	—	Remeasurement of Equity Method Investment	(7)	—	—
Interest rate and foreign exchange instruments	5	(20)	—	Equity Earnings, Net of Income Tax	(5)	(13)	—
Foreign exchange instruments	4	—	—	Revenues: Energy-Related Businesses	—	—	—
Commodity contracts not subject to rate recovery	(13)	12	19	Revenues: Energy-Related Businesses	6	14	8
Total(2)	$ (21)	$ (106)	$ (129)		$ (33)	$ (29)	$ (20)
SDG&E:							
Interest rate instruments(1)(3)	$ (2)	$ (6)	$ (9)	Interest Expense	$ (12)	$ (12)	$ (11)
SoCalGas:							
Interest rate instruments	$ —	$ —	$ —	Interest Expense	$ (1)	$ (1)	$ (1)

(1) Amounts include Otay Mesa VIE. All of SDG&E's interest rate derivative activity relates to Otay Mesa VIE.

(2) There was $4 million, $2 million and $1 million of losses from ineffectiveness related to these cash flow hedges in 2016, 2015 and 2014, respectively.

(3) There was negligible hedge ineffectiveness related to these cash flow hedges at SDG&E in 2016, 2015 and 2014.

For Sempra Energy Consolidated, we expect that losses of $25 million, which are net of income tax benefit, that are currently recorded in AOCI (including $12 million in noncontrolling interests, substantially all of which is related to Otay Mesa VIE at SDG&E) related to cash flow hedges will be reclassified into earnings during the next twelve months as the hedged items affect earnings. SoCalGas expects that negligible losses, net of income tax benefit, that are currently recorded in AOCI related to cash flow hedges will be reclassified into earnings during the next twelve months as the hedged items affect earnings. Actual amounts ultimately reclassified into earnings depend on the interest rates in effect when derivative contracts mature.

For all forecasted transactions, the maximum remaining term over which we are hedging exposure to the variability of cash flows at December 31, 2016 is approximately 15 years and 2 years for Sempra Energy Consolidated and SDG&E, respectively. The maximum remaining term for which we are hedging exposure to the variability of cash flows at our equity method investees is 19 years.

The effects of derivative instruments not designated as hedging instruments on the Consolidated Statements of Operations for the years ended December 31 were:

UNDESIGNATED DERIVATIVE IMPACTS

(Dollars in millions)

		Pretax (loss) gain on derivatives recognized in earnings		
		Years ended December 31,		
	Location	2016	2015	2014
Sempra Energy Consolidated:				
Interest rate and foreign exchange instruments	Other Income, Net	$ (32)	$ (4)	$ (24)
Foreign exchange instruments	Equity Earnings, Net of Income Tax	3	(4)	(5)
Commodity contracts not subject to rate recovery	Revenues: Energy-Related Businesses	(18)	42	17
Commodity contracts not subject to rate recovery	Cost of Natural Gas, Electric Fuel and Purchased Power	—	—	3
Commodity contracts not subject to rate recovery	Operation and Maintenance	1	(1)	(4)
Commodity contracts subject to rate recovery	Cost of Electric Fuel and Purchased Power	(53)	(126)	(10)
Commodity contracts subject to rate recovery	Cost of Natural Gas	(4)	1	—
Total		$ (103)	$ (92)	$ (23)
SDG&E:				
Commodity contracts not subject to rate recovery	Operation and Maintenance	$ —	$ —	$ (1)
Commodity contracts subject to rate recovery	Cost of Electric Fuel and Purchased Power	(53)	(126)	(10)
Total		$ (53)	$ (126)	$ (11)
SoCalGas:				
Commodity contracts not subject to rate recovery	Operation and Maintenance	$ 1	$ (1)	$ (2)
Commodity contracts subject to rate recovery	Cost of Natural Gas	(4)	1	—
Total		$ (3)	$ —	$ (2)

CONTINGENT FEATURES

For Sempra Energy Consolidated and SDG&E, certain of our derivative instruments contain credit limits which vary depending on our credit ratings. Generally, these provisions, if applicable, may reduce our credit limit if a specified credit rating agency reduces our ratings. In certain cases, if our credit ratings were to fall below investment grade, the counterparty to these derivative liability instruments could request immediate payment or demand immediate and ongoing full collateralization.

For Sempra Energy Consolidated, the total fair value of this group of derivative instruments in a net liability position at December 31, 2016 and 2015 is $10 million and $6 million, respectively. At December 31, 2016, if the credit ratings of Sempra Energy were reduced below investment grade, $13 million of additional assets could be required to be posted as collateral for these derivative contracts.

For SDG&E, the total fair value of this group of derivative instruments in a net liability position is negligible at December 31, 2016 and $5 million at December 31, 2015. At December 31, 2016, if the credit ratings of SDG&E were reduced below investment grade, $3 million of additional assets could be required to be posted as collateral for these derivative contracts.

For Sempra Energy Consolidated, SDG&E and SoCalGas, some of our derivative contracts contain a provision that would permit the counterparty, in certain circumstances, to request adequate assurance of our performance under the contracts. Such additional assurance, if needed, is not material and is not included in the amounts above.

NOTE 10. FAIR VALUE MEASUREMENTS

Recurring Fair Value Measures

The three tables below, by level within the fair value hierarchy, set forth our financial assets and liabilities that were accounted for at fair value on a recurring basis at December 31, 2016 and 2015. We classify financial assets and liabilities in their entirety based on the lowest level of input that is significant to the fair value measurement. Our assessment of the significance of a particular input to the fair value measurement requires judgment, and may affect the valuation of fair value assets and liabilities, and their placement within the fair value hierarchy levels.

The fair value of commodity derivative assets and liabilities is presented in accordance with our netting policy, as we discuss in Note 9 in "Financial Statement Presentation."

The determination of fair values, shown in the tables below, incorporates various factors, including but not limited to, the credit standing of the counterparties involved and the impact of credit enhancements (such as cash deposits, letters of credit and priority interests).

Our financial assets and liabilities that were accounted for at fair value on a recurring basis at December 31, 2016 and 2015 in the tables below include the following:

- Nuclear decommissioning trusts reflect the assets of SDG&E's nuclear decommissioning trusts, excluding cash balances. A third party trustee values the trust assets using prices from a pricing service based on a market approach. We validate these prices by comparison to prices from other independent data sources. Equity and certain debt securities are valued using quoted prices listed on nationally recognized securities exchanges or based on closing prices reported in the active market in which the identical security is traded (Level 1). Other debt securities are valued based on yields that are currently available for comparable securities of issuers with similar credit ratings (Level 2).
- For commodity contracts, interest rate derivatives and foreign exchange instruments, we primarily use a market approach with market participant assumptions to value these derivatives. Market participant assumptions include those about risk, and the risk inherent in the inputs to the valuation techniques. These inputs can be readily observable, market corroborated, or generally unobservable. We have exchange-traded derivatives that are valued based on quoted prices in active markets for the identical instruments (Level 1). We also may have other commodity derivatives that are valued using industry standard models that consider quoted forward prices for commodities, time value, current market and contractual prices for the underlying instruments, volatility factors, and other relevant economic measures (Level 2). Level 3 recurring items relate to CRRs and long-term, fixed-price electricity positions at SDG&E, as we discuss below in "Level 3 Information."
- Rabbi Trust investments include marketable securities that we value using a market approach based on closing prices reported in the active market in which the identical security is traded (Level 1). These investments in marketable securities were negligible at both December 31, 2016 and 2015.

There were no transfers into or out of Level 1, Level 2 or Level 3 for Sempra Energy Consolidated, SDG&E or SoCalGas during the periods presented.

RECURRING FAIR VALUE MEASURES – SEMPRA ENERGY CONSOLIDATED

(Dollars in millions)

	Fair value at December 31, 2016				
	Level 1	Level 2	Level 3	Netting(1)	Total
Assets:					
Nuclear decommissioning trusts:					
Equity securities	$ 508	$ —	$ —	$ —	$ 508
Debt securities:					
Debt securities issued by the U.S. Treasury and other					
U.S. government corporations and agencies	36	16	—	—	52
Municipal bonds	—	206	—	—	206
Other securities	—	141	—	—	141
Total debt securities	36	363	—	—	399
Total nuclear decommissioning trusts(2)	544	363	—	—	907
Interest rate and foreign exchange instruments	—	9	—	—	9
Commodity contracts not subject to rate recovery	—	15	—	9	24
Commodity contracts subject to rate recovery	1	3	96	32	132
Total	$ 545	$ 390	$ 96	$ 41	$ 1,072
Liabilities:					
Interest rate and foreign exchange instruments	$ —	$ 252	$ —	$ —	$ 252
Commodity contracts not subject to rate recovery	16	11	—	(17)	10
Commodity contracts subject to rate recovery	19	8	170	(18)	179
Total	$ 35	$ 271	$ 170	$ (35)	$ 441

	Fair value at December 31, 2015				
	Level 1	Level 2	Level 3	Netting(1)	Total
Assets:					
Nuclear decommissioning trusts:					
Equity securities	$ 619	$ —	$ —	$ —	$ 619
Debt securities:					
Debt securities issued by the U.S. Treasury and other					
U.S. government corporations and agencies	47	44	—	—	91
Municipal bonds	—	156	—	—	156
Other securities	—	182	—	—	182
Total debt securities	47	382	—	—	429
Total nuclear decommissioning trusts(2)	666	382	—	—	1,048
Interest rate and foreign exchange instruments	—	5	—	—	5
Commodity contracts not subject to rate recovery	22	16	—	(4)	34
Commodity contracts subject to rate recovery	—	1	72	28	101
Total	$ 688	$ 404	$ 72	$ 24	$ 1,188
Liabilities:					
Interest rate and foreign exchange instruments	$ —	$ 171	$ —	$ —	$ 171
Commodity contracts not subject to rate recovery	5	3	—	(4)	4
Commodity contracts subject to rate recovery	—	68	53	(54)	67
Total	$ 5	$ 242	$ 53	$ (58)	$ 242

(1) Includes the effect of the contractual ability to settle contracts under master netting agreements and with cash collateral, as well as cash collateral not offset.

(2) Excludes cash balances and cash equivalents.

RECURRING FAIR VALUE MEASURES – SDG&E

(Dollars in millions)

	Fair value at December 31, 2016				
	Level 1	Level 2	Level 3	Netting(1)	Total
Assets:					
Nuclear decommissioning trusts:					
Equity securities	$ 508	$ —	$ —	$ —	$ 508
Debt securities:					
Debt securities issued by the U.S. Treasury and other U.S. government corporations and agencies	36	16	—	—	52
Municipal bonds	—	206	—	—	206
Other securities	—	141	—	—	141
Total debt securities	36	363	—	—	399
Total nuclear decommissioning trusts(2)	544	363	—	—	907
Commodity contracts not subject to rate recovery	—	—	—	1	1
Commodity contracts subject to rate recovery	1	2	96	30	129
Total	$ 545	$ 365	$ 96	$ 31	$ 1,037
Liabilities:					
Interest rate instruments	$ —	$ 25	$ —	$ —	$ 25
Commodity contracts subject to rate recovery	17	7	170	(16)	178
Total	$ 17	$ 32	$ 170	$ (16)	$ 203

	Fair value at December 31, 2015				
	Level 1	Level 2	Level 3	Netting(1)	Total
Assets:					
Nuclear decommissioning trusts:					
Equity securities	$ 619	$ —	$ —	$ —	$ 619
Debt securities:					
Debt securities issued by the U.S. Treasury and other U.S. government corporations and agencies	47	44	—	—	91
Municipal bonds	—	156	—	—	156
Other securities	—	182	—	—	182
Total debt securities	47	382	—	—	429
Total nuclear decommissioning trusts(2)	666	382	—	—	1,048
Commodity contracts not subject to rate recovery	—	—	—	1	1
Commodity contracts subject to rate recovery	—	—	72	27	99
Total	$ 666	$ 382	$ 72	$ 28	$ 1,148
Liabilities:					
Interest rate instruments	$ —	$ 37	$ —	$ —	$ 37
Commodity contracts not subject to rate recovery	1	—	—	(1)	—
Commodity contracts subject to rate recovery	—	67	53	(54)	66
Total	$ 1	$ 104	$ 53	$ (55)	$ 103

(1) Includes the effect of the contractual ability to settle contracts under master netting agreements and with cash collateral, as well as cash collateral not offset.

(2) Excludes cash balances and cash equivalents.

RECURRING FAIR VALUE MEASURES – SOCALGAS

(Dollars in millions)

	Fair value at December 31, 2016				
	Level 1	Level 2	Level 3	Netting(1)	Total
Assets:					
Commodity contracts not subject to rate recovery	$ —	$ —	$ —	$ 1	$ 1
Commodity contracts subject to rate recovery	—	1	—	2	3
Total	$ —	$ 1	$ —	$ 3	$ 4
Liabilities:					
Commodity contracts subject to rate recovery	$ 2	$ 1	$ —	$ (2)	$ 1
Total	$ 2	$ 1	$ —	$ (2)	$ 1

	Fair value at December 31, 2015				
	Level 1	Level 2	Level 3	Netting(1)	Total
Assets:					
Commodity contracts subject to rate recovery	$ —	$ 1	$ —	$ 1	$ 2
Total	$ —	$ 1	$ —	$ 1	$ 2
Liabilities:					
Commodity contracts not subject to rate recovery	$ 1	$ —	$ —	$ (1)	$ —
Commodity contracts subject to rate recovery	—	1	—	—	1
Total	$ 1	$ 1	$ —	$ (1)	$ 1

(1) Includes the effect of the contractual ability to settle contracts under master netting agreements and with cash collateral, as well as cash collateral not offset.

Level 3 Information

The following table sets forth reconciliations of changes in the fair value of CRRs and long-term, fixed-price electricity positions classified as Level 3 in the fair value hierarchy for Sempra Energy Consolidated and SDG&E:

LEVEL 3 RECONCILIATIONS

(Dollars in millions)

	Years ended December 31,		
	2016	2015	2014
Balance at January 1	$ 19	$ 107	$ 99
Realized and unrealized (losses) gains	(120)	(134)	15
Allocated transmission instruments	8	12	19
Settlements	19	34	(26)
Balance at December 31	$ (74)	$ 19	$ 107
Change in unrealized (losses) gains relating to instruments still held at December 31	$ (101)	$ (27)	$ 8

SDG&E's Energy and Fuel Procurement department, in conjunction with SDG&E's finance group, is responsible for determining the appropriate fair value methodologies used to value and classify CRRs and long-term, fixed-price electricity positions on an ongoing basis. Inputs used to determine the fair value of CRRs and fixed-price electricity positions are reviewed and compared with market conditions to determine reasonableness. SDG&E expects all costs related to these instruments to be recoverable through customer rates. As such, there is no impact to earnings from changes in the fair value of these instruments.

CRRs are recorded at fair value based almost entirely on the most current auction prices published by the California ISO, an objective source. Annual auction prices are published once a year, typically in the middle of November, and remain in effect for the following year. The impact associated with discounting is negligible. Because these auction prices are a less observable input, these instruments are classified as Level 3. The fair value of these instruments is derived from auction price differences between two locations. From January 1, 2016 to December 31, 2016, the auction prices ranged from $(24) per MWh to $10 per MWh at a given location, and from January 1, 2015 to December 31, 2015, the auction prices ranged from $(16) per MWh to $8 per MWh at a given location. Positive values between two locations represent expected future reductions in congestion costs, whereas negative values between two locations represent expected future charges. Valuation of our CRRs is sensitive to a change in auction price. If auction prices at one location increase (decrease) relative to another location, this could result in a higher (lower) fair value measurement. We summarize CRR volumes in Note 9.

Long-term, fixed-price electricity positions that are valued using significant unobservable data are classified as Level 3 because the contract terms relate to a delivery location or tenor for which observable market rate information is not available. The fair value of the net electricity positions classified as Level 3 is derived from a discounted cash flow model using market electricity forward price inputs. At December 31, 2016, these inputs range from $17.40 per MWh to $56.67 per MWh. A significant increase or decrease in market electricity forward prices would result in a significantly higher or lower fair value, respectively. We summarize long-term, fixed-price electricity position volumes in Note 9.

Realized gains and losses associated with CRRs and long-term electricity positions, which are recoverable in rates, are recorded in Cost of Electric Fuel and Purchased Power on the Consolidated Statements of Operations. Unrealized gains and losses are recorded as regulatory assets and liabilities, and therefore also do not affect earnings.

Fair Value of Financial Instruments

The fair values of certain of our financial instruments (cash, temporary investments, accounts and notes receivable, short-term due to/from unconsolidated affiliates, dividends and accounts payable, short-term debt and customer deposits) approximate their carrying amounts because of the short-term nature of these instruments. Investments in life insurance contracts that we hold in support of our Supplemental Executive Retirement, Cash Balance Restoration and Deferred Compensation Plans are carried at cash surrender values, which represent the amount of cash that could be realized under the contracts. The following table provides the carrying amounts and fair values of certain other financial instruments that are not recorded at fair value on the Consolidated Balance Sheets at December 31, 2016 and 2015:

FAIR VALUE OF FINANCIAL INSTRUMENTS
(Dollars in millions)

	December 31, 2016				
	Carrying amount	Fair Value			
		Level 1	Level 2	Level 3	Total
Sempra Energy Consolidated:					
Long-term amounts due from unconsolidated affiliates(1)	$ 184	$ —	$ 91	$ 84	$ 175
Total long-term debt(2)(3)	15,068	—	15,455	492	15,947
SDG&E:					
Total long-term debt(3)(4)	$ 4,654	$ —	$ 4,727	$ 305	$ 5,032
SoCalGas:					
Total long-term debt(5)	$ 3,009	$ —	$ 3,131	$ —	$ 3,131

	December 31, 2015				
	Carrying amount	Fair Value			
		Level 1	Level 2	Level 3	Total
Sempra Energy Consolidated:					
Long-term amounts due from unconsolidated affiliates(1)	$ 175	$ —	$ 97	$ 69	$ 166
Total long-term debt(2)(3)	13,761	—	13,985	648	14,633
SDG&E:					
Total long-term debt(3)(4)	$ 4,304	$ —	$ 4,355	$ 315	$ 4,670
SoCalGas:					
Total long-term debt(5)	$ 2,513	$ —	$ 2,621	$ —	$ 2,621

(1) Excluding accumulated interest outstanding of $17 million and $11 million at December 31, 2016 and 2015, respectively.
(2) Before reductions for unamortized discount (net of premium) and debt issuance costs of $109 million and $107 million at December 31, 2016 and 2015, respectively, and excluding build-to-suit and capital lease obligations of $383 million and $387 million at December 31, 2016 and 2015, respectively. We discuss our long-term debt in Note 5.
(3) Level 3 instruments include $305 million and $315 million at December 31, 2016 and 2015, respectively, related to Otay Mesa VIE.
(4) Before reductions for unamortized discount and debt issuance costs of $45 million and $43 million at December 31, 2016 and 2015, respectively, and excluding capital lease obligations of $240 million and $244 million at December 31, 2016 and 2015, respectively.
(5) Before reductions for unamortized discount and debt issuance costs of $27 million and $24 million at December 31, 2016 and 2015, respectively, and excluding capital lease obligations of $1 million at December 31, 2015.

We determine the fair value of certain long-term amounts due from unconsolidated affiliates and long-term debt based on a market approach using quoted market prices for identical or similar securities in thinly-traded markets (Level 2). We value other long-term amounts due from unconsolidated affiliates of our South American utilities using a perpetuity approach based on the obligation's fixed interest rate, the absence of a stated maturity date and a discount rate reflecting local borrowing costs (Level 3). We value other long-

term amounts due from unconsolidated affiliates and long-term debt using an income approach based on the present value of estimated future cash flows discounted at rates available for similar securities (Level 3).

We provide the fair values for the securities held in the nuclear decommissioning trust funds related to SONGS in Note 13.

Non-Recurring Fair Value Measures

Sempra Mexico

GdC. On September 26, 2016, IEnova completed the acquisition of PEMEX's 50-percent interest in GdC, increasing its ownership interest to 100 percent. As a result of IEnova obtaining control over GdC, in the year ended December 31, 2016, Sempra Mexico recognized a pretax gain of $617 million ($432 million after-tax) for the excess of the acquisition-date fair value of its previously held equity interest in GdC ($1.144 billion) over the carrying value of that interest ($520 million) and losses reclassified from AOCI ($7 million), included as Remeasurement of Equity Method Investment on Sempra Energy's Consolidated Statement of Operations. The valuation technique used to measure the acquisition-date fair value of our equity interest in GdC immediately prior to the business acquisition was based on the fair value of the entire business combination ($2.288 billion) less the fair value of the consideration paid ($1.144 billion, the equity sale price). We discuss the GdC acquisition in Note 3.

TdM. In February 2016, management approved a plan to market and sell its TdM natural gas-fired power plant, and it was classified as held for sale on the Sempra Energy Consolidated Balance Sheet, as we discuss in Note 3. In September 2016, we received market information that indicated that the fair value of TdM may be less than its carrying value. As a result, after performing an analysis of the information, Sempra Mexico reduced the carrying value of TdM by recognizing a noncash impairment charge of $131 million ($111 million after-tax) for the year ended December 31, 2016 in Impairment Losses on the Sempra Energy Consolidated Statement of Operations. Market values resulting from a third party bidding process are considered to be Level 2 inputs in the fair value hierarchy.

Energía Sierra Juárez. In July 2014, Sempra Mexico completed the sale of a 50-percent interest in the 155-MW first phase of its Energía Sierra Juárez wind project to a wholly owned subsidiary of InterGen N.V. for cash proceeds of $24 million, net of $2 million cash sold, as discussed in Note 3. Upon deconsolidation, our equity method investment in Energía Sierra Juárez was measured at fair value, which resulted in a $7 million after-tax gain attributable to a remeasurement of the retained investment to fair value. The fair value measurement was based on the cash sales price of $26 million paid by InterGen N.V., a nonrelated party and market participant.

Sempra LNG & Midstream

Rockies Express. As we discuss in Note 3, in March 2016, Sempra LNG & Midstream agreed to sell its 25-percent interest in Rockies Express for cash consideration of $440 million, subject to adjustment at closing. In March 2016, we recorded a noncash impairment of our investment in Rockies Express of $44 million ($27 million after-tax). The charge is included in Equity Earnings, Before Income Tax, on the Sempra Energy Consolidated Statement of Operations for the year ended December 31, 2016. We considered the sale price for our equity interest in Rockies Express to be a market participants' view of the total value of Rockies Express and measured the fair value of our investment based on the equity sale price.

The following table summarizes significant inputs impacting our non-recurring fair value measures:

NON-RECURRING FAIR VALUE MEASURES – SEMPRA ENERGY CONSOLIDATED

(Dollars in millions)

	Estimated fair value		Valuation technique	Fair value hierarchy	% of fair value measurement	Inputs used to develop measurement	Range of inputs
Investment in GdC	$ 1,144	(1)	Market approach	Level 2	100%	Equity sale price	100%
TdM	$ 145	(2)	Market approach	Level 2	100%	Purchase price offers	100%
Investment in Energía Sierra Juárez	$ 26	(3)	Market approach	Level 2	100%	Equity sale price	100%
Investment in Rockies Express	$ 440	(4)	Market approach	Level 2	100%	Equity sale price	100%

(1) At measurement date of September 26, 2016, immediately prior to acquiring a 100-percent ownership interest in GdC.

(2) At measurement date of September 29, 2016. At December 31, 2016, TdM has a carrying value of $154 million, reflecting subsequent operating activity, and is classified as held for sale.

(3) At measurement date of July 16, 2014. At December 31, 2016, our investment in Energía Sierra Juárez had a carrying value of $38 million, reflecting subsequent equity method activity to record distributions and earnings.

(4) At measurement date of March 29, 2016. On May 9, 2016, Sempra LNG & Midstream sold its equity interest in Rockies Express.

NOTE 11. PREFERRED STOCK

Sempra Energy and SDG&E are authorized to issue up to 50 million and 45 million shares of preferred stock, respectively. At December 31, 2016 and 2015, Sempra Energy and SDG&E have no preferred stock outstanding. The rights, preferences, privileges and restrictions for any new series of preferred stock would be established by each company's board of directors at the time of issuance.

SoCalGas is authorized to issue up to 11 million shares of preferred stock. At December 31, 2016 and 2015, SoCalGas has the following preferred stock outstanding:

PREFERRED STOCK OUTSTANDING

(Dollars in millions, except per share amounts)

	December 31,	
	2016	2015
$25 par value, authorized 1,000,000 shares:		
6% Series, 79,011 shares outstanding	$ 3	$ 3
6% Series A, 783,032 shares outstanding	19	19
SoCalGas - Total preferred stock	22	22
Less: 50,970 shares of the 6% Series outstanding owned by Pacific Enterprises	(2)	(2)
Sempra Energy - Total preferred stock of subsidiary	$ 20	$ 20

None of SoCalGas' outstanding preferred stock is callable and no shares are subject to mandatory redemption.

All outstanding shares have one vote per share, cumulative preferences as to dividends and liquidation preferences of $25 per share plus any unpaid dividends.

In addition to the outstanding preferred stock above, SoCalGas' authorized preferred stock includes 5 million shares of series preferred stock and 5 million shares of preference stock, both without par value and with cumulative preferences as to dividends and liquidation value. The preference stock would rank junior to all series of preferred stock. Other rights and privileges of any new series of such stock would be established by the SoCalGas board of directors at the time of issuance.

NOTE 12. SEMPRA ENERGY – SHAREHOLDERS' EQUITY AND EARNINGS PER SHARE

The following table provides EPS computations for the years ended December 31, 2016, 2015 and 2014. Basic EPS is calculated by dividing earnings attributable to common stock by the weighted-average number of common shares outstanding for the year. Diluted EPS includes the potential dilution of common stock equivalent shares that could occur if securities or other contracts to issue common stock were exercised or converted into common stock.

EARNINGS PER SHARE COMPUTATIONS AND DIVIDENDS DECLARED

(Dollars in millions, except per share amounts; shares in thousands)

	Years ended December 31,		
	2016	2015	2014
Numerator:			
Earnings/Income attributable to common shares	$ 1,370	$ 1,349	$ 1,161
Denominator:			
Weighted-average common shares outstanding for basic EPS(1)	250,217	248,249	245,891
Dilutive effect of stock options, restricted stock awards and restricted stock units(2)(3)	938	2,674	4,764
Weighted-average common shares outstanding for diluted EPS(2)	251,155	250,923	250,655
Earnings per share:			
Basic	$ 5.48	$ 5.43	$ 4.72
Diluted	$ 5.46	$ 5.37	$ 4.63
Dividends declared per share of common stock(4)	$ 3.02	$ 2.80	$ 2.64

(1) Includes average fully vested RSUs held in our Deferred Compensation Plan of 568 in 2016, 491 in 2015 and 212 in 2014. These fully vested RSUs are included in weighted-average common shares outstanding for basic EPS because there are no conditions under which the corresponding shares will not be issued.

(2) Reflects the prospective adoption of ASU 2016-09 as of January 1, 2016. Prior to the adoption, the dilutive effect of stock options, RSAs and RSUs was reduced by excess tax benefits assumed to be used to repurchase shares on the open market.

(3) Due to market fluctuations of both Sempra Energy stock and the comparative indices used to determine the vesting percentage of our total shareholder return performance-based RSUs, which we discuss in Note 8, dilutive RSUs may vary widely from period-to-period.

(4) Our board of directors has the discretion to determine the payment and amount of future dividends.

The potentially dilutive impact from stock options, RSAs and RSUs is calculated under the treasury stock method. Under this method, proceeds based on the exercise price and unearned compensation are assumed to be used to repurchase shares on the open market at the average market price for the period, reducing the number of potential new shares to be issued and sometimes causing an antidilutive effect. The computation of diluted EPS excludes zero, 722 and 4,087 RSUs for the years ended December 31, 2016, 2015 and 2014, respectively, because to include them would be antidilutive for the period. However, these RSUs could potentially dilute basic EPS in the future. There were no antidilutive stock options or RSAs for the years ended December 31, 2016, 2015 and 2014.

Prior to adoption of ASU 2016-09 as of January 1, 2016, which we discuss in Note 2, excess tax benefits were also assumed to be used to repurchase shares on the open market when applying the treasury stock method. The excess tax benefits are tax deductions we would receive upon the assumed exercise of stock options and assumed vesting of RSAs and RSUs in excess of the deferred income taxes we recorded related to the compensation expense on such stock options, awards and units. Tax shortfalls occur when the assumed tax deductions are less than recorded deferred income taxes. Upon adoption of ASU 2016-09, as a result of the provision to recognize excess tax benefits and shortfalls in earnings, these benefits and shortfalls are no longer included in the calculation of diluted EPS beginning January 1, 2016.

We are authorized to issue 750 million shares of no par value common stock. The following table provides common stock activity for the years ended December 31, 2016, 2015 and 2014.

COMMON STOCK ACTIVITY

	Years ended December 31,		
	2016	2015	2014
Common shares outstanding, January 1	248,298,080	246,330,884	244,461,327
Restricted stock units vesting(1)	1,363,555	1,499,062	989,027
Stock options exercised	167,742	227,815	699,783
Savings plan issuance	653,607	652,631	398,042
Common stock investment plan(2)	266,056	249,665	205,203
Shares repurchased(3)	(596,526)	(661,977)	(422,498)
Common shares outstanding, December 31	250,152,514	248,298,080	246,330,884

(1) Includes dividend equivalents.

(2) Participants in the Direct Stock Purchase Plan may reinvest dividends to purchase newly issued shares.

(3) From time to time, we purchase shares of our common stock or units from long-term incentive plan participants who elect to sell to us a sufficient number of vested RSAs or RSUs to meet minimum statutory tax withholding requirements.

NOTE 13. SAN ONOFRE NUCLEAR GENERATING STATION (SONGS)

SDG&E has a 20-percent ownership interest in SONGS, a nuclear generating facility near San Clemente, California, which ceased operations in June 2013. On June 6, 2013, after an extended outage beginning in 2012, Southern California Edison Company (Edison), the majority owner and operator of SONGS, notified SDG&E that it had reached a decision to permanently retire SONGS and seek approval from the Nuclear Regulatory Commission (NRC) to start the decommissioning activities for the entire facility. SONGS is subject to the jurisdiction of the NRC and the CPUC.

SDG&E, and each of the other owners, holds its undivided interest as a tenant in common in the property. Each owner is responsible for financing its share of expenses and capital expenditures. SDG&E's share of operating expenses is included in Sempra Energy's and SDG&E's Consolidated Statements of Operations.

SONGS Steam Generator Replacement Project

As part of the Steam Generator Replacement Project (SGRP), the steam generators were replaced in SONGS Units 2 and 3, and the Units returned to service in 2010 and 2011, respectively. Both Units were shut down in early 2012 after a water leak occurred in the Unit 3 steam generator. Edison concluded that the leak was due to unexpected wear from tube-to-tube contact. At the time the leak was identified, Edison also inspected and tested Unit 2 and subsequently found unexpected tube wear in Unit 2's steam generator. These issues with the steam generators ultimately resulted in Edison's decision to permanently retire SONGS.

The replacement steam generators were designed and provided by Mitsubishi Heavy Industries, Ltd., Mitsubishi Nuclear Energy Systems, Inc., and Mitsubishi Heavy Industries America, Inc. (collectively MHI). In July 2013, SDG&E filed a lawsuit against MHI seeking to recover damages SDG&E has incurred and will incur related to the design defects in the steam generators. In October 2013, Edison instituted arbitration proceedings against MHI seeking damages as well. SDG&E is participating in the arbitration as a claimant and respondent. The arbitration hearing concluded in April 2016, and a decision could be reached in the first half of 2017. We discuss these proceedings in Note 15.

Settlement Agreement to Resolve the CPUC's Order Instituting Investigation (OII) into the SONGS Outage (SONGS OII)

In November 2012, in response to the outage, the CPUC issued the SONGS OII, which was intended to determine the ultimate recovery of the investment in SONGS and the costs incurred since the commencement of this outage.

In November 2014, the CPUC issued a final decision approving an Amended and Restated Settlement Agreement (Amended Settlement Agreement) in the SONGS OII proceeding executed by SDG&E along with Edison, The Utility Reform Network (TURN), the CPUC Office of Ratepayer Advocates (ORA) and two other intervenors who joined an earlier settlement agreement. The Amended Settlement Agreement does not affect ongoing or future proceedings before the NRC, or litigation or arbitration related to potential future recoveries from third parties (except for the allocation to ratepayers of any recoveries addressed in the final decision) or proceedings addressing decommissioning activities and costs.

The Amended Settlement Agreement provides for various disallowances, refunds and rate recoveries, including authorizing SDG&E to recover in rates its remaining investment in SONGS, including base plant and construction work in progress, but excluding its investment in the SGRP, generally over a ten-year period commencing February 1, 2012, together with a return on investment at a reduced rate equal to:

- SDG&E's weighted average return on debt, plus
- 50 percent of SDG&E's weighted average return on preferred stock, as authorized in the CPUC's Cost of Capital (discussed in Note 14) proceeding then in effect (collectively, SONGS rate of return or SONGS ROR)

This has resulted in a SONGS ROR of 2.35 percent for the period from January 1, 2013 through December 31, 2016, which rate will remain in effect through 2017. The SONGS ROR for future periods will fluctuate based on SDG&E's authorized weighted average returns on debt and preferred stock in effect for those future periods.

In April 2015, a petition for modification was filed with the CPUC by Alliance for Nuclear Responsibility (A4NR), an intervenor in the SONGS OII proceeding, asking the CPUC to set aside its decision approving the Amended Settlement Agreement and reopen the SONGS OII proceeding. In June 2015, TURN, a party to the Amended Settlement Agreement, filed a response supporting the A4NR petition. TURN does not question the merits of the Amended Settlement Agreement, but is concerned that certain allegations regarding Edison raised by A4NR have undermined the public's confidence in the regulatory process.

In August 2015, ORA, also a party to the Amended Settlement Agreement, filed a petition for modification with the CPUC, withdrawing its support for the Amended Settlement Agreement and asking the CPUC to reopen the SONGS OII proceeding. The ORA does not question the merits of the Amended Settlement Agreement, but is concerned with the CPUC's approach toward disclosures concerning Edison *ex parte* communications with the CPUC.

In May 2016, the CPUC issued a ruling reopening the record of the OII to address the issue of whether the Amended Settlement Agreement is reasonable and in the public interest. In accordance with the ruling, Edison and SDG&E filed separate reports with the CPUC in June 2016 on the Amended Settlement Agreement and the status of its implementation, and filed separate legal briefs in July 2016 asserting that the Amended Settlement Agreement is reasonable and in the public interest.

In December 2016, the CPUC issued a procedural ruling directing parties to the SONGS OII to determine whether an agreement could be reached to modify the Amended Settlement Agreement previously approved by the CPUC to resolve allegations that unreported *ex parte* communications between Edison and the CPUC resulted in an unfair advantage at the time the settlement agreement was negotiated. The ruling directs the parties to consider various issues, including the division between ratepayers and shareholders of any future MHI arbitration award. If no agreement is reached by April 28, 2017, the CPUC will consider other options including entertaining additional testimony, hearings and briefs.

There is no assurance that the Amended Settlement Agreement will not be renegotiated, modified or set aside as a result of these proceedings, which could result in a substantial reduction in our expected recovery and have a material adverse effect on Sempra Energy's and SDG&E's results of operations, financial condition and cash flows.

Accounting and Financial Impacts

Through December 31, 2016, the cumulative after-tax loss from plant closure recorded by Sempra Energy and SDG&E is $125 million, including a reduction in the after-tax loss of $13 million recorded in the first quarter of 2015 based on the CPUC's approval in March 2015 of SDG&E's compliance filing and establishment of the SONGS settlement revenue requirement, and a reduction in the after-tax loss of $2 million based on a settlement with Nuclear Electric Insurance Limited in the fourth quarter of 2015, as we discuss below. In 2014, SDG&E recorded a $21 million after-tax increase to the loss, including $12 million based on a compliance filing regarding SDG&E's annual revenue requirement and the timing of refunds to ratepayers.

The remaining regulatory asset for the expected recovery of SONGS costs, consistent with the Amended Settlement Agreement, is $183 million ($31 million current and $152 million long-term) at December 31, 2016. The amortization period prescribed for the regulatory asset is 10 years, which commenced in January 2015 following the CPUC's final decision approving the Amended Settlement Agreement in November 2014.

A decision in the MHI arbitration could be reached in the first half of 2017. Under the Amended Settlement Agreement, SDG&E's 20-percent share of any proceeds from the MHI arbitration, net of legal costs, must be equally divided between SDG&E shareholders and ratepayers. As we discuss above, there is no assurance that the Amended Settlement Agreement will not be modified as it pertains to the MHI arbitration proceedings by the ongoing CPUC OII proceeding. Accordingly, determination of the shareholder component of MHI arbitration proceeds, if any, may be suspended until resolution of the SONGS OII proceeding.

Settlement with Nuclear Electric Insurance Limited (NEIL)

As we discuss in Note 15, NEIL insures domestic and international nuclear utilities for the costs associated with interruptions, damages, decontaminations and related nuclear risks. In October 2015, the SONGS co-owners (Edison, SDG&E and the City of Riverside) reached an agreement with NEIL to resolve all of SONGS' insurance claims arising out of the failures of the replacement steam generators for a total payment by NEIL of $400 million, SDG&E's share of which was $80 million. Pursuant to the terms of the SONGS OII Amended Settlement Agreement, after reimbursement of legal fees and a 5-percent allocation to shareholders, the net proceeds of $75 million were allocated to ratepayers through the Energy Resource Recovery Account.

NRC Proceedings

In December 2013, Edison received a final NRC Inspection Report that identified a violation for the failure to verify the adequacy of the thermal-hydraulic and flow-induced vibration design of the Unit 3 replacement steam generator. In January 2014, Edison provided a response to the NRC Inspection Report stating that MHI, as contracted by Edison to prepare the SONGS replacement steam generator design, was the party responsible for validating the design of the steam generators.

In addition, the NRC issued an Inspection Report to MHI containing a Notice of Nonconformance for its flawed computer modeling in the design of the replacement steam generators.

Because SONGS has ceased operation, NRC inspection oversight of SONGS will now be continued through the NRC's Decommissioning Power Reactor Inspection Program to verify that decommissioning activities are being conducted safely, that spent fuel is safely stored onsite or transferred to another licensed location, and that the site operations and licensee termination activities conform to applicable regulatory requirements, licensee commitments and management controls.

Nuclear Decommissioning and Funding

As a result of Edison's decision to permanently retire SONGS Units 2 and 3, Edison has begun the decommissioning phase of the plant. The process of decommissioning a nuclear power plant is governed by the regulations of various governmental and other agencies, including but not limited to, those of the NRC, the U.S. Department of the Navy (the land owner) and the CPUC. The NRC regulations generally categorize the decommissioning activities into three phases: initial activities, major decommissioning and storage activities, and license termination. Initial activities include providing notice of permanent cessation of operations and notice of permanent removal of fuel from the reactor vessels, which were provided by Edison in 2013. Within two years after the cessation of operations, the licensee (Edison) must submit a post-shutdown decommissioning activities report, an irradiated fuel management plan and a site-specific decommissioning cost estimate. Edison submitted each of these items to the NRC in September 2014.

In December 2016, Edison announced that, following a 10-month competitive bid process, it had contracted with a joint venture of AECOM and EnergySolutions (known as SONGS Decommissioning Solutions) as the general contractor to complete the dismantlement of SONGS. The majority of the dismantlement work is expected to take 10 years. SDG&E is responsible for 20 percent of the total contract price.

In accordance with state and federal requirements and regulations, SDG&E has assets held in trusts, referred to as the Nuclear Decommissioning Trusts (NDT), to fund decommissioning costs for SONGS Units 1, 2 and 3. Decommissioning of Unit 1, removed from service in 1992, is largely complete. The remaining work for Unit 1 will be done once Units 2 and 3 are dismantled. At December 31, 2016, the fair value of SDG&E's NDT assets was $1.0 billion. Except for the use of funds for the planning of decommissioning activities or NDT administrative costs, CPUC approval is required for SDG&E to access the NDT assets to fund SONGS decommissioning costs for Units 2 and 3.

In April 2016, the CPUC adopted a decision approving a total decommissioning cost estimate for SONGS Units 2 and 3 of $4.4 billion (in 2014 dollars), of which SDG&E's share is $899 million. The decision also approves an annual advice letter request process for SDG&E to request trust fund disbursements for decommissioning costs based on a forecast for 2016 and thereafter. Disbursements from the trust will then be made up to this annual forecast amount as decommissioning expenses are incurred. To the extent actual expenses are consistent with forecasts, this arrangement will generally result in the utilization of nuclear decommissioning trust funds to support decommissioning, reducing the need to temporarily fund such costs with working capital. Certain spent fuel management costs, described below, continue to be temporarily funded with working capital. All disbursements will be subject to future refund until a reasonableness review of the actual decommissioning costs is conducted, which would be no less frequently than every three years.

SDG&E has received authorization from the CPUC to access trust funds for SONGS decommissioning costs of up to $218 million for 2013 through 2016. The $218 million includes $37 million related to spent fuel management costs. In April 2016, Edison, acting for itself and on behalf of SDG&E, entered into a settlement agreement with the U.S. Department of Energy (DOE) to resolve the claims against the DOE related to the spent fuel management costs incurred through 2013. The settlement agreement sets forth an administrative procedure for the submission of claims for costs incurred from 2014 through 2016, which provides for arbitration if the settlement process is unsuccessful. Edison, acting for itself and SDG&E, submitted claims for spent fuel management costs incurred during 2014 and 2015 in September 2016. Claims for spent fuel management costs incurred during 2016 must be submitted by September 30, 2017. SDG&E is not guaranteed recovery of its claims for 2014-2016; however, SDG&E anticipates that the claims for costs incurred in 2014 and 2015 will be resolved during 2017, and the claims for costs incurred in 2016 will be resolved during 2018.

In December 2016, the IRS and the U.S. Department of the Treasury issued proposed regulations that clarify the definition of "nuclear decommissioning costs," which are costs that may be paid for or reimbursed from a qualified fund. The proposed regulations state that costs related to the construction and maintenance of independent spent fuel management installations are included in the definition of "nuclear decommissioning costs." The proposed regulations will be effective prospectively once they are finalized; however, the IRS has stated that it will not challenge taxpayer positions consistent with the proposed regulations for taxable years ending on or after the date the proposed regulations were issued. SDG&E is working with outside counsel to clarify with the IRS some of the provisions in the proposed regulations so as to confirm that the proposed regulations will allow SDG&E to access the trust funds for reimbursement or payment of the spent fuel management costs that were or will be incurred in 2016 and subsequent years.

In December 2016, SDG&E filed an advice letter with the CPUC requesting authority to withdraw up to $84 million for 2017 SONGS Units 2 and 3 costs (forecasted). The CPUC approved SDG&E's request in February 2017, which allows SDG&E to withdraw from the funds as decommissioning costs are incurred.

Nuclear Decommissioning Trusts

The amounts collected in rates for SONGS' decommissioning are invested in the NDT, which is comprised of externally managed trust funds. Amounts held by the trusts are invested in accordance with CPUC regulations. These trusts are shown on the Sempra Energy and SDG&E Consolidated Balance Sheets at fair value with the offsetting credits recorded in Regulatory Liabilities Arising from Removal Obligations.

The following table shows the fair values and gross unrealized gains and losses for the securities held in the NDT. We provide additional fair value disclosures for the NDT in Note 10.

NUCLEAR DECOMMISSIONING TRUSTS

(Dollars in millions)

	Cost	Gross unrealized gains	Gross unrealized losses	Estimated fair value
At December 31, 2016:				
Debt securities:				
Debt securities issued by the U.S. Treasury and other U.S. government corporations and agencies(1)	$ 52	$ —	$ —	$ 52
Municipal bonds(2)	203	4	(1)	206
Other securities(3)	141	2	(2)	141
Total debt securities	396	6	(3)	399
Equity securities	143	366	(1)	508
Cash and cash equivalents	119	—	—	119
Total	$ 658	$ 372	$ (4)	$ 1,026
At December 31, 2015:				
Debt securities:				
Debt securities issued by the U.S. Treasury and other U.S. government corporations and agencies	$ 89	$ 2	$ —	$ 91
Municipal bonds	148	8	—	156
Other securities	194	1	(13)	182
Total debt securities	431	11	(13)	429
Equity securities	214	412	(7)	619
Cash and cash equivalents	15	—	—	15
Total	$ 660	$ 423	$ (20)	$ 1,063

(1) Maturity dates are 2017-2047.
(2) Maturity dates are 2017-2115.
(3) Maturity dates are 2017-2111.

The following table shows the proceeds from sales of securities in the NDT and gross realized gains and losses on those sales.

SALES OF SECURITIES

(Dollars in millions)

	Years ended December 31,		
	2016	2015	2014
Proceeds from sales(1)	$ 1,134	$ 577	$ 601
Gross realized gains	111	29	11
Gross realized losses	(29)	(15)	(11)

(1) Excludes securities that are held to maturity.

Net unrealized gains (losses) are included in Regulatory Liabilities Arising from Removal Obligations on Sempra Energy's and SDG&E's Consolidated Balance Sheets. We determine the cost of securities in the trusts on the basis of specific identification. In 2016, sale and purchase activities in our NDT increased significantly compared to prior years as a result of a change to our asset allocation to reduce our equity volatility, lower our duration risk, and increase exposure to municipal bonds and intermediate credit. This shift in our asset mix is intended to reduce the overall risk profile of the NDT, as we are in the decommissioning stage at the plant.

Asset Retirement Obligation and Spent Nuclear Fuel

SDG&E's asset retirement obligation related to decommissioning costs for the SONGS units was $637 million at December 31, 2016. That amount includes the cost to decommission Units 2 and 3, and the remaining cost to complete the decommissioning of Unit 1, which is substantially complete. The asset retirement obligation at December 31, 2016 is based on a CPUC-approved cost study prepared in 2014 that reflects the acceleration of the start of decommissioning Units 2 and 3 as a result of the early closure of the plant. An updated cost study for Unit 1 is pending approval by the CPUC. SDG&E's share of total decommissioning costs in 2016 dollars is approximately $989 million.

Spent nuclear fuel from SONGS is stored on-site in an Independent Spent Fuel Storage Installation (ISFSI) licensed by the NRC or temporarily in spent fuel pools. The ISFSI will be decommissioned after a spent fuel storage facility becomes available and the DOE removes the spent fuel from the site. Until then, SONGS owners are responsible for interim storage of spent nuclear fuel at SONGS.

NOTE 14. REGULATORY MATTERS

REGULATORY BALANCING ACCOUNTS

SDG&E and SoCalGas maintain regulatory balancing accounts. Over- and undercollected regulatory balancing accounts reflect the difference between customer billings and recorded or CPUC-authorized costs, including commodity costs. Amounts in the balancing accounts are recoverable (receivable) or refundable (payable) in future rates, subject to CPUC approval. Balancing account treatment eliminates the impact on earnings from variances in the covered costs from authorized amounts. Absent balancing account treatment, variations in the cost of fuel supply and certain operating and maintenance costs from amounts approved by the CPUC would increase volatility in utility earnings.

The following table summarizes our regulatory balancing accounts at December 31.

SUMMARY OF REGULATORY BALANCING ACCOUNTS AT DECEMBER 31
(Dollars in millions)

	Sempra Energy Consolidated		SDG&E		SoCalGas	
	2016	2015	2016	2015	2016	2015
Current:						
Overcollected	$ (804)	$ (789)	$ (301)	$ (345)	$ (503)	$ (444)
Undercollected	941	1,062	560	652	381	410
Net current receivable (payable)(1)	137	273	259	307	(122)	(34)
Noncurrent:						
Undercollected(2)	85	215	—	—	85	215
Net noncurrent receivable (payable)(1)	85	215	—	—	85	215
Total net receivable (payable)	$ 222	$ 488	$ 259	$ 307	$ (37)	$ 181

(1) At both December 31, 2016 and 2015, the net receivable at SDG&E and the net payable at SoCalGas are shown separately on Sempra Energy's Consolidated Balance Sheets.

(2) Long-term undercollected balance is included in Regulatory Assets (long-term) on Sempra Energy's Consolidated Balance Sheets and in Other Regulatory Assets (long-term) on SoCalGas' Consolidated Balance Sheets.

REGULATORY ASSETS AND LIABILITIES

We show the details of regulatory assets and liabilities in the following table, and discuss each of them separately below.

REGULATORY ASSETS (LIABILITIES)
(Dollars in millions)

	December 31, 2016	December 31, 2015
SDG&E:		
Fixed-price contracts and other derivatives	$ 141	$ 99
Costs related to SONGS plant closure(1)	183	257
Costs related to wildfire litigation	353	362
Deferred taxes recoverable in rates	1,014	914
Pension and other postretirement benefit plan obligations	210	180
Removal obligations(2)	(1,725)	(1,629)
Unamortized loss on reacquired debt	12	12
Environmental costs	48	16
Legacy meters(1)	16	32
Sunrise Powerlink fire mitigation	118	117
Other	(2)	9
Total SDG&E	368	369
SoCalGas:		
Pension and other postretirement benefit plan obligations	563	629
Employee benefit costs	45	51
Removal obligations(2)	(972)	(1,145)
Deferred taxes recoverable in rates	417	330
Unamortized loss on reacquired debt	10	11
Environmental costs	22	22
Workers' compensation	10	13
Other	8	—
Total SoCalGas	103	(89)
Other Sempra Energy:		
Sempra LNG & Midstream	—	(7)
Sempra Mexico	71	33
Total Other Sempra Energy	71	26
Total Sempra Energy Consolidated	$ 542	$ 306

(1) Regulatory assets earning a rate of return.
(2) Represents cumulative amounts collected in rates for future nonlegal asset removal costs.

NET REGULATORY ASSETS (LIABILITIES) AS PRESENTED ON THE CONSOLIDATED BALANCE SHEETS

(Dollars in millions)

	December 31,					
	2016			2015		
	Sempra Energy Consolidated	SDG&E	SoCalGas	Sempra Energy Consolidated	SDG&E	SoCalGas
Current regulatory assets(1)	$ 89	$ 81	$ 8	$ 115	$ 107	$ 7
Noncurrent regulatory assets(2)	3,329	2,012	1,246	3,058	1,891	1,120
Current regulatory liabilities(3)	—	—	—	(2)	—	—
Noncurrent regulatory liabilities(4)	(2,876)	(1,725)	(1,151)	(2,865)	(1,629)	(1,216)
Total	$ 542	$ 368	$ 103	$ 306	$ 369	$ (89)

(1) At Sempra Energy Consolidated, included in Other Current Assets.

(2) Excludes long-term undercollected balancing accounts at December 31, 2016 and 2015 of $85 million and $215 million, respectively, recorded at Sempra Energy Consolidated as Regulatory Assets (long-term) and at SoCalGas as Other Regulatory Assets (long-term).

(3) Included in Other Current Liabilities.

(4) At December 31, 2016 and 2015, $179 million and $72 million, respectively, at Sempra Energy Consolidated and $179 million and $71 million, respectively, at SoCalGas are included in Deferred Credits and Other.

In the tables above:

- Regulatory assets arising from fixed-price contracts and other derivatives are offset by corresponding liabilities arising from purchased power and natural gas commodity and transportation contracts. The regulatory asset is increased/decreased based on changes in the fair market value of the contracts. It is also reduced as payments are made for commodities and services under these contracts.
- Regulatory assets arising from the SONGS plant closure are associated with SDG&E's investment in SONGS as of the plant closure date and the cost of operations since Units 2 and 3 were taken offline, as we discuss further in Note 13.
- Regulatory assets recorded to the Wildfire Expense Memorandum Account (WEMA) arising from CPUC-related costs for wildfire litigation are costs in excess of liability insurance coverage and amounts recovered from third parties, and are subject to CPUC review for reasonableness and assessment of SDG&E's prudence surrounding the settlement of claims in connection with the 2007 wildfires. We discuss the 2007 wildfires in Note 15 in "SDG&E – 2007 Wildfire Litigation."
- Deferred taxes recoverable in rates are based on current regulatory ratemaking and income tax laws. SDG&E, SoCalGas and Sempra Mexico expect to recover net regulatory assets related to deferred income taxes over the lives of the assets that give rise to the accumulated deferred income tax liabilities. Regulatory assets include certain income tax benefits associated with flow-through repair allowance deductions, which we discuss further below.
- Regulatory assets/liabilities related to pension and other postretirement benefit plan obligations are offset by corresponding liabilities/assets and are being recovered in rates as the plans are funded.
- Regulatory assets related to unamortized losses on reacquired debt are recovered over the remaining amortization periods of the losses on reacquired debt. These periods range from 1 year to 11 years for SDG&E and from 5 years to 9 years for SoCalGas.
- Regulatory assets related to environmental costs represent the portion of our environmental liability recognized at the end of the period in excess of the amount that has been recovered through rates charged to customers. We expect this amount to be recovered in future rates as expenditures are made. We discuss environmental issues further in Note 15.
- The regulatory asset related to the legacy meters removed from service and replaced under the Smart Meter Program is their undepreciated value. SDG&E is recovering this asset over a remaining 1-year period in rate base.
- The regulatory asset related to Sunrise Powerlink fire mitigation is offset by a corresponding liability for the funding of a trust to cover the mitigation costs. SDG&E expects to recover the regulatory asset in rates as the trust is funded over a remaining 53-year period. We discuss the trust further in Note 15.
- The regulatory asset related to workers' compensation represents accrued costs for future claims that will be recovered from customers in future rates as expenditures are made.
- Amortization expense on regulatory assets for the years ended December 31, 2016, 2015 and 2014 was $65 million, $62 million and $20 million, respectively, at Sempra Energy Consolidated, $63 million, $60 million and $18 million, respectively, at SDG&E, and $2 million in each year at SoCalGas.

CALIFORNIA UTILITIES MATTERS

CPUC General Rate Case (GRC)

The CPUC uses a general rate case proceeding to set sufficient rates to allow the California Utilities to recover their reasonable cost of operations and maintenance and to provide the opportunity to realize their authorized rates of return on their investment.

In November 2014, the California Utilities filed their 2016 General Rate Case (2016 GRC) applications to establish their authorized 2016 revenue requirements and the ratemaking mechanisms by which those requirements would change on an annual basis until the next general rate case proceeding.

In June 2016, the CPUC issued a final decision in the 2016 GRC. The final decision (2016 GRC FD) adopted a 2016 revenue requirement of $2.204 billion for SoCalGas and $1.791 billion for SDG&E. The 2016 GRC FD also required certain refunds to be paid to customers and establishes a two-way income tax expense memorandum account, each discussed below.

The 2016 GRC FD also adopted subsequent annual escalation of the adopted revenue requirements by 3.5 percent for years 2017 and 2018 and continuation of the Z-Factor mechanism for qualifying cost recovery. The Z-Factor mechanism allows the California Utilities to seek cost recovery of significant cost increases, under certain unforeseen circumstances, incurred between GRC filings, subject to a $5 million deductible per event. Also, the 2016 GRC FD denied a separate request for a four-year GRC period and instead adopted a three-year GRC period (through 2018).

The 2016 GRC FD is effective retroactive to January 1, 2016, and the California Utilities recorded the retroactive impacts in the second quarter of 2016. The adopted revenue requirements associated with the seven-month period through July 2016 will be recovered in rates over a 17-month period, beginning August 2016 through December 2017. At December 31, 2016, balancing accounts related to the adoption of the revenue requirements were $20 million and $47 million, at SDG&E and SoCalGas, respectively.

The 2016 GRC FD results in certain accounting impacts associated with flow-through income tax repairs deductions. In general, the 2016 GRC FD considers that the income tax benefits obtained from income tax repairs deductions exceeded amounts forecasted by the California Utilities from 2011 to 2015, and that they were attributed to shareholders during that time. The 2016 GRC FD reallocates the economic benefit of this tax deduction forecasting difference to ratepayers. Accordingly, revenues corresponding to income tax repair deductions that exceeded forecasted amounts relating to 2015, which have been tracked in memorandum accounts, are ordered to be refunded to customers. The 2015 estimated amounts in the memorandum accounts totaled $72 million for SoCalGas and $37 million for SDG&E. Pursuant to this refund requirement, SoCalGas and SDG&E recorded regulatory liabilities for these amounts, resulting in after-tax charges to earnings of $43 million and $22 million, respectively, in the second quarter of 2016 (summarized below). In addition, the 2016 GRC FD reduced rate base by $38 million at SoCalGas and $55 million at SDG&E. The corresponding reductions in the 2016 revenue requirement will be $5 million at SoCalGas and $7 million at SDG&E (which reductions are included in the adopted 2016 revenue requirement amounts described above). The rate base reductions reallocate to ratepayers the economic benefits associated with tax repair deductions that were previously provided to the shareholders for the period of 2012-2014 for SoCalGas and 2011-2014 for SDG&E. The rate base reductions do not result in an impairment of any of our reported assets, but will impact our revenues and earnings prospectively.

The 2016 GRC FD also requires us to notify the CPUC if the 2012-2015 repairs deductions estimated in this GRC are different from the actual repairs deductions for SoCalGas and SDG&E. SoCalGas and SDG&E recorded regulatory liabilities of $11 million and $15 million, respectively, related to 2012-2014, resulting in after-tax charges to earnings for these differences of $6 million and $9 million in the second quarter of 2016 for SoCalGas and SDG&E, respectively (summarized below). In the third quarter of 2016, SoCalGas and SDG&E completed their 2015 calendar year tax returns, and final tax deductions associated with tax repair benefits to be refunded to ratepayers associated with the 2015 memo account were lower than the amounts estimated in 2015. Accordingly, the amounts to be refunded decreased by $19 million for SoCalGas and $5 million for SDG&E. In October 2016, SoCalGas and SDG&E filed a regulatory account update with the CPUC to reflect their final total 2015 repair allowance deductions of $53 million and $32 million, respectively. After recording the related income tax effect and corresponding regulatory revenue adjustments for income tax purposes, there was no net impact to earnings from the adjustments to the 2015 tax repairs deductions recorded in the third quarter of 2016. Accordingly, the earnings impacts in the table below are also the earnings impacts for the year ended December 31, 2016.

Following is a summary of immediate earnings impacts from the 2016 GRC FD:

EARNINGS IMPACTS FROM THE 2016 GRC FD
(Dollars in millions)

	SoCalGas		SDG&E	
	Pretax earnings (charge)	After-tax earnings (charge)	Pretax earnings (charge)	After-tax earnings (charge)
Adjustments to revenue related to tax repairs deductions:				
2015 memorandum account balance	$ (72)	$ (43)	$ (37)	$ (22)
True-up of 2012-2014 estimates to actuals	(11)	(6)	(15)	(9)
Total	$ (83)	$ (49)	$ (52)	$ (31)

Finally, the 2016 GRC FD requires the establishment of a two-way income tax expense memorandum account to track any revenue differences resulting from differences between the income tax expense forecasted in the GRC and the income tax expense incurred by the California Utilities from 2016 through 2018. The differences tracked are to specifically include tax expense differences relating to:

- net revenue changes;
- mandatory tax law, tax accounting, tax procedural, or tax policy changes; and
- elective tax law, tax accounting, tax procedural, or tax policy changes.

The account will remain open, and the balance in the account will be reviewed in subsequent GRC proceedings, until the CPUC decides to close the account. In July 2016, to address the implementation of the 2016 GRC FD, the California Utilities filed an advice letter to establish a two-way memorandum account to track revenue requirement differences resulting from the differences in the income tax expense forecasted in the GRC proceedings of SoCalGas and SDG&E and the income tax expense incurred by them during the GRC period. Starting in the second quarter of 2016, SoCalGas and SDG&E are recording liabilities associated with tracking the differences in the income tax expense forecasted in the GRC proceedings and the income tax expense incurred, which for the year ended December 31, 2016 resulted in after-tax charges to earnings of $16 million ($27 million pretax) and $3 million ($5 million pretax), for SoCalGas and SDG&E, respectively.

CPUC Cost of Capital

A CPUC cost of capital proceeding determines a utility's authorized capital structure and authorized rate of return on rate base (ROR), which is a weighted average of the authorized returns on debt, preferred stock, and common equity (return on equity or ROE), weighted on a basis consistent with the authorized capital structure. The authorized ROR is the rate that the California Utilities are authorized to use in establishing rates to recover the cost of debt and equity used to finance their investment in CPUC-regulated electric distribution and generation as well as natural gas distribution, transmission and storage assets.

A cost of capital proceeding also addresses the automatic cost of capital adjustment mechanism (CCM), which applies market-based benchmarks to determine whether an adjustment to the authorized ROR is required during the interim years between cost of capital proceedings. The market-based benchmark for SDG&E's and SoCalGas' CCM is the 12-month average monthly A-rated utility bond index, as published by Moody's for the 12-month period of October 1st through September 30th (CCM Period) of each calculation year. In the last cost of capital proceeding, SDG&E's and SoCalGas' CCM benchmark rate was set at 4.24 percent. If at the end of the CCM Period the monthly average benchmark rate falls outside of the established range of 3.24 percent to 5.24 percent, SDG&E's and SoCalGas' authorized ROE would be adjusted, upward or downward, by one-half of the difference between the 12-month average and the benchmark rate. In addition, the authorized recovery rate for SDG&E's and SoCalGas' cost of debt and preferred stock would be adjusted to their respective actual weighted average costs, with no change to the authorized capital structure. All three adjustments with the new rate would become effective on January 1st of the following year in which the benchmark range was exceeded. For the twelve-month period ended September 30, 2016, the 12-month average of monthly Moody's A-rated utility bond index was 4.01 percent, which is within the established range of 3.24 percent and 5.24 percent.

The CCM only applies during the intervening years between scheduled cost of capital proceedings. In the year the cost of capital proceeding is scheduled, the cost of capital proceeding takes precedence over the CCM and will set new rates for the following year.

SDG&E's current CPUC-authorized ROR is 7.79 percent and SoCalGas' current CPUC-authorized ROR is 8.02 percent based on their authorized capital structures as follows:

COST OF CAPITAL AND AUTHORIZED RATE STRUCTURE – CPUC

SDG&E				SoCalGas		
Authorized weighting	Authorized rate of recovery	Weighted authorized ROR		Authorized weighting	Authorized rate of recovery	Weighted authorized ROR
45.25%	5.00%	2.26%	**Long-Term Debt**	45.60%	5.77%	2.63%
2.75%	6.22%	0.17%	**Preferred Stock**	2.40%	6.00%	0.14%
52.00%	10.30%	5.36%	**Common Equity**	52.00%	10.10%	5.25%
100.00%		**7.79%**		**100.00%**		**8.02%**

Under an agreement approved in 2016, the CPUC granted SDG&E and SoCalGas an extension of their cost of capital filing deadlines to April 2017 and extended the current CCM until the April 2017 filing date. However, in the event the adjustment mechanism is triggered, the utilities agreed that no changes to the current cost of capital would be made under the mechanism.

On February 7, 2017, SDG&E, SoCalGas, Pacific Gas and Electric Company (PG&E) and Edison (collectively, the Joint Investor-Owned Utilities or Joint IOUs), along with the ORA and TURN, entered into a memorandum of understanding and filed a joint petition for modification (PFM) with the CPUC seeking a two-year extension for each of the Joint IOUs to file its next respective cost of capital application, extending the date to file the next cost of capital application from April 2017 to April 2019 for a 2020 test year. In addition to the two-year extension of the deadline to file the next cost of capital application, the memorandum of understanding contains provisions to reduce the ROE for SDG&E from 10.30 percent to 10.20 percent and for SoCalGas from 10.10 percent to 10.05 percent, effective from January 1, 2018 through December 31, 2019. SDG&E's and SoCalGas' ratemaking capital structures will remain at the levels shown above until modified, if at all, by a future cost of capital decision by the CPUC. Also, the Joint IOUs will update their cost of capital for actual cost of long-term debt through August 2017 and forecasted cost through 2018, and update preferred stock costs for anticipated issuances (if any) through 2018. The CCM will be in effect to adjust 2019 cost of capital, if necessary. Unless changed by the operation of the CCM, the updated costs of long-term debt and preferred stock (if applicable) and new ROEs will remain in effect through December 31, 2019. The PFM is subject to final approval by the CPUC.

SDG&E MATTERS

FERC Rate Matters and Cost of Capital

SDG&E files separately with the FERC for its authorized ROE on FERC-regulated electric transmission operations and assets. The Electric Transmission Formula Rate (TO4) settlement agreement, approved by the FERC in May 2014 and in effect through December 31, 2018, established a 10.05 percent ROE. The settlement also established 1) a process whereby rates are determined using a base period of historical costs and a forecast of capital investments and 2) a true-up period similar to balancing account treatment that is designed to provide SDG&E earnings of no more and no less than its actual cost of service including its authorized return on investment. SDG&E will make annual information filings on December 1 of a given year to update rates for the following calendar year. SDG&E also has the right to file for any ROE incentives that might apply under FERC rules. SDG&E's debt to equity ratio will be set annually based on the actual ratio at the end of each year.

SDG&E's current estimated FERC ROR is 7.51 percent based on its capital structure as follows:

SDG&E COST OF CAPITAL AND RATE STRUCTURE – FERC

	Weighting	Rate of recovery	Weighted ROR
Long-Term Debt	43.48%	4.21%	1.83%
Common Equity	56.52%	10.05%	5.68%
	100.00%		**7.51%**

In September 2015, the presiding judge assigned by the FERC to SDG&E's annual TO4 Formula Cycle 2 filing issued an initial decision and an order on summary judgment that authorized SDG&E to recover all of the costs incurred and allocated to SDG&E's FERC-regulated operations, including $23 million of costs associated with the 2007 wildfires, discussed in Note 15. In October 2015, the CPUC filed a request for rehearing of the FERC's September 2015 order, which requested abeyance of SDG&E's request to recover 2007 wildfire damage expenses. In April 2016, the FERC affirmed its finding in the September 2015 order and denied the CPUC's request for rehearing. The FERC decision finalizes SDG&E's base transmission revenue requirement and the recovery of $23 million of wildfire damage expenses allocated to SDG&E's FERC-regulated operations.

NOTE 15. COMMITMENTS AND CONTINGENCIES

LEGAL PROCEEDINGS

We accrue losses for a legal proceeding when it is probable that a loss has been incurred and the amount of the loss can be reasonably estimated. However, the uncertainties inherent in legal proceedings make it difficult to estimate with reasonable certainty the costs and effects of resolving these matters. Accordingly, actual costs incurred may differ materially from amounts accrued, may exceed applicable insurance coverage and could materially adversely affect our business, cash flows, results of operations, financial condition and prospects. Unless otherwise indicated, we are unable to estimate reasonably possible losses in excess of any amounts accrued.

At December 31, 2016, Sempra Energy's accrued liabilities for legal proceedings, including associated legal fees and costs of litigation, on a consolidated basis, were $19 million. At December 31, 2016, accrued liabilities for legal proceedings were $16 million for SDG&E and $1 million for SoCalGas. Amounts for Sempra Energy and SoCalGas include $1 million for matters related to the Aliso Canyon natural gas leak, which we discuss below. We discuss our policy regarding accrual of legal fees in Note 1.

SDG&E

2007 Wildfire Litigation

In October 2007, San Diego County experienced several catastrophic wildfires. Reports issued by the California Department of Forestry and Fire Protection (Cal Fire) concluded that two of these fires (the Witch and Rice fires) were SDG&E "power line caused" and that a third fire (the Guejito fire) occurred when a wire securing a Cox Communications' fiber optic cable came into contact with an SDG&E power line "causing an arc and starting the fire." A September 2008 staff report issued by the CPUC's Consumer Protection and Safety Division, now known as the Safety and Enforcement Division, reached substantially the same conclusions as the Cal Fire reports, but also contended that the power lines involved in the Witch and Rice fires and the lashing wire involved in the Guejito fire were not properly designed, constructed and maintained.

SDG&E has resolved almost all of the lawsuits associated with the three fires. Only two appeals remain pending after judgment in the trial court. SDG&E does not expect additional plaintiffs to file lawsuits given the applicable statutes of limitation, but could receive additional settlement demands and damage estimates from the remaining plaintiffs until the cases are resolved. SDG&E establishes reserves for the wildfire litigation as information becomes available and amounts are estimable.

SDG&E has concluded that it is probable that it will be permitted to recover in rates a substantial portion of the costs incurred to resolve wildfire claims in excess of its liability insurance coverage and the amounts recovered from third parties. Accordingly, at December 31, 2016, Sempra Energy and SDG&E have recorded assets of $353 million in Other Regulatory Assets (long-term) on their Consolidated Balance Sheets ($352 million related to CPUC-regulated operations and $1 million related to FERC-regulated operations). In September 2015, SDG&E filed an application with the CPUC seeking authority to recover these costs in rates over a six- to ten-year period. The requested amount is the net estimated CPUC-related cost incurred by SDG&E after deductions for insurance reimbursement and third party settlement recoveries, and reflects a voluntary 10-percent shareholder contribution applied to the net WEMA balance. In April 2016, the CPUC issued a ruling establishing the scope and schedule for the proceeding, which will be managed in two phases. Phase 1 will address SDG&E's operational and management prudence surrounding the 2007 wildfires. Phase 2 will address whether SDG&E's actions and decision-making in connection with settling legal claims in relation to the wildfires were reasonable. Should SDG&E conclude that recovery in rates is no longer probable, SDG&E will record a charge against earnings at the time such conclusion is reached. If SDG&E had concluded that the recovery of regulatory assets related to CPUC-regulated operations was no longer probable or was less than currently estimated at December 31, 2016, the resulting after-tax charge against earnings would have been up to approximately $208 million. A failure to obtain substantial or full recovery of these costs from customers, or any negative assessment of the likelihood of recovery, would likely have a material adverse effect on Sempra Energy's and SDG&E's results of operations and cash flows.

We discuss how we assess the probability of recovery of our regulatory assets in Note 1.

Lawsuit Against Mitsubishi Heavy Industries, Ltd.

As we discuss in Note 13, on July 18, 2013, SDG&E filed a lawsuit in the Superior Court of California in the County of San Diego against MHI. The lawsuit seeks to recover damages SDG&E has incurred and will incur related to the design defects in the steam generators MHI provided to the SONGS nuclear power plant. The lawsuit asserts a number of causes of action, including fraud, based on the representations MHI made about its qualifications and ability to design generators free from defects of the kind that resulted in the permanent shutdown of the plant and further seeks to set aside the contractual limitation of damages that MHI has asserted. On July 24, 2013, MHI removed the lawsuit to the United States District Court for the Southern District of California and on August 8,

2013, MHI moved to stay the proceeding pending resolution of the dispute resolution process involving MHI and Edison arising from their contract for the purchase and sale of the steam generators. On October 16, 2013, Edison initiated an arbitration proceeding against MHI seeking damages stemming from the failure of the replacement steam generators. In late December 2013, MHI answered and filed a counterclaim against Edison. On March 14, 2014, MHI's motion to stay the United States District Court proceeding was granted with instructions that require the parties to allow SDG&E to participate in the ongoing Edison/MHI arbitration. As a result, SDG&E participated in the arbitration as a claimant and respondent. The arbitration hearing concluded at the end of April 2016. A decision could be reached in the first half of 2017.

Concluded Matters

Rim Rock Wind Farm. In 2011, the CPUC and FERC approved SDG&E's estimated $285 million tax equity investment in a wind farm project and its purchase of renewable energy credits from that project. SDG&E's contractual obligations to both invest in the Rim Rock wind farm and to purchase renewable energy credits from the wind farm under the power purchase agreement were subject to the satisfaction of certain conditions which, if not achieved, would allow SDG&E to terminate the power purchase agreement and not make the investment.

In December 2013, SDG&E and the project developer began litigating claims against each other regarding whether the project developer had timely satisfied all contractual conditions necessary to trigger SDG&E's obligations to invest in the project and purchase renewable energy credits. On February 11, 2016, SDG&E, the project developer and several of the project developer's parent and affiliated entities entered into a settlement agreement, which was approved by the CPUC in July 2016 and all related lawsuits were dismissed. Under the settlement agreement, among other things, the parties agreed to terminate the tax equity investment arrangement, continue the power purchase agreement for the wind farm generation and release all claims against each other, while generally continuing the other elements of the 2011 approved decision. The settlement agreement resulted in a $39 million credit to ratepayers.

Smart Meters Patent Infringement Lawsuit. In October 2011, SDG&E was sued by a Texas design and manufacturing company in Federal District Court, Southern District of California, and later transferred to the Federal District Court, Western District of Oklahoma as part of Multi-District Litigation proceedings, alleging that SDG&E's recently installed smart meters infringed certain patents. The meters were purchased from a third party vendor that has agreed to defend and indemnify SDG&E. The lawsuit sought injunctive relief and recovery of unspecified amounts of damages. The third party vendor has settled the lawsuit without cost to SDG&E, and a dismissal was entered in federal court on July 20, 2016.

SoCalGas

Aliso Canyon Natural Gas Storage Facility Gas Leak

On October 23, 2015, SoCalGas discovered a leak at one of its injection-and-withdrawal wells, SS25, at its Aliso Canyon natural gas storage facility, located in the northern part of the San Fernando Valley in Los Angeles County. The Aliso Canyon facility has been operated by SoCalGas since 1972. SS25 is more than one mile away from and 1,200 feet above the closest homes. It is one of more than 100 injection-and-withdrawal wells at the storage facility.

Stopping the Leak, and Local Community Mitigation Efforts. SoCalGas worked closely with several of the world's leading experts to stop the leak, and on February 18, 2016, the California Department of Conservation's Division of Oil, Gas, and Geothermal Resources (DOGGR) confirmed that the well was permanently sealed.

Pursuant to a stipulation and order by the Los Angeles County Superior Court (Superior Court), SoCalGas provided temporary relocation support to residents in the nearby community who requested it before the well was permanently sealed. Following the permanent sealing of the well and the completion of the Los Angeles County Department of Public Health's (DPH) indoor testing of certain homes in the Porter Ranch community, which concluded that indoor conditions did not present a long-term health risk and that it was safe for residents to return home, the Superior Court issued an order in May 2016, ruling that: (1) currently relocated residents be given the choice to request residence cleaning prior to returning home, with such cleaning to be performed according to the DPH's proposed protocol and at SoCalGas' expense, and (2) the relocation program for currently relocated residents would then terminate. SoCalGas completed the cleaning program, and the relocation program ended in July 2016.

Apart from the Superior Court order, in May 2016, the DPH also issued a directive that SoCalGas professionally clean (in accordance with the proposed protocol prepared by the DPH) the homes of all residents located within the Porter Ranch Neighborhood Council boundary, or who participated in the relocation program, or who are located within a five mile radius of the Aliso Canyon natural gas storage facility and have experienced symptoms from the natural gas leak (the Directive). SoCalGas disputes the Directive, contending that it is invalid and unenforceable, and has filed a petition for writ of mandate to set aside the Directive.

The total costs incurred to remediate and stop the leak and to mitigate local community impacts are significant and may increase, and to the extent not covered by insurance (including any costs in excess of applicable policy limits), or if there were to be significant

delays in receiving insurance recoveries, such costs could have a material adverse effect on SoCalGas' and Sempra Energy's cash flows, financial condition and results of operations.

Cost Estimates and Accounting Impact. As of December 31, 2016, SoCalGas recorded estimated costs of $780 million related to the leak. Of this amount, approximately 70 percent is for the temporary relocation program (including cleaning costs and certain labor costs) and approximately 20 percent is for efforts to control the well, stop the leak, stop or reduce the emissions, and the estimated cost of the root cause analysis being conducted by an independent third party to determine the cause of the leak. The remaining portion of the $780 million includes legal costs incurred to defend litigation, the value of lost gas, the costs to mitigate the actual natural gas released, and other costs. As the value of lost gas reflects the current replacement cost, the value may fluctuate until such time as replacement gas is purchased and injected into storage. SoCalGas adjusts its estimated total liability associated with the leak as additional information becomes available. The $780 million represents management's best estimate of these costs related to the leak. Of these costs, a substantial portion has been paid and $53 million is recorded as Reserve for Aliso Canyon Costs as of December 31, 2016 on SoCalGas' and Sempra Energy's Consolidated Balance Sheets for amounts expected to be paid after December 31, 2016.

As of December 31, 2016, we recorded the expected recovery of the costs described in the immediately preceding paragraph related to the leak of $606 million as Insurance Receivable for Aliso Canyon Costs on SoCalGas' and Sempra Energy's Consolidated Balance Sheets. This amount is net of insurance retentions and $169 million of insurance proceeds we received in 2016 related to control of well expenses and temporary relocation costs. If we were to conclude that this receivable or a portion of it was no longer probable of recovery from insurers, some or all of this receivable would be charged against earnings, which would have a material adverse effect on SoCalGas' and Sempra Energy's financial condition, results of operations and cash flows.

The above amounts do not include any unsettled damage claims, restitution, or civil, administrative or criminal fines, costs or other penalties that may be imposed in connection with the incident or our responses thereto, as it is not possible to predict the outcome of any civil or criminal proceeding or any administrative action in which such damage awards, restitution or civil, administrative or criminal fines, costs or other penalties could be imposed, and any such amounts, if awarded or imposed, cannot be reasonably estimated at this time. In addition, the recorded amounts above do not include the costs to clean additional homes pursuant to the DPH Directive, future legal costs necessary to defend litigation, and other potential costs that we currently do not anticipate incurring or that we cannot reasonably estimate.

In March 2016, the CPUC issued a decision directing SoCalGas to establish a memorandum account to prospectively track its authorized revenue requirement and all revenues that it receives for its normal, business-as-usual costs to own and operate the Aliso Canyon gas storage field. The CPUC will determine at a later time whether, and to what extent, the authorized revenues tracked in the memorandum account may be refunded to ratepayers. Pursuant to the CPUC's decision, SoCalGas filed an advice letter requesting to establish a memorandum account to track all normal, business-as-usual costs to own and operate the Aliso Canyon storage field. In September 2016, the advice letter was approved and made effective as of March 17, 2016, the date of the decision directing the company to establish the account.

Insurance. Excluding directors and officers liability insurance, we have four kinds of insurance policies that together provide between $1.2 billion to $1.4 billion in insurance coverage, depending on the nature of the claims. We cannot predict all of the potential categories of costs or the total amount of costs that we may incur as a result of the leak. In reviewing each of our policies, and subject to various policy limits, exclusions and conditions, based upon what we know as of the filing date of this report, we believe that our insurance policies collectively should cover the following categories of costs: costs incurred for temporary relocation (including cleaning costs and certain labor costs), costs to address the leak and stop or reduce emissions, the root cause analysis being conducted to determine the cause of the leak, the value of lost natural gas, costs incurred to mitigate the actual natural gas released, costs associated with litigation and claims by nearby residents and businesses, the costs to clean additional homes pursuant to the DPH Directive, and, in some circumstances depending on their nature and manner of assessment, fines and penalties. We have been communicating with our insurance carriers and, as discussed above, we have received insurance payments for control of well expenses and temporary relocation costs. We intend to pursue the full extent of our insurance coverage for the costs we have incurred or may incur. There can be no assurance that we will be successful in obtaining insurance coverage for these costs under the applicable policies, and to the extent we are not successful, such costs could have a material adverse effect on SoCalGas' and Sempra Energy's cash flows, financial condition and results of operations.

Our recorded estimate as of December 31, 2016 of $780 million of certain costs in connection with the Aliso Canyon storage facility leak may rise significantly as more information becomes available, and any costs not included in our estimate could be material. To the extent not covered by insurance (including any costs in excess of applicable policy limits), or if there were to be significant delays in receiving insurance recoveries, such costs could have a material adverse effect on SoCalGas' and Sempra Energy's cash flows, financial condition and results of operations.

Governmental Investigations and Civil and Criminal Litigation. Various governmental agencies, including DOGGR, DPH, South Coast Air Quality Management District (SCAQMD), California Air Resources Board (CARB), Los Angeles Regional Water Quality Control Board, California Division of Occupational Safety and Health, CPUC, Pipeline and Hazardous Materials Safety

Administration (PHMSA), U.S. Environmental Protection Agency (EPA), Los Angeles County District Attorney's Office and California Attorney General's Office, have investigated or are investigating this incident. Other federal agencies (e.g., the DOE and the U.S. Department of the Interior) investigated the incident as part of the joint interagency task force discussed below. In January 2016, DOGGR and the CPUC selected Blade Energy Partners (Blade) to conduct an independent analysis under their supervision and to be funded by SoCalGas to investigate the technical root cause of the Aliso Canyon gas leak. The timing of the root cause analysis is under the control of Blade, the DOGGR and the CPUC.

As of February 27, 2017, 250 lawsuits, including over 14,000 plaintiffs, have been filed in the Los Angeles County Superior Court against SoCalGas, some of which have also named Sempra Energy. These various lawsuits assert causes of action for negligence, negligence per se, strict liability, property damage, fraud, public and private nuisance (continuing and permanent), trespass, inverse condemnation, fraudulent concealment, unfair business practices and loss of consortium, among other things, and additional litigation may be filed against us in the future related to this incident. A complaint alleging violations of Proposition 65 was also filed. Many of these complaints seek class action status, compensatory and punitive damages, civil penalties, injunctive relief, costs of future medical monitoring and attorneys' fees. All of these cases, other than a matter brought by the Los Angeles County District Attorney, the federal securities class action and one of the federal shareholder derivative actions discussed below, are coordinated before a single court in the Los Angeles County Superior Court for pretrial management.

In addition to the lawsuits described above, a federal securities class action alleging violation of the federal securities laws has been filed against Sempra Energy and certain of its officers and directors in the United States District Court for the Southern District of California, and four shareholder derivative actions alleging breach of fiduciary duties have been filed against certain officers and directors of Sempra Energy and/or SoCalGas, one in the San Diego County Superior Court, one in the United States District Court for the Southern District of California, and two in the Los Angeles County Superior Court. In January 2017, the judge in the coordination proceeding in the Los Angeles County Superior Court granted a petition seeking to coordinate the shareholder derivative actions pending in state court into that proceeding.

Pursuant to the parties' agreement, the Los Angeles County Superior Court ordered that the individual and business entity plaintiffs (other than the Proposition 65 case, the federal securities class action and the one shareholder derivative action), would proceed by filing consolidated master complaints. Accordingly, in November 2016 the individuals and business entities asserting tort claims filed a First Amended Consolidated Master Case Complaint for Individual Actions through which their separate lawsuits will be managed for pretrial purposes. The consolidated complaint asserts causes of action for negligence, negligence per se, private and public nuisance (continuing and permanent), trespass, inverse condemnation, strict liability, negligent and intentional infliction of emotional distress, fraudulent concealment and loss of consortium against SoCalGas, with certain causes also naming Sempra Energy. The consolidated complaint seeks compensatory and punitive damages for personal injuries, property damage and diminution in property value, a temporary injunction, costs of future medical monitoring, and attorneys' fees.

Also in January 2017, pursuant to the coordination proceeding, two consolidated class action complaints were filed against SoCalGas and Sempra Energy, one on behalf of a putative class of persons and businesses who own or lease real property within a five-mile radius of the well (the Property Class Action), and a second on behalf of a putative class of all persons and entities conducting business within five miles of the facility (the Business Class Action). Both complaints assert claims for strict liability for ultra-hazardous activities, negligence and violation of California Unfair Competition Law. The Property Class Action also asserts claims for negligence per se, trespass, permanent and continuing public and private nuisance, and inverse condemnation. The Business Class Action also asserts a claim for negligent interference with prospective economic advantage. Both complaints seek compensatory, statutory and punitive damages, injunctive relief and attorneys' fees.

Three complaints have also been filed by public entities, as follows. These lawsuits are also included in the coordinated proceedings in the Los Angeles County Superior Court. First, the SCAQMD filed a complaint against SoCalGas seeking civil penalties for alleged violations of several nuisance-related statutory provisions arising from the leak and delays in stopping the leak. That suit seeks up to $250,000 in civil penalties for each day the violations occurred. In July 2016, the SCAQMD amended its complaint to seek a declaration that SoCalGas is required to pay the costs of a longitudinal study of the health of persons exposed to the gas leak. In February 2017, SoCalGas and SCAQMD entered into a settlement agreement under which SoCalGas will pay $8.5 million, $1 million of which will be used to pay for a health study, and the SCAQMD will dismiss its complaint and will petition the SCAQMD Hearing Board to terminate the stipulated abatement order described below.

Second, in July 2016, the County of Los Angeles, on behalf of itself and the people of the State of California, filed a complaint against SoCalGas in the Los Angeles County Superior Court for public nuisance, unfair competition, breach of franchise agreement, breach of lease, and damages. This suit alleges that the four natural gas storage fields operated or formerly operated by SoCalGas in Los Angeles County require safety upgrades, including the installation of sub-surface safety shut-off valves on every well. It additionally alleges that SoCalGas failed to comply with the DPH Directive. It seeks preliminary and permanent injunctive relief, civil penalties, and damages for the County's costs to respond to the leak, as well as punitive damages and attorneys' fees.

Third, in August 2016, the California Attorney General, acting in an independent capacity and on behalf of the people of the State of California and the CARB, together with the Los Angeles City Attorney, filed a third amended complaint on behalf of the people of the State of California against SoCalGas alleging public nuisance, violation of the California Unfair Competition Law, violations of California Health and Safety Code sections 41700, prohibiting discharge of air contaminants that cause annoyance to the public, and 25510, requiring reporting of the release of hazardous material, as well as California Government Code section 12607 for equitable relief for the protection of natural resources. The complaint seeks an order for injunctive relief, to abate the public nuisance, and to impose civil penalties.

Separately, in February 2016, the Los Angeles County District Attorney's Office filed a misdemeanor criminal complaint against SoCalGas seeking penalties and other remedies for alleged failure to provide timely notice of the leak pursuant to California Health and Safety Code section 25510(a), Los Angeles County Code section 12.56.030, and Title 19 California Code of Regulations section 2703(a), and for allegedly violating California Health and Safety Code section 41700 prohibiting discharge of air contaminants that cause annoyance to the public. In September 2016, SoCalGas entered into a settlement agreement with the District Attorney's Office in which it agreed to plead no contest to the notice charge under Health and Safety Code section 25510(a) and agreed to pay the maximum fine of $75,000, penalty assessments of approximately $233,500, and up to $4 million in operational commitments, reimbursement and assessments in exchange for the District Attorney's Office moving to dismiss the remaining counts at sentencing and settling the complaint (collectively referred to as the District Attorney Settlement). In November 2016, SoCalGas completed the commitments and obligations under the District Attorney Settlement, and on November 29, 2016, the Court approved the settlement and entered judgment on the notice charge. Certain individuals residing near Aliso Canyon who objected to the settlement have filed a notice of appeal of the judgment, as well as a petition asking the Superior Court to set aside the November 29, 2016 order and grant them restitution.

The costs of defending against these civil and criminal lawsuits, cooperating with these investigations, and any damages, restitution, and civil, administrative and criminal fines, costs and other penalties, if awarded or imposed, as well as the costs of mitigating the actual natural gas released, could be significant and to the extent not covered by insurance (including any costs in excess of applicable policy limits), or if there were to be significant delays in receiving insurance recoveries, such costs could have a material adverse effect on SoCalGas' and Sempra Energy's cash flows, financial condition and results of operations.

Regulatory Investigations. In February 2017, the CPUC opened a proceeding to determine the feasibility of minimizing or eliminating the use of the Aliso Canyon natural gas storage facility while still maintaining reliability for the region. The order was issued pursuant to the provisions of Senate Bill (SB) 380. The proceeding will be conducted in two phases, with Phase 1 conducting an analysis of the feasibility of reducing or eliminating the use of Aliso Canyon and Phase 2 considering the potential implementation of the Phase 1 analysis. The Phase 1 schedule contemplates public participation hearings and workshops. The scope of the order expressly excludes issues with respect to air quality, public health, causation, culpability or cost responsibility regarding the Aliso Canyon gas leak.

Section 455.5 of the California Public Utilities Code, among other things, directs regulated utilities to notify the CPUC if any portion of a major facility has been out of service for nine consecutive months. Although SoCalGas does not believe the Aliso Canyon facility or any portion of that facility has been out of service for nine consecutive months, SoCalGas provided notification for transparency, and because the process for obtaining authorization to resume injection operations at the facility is taking longer to complete than initially contemplated. In response, and as required by Section 455.5, the CPUC issued a draft OII to address whether the Aliso Canyon facility or any portion of that facility has been out of service for nine consecutive months pursuant to Section 455.5, and if it is determined to have been out of service, whether the CPUC should adjust SoCalGas' rates to reflect the period the facility is deemed to have been out of service. If the CPUC adopts the order as drafted and as required under Section 455.5, hearings on the investigation will be consolidated with SoCalGas' next GRC proceeding.

Governmental Orders and Additional Regulation. In January 2016, the Governor of the State of California issued the Governor's Order proclaiming a state of emergency to exist in Los Angeles County due to the natural gas leak at the Aliso Canyon facility. The Governor's Order imposes various orders with respect to: stopping the leak; protecting public health and safety; ensuring accountability; and strengthening oversight. Most of the directives in the Governor's Order have been fulfilled, with the following remaining open items: (1) the prohibition against SoCalGas injecting any natural gas into the Aliso Canyon facility will continue until a comprehensive review, utilizing independent experts, of the safety of the storage wells is completed; (2) applicable agencies must convene an independent panel of scientific and medical experts to review public health concerns stemming from the natural gas leak and evaluate whether additional measures are needed to protect public health; (3) the CPUC must ensure that SoCalGas covers costs related to the natural gas leak and its response, while protecting ratepayers, and CARB was ordered to develop a program to fully mitigate the leak's emissions of methane by March 31, 2016, with such program to be funded by SoCalGas; and (4) DOGGR, CPUC, CARB and California Energy Commission (CEC) must submit to the Governor's Office a report that assesses the long-term viability of natural gas storage facilities in California.

In December 2015, SoCalGas made a commitment to mitigate the actual natural gas released from the leak and has been working on a plan to accomplish the mitigation. In March 2016, pursuant to the Governor's Order, the CARB issued its *Aliso Canyon Methane Leak*

Climate Impacts Mitigation Program, which sets forth its recommended approach to achieve full mitigation of the emissions from the Aliso Canyon natural gas leak. The CARB program requires that reductions in short-lived climate pollutants and other greenhouse gases be at least equivalent to the amount of the emissions from the leak, and that the appropriate global warming potential to be used in deriving the amount of reductions required is based on a 20-year term (rather than the 100-year term the CARB and other state and federal agencies use in regulating emissions), resulting in a target of approximately 9,000,000 metric tons of carbon dioxide equivalent. CARB's program also provides that all of the mitigation is to occur in California over the next five to ten years without the use of allowances or offsets. In October 2016, CARB issued its final report concluding that the incident resulted in total emissions from 90,350 to 108,950 metric tons of methane, and asserting that SoCalGas should mitigate 109,000 metric tons of methane to fully mitigate the greenhouse gas impacts of the leak. We have not agreed with CARB's estimate of methane released and continue to work with CARB on developing a mitigation plan.

In January 2016, the Hearing Board of the SCAQMD ordered SoCalGas to take various actions in connection with injecting and withdrawing natural gas at Aliso Canyon, sealing the well, monitoring, reporting, safety and funding a health impact study, among other things. SoCalGas has fulfilled its obligations under the Abatement Order to the satisfaction of the SCAQMD and its Hearing Board, except for the condition that SoCalGas agree to fund the reasonable costs of a study of the health impacts of the leak. SoCalGas tendered an offer to fund the reasonable costs of a health study and a proposed scope of work for the study, which SCAQMD rejected. As described above, SCAQMD amended its civil complaint against SoCalGas to seek a declaration that SoCalGas is required to pay the costs of a longitudinal study of the health of persons exposed to the gas leak. At a status report hearing in January 2017 regarding the progress of compliance with the health study condition, the Hearing Board modified the Abatement Order to retain jurisdiction over the matter until the later of September 30, 2017 and the satisfaction of the health study condition. Pursuant to the settlement agreement between SCAQMD and SoCalGas described above, the SCAQMD agrees that the health study condition has been satisfied and will petition the Hearing Board to terminate the Abatement Order.

PHMSA, DOGGR, SCAQMD, EPA and CARB have each commenced separate rulemaking proceedings to adopt further regulations covering natural gas storage facilities and injection wells. DOGGR issued new regulations following the Governor's Order as described above, and in 2016, the California Legislature enacted four separate bills providing for additional regulation of natural gas storage facilities. Additional hearings in the California Legislature, as well as with various other federal and state regulatory agencies, have been or may be scheduled, additional legislation has been proposed in the California Legislature, and additional laws, orders, rules and regulations may be adopted. The Los Angeles County Board of Supervisors has formed a task force to review and potentially implement new, more stringent land use (zoning) requirements and associated regulations and enforcement protocols for oil and gas activities, including natural gas storage field operations, which could materially affect new or modified uses of the Aliso Canyon and other natural gas storage fields located in the County.

Higher operating costs and additional capital expenditures incurred by SoCalGas as a result of new laws, orders, rules and regulations arising out of this incident or our responses thereto could be significant and may not be recoverable in customer rates, and SoCalGas' and Sempra Energy's cash flows, financial condition and results of operations may be materially adversely affected by any such new laws, orders, rules and regulations.

Natural Gas Storage Operations and Reliability. Natural gas withdrawn from storage is important for service reliability during peak demand periods, including peak electric generation needs in the summer and heating needs in the winter. Aliso Canyon, with a storage capacity of 86 Bcf (which represents 63 percent of SoCalGas' natural gas storage inventory capacity), is the largest SoCalGas storage facility and an important element of SoCalGas' delivery system. SoCalGas completed its measurement of the natural gas lost from the leak and calculated that approximately 4.62 Bcf of natural gas was released from the Aliso Canyon natural gas storage facility as a result of the leak. SoCalGas has not injected natural gas into Aliso Canyon since October 25, 2015, pursuant to orders by DOGGR and the governor, and SB 380. Limited withdrawals of natural gas from Aliso Canyon have been made in 2017 to augment gas supplies during critical demand periods. In November 2016, SoCalGas submitted a request to DOGGR seeking authorization to resume injection operations at the Aliso Canyon storage facility. In accordance with SB 380, DOGGR held public meetings in the affected community to provide the public an opportunity to comment on the safety review findings, and the comment period has expired. It remains for DOGGR to issue its safety determination after which, the CPUC must concur with DOGGR's safety determination, before injections at the facility can resume.

If the Aliso Canyon facility were to be taken out of service for any meaningful period of time, it could result in an impairment of the facility, significantly higher than expected operating costs and/or additional capital expenditures, and natural gas reliability and electric generation could be jeopardized. At December 31, 2016, the Aliso Canyon facility has a net book value of $531 million, including $217 million of construction work in progress for the project to construct a new compression station. Any significant impairment of this asset could have a material adverse effect on SoCalGas' and Sempra Energy's results of operations for the period in which it is recorded. Higher operating costs and additional capital expenditures incurred by SoCalGas may not be recoverable in customer rates, and SoCalGas' and Sempra Energy's results of operations, cash flows and financial condition may be materially adversely affected.

Concluded Matter

SoCalGas, along with Monsanto Co., Solutia, Inc., Pharmacia Corp. and Pfizer, Inc., were defendants in seven Los Angeles County Superior Court lawsuits filed beginning in April 2011 seeking recovery of unspecified amounts of damages, including punitive damages, as a result of plaintiffs' exposure to PCBs (polychlorinated biphenyls). The lawsuits alleged plaintiffs were exposed to PCBs not only through the food chain and other various sources but from PCB-contaminated natural gas pipelines owned and operated by SoCalGas. This contamination allegedly caused plaintiffs to develop cancer and other serious illnesses. Plaintiffs asserted various bases for recovery, including negligence and products liability. As of February 2017, SoCalGas has settled all of the seven lawsuits for an amount that is not significant.

Sempra Mexico

Permit Challenges and Property Disputes

Sempra Mexico has been engaged in a long-running land dispute relating to property adjacent to its Energía Costa Azul LNG terminal near Ensenada, Mexico. Ownership of the adjacent property is not required by any of the environmental or other regulatory permits issued for the operation of the terminal. A claimant to the adjacent property has nonetheless asserted that his health and safety are endangered by the operation of the facility, and in February 2011, filed an action in the Federal Court challenging the permits. In September 2016, the Federal Court dismissed the lawsuit in which the permits were challenged.

The claimant also filed complaints in the federal Agrarian Court challenging the refusal of the Secretaría de la Reforma Agraria (now the Secretaría de Desarrollo Agrario, Territorial y Urbano, or SEDATU) in 2006 to issue a title to him for the disputed property. In November 2013, the Agrarian Court ordered that SEDATU issue the requested title and cause it to be registered. Both SEDATU and Sempra Mexico challenged the ruling, due to lack of notification of the underlying process. Both challenges are pending to be resolved by a Federal Court. Sempra Mexico expects additional proceedings regarding the claims, although such proceedings are not related to the permit challenges referenced above.

The property claimant also filed a lawsuit in July 2010 against Sempra Energy in Federal District Court in San Diego seeking compensatory and punitive damages as well as the earnings from the Energía Costa Azul LNG terminal based on his allegations that he was wrongfully evicted from the adjacent property and that he has been harmed by other allegedly improper actions. In September 2015, the Court granted Sempra Energy's motion for summary judgment and closed the case. The claimant has appealed the summary judgment and an earlier order dismissing certain of his causes of action. Argument on the appeal is scheduled for March 2017.

Additionally, several administrative challenges are pending in Mexico before the Mexican environmental protection agency and the Federal Tax and Administrative Courts seeking revocation of the environmental impact authorization issued to Energía Costa Azul in 2003. These cases generally allege that the conditions and mitigation measures in the environmental impact authorization are inadequate and challenge findings that the activities of the terminal are consistent with regional development guidelines.

Two real property cases have been filed against Energía Costa Azul. In one, the plaintiffs seek to annul the recorded property title for a parcel on which the Energía Costa Azul LNG terminal is situated and to obtain possession of a different parcel that allegedly sits in the same place. A second complaint was served in April 2013 seeking to invalidate the contract by which Energía Costa Azul purchased another of the terminal parcels, on the grounds the purchase price was unfair. In January 2016, the second complaint was dismissed by the Federal Agrarian Court. Sempra Mexico expects further proceedings on these two matters.

In 2015, the Yaqui tribe, with the exception of the Bácum community, granted its consent and a right-of-way easement agreement for the construction of the Guaymas-El Oro segment of IEnova's Sonora natural gas pipeline that crosses its territory. Representatives of the Bácum community filed an amparo claim in Mexican Federal Court demanding the right to withhold consent for the project, the stoppage of work in the Yaqui territory and damages. The judge granted a suspension order that prohibited the construction through the Bácum community territory only. As a result, IEnova was delayed in the construction of the approximately 14 kilometers of pipeline that pass through territory of the Yaqui tribe. The CFE has agreed to extend the deadline for commercial operations until late April 2017. Later-appointed Bácum authorities have requested that the Mexican Federal Court dismiss the amparo claim. In the meantime, the portion of the pipeline crossing the Bácum territory has been completed.

In December 2012, Backcountry Against Dumps, Donna Tisdale and the Protect Our Communities Foundation filed a complaint in the United States District Court for the Southern District of California seeking to invalidate the presidential permit issued by the DOE for Energía Sierra Juárez's cross-border generation tie line (Gen-tie line) connecting the Energía Sierra Juárez wind project in Mexico to the electric grid in the United States. The suit alleged violations of the National Environmental Policy Act (NEPA), the Endangered Species Act, the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. Plaintiffs filed a motion for summary judgment, which the court largely denied in September 2015. One NEPA claim, however, was not resolved – whether the Environmental Impact Statement's (EIS) assessment of alleged extraterritorial impacts of the Gen-tie line in the United States on the environment in Mexico was inadequate (the "extraterritorial impact issue") – and was the subject of additional briefing in 2016. On January 30, 2017, the Court issued a ruling on the extraterritorial impact issue and, contrary to its prior ruling, ruled that the EIS was

deficient for not considering the effects in Mexico of both the U.S. and Mexican portion of the Gen-tie line and the wind farm itself. The Court has not yet made a decision on the ultimate remedy, and a final judgment has not been entered.

Sempra LNG & Midstream

Beginning in April 2012, a series of lawsuits were filed against Mobile Gas in Mobile County Circuit Court alleging that in the first half of 2008 Mobile Gas spilled tert-butyl mercaptan, an odorant added to natural gas for safety reasons, in Eight Mile, Alabama. Under the terms of the agreement to sell the outstanding equity of EnergySouth, the parent company of Mobile Gas, as discussed in Note 3, this litigation and any associated liabilities and insurance receivable were retained by Mobile Gas at the close of the transaction in September 2016.

Other Litigation

Sempra Energy holds a noncontrolling interest in RBS Sempra Commodities, a limited liability partnership in the process of being liquidated. RBS, our partner in the joint venture, paid an £86 million assessment in October 2014 to the United Kingdom's Revenue and Customs Department (HMRC) for denied value-added tax (VAT) refund claims filed in connection with the purchase of carbon credit allowances by RBS Sempra Energy Europe (RBS SEE), a subsidiary of RBS Sempra Commodities. RBS SEE has since been sold to JP Morgan and later to Mercuria Energy Group, Ltd. HMRC asserted that RBS was not entitled to reduce its VAT liability by VAT paid on certain carbon credit purchases during 2009 because RBS knew or should have known that certain vendors in the trading chain did not remit their own VAT to HMRC. After paying the assessment, RBS filed a Notice of Appeal of the assessment with the First-Tier Tribunal. The First-Tier Tribunal held a preliminary hearing in September 2016 to determine whether HMRC's assessment was time-barred. On January 20, 2017, the Tribunal issued a decision in favor of HMRC concluding that the assessment was not time-barred. RBS may appeal the First-Tier Tribunal's decision to the Upper Tribunal. If RBS does not appeal the decision, there will be a hearing on the substantive matter regarding whether RBS knew or should have known that certain vendors in the trading chain did not remit their VAT to HMRC.

During 2015, liquidators, acting on behalf of ten companies (the Companies) that engaged in carbon credit trading via chains that included a company that RBS SEE traded with directly, filed a claim in the High Court of Justice asserting damages of £146 million against RBS and Mercuria Energy Europe Trading Limited (the Defendants). The claim alleges that the Defendants' participation in the purchase and sale of carbon credits resulted in the Companies' carbon credit trading transactions creating a VAT liability they were unable to pay. JP Morgan has notified us that Mercuria Energy Group, Ltd. has sought indemnity for the claim, and JP Morgan has in turn sought indemnity from us.

Our remaining balance in RBS Sempra Commodities is accounted for under the equity method. The investment balance of $67 million at December 31, 2016 reflects remaining distributions expected to be received from the partnership as it is liquidated. The timing and amount of distributions may be impacted by these matters. We discuss RBS Sempra Commodities further in Note 4.

We are also defendants in ordinary routine litigation incidental to our businesses, including personal injury, employment litigation, product liability, property damage and other claims. Juries have demonstrated an increasing willingness to grant large awards, including punitive damages, in these types of cases.

CONTRACTUAL COMMITMENTS

Natural Gas Contracts

SoCalGas has the responsibility for procuring natural gas for both SDG&E's and SoCalGas' core customers in a combined portfolio. SoCalGas buys natural gas under short-term and long-term contracts for this portfolio. Purchases are from various producing regions in the southwestern U.S., U.S. Rockies, and Canada and are primarily based on published monthly bid-week indices.

SoCalGas transports natural gas primarily under long-term firm interstate pipeline capacity agreements that provide for annual reservation charges, which are recovered in rates. SoCalGas has commitments with interstate pipeline companies for firm pipeline capacity under contracts that expire at various dates through 2031.

Sempra LNG & Midstream's and Sempra Mexico's businesses have various capacity agreements for natural gas storage and transportation. In addition, Sempra Mexico has a natural gas purchase agreement to fuel a natural gas-fired power plant.

In May 2016, Sempra LNG & Midstream permanently released certain pipeline capacity that it held with Rockies Express and others. The effect of the permanent capacity releases resulted in a pretax charge of $206 million ($123 million after-tax), which is included in Other Cost of Sales on the Sempra Energy Consolidated Statement of Operations. The charge represents an acceleration of costs that would otherwise have been recognized over the duration of the contracts. Sempra LNG & Midstream has recorded a liability for these costs, less expected proceeds generated from the permanent capacity releases. Sempra LNG & Midstream's related obligation to make future capacity payments through November 2019 is included in the table below.

At December 31, 2016, the future minimum payments under existing natural gas contracts and natural gas storage and transportation contracts were

FUTURE MINIMUM PAYMENTS – SEMPRA ENERGY CONSOLIDATED

(Dollars in millions)

	Storage and transportation	Natural gas(1)	Total(1)
2017	$ 240	$ 148	$ 388
2018	213	84	297
2019	138	1	139
2020	42	—	42
2021	42	—	42
Thereafter	144	—	144
Total minimum payments	$ 819	$ 233	$ 1,052

(1) Excludes amounts related to LNG purchase agreements discussed below.

FUTURE MINIMUM PAYMENTS – SOCALGAS

(Dollars in millions)

	Transportation	Natural gas	Total
2017	$ 123	$ 16	$ 139
2018	104	1	105
2019	52	1	53
2020	23	—	23
2021	23	—	23
Thereafter	82	—	82
Total minimum payments	$ 407	$ 18	$ 425

Total payments under natural gas contracts and natural gas storage and transportation contracts as well as payments to meet additional portfolio needs at Sempra Energy Consolidated and SoCalGas were

PAYMENTS UNDER NATURAL GAS CONTRACTS

(Dollars in millions)

	Years ended December 31,		
	2016	2015	2014
Sempra Energy Consolidated	$ 1,169	$ 1,200	$ 1,984
SoCalGas	966	975	1,735

LNG Purchase Agreement

Sempra LNG & Midstream has a purchase agreement for the supply of LNG to the Energía Costa Azul terminal. The agreement is priced using a predetermined formula based on forward prices of the index applicable from 2017 to 2028 and an estimated one percent escalation in 2029. Although this agreement specifies a number of cargoes to be delivered, under its terms, the customer may divert certain cargoes, which would reduce amounts paid under the agreement by Sempra LNG & Midstream. At December 31, 2016, the following LNG commitment amounts are based on the assumption that all cargoes, less those already confirmed to be diverted, under the agreement are delivered:

LNG COMMITMENT AMOUNTS

(Dollars in millions)

2017	$ 446
2018	459
2019	416
2020	423
2021	434
Thereafter	4,004
Total	$ 6,182

Actual LNG purchases in 2016, 2015 and 2014 have been significantly lower than the maximum amount required under the agreement due to the customer electing to divert most cargoes as allowed by the agreement.

Purchased-Power Contracts

For 2017, SDG&E expects to meet its customer power requirements from the following resource types:

- Long-term contracts: 40 percent (of which 35 percent is provided by renewable energy contracts expiring on various dates through 2041)
- Other SDG&E-owned generation and tolling contracts (including OMEC): 45 percent
- Spot market purchases: 15 percent

Chilquinta Energía and Luz del Sur also have purchased-power contracts, expiring on various dates extending through 2031, which cover most of the consumption needs of the companies' customers. These commitments are included under Sempra Energy Consolidated in the table below.

In July 2016, the Ministry of Energy and Mines in Peru amended the basis upon which tolling fees are billed for transmission connection from the generator to the distributor. Prior to the change in law, tolling fees were based on contracted capacity. As a result of the change in law, tolling fees are now based on coincident peak demand, resulting in a variable contractual commitment.

At December 31, 2016, the fixed and determinable estimated future minimum payments under long-term purchased-power contracts were

FUTURE MINIMUM PAYMENTS – PURCHASED-POWER CONTRACTS

(Dollars in millions)

	Sempra Energy Consolidated	SDG&E
2017	$ 666	$ 563
2018	672	556
2019	664	546
2020	606	487
2021	608	487
Thereafter	6,205	5,865
Total minimum payments(1)	$ 9,421	$ 8,504

(1) Excludes purchase agreements accounted for as capital leases and amounts related to Otay Mesa VIE, as it is consolidated by Sempra Energy and SDG&E.

Payments on these contracts represent capacity charges and minimum energy and transmission purchases that exceed the minimum commitment. SDG&E, Chilquinta Energía and Luz del Sur are required to pay additional amounts for actual purchases of energy that exceed the minimum energy commitments. Total payments under purchased-power contracts were

PAYMENTS UNDER PURCHASED-POWER CONTRACTS

(Dollars in millions)

	Years ended December 31,		
	2016	2015	2014
Sempra Energy Consolidated	$ 1,667	$ 1,573	$ 1,574
SDG&E	752	715	710

Operating Leases

Sempra Energy Consolidated, SDG&E and SoCalGas have operating leases on real and personal property expiring at various dates from 2017 through 2054. Certain leases on office facilities contain escalation clauses requiring annual increases in rent ranging from two percent to five percent at Sempra Energy Consolidated, SDG&E and SoCalGas. The rentals payable under these leases may increase by a fixed amount each year or by a percentage of a base year, and most leases contain extension options that we could exercise.

The California Utilities have an operating lease agreement for future acquisitions of fleet vehicles with an aggregate maximum lease limit of $150 million, $125 million of which has been utilized as of December 31, 2016.

Rent expense for operating leases is as follows:

RENT EXPENSE – OPERATING LEASES

(Dollars in millions)

	Years ended December 31,		
	2016	2015	2014
Sempra Energy Consolidated	$ 77	$ 78	$ 78
SDG&E	28	27	26
SoCalGas	38	39	38

At December 31, 2016, the minimum rental commitments payable in future years under all noncancelable operating leases were

FUTURE MINIMUM PAYMENTS – OPERATING LEASES

(Dollars in millions)

	Sempra Energy Consolidated	SDG&E	SoCalGas
2017	$ 78	$ 27	$ 42
2018	69	23	38
2019	61	22	32
2020	54	20	27
2021	49	19	25
Thereafter	306	71	134
Total future minimum rental commitments	$ 617	$ 182	$ 298

Capital Leases

Power Purchase Agreements

SDG&E has four power purchase agreements with peaker plant facilities, one of which went into commercial operation in 2015. All four are accounted for as capital leases. At December 31, 2016, capital lease obligations for these leases, three with a 25-year term and one with a 9-year term, were valued at $239 million.

In 2015, SDG&E entered into a CPUC-approved 25-year power purchase agreement with a peaker plant facility that is currently under construction. Beginning with the initial delivery of the contracted power, scheduled in June 2017, the power purchase agreement will be accounted for as a capital lease.

The entities that own the peaker plant facilities are VIEs of which SDG&E is not the primary beneficiary. SDG&E does not have any additional implicit or explicit financial responsibility related to these VIEs.

At December 31, 2016, the future minimum lease payments and present value of the net minimum lease payments under these capital leases for both Sempra Energy Consolidated and SDG&E were

FUTURE MINIMUM PAYMENTS – POWER PURCHASE AGREEMENTS *(Dollars in millions)*	
2017	$ 77
2018	104
2019	104
2020	104
2021	104
Thereafter	1,806
Total minimum lease payments(1)	2,299
Less: estimated executory costs	(517)
Less: interest(2)	(1,043)
Present value of net minimum lease payments(3)	$ 739

(1) This amount will be recorded over the lives of the leases as Cost of Electric Fuel and Purchased Power on Sempra Energy's and SDG&E's Consolidated Statements of Operations. This expense will receive ratemaking treatment consistent with purchased-power costs, which are recovered in rates.

(2) Amount necessary to reduce net minimum lease payments to present value at the inception of the leases.

(3) Includes $8 million in Current Portion of Long-Term Debt and $231 million in Long-Term Debt on Sempra Energy's and SDG&E's Consolidated Balance Sheets at December 31, 2016. Of the present value of net minimum lease payments, $500 million will be recorded as a capital lease obligation when construction of the peaker plant facility is completed and delivery of contracted power commences, which is scheduled to occur in June 2017.

The annual amortization charge for the power purchase agreements was $4 million in 2016, $4 million in 2015 and $3 million in 2014.

In January 2017, SDG&E entered into a CPUC-approved 20-year power purchase agreement with a 500-MW intermediate stage power plant facility to be constructed. Upon commercial operation, scheduled in 2018, the power purchase agreement will be accounted for as a capital lease.

Headquarters Build-to-Suit Lease

Sempra Energy has a 25-year, build-to-suit lease for its San Diego, California, headquarters completed in 2015. We began occupying the building in the second half of 2015, concurrent with the termination of the prior headquarters lease. As a result of our involvement during and after the construction period, we have recorded the related assets and financing liability for construction costs incurred under this build-to-suit leasing arrangement.

The building is being depreciated on a straight-line basis over its estimated useful life and the associated lease payments are allocated between interest expense and amortization of the financing obligation over the lease period. Further, a portion of the lease payments pertain to the lease of the underlying land and are recorded as rental expense. The balance of the financing obligation, representing the net present value of the future minimum lease payments on the building, is $137 million at December 31, 2016.

At December 31, 2016, the future minimum lease payments on the lease are as follows:

FUTURE MINIMUM PAYMENTS – BUILD-TO-SUIT LEASE *(Dollars in millions)*	
2017	$ 10
2018	10
2019	10
2020	11
2021	11
Thereafter	245
Total minimum lease payments	$ 297

Other Capital Leases

Sempra South American Utilities entered into capital lease agreements for fleet vehicles and other assets in 2015. At December 31, 2016, the future minimum lease payments under these capital leases for Sempra Energy Consolidated were $2 million in 2017, $2 million in 2018, $1 million in 2019, negligible in 2020 and 2021 and $8 million thereafter. The net present value of the minimum lease payments is $6 million at December 31, 2016.

The annual depreciation charge for the fleet vehicles and other assets in 2016, 2015 and 2014 was $2 million, $4 million and $4 million, respectively, at Sempra Energy Consolidated, including $1 million, $2 million and $2 million, respectively, at SDG&E and $1 million, $2 million and $2 million, respectively, at SoCalGas.

Construction and Development Projects

Sempra Energy Consolidated has various capital projects in progress in the United States, Mexico and South America. Sempra Energy's total commitments under these projects are approximately $827 million, requiring future payments of $398 million in 2017, $73 million in 2018, $44 million in 2019, $39 million in 2020, $28 million in 2021 and $245 million thereafter. The following is a summary by segment of contractual commitments and contingencies related to such projects.

SDG&E

At December 31, 2016, SDG&E has commitments to make future payments of $143 million for construction projects that include

- $80 million for infrastructure improvements for natural gas and electric transmission and distribution operations;
- $49 million for the engineering, material procurement and construction costs primarily associated with the San Luis Rey Synchronous Condenser and Bay Boulevard Substation relocation projects; and
- $14 million related to spent fuel management at SONGS.

SDG&E expects future payments under these contractual commitments to be $59 million in 2017, $44 million in 2018, $17 million in 2019, $12 million in 2020, $3 million in 2021 and $8 million thereafter.

SoCalGas

At December 31, 2016, SoCalGas has commitments to make future payments of $13 million for contracts related to the procurement of gas rotary meters. SoCalGas expects the future payments under these contractual commitments to approximate $3 million each year in 2017 through 2019 and $4 million in 2020.

Sempra South American Utilities

At December 31, 2016, Sempra South American Utilities has commitments to make future payments of $21 million for the construction of substations and related transmission lines. The future payments under these contractual commitments are all expected to be made in 2017.

Sempra Mexico

At December 31, 2016, Sempra Mexico has commitments to make future payments of $470 million for contracts related to the construction of various natural gas pipelines and ongoing maintenance services. Sempra Mexico expects future payments under these contractual commitments to be $135 million in 2017, $26 million in 2018, $24 million in 2019, $23 million in 2020, $25 million in 2021 and $237 million thereafter.

Sempra Renewables

At December 31, 2016, Sempra Renewables has commitments to make future payments of $166 million for contracts related to the construction of renewable energy projects. The future payments under these contractual commitments are all expected to be made in 2017.

Sempra LNG & Midstream

At December 31, 2016, Sempra LNG & Midstream has commitments to make future payments of $14 million primarily for natural gas transportation projects. The future payments under these contractual commitments are all expected to be made in 2017.

OTHER COMMITMENTS

SDG&E

In connection with the completion of the Sunrise Powerlink project in 2012, the CPUC required that SDG&E establish a fire mitigation fund to minimize the risk of fire as well as reduce the potential wildfire impact on residences and structures near the Sunrise Powerlink. The future payments for these contractual commitments are expected to be approximately $3 million per year, subject to escalation of 2 percent per year, for a remaining 53-year period. At December 31, 2016, the present value of these future payments of $118 million has been recorded as a regulatory asset as the amounts represent a cost that is expected to be recovered from customers in the future, and the related liability was $118 million.

Sempra LNG & Midstream

Additional consideration for a 2006 comprehensive legal settlement with the State of California to resolve the Continental Forge litigation included an agreement that, for a period of 18 years beginning in 2011, Sempra LNG & Midstream would sell to the California Utilities, subject to annual CPUC approval, up to 500 million cubic feet per day of regasified LNG from Sempra Mexico's Energía Costa Azul facility that is not delivered or sold in Mexico at the price indexed to the California border minus $0.02 per MMBtu. There are no specified minimums required, and to date, Sempra LNG & Midstream has not been required to deliver any natural gas pursuant to this agreement.

ENVIRONMENTAL ISSUES

Our operations are subject to federal, state and local environmental laws. We also are subject to regulations related to hazardous wastes, air and water quality, land use, solid waste disposal and the protection of wildlife. These laws and regulations require that we investigate and correct the effects of the release or disposal of materials at sites associated with our past and our present operations. These sites include those at which we have been identified as a Potentially Responsible Party (PRP) under the federal Superfund laws and similar state laws.

In addition, we are required to obtain numerous governmental permits, licenses and other approvals to construct facilities and operate our businesses. The related costs of environmental monitoring, pollution control equipment, cleanup costs, and emissions fees are significant. Increasing national and international concerns regarding global warming and mercury, carbon dioxide, nitrogen oxide and sulfur dioxide emissions could result in requirements for additional pollution control equipment or significant emissions fees or taxes that could adversely affect Sempra LNG & Midstream and Sempra Mexico. The California Utilities' costs to operate their facilities in compliance with these laws and regulations generally have been recovered in customer rates.

We discuss environmental matters related to the natural gas leak at SoCalGas' Aliso Canyon natural gas storage facility above in "Legal Proceedings – SoCalGas – Aliso Canyon Natural Gas Storage Facility Gas Leak."

Other Environmental Issues

We generally capitalize the significant costs we incur to mitigate or prevent future environmental contamination or extend the life, increase the capacity, or improve the safety or efficiency of property used in current operations. The following table shows our capital expenditures (including construction work in progress) in order to comply with environmental laws and regulations:

CAPITAL EXPENDITURES FOR ENVIRONMENTAL ISSUES

(Dollars in millions)

	Years ended December 31,		
	2016	2015	2014
Sempra Energy Consolidated(1)	$ 53	$ 64	$ 45
SDG&E	17	24	23
SoCalGas	35	39	21

(1) In cases of non-wholly owned affiliates, includes only our share.

We have not identified any significant environmental issues outside the United States.

At the California Utilities, costs that relate to current operations or an existing condition caused by past operations are generally recorded as a regulatory asset due to the probability that these costs will be recovered in rates.

The environmental issues currently facing us, except for those related to the Aliso Canyon natural gas leak as we discuss above or resolved during the last three years, include (1) investigation and remediation of the California Utilities' manufactured-gas sites, (2) cleanup of third-party waste-disposal sites used by the California Utilities at sites for which we have been identified as a PRP and (3) mitigation of damage to the marine environment caused by the cooling-water discharge from SONGS.

The table below shows the status at December 31, 2016, of the California Utilities' manufactured-gas sites and the third-party waste-disposal sites for which we have been identified as a PRP:

STATUS OF ENVIRONMENTAL SITES

	# Sites complete(1)	# Sites in process
SDG&E:		
Manufactured-gas sites	3	—
Third-party waste-disposal sites	2	1
SoCalGas:		
Manufactured-gas sites	39	3
Third-party waste-disposal sites	5	2

(1) There may be ongoing compliance obligations for completed sites, such as regular inspections, adherence to land use covenants and water quality monitoring.

We record environmental liabilities at undiscounted amounts when our liability is probable and the costs can be reasonably estimated. In many cases, however, investigations are not yet at a stage where we can determine whether we are liable or, if the liability is probable, to reasonably estimate the amount or range of amounts of the costs. Estimates of our liability are further subject to uncertainties such as the nature and extent of site contamination, evolving cleanup standards and imprecise engineering evaluations. We review our accruals periodically and, as investigations and cleanups proceed, we make adjustments as necessary. The following table shows our accrued liabilities for environmental matters at December 31, 2016:

ACCRUED LIABILITIES FOR ENVIRONMENTAL MATTERS

(Dollars in millions)

	Manufactured-gas sites	Waste disposal sites (PRP)(1)	Former fossil-fueled power plants	Total(2)
SDG&E(3)	$ —	$ 1	$ 1	$ 2
SoCalGas(4)	23	2	—	25
Other	—	1	—	1
Total Sempra Energy	$ 23	$ 4	$ 1	$ 28

(1) Sites for which we have been identified as a Potentially Responsible Party.

(2) Includes $8 million, $1 million and $7 million classified as current liabilities, and $20 million, $1 million and $18 million classified as noncurrent liabilities on Sempra Energy's, SDG&E's and SoCalGas' Consolidated Balance Sheets, respectively.

(3) Does not include SDG&E's liability for SONGS marine mitigation.

(4) Does not include SoCalGas' liability for environmental matters for the natural gas leak at the Aliso Canyon facility. We discuss matters related to the leak above in "Legal Proceedings – SoCalGas – Aliso Canyon Natural Gas Storage Facility Gas Leak."

We expect to pay the majority of these accruals over the next three years.

In connection with the issuance of operating permits, SDG&E and the other owners of SONGS previously reached an agreement with the California Coastal Commission (CCC) to mitigate the damage to the marine environment caused by the cooling-water discharge from SONGS during its operation. SONGS' early retirement, described in Note 13, does not reduce SDG&E's mitigation obligation. SDG&E's share of the estimated mitigation costs is $89 million, of which $43 million has been incurred through December 31, 2016, and $46 million is accrued for remaining costs through 2050, which is recoverable in rates and included in Deferred Credits and Other Liabilities on Sempra Energy's and SDG&E's Consolidated Balance Sheets. The requirements for enhanced fish protection and restoration of coastal wetlands for the SONGS mitigation are in process. Work on the artificial reef that was dedicated in 2008 continues. The CCC has stated that it now requires an expansion of the reef because the existing reef may be too small to consistently meet the performance standards. In December 2016, SDG&E and Edison filed a joint application with the CPUC seeking rate recovery of the costs of the reef expansion. SDG&E's share of the reef expansion costs currently forecasted through 2020 is $7 million. A decision in the proceeding is expected by the end of 2017.

NUCLEAR INSURANCE

SDG&E and the other owners of SONGS have insurance to cover claims from nuclear liability incidents arising at SONGS. This insurance provides $375 million in coverage limits, the maximum amount available, including coverage for acts of terrorism. In addition, the Price-Anderson Act provides for up to $13 billion of secondary financial protection (SFP). If a nuclear liability loss occurring at any U.S. licensed/commercial reactor exceeds the $375 million insurance limit, all nuclear reactor owners could be required to contribute to the SFP. SDG&E's contribution would be up to $50.93 million. This amount is subject to an annual maximum of $7.6 million, unless a default occurs by any other SONGS owner. If the SFP is insufficient to cover the liability loss, SDG&E could be subject to an additional assessment.

The SONGS owners, including SDG&E, also have $2.75 billion of nuclear property, decontamination, and debris removal insurance, subject to a $2.5 million deductible for "each and every loss." This insurance coverage is provided through Nuclear Electric Insurance Limited (NEIL). The NEIL policies have specific exclusions and limitations that can result in reduced or eliminated coverage. Insured members as a group are subject to retrospective premium assessments to cover losses sustained by NEIL under all issued policies. SDG&E could be assessed up to $10.4 million of retrospective premiums based on overall member claims. See Note 13 in "Settlement with NEIL" for discussion of an agreement between the SONGS co-owners and NEIL to settle all claims under the NEIL policies associated with the SONGS outage.

The nuclear property insurance program includes an industry aggregate loss limit for non-certified acts of terrorism (as defined by the Terrorism Risk Insurance Act). The industry aggregate loss limit for property claims arising from non-certified acts of terrorism is $3.24 billion. This is the maximum amount that will be paid to insured members who suffer losses or damages from these non-certified terrorist acts.

U.S. DEPARTMENT OF ENERGY NUCLEAR FUEL DISPOSAL

The Nuclear Waste Policy Act of 1982 made the DOE responsible for accepting, transporting, and disposing of spent nuclear fuel. However, it is uncertain when the DOE will begin accepting spent nuclear fuel from SONGS. This delay will lead to increased costs for spent fuel storage. SDG&E will continue to support Edison in its pursuit of claims on behalf of the SONGS co-owners against the DOE for its failure to timely accept the spent nuclear fuel. In April 2016, Edison executed a spent fuel settlement agreement with the DOE for $162 million covering damages incurred from January 1, 2006 through December 31, 2013. In May 2016, Edison refunded SDG&E $32 million for its respective share of the damage award paid. In applying this refund, SDG&E recorded a $23 million reduction to the SONGS regulatory asset, an $8 million reduction of its nuclear decommissioning balancing account and a $1 million reduction in its SONGS operation and maintenance cost balancing account.

In September 2016, Edison filed claims with the DOE for $56 million in spent fuel management costs incurred in 2014 and 2015 on behalf of the SONGS co-owners under the terms of the 2016 spent fuel settlement agreement. SDG&E's respective share of the claim is $11 million. It is unclear whether the claim will be resolved through settlement or arbitration, when resolution is expected, and whether Edison will receive an award for the full claim amount.

In October 2015, the CCC approved Edison's application for the proposed expansion of an ISFSI at SONGS. The ISFSI expansion began construction in 2016, will be fully loaded with spent fuel by 2019, and will operate until 2049, when it is assumed that the DOE will have taken custody of all the SONGS spent fuel. The ISFSI would then be decommissioned, and the site restored to its original environmental state.

CONCENTRATION OF CREDIT RISK

We maintain credit policies and systems to manage our overall credit risk. These policies include an evaluation of potential counterparties' financial condition and an assignment of credit limits. These credit limits are established based on risk and return considerations under terms customarily available in the industry. We grant credit to utility customers and counterparties, substantially all of whom are located in our service territory, which covers most of Southern California and a portion of central California for SoCalGas, and all of San Diego County and an adjacent portion of Orange County for SDG&E. We also grant credit to utility customers and counterparties of our other companies providing natural gas or electric services in Mexico, Chile and Peru.

As they become operational, projects owned or partially owned by Sempra LNG & Midstream, Sempra Renewables, Sempra South American Utilities and Sempra Mexico place significant reliance on the ability of their suppliers, customers and partners to perform on long-term agreements and on our ability to enforce contract terms in the event of nonperformance. We consider many factors, including the negotiation of supplier and customer agreements, when we evaluate and approve development projects.

NOTE 16. SEGMENT INFORMATION

We have six separately managed reportable segments, as follows:

- *SDG&E* provides electric service to San Diego and southern Orange counties and natural gas service to San Diego County.
- *SoCalGas* is a natural gas distribution utility, serving customers throughout most of Southern California and part of central California.
- *Sempra South American Utilities* develops, owns and operates, or holds interests in, electric transmission, distribution and generation infrastructure in Chile and Peru.

- *Sempra Mexico* develops, owns and operates, or holds interests in, natural gas transmission systems and an ethane system, a liquid petroleum gas pipeline and associated storage terminal, a natural gas distribution utility, electric generation facilities (including wind and solar electric generation facilities and a natural gas-fired power plant), a terminal for the import of LNG, and marketing operations for the purchase of LNG and the purchase and sale of natural gas in Mexico. In February 2016, management approved a plan to market and sell the TdM natural gas fired power plant located in Mexicali, Baja California, as we discuss in Note 3.
- *Sempra Renewables* develops, owns and operates, or holds interests in, wind and solar energy generation facilities serving wholesale electricity markets in the United States.
- *Sempra LNG & Midstream* develops, owns and operates, or holds interests in, natural gas pipelines and storage facilities and a terminal for the import and export of LNG and sale of natural gas, all within the United States. In September 2016, Sempra LNG & Midstream sold EnergySouth, the parent company of Mobile Gas and Willmut Gas, and in May 2016, sold its 25-percent interest in Rockies Express. Sempra LNG & Midstream also owned and operated the Mesquite Power plant, a natural gas-fired electric generation asset, the remaining 625-MW block of which was sold in April 2015. We discuss these divestitures in Note 3.

We evaluate each segment's performance based on its contribution to Sempra Energy's reported earnings. The California Utilities operate in essentially separate service territories, under separate regulatory frameworks and rate structures set by the CPUC. The California Utilities' operations are based on rates set by the CPUC and the FERC. We describe the accounting policies of all of our segments in Note 1.

Common services shared by the business segments are assigned directly or allocated based on various cost factors, depending on the nature of the service provided. Interest income and expense is recorded on intercompany loans. The loan balances and related interest are eliminated in consolidation.

The following tables show selected information by segment from our Consolidated Statements of Operations and Consolidated Balance Sheets. We provide information about our equity method investments by segment in Note 4. Amounts labeled as "All other" in the following tables consist primarily of parent organizations.

SEGMENT INFORMATION

(Dollars in millions)

	Years ended December 31,		
	2016	2015	2014
REVENUES			
SDG&E	$ 4,253	$ 4,219	$ 4,329
SoCalGas	3,471	3,489	3,855
Sempra South American Utilities	1,556	1,544	1,534
Sempra Mexico	725	669	818
Sempra Renewables	34	36	35
Sempra LNG & Midstream	508	653	979
Adjustments and eliminations	—	(2)	(3)
Intersegment revenues(1)	(364)	(377)	(512)
Total	$ 10,183	$ 10,231	$ 11,035
INTEREST EXPENSE			
SDG&E	$ 195	$ 204	$ 202
SoCalGas	97	84	69
Sempra South American Utilities	38	32	33
Sempra Mexico	13	23	17
Sempra Renewables	4	3	5
Sempra LNG & Midstream	43	72	111
All other	282	263	241
Intercompany eliminations	(119)	(120)	(124)
Total	$ 553	$ 561	$ 554
INTEREST INCOME			
SoCalGas	$ 1	$ 4	$ —
Sempra South American Utilities	21	19	14
Sempra Mexico	6	7	4
Sempra Renewables	5	4	1
Sempra LNG & Midstream	71	75	115
All other	—	—	1
Intercompany eliminations	(78)	(80)	(113)
Total	$ 26	$ 29	$ 22
DEPRECIATION AND AMORTIZATION			
SDG&E	$ 646	$ 604	$ 530
SoCalGas	476	461	431
Sempra South American Utilities	49	50	55
Sempra Mexico	77	70	64
Sempra Renewables	6	6	5
Sempra LNG & Midstream	47	49	61
All other	11	10	10
Total	$ 1,312	$ 1,250	$ 1,156
INCOME TAX EXPENSE (BENEFIT)			
SDG&E	$ 280	$ 284	$ 270
SoCalGas	143	138	139
Sempra South American Utilities	80	67	58
Sempra Mexico	188	11	5
Sempra Renewables	(38)	(49)	(44)
Sempra LNG & Midstream	(80)	28	(20)
All other	(184)	(138)	(108)
Total	$ 389	$ 341	$ 300

SEGMENT INFORMATION (CONTINUED)

(Dollars in millions)

	Years ended December 31 or at December 31,		
	2016	2015	2014
EARNINGS (LOSSES)			
SDG&E	$ 570	$ 587	$ 507
SoCalGas(2)	349	419	332
Sempra South American Utilities	156	175	172
Sempra Mexico	463	213	192
Sempra Renewables	55	63	81
Sempra LNG & Midstream	(107)	44	50
All other	(116)	(152)	(173)
Total	$ 1,370	$ 1,349	$ 1,161
ASSETS			
SDG&E	$ 17,719	$ 16,515	$ 16,260
SoCalGas	13,424	12,104	10,446
Sempra South American Utilities	3,591	3,235	3,379
Sempra Mexico	7,542	3,783	3,486
Sempra Renewables	3,644	1,441	1,334
Sempra LNG & Midstream	5,564	5,566	6,435
All other	475	734	872
Intersegment receivables	(4,173)	(2,228)	(2,561)
Total	$ 47,786	$ 41,150	$ 39,651
EXPENDITURES FOR PROPERTY, PLANT & EQUIPMENT			
SDG&E	$ 1,399	$ 1,133	$ 1,100
SoCalGas	1,319	1,352	1,104
Sempra South American Utilities	194	154	174
Sempra Mexico	330	302	325
Sempra Renewables	835	81	190
Sempra LNG & Midstream	117	87	212
All other	20	47	18
Total	$ 4,214	$ 3,156	$ 3,123
GEOGRAPHIC INFORMATION			
Long-lived assets(3):			
United States	$ 28,351	$ 26,132	$ 24,183
Mexico	4,814	3,160	2,821
South America	1,863	1,652	1,746
Total	$ 35,028	$ 30,944	$ 28,750
Revenues(4):			
United States	$ 8,004	$ 8,119	$ 8,774
South America	1,556	1,544	1,534
Mexico	623	568	727
Total	$ 10,183	$ 10,231	$ 11,035

(1) Revenues for reportable segments include intersegment revenues of $6 million, $76 million, $102 million, and $180 million for 2016, $9 million, $75 million, $101 million and $192 million for 2015, and $10 million, $69 million, $91 million and $342 million for 2014 for SDG&E, SoCalGas, Sempra Mexico and Sempra LNG & Midstream, respectively.

(2) After preferred dividends.

(3) Includes net PP&E and investments.

(4) Amounts are based on where the revenue originated, after intercompany eliminations.

NOTE 17. QUARTERLY FINANCIAL DATA (UNAUDITED)

We provide quarterly financial information for Sempra Energy Consolidated, SDG&E and SoCalGas below:

SEMPRA ENERGY

(In millions, except per share amounts)

	Quarters ended			
	March 31	June 30	September 30	December 31
2016(1):				
Revenues	$ 2,622	$ 2,156	$ 2,535	$ 2,870
Expenses and other income	$ 2,167	$ 2,268	$ 1,553	$ 2,365
Net income	$ 364	$ 27	$ 719	$ 409
Earnings attributable to Sempra Energy	$ 353	$ 16	$ 622	$ 379
Basic per-share amounts(2):				
Net income	$ 1.46	$ 0.11	$ 2.87	$ 1.63
Earnings attributable to Sempra Energy	$ 1.41	$ 0.06	$ 2.48	$ 1.51
Weighted-average common shares outstanding	249.7	250.1	250.4	250.6
Diluted per-share amounts(2):				
Net income	$ 1.45	$ 0.11	$ 2.85	$ 1.62
Earnings attributable to Sempra Energy	$ 1.40	$ 0.06	$ 2.46	$ 1.51
Weighted-average common shares outstanding	251.5	252.0	252.4	251.6
2015:				
Revenues	$ 2,682	$ 2,367	$ 2,481	$ 2,701
Expenses and other income	$ 2,076	$ 1,971	$ 2,211	$ 2,269
Net income	$ 458	$ 320	$ 282	$ 388
Earnings attributable to Sempra Energy	$ 437	$ 295	$ 248	$ 369
Basic per-share amounts(2):				
Net income	$ 1.85	$ 1.29	$ 1.14	$ 1.56
Earnings attributable to Sempra Energy	$ 1.76	$ 1.19	$ 1.00	$ 1.48
Weighted-average common shares outstanding	247.7	248.1	248.4	248.7
Diluted per-share amounts(2):				
Net income	$ 1.83	$ 1.27	$ 1.12	$ 1.54
Earnings attributable to Sempra Energy	$ 1.74	$ 1.17	$ 0.99	$ 1.47
Weighted-average common shares outstanding	251.2	251.5	251.0	251.5

(1) Reflects the prospective adoption of ASU 2016-09 effective January 1, 2016, as we discuss in Note 2.

(2) Earnings per share are computed independently for each of the quarters and therefore may not sum to the total for the year.

In September 2016, Sempra Mexico recorded a $617 million noncash gain ($432 million after-tax; $350 million after-tax and noncontrolling interests) associated with the remeasurement of its equity interest in GdC, which we discuss in Note 3.

In September 2016, Sempra Mexico recognized an impairment charge of $131 million ($111 million after-tax; $90 million after-tax and noncontrolling interests) related to assets held for sale at TdM, which we discuss in Notes 3 and 10.

In May 2016, Sempra LNG & Midstream recorded a pretax charge of $206 million ($123 million after-tax) related to permanently released pipeline capacity with Rockies Express and others, which we discuss in Note 15.

In March 2016, Sempra LNG & Midstream recognized an impairment charge of $44 million ($27 million after-tax) on its investment in Rockies Express, which we discuss in Notes 3 and 10.

SDG&E

(Dollars in millions)

	Quarters ended			
	March 31	June 30	September 30	December 31
2016(1):				
Operating revenues	$ 991	$ 992	$ 1,209	$ 1,061
Operating expenses	755	822	886	800
Operating income	$ 236	$ 170	$ 323	$ 261
Net income	$ 137	$ 87	$ 194	$ 147
(Earnings) losses attributable to noncontrolling interest	(1)	13	(11)	4
Earnings attributable to common shares	$ 136	$ 100	$ 183	$ 151
2015:				
Operating revenues	$ 966	$ 972	$ 1,230	$ 1,051
Operating expenses	684	745	930	802
Operating income	$ 282	$ 227	$ 300	$ 249
Net income	$ 151	$ 130	$ 182	$ 143
(Earnings) losses attributable to noncontrolling interest	(4)	(4)	(12)	1
Earnings attributable to common shares	$ 147	$ 126	$ 170	$ 144

(1) Reflects the prospective adoption of ASU 2016-09 effective January 1, 2016, as we discuss in Note 2.

SOCALGAS

(Dollars in millions)

	Quarters ended			
	March 31	June 30	September 30	December 31
2016(1):				
Operating revenues	$ 1,033	$ 617	$ 686	$ 1,135
Operating expenses	739	628	648	899
Operating income (loss)	$ 294	$ (11)	$ 38	$ 236
Net income	$ 199	$ —	$ —	$ 151
Dividends on preferred stock	—	(1)	—	—
Earnings (losses) attributable to common shares	$ 199	$ (1)	$ —	$ 151
2015:				
Operating revenues	$ 1,048	$ 780	$ 620	$ 1,041
Operating expenses	728	686	633	834
Operating income (loss)	$ 320	$ 94	$ (13)	$ 207
Net income (loss)	$ 214	$ 71	$ (8)	$ 143
Dividends on preferred stock	—	(1)	—	—
Earnings (losses) attributable to common shares	$ 214	$ 70	$ (8)	$ 143

(1) Reflects the prospective adoption of ASU 2016-09 effective January 1, 2016, as we discuss in Note 2.

SoCalGas recognizes annual authorized revenue for core natural gas customers using seasonal factors established in the Triennial Cost Allocation Proceeding. Accordingly, substantially all of SoCalGas' annual earnings are recognized in the first and fourth quarters each year.

GLOSSARY

2016 GRC	2016 General Rate Case
2016 GRC FD	2016 General Rate Case Final Decision
A4NR	Alliance for Nuclear Responsibility
AB	Assembly Bill
AFUDC	Allowance for funds used during construction
AOCI	Accumulated other comprehensive income (loss)
API	American Petroleum Institute
ARO	Asset retirement obligation
ASU	Accounting Standards Update
Bay Gas	Bay Gas Storage Company Ltd.
Bcf	Billion cubic feet
Blade	Blade Energy Partners
BMV	La Bolsa Mexicana de Valores, S.A.B. de C.V. (Mexican Stock Exchange)
Cal Fire	California Department of Forestry and Fire Protection
California Utilities	San Diego Gas & Electric Company and Southern California Gas Company
Cameron LNG JV	Cameron LNG Holdings, LLC
CARB	California Air Resources Board
CCA	Community Choice Aggregation
CCC	California Coastal Commission
CCM	Cost of capital adjustment mechanism
CEC	California Energy Commission
CENAGAS	Centro Nacional de Control de Gas
CFCA	Core fixed cost account
CFE	Comisión Federal de Electricidad (Federal Electricity Commission) (Mexico)
CFTC	U.S. Commodity Futures Trading Commission
Chilquinta Energía	Chilquinta Energía S.A. and its subsidiaries
CLF	Chilean Unidad de Fomento
CNE	Comisión Nacional de Energía (National Energy Commission) (Chile)
CNF	Cleveland National Forest
Con Edison Development	Consolidated Edison Development
CPCN	Certificate of Public Convenience and Necessity
CPI	Consumer Price Index
CPUC	California Public Utilities Commission
CRE	Comisión Reguladora de Energía (Energy Regulatory Commission) (Mexico)
CRRs	Congestion revenue rights
DEN	Ductos y Energéticos del Norte, S. de R.L. de C.V.
DOE	U.S. Department of Energy
DOGGR	California Department of Conservation's Division of Oil, Gas, and Geothermal Resources
DPH	Los Angeles County Department of Public Health
Ecogas	Ecogas México, S. de R.L. de C.V.
Edison	Southern California Edison Company
EIR	Environmental impact report
EIS	Environmental Impact Statement
Eletrans	Eletrans, collectively for Eletrans S.A. and Eletrans II S.A.
EMA	Energy Management Agreement
EnergySouth	EnergySouth Inc.
Enova	Enova Corporation
EPA	U.S. Environmental Protection Agency
EPC	Engineering, procurement and construction
EPS	Earnings per common share
ERRA	Energy Resource Recovery Account
EV	Electric vehicle
FERC	Federal Energy Regulatory Commission
FTA	Free Trade Agreement
Gazprom	Gazprom Marketing & Trading Mexico
GCIM	Gas Cost Incentive Mechanism
GdC	Gasoductos de Chihuahua S. de R.L. de C.V.
GHG	Greenhouse gas
GRC	General Rate Case
HLBV	Hypothetical liquidation at book value
HMRC	United Kingdom's Revenue and Customs Department
IEnova	Infraestructura Energética Nova, S.A.B. de C.V.
IMG	Infraestructura Marina del Golfo
IOU	Investor-owned utility
IRS	Internal Revenue Service
ISFSI	Independent spent fuel storage installation
ISO	California Independent System Operator, also known as CAISO
JBIC	Japan Bank for International Cooperation
Joint IOUs	Joint investor-owned utilities
JP Morgan	J.P. Morgan Chase & Co.
kV	Kilovolt
LIFO	Last-in first-out
LNG	Liquefied natural gas
LPG	Liquid petroleum gas
Luz del Sur	Luz del Sur S.A.A. and its subsidiaries
MHI	Mitsubishi Heavy Industries, Ltd., Mitsubishi Nuclear Energy Systems, Inc., and Mitsubishi Heavy Industries America, Inc.

Mississippi Hub	Mississippi Hub, LLC
MMBtu	Million British thermal units (of natural gas)
MMcf	Million cubic feet
Mobile Gas	Mobile Gas Service Corporation
Mtpa	Million tonnes per annum
MW	Megawatt
MWh	Megawatt hour
NAV	Net asset value
NDT	Nuclear Decommissioning Trusts
NEIL	Nuclear Electric Insurance Limited
NEM	Net energy metering
NEXI	Nippon Export and Investment Insurance
NOL	Net operating loss
NRC	Nuclear Regulatory Commission
OCI	Other comprehensive income (loss)
OII	Order Instituting Investigation
OMEC	Otay Mesa Energy Center
OMEC LLC	Otay Mesa Energy Center LLC
ORA	Office of Ratepayer Advocates
OSINERGMIN	Organismo Supervisor de la Inversión en Energía y Minería (Energy and Mining Investment Supervisory Body) (Peru)
Otay Mesa VIE	OMEC LLC VIE
OTC	Over-the-counter
PBOP	Other postretirement benefit plans
PBOP plan trusts	Other postretirement benefit plan trusts
PCB	Polychlorinated Biphenyl
PEMEX	Petróleos Mexicanos (Mexican state-owned oil company)
PFM	Petition for modification
PG&E	Pacific Gas and Electric Company
PHMSA	Pipeline and Hazardous Materials Safety Administration
PPA	Power purchase agreement
PP&E	Property, plant and equipment
PRP	Potentially Responsible Party
PSEP	Pipeline Safety Enhancement Plan
PTC	Production tax credits
RBS	The Royal Bank of Scotland plc
RBS SEE	RBS Sempra Energy Europe
RBS Sempra Commodities	RBS Sempra Commodities LLP
RECs	Renewable energy certificates
REX	Rockies Express pipeline
Rockies Express	Rockies Express Pipeline LLC
ROE	Return on equity
ROR	Rate of return
RPS	Renewables Portfolio Standard
RSAs	Restricted stock awards
RSUs	Restricted stock units
S&P	Standard & Poor’s
SB	Senate Bill
SCAQMD	South Coast Air Quality Management District
SDG&E	San Diego Gas & Electric Company
Securities Act	The U.S. Securities Act of 1933
SEDATU	Secretaría de Desarrollo Agrario, Territorial y Urbano
SFP	Secondary financial protection
SGRP	Steam Generator Replacement Project
SGS	Sempra Global Services, Inc.
Shell	Shell México Gas Natural
SoCalGas	Southern California Gas Company
SONGS	San Onofre Nuclear Generating Station
SONGS OII	CPUC’s Order Instituting Investigation (OII) into the SONGS Outage
SWPL	Southwest Powerlink
Tangguh PSC	Tangguh PSC Contractors
TdM	Termoeléctrica de Mexicali
Tecnored	Tecnored S.A.
Tecsur	Tecsur S.A.
TO4	Electric Transmission Formula Rate
TOU	Time-of-Use
TURN	The Utility Reform Network
U.S. GAAP	Accounting principles generally accepted in the United States of America
VaR	Value at risk
VAT	Value-added tax
Ventika	Ventika, S.A.P.I. de C.V. and Ventika II, S.A.P.I. de C.V. (collectively, Ventika)
VIE	Variable interest entity
WEMA	Wildfire Expense Memorandum Account
Willmut Gas	Willmut Gas Company

Exhibit 21.1
Sempra Energy
Schedule of Certain Subsidiaries
at December 31, 2016

Subsidiary	State of Incorporation or Other Jurisdiction
Enova Corporation	California
IEnova Gasoductos Holding, S. de R.L. de C.V	Mexico
Infraestructura Energética Nova, S. A.B.	Mexico
Luz del Sur S.A.A.	Peru
Pacific Enterprises	California
Pacific Enterprises International	California
San Diego Gas & Electric Company	California
Sempra Energy International	California
Sempra Energy Holdings III B.V.	Netherlands
Sempra Energy International Holdings N.V.	Netherlands
Sempra Energy Holdings XI B.V.	Netherlands
Sempra Global	Delaware
Semco Holdco, S. de R.L. de C.V.	Mexico
Southern California Gas Company	California

EXHIBIT 31.1

CERTIFICATION

I, Debra L. Reed, certify that:

1. I have reviewed this report on Form 10-K of Sempra Energy;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13(a)-15(f) and 15d-15(f)) for the registrant and have:

   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report, based on such evaluation; and

   d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):

   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

February 28, 2017

/s/ Debra L. Reed

Debra L. Reed

Chief Executive Officer

EXHIBIT 31.2

CERTIFICATION

I, J. Walker Martin, certify that:

1. I have reviewed this report on Form 10-K of Sempra Energy;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13(a)-15(f) and 15d-15(f)) for the registrant and have:

   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report, based on such evaluation; and

   d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):

   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

February 28, 2017

/s/ J. Walker Martin

J. Walker Martin

Chief Financial Officer

EXHIBIT 31.3

CERTIFICATION

I, Scott D. Drury, certify that:

1. I have reviewed this report on Form 10-K of San Diego Gas & Electric Company;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13(a)-15(f) and 15d-15(f)) for the registrant and have:

   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report, based on such evaluation; and

   d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):

   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

February 28, 2017

/s/ Scott D. Drury

Scott D. Drury

President

EXHIBIT 31.4

CERTIFICATION

I, Bruce A. Folkmann, certify that:

1. I have reviewed this report on Form 10-K of San Diego Gas & Electric Company;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13(a)-15(f) and 15d-15(f)) for the registrant and have:

   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report, based on such evaluation; and

   d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):

   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

February 28, 2017

/s/ Bruce A. Folkmann

Bruce A. Folkmann

Chief Financial Officer

EXHIBIT 31.5

CERTIFICATION

I, Patricia K. Wagner, certify that:

1. I have reviewed this report on Form 10-K of Southern California Gas Company;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13(a)-15(f) and 15d-15(f)) for the registrant and have:

   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report, based on such evaluation; and

   d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):

   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

February 28, 2017

/s/ Patricia K. Wagner

Patricia K. Wagner

Chief Executive Officer

EXHIBIT 31.6

CERTIFICATION

I, Bruce A. Folkmann, certify that:

1. I have reviewed this report on Form 10-K of Southern California Gas Company;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13(a)-15(f) and 15d-15(f)) for the registrant and have:

   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report, based on such evaluation; and

   d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):

   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

February 28, 2017

/s/ Bruce A. Folkmann

Bruce A. Folkmann

Chief Financial Officer

Exhibit 32.1

Statement of Chief Executive Officer

Pursuant to 18 U.S.C. Sec 1350, as created by Section 906 of the Sarbanes-Oxley Act of 2002, the undersigned Chief Executive Officer of Sempra Energy (the "Company") certifies that:

(i) the Annual Report on Form 10-K of the Company filed with the Securities and Exchange Commission for the year ended December 31, 2016 (the "Annual Report") fully complies with the requirements of Section 13(a) or Section 15(d), as applicable, of the Securities Exchange Act of 1934, as amended; and

(ii) the information contained in the Annual Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

February 28, 2017

/s/ Debra L. Reed

Debra L. Reed

Chief Executive Officer

Exhibit 32.2

Statement of Chief Financial Officer

Pursuant to 18 U.S.C. Sec 1350, as created by Section 906 of the Sarbanes-Oxley Act of 2002, the undersigned Chief Financial Officer of Sempra Energy (the "Company") certifies that:

(i) the Annual Report on Form 10-K of the Company filed with the Securities and Exchange Commission for the year ended December 31, 2016 (the "Annual Report") fully complies with the requirements of Section 13(a) or Section 15(d), as applicable, of the Securities Exchange Act of 1934, as amended; and

(ii) the information contained in the Annual Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

February 28, 2017

/s/ J. Walker Martin

J. Walker Martin

Chief Financial Officer

Exhibit 32.3

Statement of President

Pursuant to 18 U.S.C. Sec 1350, as created by Section 906 of the Sarbanes-Oxley Act of 2002, the undersigned President of San Diego Gas & Electric Company (the "Company") certifies that:

(i) the Annual Report on Form 10-K of the Company filed with the Securities and Exchange Commission for the year ended December 31, 2016 (the "Annual Report") fully complies with the requirements of Section 13(a) or Section 15(d), as applicable, of the Securities Exchange Act of 1934, as amended; and

(ii) the information contained in the Annual Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

February 28, 2017

/s/ Scott D. Drury

Scott D. Drury

President

Exhibit 32.4

Statement of Chief Financial Officer

Pursuant to 18 U.S.C. Sec 1350, as created by Section 906 of the Sarbanes-Oxley Act of 2002, the undersigned Chief Financial Officer of San Diego Gas & Electric Company (the "Company") certifies that:

(i) the Annual Report on Form 10-K of the Company filed with the Securities and Exchange Commission for the year ended December 31, 2016 (the "Annual Report") fully complies with the requirements of Section 13(a) or Section 15(d), as applicable, of the Securities Exchange Act of 1934, as amended; and

(ii) the information contained in the Annual Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

February 28, 2017

/s/ Bruce A. Folkmann

Bruce A. Folkmann

Chief Financial Officer

Exhibit 32.5

Statement of Chief Executive Officer

Pursuant to 18 U.S.C. Sec 1350, as created by Section 906 of the Sarbanes-Oxley Act of 2002, the undersigned Chief Executive Officer of Southern California Gas Company (the "Company") certifies that:

(i) the Annual Report on Form 10-K of the Company filed with the Securities and Exchange Commission for the year ended December 31, 2016 (the "Annual Report") fully complies with the requirements of Section 13(a) or Section 15(d), as applicable, of the Securities Exchange Act of 1934, as amended; and

(ii) the information contained in the Annual Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

February 28, 2017

/s/ Patricia K. Wagner

Patricia K. Wagner

Chief Executive Officer

Exhibit 32.6

Statement of Chief Financial Officer

Pursuant to 18 U.S.C. Sec 1350, as created by Section 906 of the Sarbanes-Oxley Act of 2002, the undersigned Chief Financial Officer of Southern California Gas Company (the "Company") certifies that:

(i) the Annual Report on Form 10-K of the Company filed with the Securities and Exchange Commission for the year ended December 31, 2016 (the "Annual Report") fully complies with the requirements of Section 13(a) or Section 15(d), as applicable, of the Securities Exchange Act of 1934, as amended; and

(ii) the information contained in the Annual Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

February 28, 2017

/s/ Bruce A. Folkmann

Bruce A. Folkmann

Chief Financial Officer