

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

FORM 10-Q

(Mark One)

QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the quarterly period ended March 31, 2020

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 Registrant as Specified in its Charter, Address of Principal Executive Office and Telephone Number	State of Incorporation	I.R.S. Employer Identification No.	Former name, former address and former fiscal year, if changed since last report
1-14201	SEMPRA ENERGY 488 8th Avenue San Diego, California 92101 (619) 696-2000	California	33-0732627	No change
				
1-03779	SAN DIEGO GAS & ELECTRIC COMPANY 8326 Century Park Court San Diego, California 92123 (619) 696-2000	California	95-1184800	No change
				
1-01402	SOUTHERN CALIFORNIA GAS COMPANY 555 West Fifth Street Los Angeles, California 90013 (213) 244-1200	California	95-1240705	No change
				

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

Title of Each Class	Trading Symbol	Name of Each Exchange on Which Registered
SEMPRA ENERGY:		
Sempra Energy Common Stock, without par value	SRE	NYSE
Sempra Energy 6% Mandatory Convertible Preferred Stock, Series A, \$100 liquidation preference	SREPRA	NYSE
Sempra Energy 6.75% Mandatory Convertible Preferred Stock, Series B, \$100 liquidation preference	SREPRB	NYSE
Sempra Energy 5.75% Junior Subordinated Notes Due 2079, \$25 par value	SREA	NYSE

SAN DIEGO GAS & ELECTRIC COMPANY:

None

SOUTHERN CALIFORNIA GAS COMPANY:

None

Indicate by check mark whether the registrant (1) has 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) has been subject to such filing requirements for the past 90 days.

Sempra Energy	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
San Diego Gas & Electric Company	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Southern California Gas Company	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted 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 such files).

Sempra Energy	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
San Diego Gas & Electric Company	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Southern California Gas Company	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>

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

Sempra Energy:

Large Accelerated Filer Accelerated Filer Non-accelerated Filer Smaller Reporting Company Emerging Growth Company

San Diego Gas & Electric Company:

Large Accelerated Filer Accelerated Filer Non-accelerated Filer Smaller Reporting Company Emerging Growth Company

Southern California Gas Company:

Large Accelerated Filer Accelerated Filer Non-accelerated Filer Smaller Reporting Company Emerging Growth Company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Sempra Energy	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
San Diego Gas & Electric Company	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
Southern California Gas Company	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>

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

Sempra Energy	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
San Diego Gas & Electric Company	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
Southern California Gas Company	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>

Indicate the number of shares outstanding of each of the issuers’ classes of common stock, as of the latest practicable date.

Common stock outstanding on April 29, 2020:

Sempra Energy	292,533,413 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

SEMPRA ENERGY FORM 10-Q
SAN DIEGO GAS & ELECTRIC COMPANY FORM 10-Q
SOUTHERN CALIFORNIA GAS COMPANY FORM 10-Q
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This combined report 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 statements herein only as to itself and its consolidated subsidiaries and makes no statement 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 Part I – Item 1 sections are provided for each reporting company, except for the Notes to Condensed Consolidated Financial Statements. The Notes to Condensed Consolidated Financial Statements for all of the reporting companies are combined. All Items other than Part I – Item 1 are combined for the reporting companies.

The following terms and abbreviations appearing in the text of this report have the meanings indicated below.

GLOSSARY

2019 GRC FD	final decision in the California Utilities' 2019 General Rate Case
AB	California Assembly Bill
AFUDC	allowance for funds used during construction
Annual Report	Annual Report on Form 10-K for the year ended December 31, 2019
AOCI	accumulated other comprehensive income (loss)
ARO	asset retirement obligation
ASC	Accounting Standards Codification
ASU	Accounting Standards Update
Bay Gas	Bay Gas Storage Company, Ltd.
Bechtel	Bechtel Oil, Gas and Chemicals, Inc.
Blade	Blade Energy Partners
bps	basis points
CalGEM	California Geologic Energy Management Division (formerly known as Division of Oil, Gas, and Geothermal Resources or DOGGR)
California Utilities	San Diego Gas & Electric Company and Southern California Gas Company, collectively
Cameron LNG JV	Cameron LNG Holdings, LLC
CARB	California Air Resources Board
CCM	cost of capital adjustment mechanism
CFE	Comisión Federal de Electricidad (Federal Electricity Commission of Mexico)
Chilquinta Energía	Chilquinta Energía S.A. and its subsidiaries
COVID-19	Coronavirus disease 2019
CPPMA	COVID-19 Pandemic Protections Memorandum Account
CPUC	California Public Utilities Commission
CRR	congestion revenue right
DOE	U.S. Department of Energy
ECA LNG JV	ECA LNG Holdings B.V.
ECA LNG Regasification	Energía Costa Azul, S. de R.L. de C.V. regasification
Ecogas	Ecogas México, S. de R.L. de C.V.
Edison	Southern California Edison Company, a subsidiary of Edison International
EFH	Energy Future Holdings Corp. (renamed Sempra Texas Holdings Corp.)
Eletrans	Eletrans S.A., Eletrans II S.A. and Eletrans III S.A., collectively
EPC	engineering, procurement and construction
EPS	earnings per common share
ESJ	Energía Sierra Juárez, S. de R.L. de C.V.
ETR	effective income tax rate
FERC	Federal Energy Regulatory Commission
Fitch	Fitch Ratings
FTA	Free Trade Agreement
GCIM	Gas Cost Incentive Mechanism
GHG	greenhouse gas
GRC	General Rate Case
HMRC	United Kingdom's Revenue and Customs Department
IEnova	Infraestructura Energética Nova, S.A.B. de C.V.
IMG JV	Infraestructura Marina del Golfo
IOU	investor-owned utility
IRS	Internal Revenue Service
ISFSI	independent spent fuel storage installation
ISO	Independent System Operator
JV	joint venture
LA Superior Court	Los Angeles County Superior Court
Leak	the leak at the SoCalGas Aliso Canyon natural gas storage facility injection-and-withdrawal well, SS25, discovered by SoCalGas on October 23, 2015
LIBOR	London Interbank Offered Rate
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

GLOSSARY (CONTINUED)

MD&A	Management's Discussion and Analysis of Financial Condition and Results of Operations
Mississippi Hub	Mississippi Hub, LLC
MMBtu	million British thermal units (of natural gas)
Moody's	Moody's Investors Service
MOU	Memorandum of Understanding
Mtpa	million tonnes per annum
MWh	megawatt hour
NCI	noncontrolling interest(s)
NDT	nuclear decommissioning trusts
NEIL	Nuclear Electric Insurance Limited
NOL	net operating loss
OCI	other comprehensive income (loss)
OII	Order Instituting Investigation
O&M	operation and maintenance expense
Oncor	Oncor Electric Delivery Company LLC
Oncor Holdings	Oncor Electric Delivery Holdings Company LLC
Otay Mesa VIE	Otay Mesa Energy Center LLC VIE
PPA	power purchase agreement
PP&E	property, plant and equipment
PUCT	Public Utility Commission of Texas
RBS	The Royal Bank of Scotland plc
RBS SEE	RBS Sempra Energy Europe
RBS Sempra Commodities	RBS Sempra Commodities LLP
ROE	return on equity
ROU	right-of-use
RSU	restricted stock unit
SB	California Senate Bill
SDG&E	San Diego Gas & Electric Company
SEC	U.S. Securities and Exchange Commission
SEDATU	Secretaría de Desarrollo Agrario, Territorial y Urbano (Mexican agency in charge of agriculture, land and urban development)
Sempra Global	holding company for most of Sempra Energy's subsidiaries not subject to California or Texas utility regulation
series A preferred stock	Sempra Energy's 6% mandatory convertible preferred stock, series A
series B preferred stock	Sempra Energy's 6.75% mandatory convertible preferred stock, series B
Sharyland Holdings	Sharyland Holdings, L.P.
Sharyland Utilities	Sharyland Utilities, L.L.C.
SoCalGas	Southern California Gas Company
SONGS	San Onofre Nuclear Generating Station
S&P	Standard & Poor's
TAG JV	TAG Norte Holding, S. de R.L. de C.V.
TCJA	Tax Cuts and Jobs Act of 2017
TdM	Termoeléctrica de Mexicali
TechnipFMC	TP Oil & Gas Mexico, S. De R.L. De C.V., an affiliate of TechnipFMC plc
Tecnored	Tecnored S.A.
Tecsur	Tecsur S.A.
TO4	Electric Transmission Owner Formula Rate, effective through May 31, 2019
TO5	Electric Transmission Owner Formula Rate, effective June 1, 2019
TTHC	Texas Transmission Holdings Corporation
TTI	Texas Transmission Investment LLC
U.S. GAAP	accounting principles generally accepted in the United States of America
VAT	value-added tax
Ventika	Ventika, S.A.P.I. de C.V. and Ventika II, S.A.P.I. de C.V., collectively
VIE	variable interest entity
Wildfire Fund	the fund established pursuant to AB 1054
Wildfire Legislation	AB 1054 and AB 111

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 on assumptions with respect to the future, involve risks and uncertainties, and are not guarantees of performance. Future results may differ materially from those expressed in the forward-looking statements. 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, forward-looking statements can be identified by words such as “believes,” “expects,” “anticipates,” “plans,” “estimates,” “projects,” “forecasts,” “should,” “could,” “would,” “will,” “confident,” “may,” “can,” “potential,” “possible,” “proposed,” “target,” “pursue,” “outlook,” “maintain,” or similar expressions, or when we discuss our guidance, strategy, goals, vision, mission, opportunities, projections or intentions.

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

- California wildfires and the risk that we may be found liable for damages regardless of fault and the risk that we may not be able to recover any such costs from insurance, the Wildfire Fund or in rates from customers;
- decisions, investigations, regulations, issuances of permits and other authorizations, renewal of franchises, and other actions by the CFE, CPUC, DOE, PUCT, regulatory and governmental bodies and jurisdictions in the U.S. and other countries in which we operate;
- the success of business development efforts, construction projects and major acquisitions and divestitures, including risks in (i) the ability to make a final investment decision and completing construction projects on schedule and budget; (ii) obtaining the consent of partners; (iii) counterparties’ financial or other ability to fulfill contractual commitments; (iv) the ability to complete contemplated acquisitions and/or divestitures; and (v) the ability to realize anticipated benefits from any of these efforts once completed;
- the impact of the COVID-19 pandemic on our (i) ability to commence and complete capital and other projects and obtain regulatory approvals, (ii) supply chain and current and prospective counterparties, contractors, customers, employees and partners, (iii) liquidity, resulting from bill payment challenges experienced by our customers, decreased stability and accessibility of the capital markets and other factors, and (iv) ability to sustain operations and satisfy compliance requirements due to social distancing measures or if employee absenteeism were to increase significantly;
- the resolution of civil and criminal litigation, regulatory investigations and proceedings, and arbitrations;
- actions by credit rating agencies to downgrade our credit ratings or to place those ratings on negative outlook and our ability to borrow at favorable interest rates;
- moves to reduce or eliminate reliance on natural gas and the impact of the extreme volatility and unprecedented decline of oil prices on our businesses and development projects;
- weather, natural disasters, accidents, equipment failures, computer system outages and other events that disrupt our operations, damage our facilities and systems, cause the release of harmful materials, cause fires and subject us to 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), may be disputed by insurers or may otherwise not be recoverable through regulatory mechanisms or may impact our ability to obtain satisfactory levels of affordable insurance;
- the availability of electric power and natural gas and natural gas storage capacity, including disruptions caused by failures in the transmission grid, limitations on the withdrawal or injection of natural gas from or into storage facilities, and equipment failures;
- 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;
- expropriation of assets, the failure of foreign governments and state-owned entities to honor the terms of contracts, and property disputes;
- the impact at SDG&E on competitive customer rates and reliability due to the growth in distributed power generation and from departing retail load resulting from customers transferring to Direct Access, Community Choice Aggregation or other forms of distributed power generation and the risk of nonrecovery for stranded assets and contractual obligations;

- Oncor's ability to eliminate or reduce its quarterly dividends due to regulatory and governance requirements and commitments, including by actions of Oncor's independent directors or a minority member director;
- volatility in foreign currency exchange, interest and inflation rates and commodity prices and our ability to effectively hedge the risk of such volatility;
- changes in trade policies, laws and regulations, including tariffs and revisions to or replacement of international trade agreements, such as the North American Free Trade Agreement, that may increase our costs or impair our ability to resolve trade disputes;
- the impact of changes to federal and state tax laws and our ability to mitigate adverse impacts; 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, in our Annual Report and in other reports that we file with the SEC.

PART I – FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

SEMPRA ENERGY

CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS

(Dollars in millions, except per share amounts; shares in thousands)

	Three months ended March 31,	
	2020	2019
	(unaudited)	
REVENUES		
Utilities	\$ 2,665	\$ 2,515
Energy-related businesses	364	383
Total revenues	3,029	2,898
EXPENSES AND OTHER INCOME		
Utilities:		
Cost of natural gas	(337)	(531)
Cost of electric fuel and purchased power	(229)	(256)
Energy-related businesses cost of sales	(59)	(108)
Operation and maintenance	(951)	(832)
Depreciation and amortization	(412)	(383)
Franchise fees and other taxes	(137)	(130)
Other (expense) income, net	(254)	82
Interest income	27	21
Interest expense	(280)	(260)
Income from continuing operations before income taxes and equity earnings	397	501
Income tax benefit (expense)	207	(42)
Equity earnings	263	101
Income from continuing operations, net of income tax	867	560
Income (loss) from discontinued operations, net of income tax	80	(42)
Net income	947	518
Earnings attributable to noncontrolling interests	(151)	(41)
Mandatory convertible preferred stock dividends	(36)	(36)
Earnings attributable to common shares	\$ 760	\$ 441
Basic EPS:		
Earnings from continuing operations	\$ 2.35	\$ 1.79
Earnings (losses) from discontinued operations	\$ 0.25	\$ (0.19)
Earnings	\$ 2.60	\$ 1.60
Weighted-average common shares outstanding	292,790	274,674
Diluted EPS:		
Earnings from continuing operations	\$ 2.30	\$ 1.78
Earnings (losses) from discontinued operations	\$ 0.23	\$ (0.19)
Earnings	\$ 2.53	\$ 1.59
Weighted-average common shares outstanding	313,925	277,228

See Notes to Condensed Consolidated Financial Statements.

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

	Sempra Energy shareholders' equity				Total
	Pretax amount	Income tax benefit (expense)	Net-of-tax amount	Noncontrolling interests (after-tax)	
	(unaudited)				
Three months ended March 31, 2020 and 2019					
2020:					
Net income	\$ 610	\$ 186	\$ 796	\$ 151	\$ 947
Other comprehensive income (loss):					
Foreign currency translation adjustments	(138)	—	(138)	(20)	(158)
Financial instruments	(188)	53	(135)	(12)	(147)
Pension and other postretirement benefits	24	(2)	22	—	22
Total other comprehensive loss	(302)	51	(251)	(32)	(283)
Comprehensive income	\$ 308	\$ 237	\$ 545	\$ 119	\$ 664
2019:					
Net income	\$ 670	\$ (193)	\$ 477	\$ 41	\$ 518
Other comprehensive income (loss):					
Foreign currency translation adjustments	32	—	32	4	36
Financial instruments	(68)	22	(46)	(4)	(50)
Pension and other postretirement benefits	4	(1)	3	—	3
Total other comprehensive loss	(32)	21	(11)	—	(11)
Comprehensive income	\$ 638	\$ (172)	\$ 466	\$ 41	\$ 507

See Notes to Condensed Consolidated Financial Statements.

SEMPRA ENERGY
CONDENSED CONSOLIDATED BALANCE SHEETS

(Dollars in millions)

	March 31, 2020	December 31, 2019 ⁽¹⁾
	(unaudited)	
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 2,247	\$ 108
Restricted cash	23	31
Accounts receivable – trade, net	1,222	1,261
Accounts receivable – other, net	369	455
Due from unconsolidated affiliates	64	32
Income taxes receivable	120	112
Inventories	217	277
Regulatory assets	210	222
Greenhouse gas allowances	79	72
Assets held for sale in discontinued operations	566	445
Other current assets	307	324
Total current assets	5,424	3,339
Other assets:		
Restricted cash	3	3
Due from unconsolidated affiliates	592	742
Regulatory assets	1,837	1,930
Nuclear decommissioning trusts	987	1,082
Investment in Oncor Holdings	11,619	11,519
Other investments	2,215	2,103
Goodwill	1,602	1,602
Other intangible assets	211	213
Dedicated assets in support of certain benefit plans	413	488
Insurance receivable for Aliso Canyon costs	511	339
Deferred income taxes	265	155
Greenhouse gas allowances	515	470
Right-of-use assets – operating leases	592	591
Wildfire fund	385	392
Assets held for sale in discontinued operations	3,364	3,513
Other long-term assets	691	732
Total other assets	25,802	25,874
Property, plant and equipment:		
Property, plant and equipment	50,185	49,329
Less accumulated depreciation and amortization	(13,118)	(12,877)
Property, plant and equipment, net	37,067	36,452
Total assets	\$ 68,293	\$ 65,665

⁽¹⁾ Derived from audited financial statements.
See Notes to Condensed Consolidated Financial Statements.

SEMPRA ENERGY
CONDENSED CONSOLIDATED BALANCE SHEETS (CONTINUED)

(Dollars in millions)

	March 31, 2020	December 31, 2019 ⁽¹⁾
	(unaudited)	
LIABILITIES AND EQUITY		
Current liabilities:		
Short-term debt	\$ 5,742	\$ 3,505
Accounts payable – trade	1,038	1,234
Accounts payable – other	163	179
Due to unconsolidated affiliates	8	5
Dividends and interest payable	548	515
Accrued compensation and benefits	264	476
Regulatory liabilities	444	319
Current portion of long-term debt and finance leases	2,079	1,526
Reserve for Aliso Canyon costs	284	9
Greenhouse gas obligations	79	72
Liabilities held for sale in discontinued operations	538	444
Other current liabilities	990	866
Total current liabilities	12,177	9,150
Long-term debt and finance leases	20,198	20,785
Deferred credits and other liabilities:		
Due to unconsolidated affiliates	263	195
Pension and other postretirement benefit plan obligations, net of plan assets	1,085	1,067
Deferred income taxes	2,466	2,577
Deferred investment tax credits	21	21
Regulatory liabilities	3,533	3,741
Asset retirement obligations	2,945	2,923
Greenhouse gas obligations	348	301
Liabilities held for sale in discontinued operations	1,006	1,052
Deferred credits and other	2,136	2,048
Total deferred credits and other liabilities	13,803	13,925
Commitments and contingencies (Note 11)		
Equity:		
Preferred stock (50 million shares authorized):		
6% mandatory convertible preferred stock, series A (17.25 million shares issued and outstanding)	1,693	1,693
6.75% mandatory convertible preferred stock, series B (5.75 million shares issued and outstanding)	565	565
Common stock (750 million shares authorized; 292 million shares outstanding; no par value)	7,472	7,480
Retained earnings	11,577	11,130
Accumulated other comprehensive income (loss)	(1,190)	(939)
Total Sempra Energy shareholders' equity	20,117	19,929
Preferred stock of subsidiary	20	20
Other noncontrolling interests	1,978	1,856
Total equity	22,115	21,805
Total liabilities and equity	\$ 68,293	\$ 65,665

⁽¹⁾ Derived from audited financial statements.

See Notes to Condensed Consolidated Financial Statements.

SEMPRA ENERGY
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS

(Dollars in millions)

	Three months ended March 31,	
	2020	2019
	(unaudited)	
CASH FLOWS FROM OPERATING ACTIVITIES		
Net income	\$ 947	\$ 518
Less: (Income) loss from discontinued operations, net of income tax	(80)	42
Income from continuing operations, net of income tax	867	560
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	412	383
Deferred income taxes and investment tax credits	(243)	24
Equity earnings	(263)	(101)
Foreign currency transaction losses (gains), net	123	(7)
Share-based compensation expense	22	21
Other	124	(7)
Intercompany activities with discontinued operations, net	—	31
Net change in other working capital components	217	169
Insurance receivable for Aliso Canyon costs	(172)	(16)
Changes in other noncurrent assets and liabilities, net	163	(199)
Net cash provided by continuing operations	1,250	858
Net cash provided by discontinued operations	68	93
Net cash provided by operating activities	1,318	951
CASH FLOWS FROM INVESTING ACTIVITIES		
Expenditures for property, plant and equipment	(1,010)	(783)
Expenditures for investments and acquisitions	(86)	(94)
Proceeds from sale of assets	5	327
Purchases of nuclear decommissioning trust assets	(552)	(225)
Proceeds from sales of nuclear decommissioning trust assets	552	225
Advances to unconsolidated affiliates	(30)	—
Repayments of advances to unconsolidated affiliates	—	3
Intercompany activities with discontinued operations, net	(3)	—
Other	8	7
Net cash used in continuing operations	(1,116)	(540)
Net cash used in discontinued operations	(65)	(70)
Net cash used in investing activities	(1,181)	(610)

See Notes to Condensed Consolidated Financial Statements.

SEMPRA ENERGY

CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS (CONTINUED)

(Dollars in millions)

	Three months ended March 31,	
	2020	2019
	(unaudited)	
CASH FLOWS FROM FINANCING ACTIVITIES		
Common dividends paid	(269)	(232)
Preferred dividends paid	(36)	(36)
Issuances of common stock	11	11
Repurchases of common stock	(57)	(14)
Issuances of debt (maturities greater than 90 days)	1,619	304
Payments on debt (maturities greater than 90 days) and finance leases	(1,433)	(837)
Increase in short-term debt, net	2,127	497
Advances from unconsolidated affiliates	64	—
Purchases of noncontrolling interests	(16)	(26)
Intercompany activities with discontinued operations, net	(2)	(2)
Other	(5)	(1)
Net cash provided by (used in) continuing operations	2,003	(336)
Net cash provided by (used in) discontinued operations	111	(45)
Net cash provided by (used in) financing activities	2,114	(381)
Effect of exchange rate changes in continuing operations	(6)	—
Effect of exchange rate changes in discontinued operations	(8)	1
Effect of exchange rate changes on cash, cash equivalents and restricted cash	(14)	1
Increase (decrease) in cash, cash equivalents and restricted cash, including discontinued operations	2,237	(39)
Cash, cash equivalents and restricted cash, including discontinued operations, January 1	217	246
Cash, cash equivalents and restricted cash, including discontinued operations, March 31	\$ 2,454	\$ 207
SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION		
Interest payments, net of amounts capitalized	\$ 263	\$ 257
Income tax payments, net of refunds	68	16
SUPPLEMENTAL DISCLOSURE OF NONCASH INVESTING AND FINANCING ACTIVITIES		
Accrued capital expenditures	\$ 437	\$ 388
Increase in finance lease obligations for investment in property, plant and equipment	20	7
Equitization of long-term debt for deficit held by NCI	22	—
Preferred dividends declared but not paid	36	36
Common dividends issued in stock	14	13
Common dividends declared but not paid	306	265

See Notes to Condensed Consolidated Financial Statements.

SEMPRA ENERGY
CONDENSED CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY
(Dollars in millions)

	Preferred stock	Common stock	Retained earnings	Accumulated other comprehensive income (loss)	Sempra Energy shareholders' equity	Non-controlling interests	Total equity
(unaudited)							
Three months ended March 31, 2020							
Balance at December 31, 2019	\$ 2,258	\$ 7,480	\$ 11,130	\$ (939)	\$ 19,929	\$ 1,876	\$ 21,805
Cumulative-effect adjustment from change in accounting principle			(7)		(7)	(2)	(9)
Net income			796		796	151	947
Other comprehensive loss				(251)	(251)	(32)	(283)
Share-based compensation expense		22			22		22
Dividends declared:							
Series A preferred stock (\$1.50/share)			(26)		(26)		(26)
Series B preferred stock (\$1.69/share)			(10)		(10)		(10)
Common stock (\$1.05/share)			(306)		(306)		(306)
Issuances of common stock		25			25		25
Repurchases of common stock		(57)			(57)		(57)
Noncontrolling interest activities:							
Purchases		2			2	(18)	(16)
Acquisition						1	1
Equitization of long-term debt for deficit held by NCI						22	22
Balance at March 31, 2020	\$ 2,258	\$ 7,472	\$ 11,577	\$ (1,190)	\$ 20,117	\$ 1,998	\$ 22,115
Three months ended March 31, 2019							
Balance at December 31, 2018	\$ 2,258	\$ 5,540	\$ 10,104	\$ (764)	\$ 17,138	\$ 2,110	\$ 19,248
Cumulative-effect adjustments from change in accounting principles			57	(42)	15		15
Net income			477		477	41	518
Other comprehensive loss				(11)	(11)		(11)
Share-based compensation expense		21			21		21
Dividends declared:							
Series A preferred stock (\$1.50/share)			(26)		(26)		(26)
Series B preferred stock (\$1.69/share)			(10)		(10)		(10)
Common stock (\$0.97/share)			(265)		(265)		(265)
Issuances of common stock		24			24		24
Repurchases of common stock		(14)			(14)		(14)
Noncontrolling interest activities:							
Distributions						(4)	(4)
Purchases		(3)			(3)	(23)	(26)
Balance at March 31, 2019	\$ 2,258	\$ 5,568	\$ 10,337	\$ (817)	\$ 17,346	\$ 2,124	\$ 19,470

See Notes to Condensed Consolidated Financial Statements.

SAN DIEGO GAS & ELECTRIC COMPANY
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS

(Dollars in millions)

	Three months ended March 31,	
	2020	2019
	(unaudited)	
Operating revenues		
Electric	\$ 1,050	\$ 940
Natural gas	219	205
Total operating revenues	1,269	1,145
Operating expenses		
Cost of electric fuel and purchased power	231	258
Cost of natural gas	60	79
Operation and maintenance	310	286
Depreciation and amortization	201	186
Franchise fees and other taxes	78	74
Total operating expenses	880	883
Operating income	389	262
Other income, net	31	22
Interest income	1	1
Interest expense	(101)	(103)
Income before income taxes	320	182
Income tax expense	(58)	(5)
Net income	262	177
Earnings attributable to noncontrolling interest	—	(1)
Earnings attributable to common shares	\$ 262	\$ 176

See Notes to Condensed Consolidated Financial Statements.

SAN DIEGO GAS & ELECTRIC COMPANY
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)

(Dollars in millions)

	SDG&E shareholder's equity				Noncontrolling interest (after-tax)	Total
	Pretax amount	Income tax expense	Net-of-tax amount			
(unaudited)						
Three months ended March 31, 2020 and 2019						
2020:						
Net income/Comprehensive income	\$ 320	\$ (58)	\$ 262	\$ —	\$ 262	
2019:						
Net income	\$ 181	\$ (5)	\$ 176	\$ 1	\$ 177	
Other comprehensive income (loss):						
Financial instruments	—	—	—	1	1	
Total other comprehensive income	—	—	—	1	1	
Comprehensive income	\$ 181	\$ (5)	\$ 176	\$ 2	\$ 178	

See Notes to Condensed Consolidated Financial Statements.

SAN DIEGO GAS & ELECTRIC COMPANY
CONDENSED CONSOLIDATED BALANCE SHEETS

(Dollars in millions)

	March 31, 2020	December 31, 2019 ⁽¹⁾
	(unaudited)	
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 203	\$ 10
Accounts receivable – trade, net	411	398
Accounts receivable – other, net	111	119
Income taxes receivable, net	61	128
Inventories	93	94
Prepaid expenses	105	120
Regulatory assets	198	209
Fixed-price contracts and other derivatives	33	43
Greenhouse gas allowances	13	13
Other current assets	27	24
Total current assets	1,255	1,158
Other assets:		
Regulatory assets	457	440
Nuclear decommissioning trusts	987	1,082
Greenhouse gas allowances	189	189
Right-of-use assets – operating leases	123	130
Wildfire fund	385	392
Other long-term assets	194	202
Total other assets	2,335	2,435
Property, plant and equipment:		
Property, plant and equipment	22,850	22,504
Less accumulated depreciation and amortization	(5,656)	(5,537)
Property, plant and equipment, net	17,194	16,967
Total assets	\$ 20,784	\$ 20,560

⁽¹⁾ Derived from audited financial statements.

See Notes to Condensed Consolidated Financial Statements.

SAN DIEGO GAS & ELECTRIC COMPANY
CONDENSED CONSOLIDATED BALANCE SHEETS (CONTINUED)

(Dollars in millions)

	March 31, 2020	December 31, 2019 ⁽¹⁾
	(unaudited)	
LIABILITIES AND EQUITY		
Current liabilities:		
Short-term debt	\$ —	\$ 80
Accounts payable	462	496
Due to unconsolidated affiliates	59	53
Interest payable	63	43
Accrued compensation and benefits	59	138
Accrued franchise fees	37	53
Regulatory liabilities	69	76
Current portion of long-term debt and finance leases	57	56
Customer deposits	74	74
Greenhouse gas obligations	13	13
Asset retirement obligations	105	95
Other current liabilities	186	133
Total current liabilities	1,184	1,310
Long-term debt and finance leases	6,687	6,306
Deferred credits and other liabilities:		
Pension obligation, net of plan assets	156	153
Deferred income taxes	1,880	1,848
Deferred investment tax credits	14	14
Regulatory liabilities	2,200	2,319
Asset retirement obligations	760	771
Greenhouse gas obligations	72	62
Deferred credits and other	669	677
Total deferred credits and other liabilities	5,751	5,844
Commitments and contingencies (Note 11)		
Shareholder's equity:		
Preferred stock (45 million shares authorized; none issued)	—	—
Common stock (255 million shares authorized; 117 million shares outstanding; no par value)	1,660	1,660
Retained earnings	5,518	5,456
Accumulated other comprehensive income (loss)	(16)	(16)
Total shareholder's equity	7,162	7,100
Total liabilities and shareholder's equity	\$ 20,784	\$ 20,560

⁽¹⁾ Derived from audited financial statements.

See Notes to Condensed Consolidated Financial Statements.

SAN DIEGO GAS & ELECTRIC COMPANY
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS

(Dollars in millions)

	Three months ended March 31,	
	2020	2019
	(unaudited)	
CASH FLOWS FROM OPERATING ACTIVITIES		
Net income	\$ 262	\$ 177
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	201	186
Deferred income taxes and investment tax credits	(8)	(28)
Other	(10)	1
Net change in working capital components	73	96
Changes in other noncurrent assets and liabilities, net	(20)	11
Net cash provided by operating activities	498	443
CASH FLOWS FROM INVESTING ACTIVITIES		
Expenditures for property, plant and equipment	(402)	(356)
Purchases of nuclear decommissioning trust assets	(552)	(225)
Proceeds from sales of nuclear decommissioning trust assets	552	225
Net cash used in investing activities	(402)	(356)
CASH FLOWS FROM FINANCING ACTIVITIES		
Common dividends paid	(200)	—
Issuances of debt (maturities greater than 90 days)	400	—
Payments on debt (maturities greater than 90 days) and finance leases	(23)	(22)
Decrease in short-term debt, net	(80)	(53)
Net cash provided by (used in) financing activities	97	(75)
Increase in cash, cash equivalents and restricted cash	193	12
Cash, cash equivalents and restricted cash, January 1	10	37
Cash, cash equivalents and restricted cash, March 31	\$ 203	\$ 49
SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION		
Interest payments, net of amounts capitalized	\$ 79	\$ 86
SUPPLEMENTAL DISCLOSURE OF NONCASH INVESTING AND FINANCING ACTIVITIES		
Accrued capital expenditures	\$ 128	\$ 100
Increase in finance lease obligations for investment in property, plant and equipment	4	4

See Notes to Condensed Consolidated Financial Statements.

SAN DIEGO GAS & ELECTRIC COMPANY
CONDENSED CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY

(Dollars in millions)

	Common stock	Retained earnings	Accumulated other comprehensive income (loss)	SDG&E shareholder's equity	Noncontrolling interest	Total equity
(unaudited)						
Three months ended March 31, 2020						
Balance at December 31, 2019	\$ 1,660	\$ 5,456	\$ (16)	\$ 7,100	\$ —	\$ 7,100
Net income		262		262	—	262
Common stock dividends declared (\$1.72/share)		(200)		(200)		(200)
Balance at March 31, 2020	\$ 1,660	\$ 5,518	\$ (16)	\$ 7,162	\$ —	\$ 7,162
Three months ended March 31, 2019						
Balance at December 31, 2018	\$ 1,338	\$ 4,687	\$ (10)	\$ 6,015	\$ 100	\$ 6,115
Cumulative-effect adjustment from change in accounting principle		2	(2)	—		—
Net income		176		176	1	177
Other comprehensive income			—	—	1	1
Balance at March 31, 2019	\$ 1,338	\$ 4,865	\$ (12)	\$ 6,191	\$ 102	\$ 6,293

See Notes to Condensed Consolidated Financial Statements.

SOUTHERN CALIFORNIA GAS COMPANY
CONDENSED STATEMENTS OF OPERATIONS

(Dollars in millions)

	Three months ended March 31,	
	2020	2019
	(unaudited)	
Operating revenues	\$ 1,395	\$ 1,361
Operating expenses		
Cost of natural gas	278	455
Operation and maintenance	543	410
Depreciation and amortization	159	147
Franchise fees and other taxes	51	48
Total operating expenses	1,031	1,060
Operating income	364	301
Other income, net	30	16
Interest income	1	—
Interest expense	(40)	(34)
Income before income taxes	355	283
Income tax expense	(52)	(19)
Net income/Earnings attributable to common shares	\$ 303	\$ 264

See Notes to Condensed Financial Statements.

SOUTHERN CALIFORNIA GAS COMPANY
CONDENSED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)

(Dollars in millions)

	Pretax amount	Income tax expense (unaudited)	Net-of-tax amount
Three months ended March 31, 2020 and 2019			
2020:			
Net income/Comprehensive income	\$ 355	\$ (52)	\$ 303
2019:			
Net income/Comprehensive income	\$ 283	\$ (19)	\$ 264

See Notes to Condensed Financial Statements.

SOUTHERN CALIFORNIA GAS COMPANY
CONDENSED BALANCE SHEETS

(Dollars in millions)

	March 31, 2020	December 31, 2019 ⁽¹⁾
	(unaudited)	
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 389	\$ 10
Accounts receivable – trade, net	669	710
Accounts receivable – other, net	74	87
Due from unconsolidated affiliates	7	11
Income taxes receivable, net	116	161
Inventories	79	136
Regulatory assets	9	7
Greenhouse gas allowances	60	52
Other current assets	48	44
Total current assets	1,451	1,218
Other assets:		
Regulatory assets	1,297	1,407
Insurance receivable for Aliso Canyon costs	511	339
Greenhouse gas allowances	291	248
Right-of-use assets – operating leases	90	94
Other long-term assets	449	447
Total other assets	2,638	2,535
Property, plant and equipment:		
Property, plant and equipment	19,661	19,362
Less accumulated depreciation and amortization	(6,140)	(6,038)
Property, plant and equipment, net	13,521	13,324
Total assets	\$ 17,610	\$ 17,077

⁽¹⁾ Derived from audited financial statements.
See Notes to Condensed Financial Statements.

SOUTHERN CALIFORNIA GAS COMPANY
CONDENSED BALANCE SHEETS (CONTINUED)

(Dollars in millions)

	March 31, 2020	December 31, 2019 ⁽¹⁾
	(unaudited)	
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current liabilities:		
Short-term debt	\$ —	\$ 630
Accounts payable – trade	331	545
Accounts payable – other	105	110
Due to unconsolidated affiliates	49	47
Accrued compensation and benefits	111	182
Regulatory liabilities	375	243
Current portion of long-term debt and finance leases	9	6
Customer deposits	73	71
Reserve for Aliso Canyon costs	284	9
Greenhouse gas obligations	60	52
Asset retirement obligations	64	65
Other current liabilities	236	222
Total current liabilities	1,697	2,182
Long-term debt and finance leases	4,442	3,788
Deferred credits and other liabilities:		
Pension obligation, net of plan assets	802	785
Deferred income taxes	1,477	1,403
Deferred investment tax credits	6	7
Regulatory liabilities	1,333	1,422
Asset retirement obligations	2,144	2,112
Greenhouse gas obligations	242	208
Deferred credits and other	416	422
Total deferred credits and other liabilities	6,420	6,359
Commitments and contingencies (Note 11)		
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	4,186	3,883
Accumulated other comprehensive income (loss)	(23)	(23)
Total shareholders' equity	5,051	4,748
Total liabilities and shareholders' equity	\$ 17,610	\$ 17,077

⁽¹⁾ Derived from audited financial statements.
See Notes to Condensed Financial Statements.

SOUTHERN CALIFORNIA GAS COMPANY
CONDENSED STATEMENTS OF CASH FLOWS

(Dollars in millions)

	Three months ended March 31,	
	2020	2019
	(unaudited)	
CASH FLOWS FROM OPERATING ACTIVITIES		
Net income	\$ 303	\$ 264
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	159	147
Deferred income taxes and investment tax credits	4	(65)
Other	6	5
Net change in working capital components	343	287
Insurance receivable for Aliso Canyon costs	(172)	(16)
Changes in other noncurrent assets and liabilities, net	114	(246)
Net cash provided by operating activities	757	376
CASH FLOWS FROM INVESTING ACTIVITIES		
Expenditures for property, plant and equipment	(388)	(324)
Net cash used in investing activities	(388)	(324)
CASH FLOWS FROM FINANCING ACTIVITIES		
Issuances of debt (maturities greater than 90 days)	649	—
Decrease in short-term debt, net	(630)	(66)
Other	(9)	(1)
Net cash provided by (used in) financing activities	10	(67)
Increase (decrease) in cash and cash equivalents	379	(15)
Cash and cash equivalents, January 1	10	18
Cash and cash equivalents, March 31	\$ 389	\$ 3
SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION		
Interest payments, net of amounts capitalized	\$ 37	\$ 26
SUPPLEMENTAL DISCLOSURE OF NONCASH INVESTING AND FINANCING ACTIVITIES		
Accrued capital expenditures	\$ 126	\$ 163
Increase in finance lease obligations for investment in property, plant and equipment	16	3

See Notes to Condensed Financial Statements.

SOUTHERN CALIFORNIA GAS COMPANY
CONDENSED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY

(Dollars in millions)

	Preferred stock	Common stock	Retained earnings	Accumulated other comprehensive income (loss)	Total shareholders' equity
	(unaudited)				
	Three months ended March 31, 2020				
Balance at December 31, 2019	\$ 22	\$ 866	\$ 3,883	\$ (23)	\$ 4,748
Net income			303		303
Dividends declared:					
Preferred stock (\$0.38/share)			—		—
Balance at March 31, 2020	\$ 22	\$ 866	\$ 4,186	\$ (23)	\$ 5,051
	Three months ended March 31, 2019				
Balance at December 31, 2018	\$ 22	\$ 866	\$ 3,390	\$ (20)	\$ 4,258
Cumulative-effect adjustment from change in accounting principle			2	(4)	(2)
Net income			264		264
Dividends declared:					
Preferred stock (\$0.38/share)			—		—
Balance at March 31, 2019	\$ 22	\$ 866	\$ 3,656	\$ (24)	\$ 4,520

See Notes to Condensed Financial Statements.

SEMPRA ENERGY AND SUBSIDIARIES

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

NOTE 1. GENERAL INFORMATION AND OTHER FINANCIAL DATA

PRINCIPLES OF CONSOLIDATION

Sempra Energy

Sempra Energy's Condensed Consolidated Financial Statements include the accounts of Sempra Energy, a California-based energy-services holding company, and its consolidated subsidiaries and VIEs. Sempra Global is the holding company for most of our subsidiaries that are not subject to California or Texas utility regulation. Sempra Energy's businesses were managed within six separate reportable segments until April 2019 and five separate reportable segments thereafter, which we discuss in Note 12. All references in these Notes to our reportable segments are not intended to refer to any legal entity with the same or similar name.

SDG&E

SDG&E's Condensed Consolidated Financial Statements include its accounts and the accounts of a VIE of which SDG&E was the primary beneficiary until August 23, 2019, at which time SDG&E deconsolidated the VIE. 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.

In this report, we refer to SDG&E and SoCalGas collectively as the California Utilities.

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," "us," "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 Condensed Consolidated Financial Statements and Notes to Condensed Consolidated Financial Statements when discussed together or collectively:

- the Condensed Consolidated Financial Statements and related Notes of Sempra Energy and its subsidiaries and VIEs;
- the Condensed Consolidated Financial Statements and related Notes of SDG&E and its VIE (until deconsolidation of Otay Mesa VIE in August 2019); and
- the Condensed Financial Statements and related Notes of SoCalGas.

We have prepared the Condensed Consolidated Financial Statements in conformity with U.S. GAAP and in accordance with the interim-period-reporting requirements of Form 10-Q. Results of operations for interim periods are not necessarily indicative of results for the entire year or for any other period. We evaluated events and transactions that occurred after March 31, 2020 through the date the financial statements were issued and, in the opinion of management, the accompanying statements reflect all adjustments necessary for a fair presentation. These adjustments are only of a normal, recurring nature.

All December 31, 2019 balance sheet information in the Condensed Consolidated Financial Statements has been derived from our audited 2019 Consolidated Financial Statements in the Annual Report. Certain information and note disclosures normally included in annual financial statements prepared in accordance with U.S. GAAP have been condensed or omitted pursuant to the interim-period-reporting provisions of U.S. GAAP and the SEC.

We describe our significant accounting policies in Note 1 of the Notes to Consolidated Financial Statements in the Annual Report and the impact of the adoption of new accounting standards on those policies in Note 2 below. We follow the same accounting policies for interim period reporting purposes.

You should read the information in this report in conjunction with the Annual Report.

Discontinued Operations

In January 2019, our board of directors approved a plan to sell our South American businesses based on our strategic focus on North America. We determined that these businesses, which previously constituted the Sempra South American Utilities segment, and certain activities associated with these businesses, met the held-for-sale criteria. These businesses are presented as discontinued operations, which we discuss further in Note 5, as the planned sales represent a strategic shift that will have a major effect on our operations and financial results. Our discussions in the Notes below relate only to our continuing operations unless otherwise noted.

Regulated Operations

The California Utilities and Sempra Mexico's natural gas distribution utility, Ecogas, prepare their financial statements in accordance with the provisions of U.S. GAAP governing rate-regulated operations. We discuss the effects of regulation and revenue recognition at our utilities in Notes 1 and 3 of the Notes to Consolidated Financial Statements in the Annual Report.

Our Sempra Texas Utilities segment is comprised of our equity method investments in holding companies that own interests in regulated electric transmission and distribution utilities in Texas and prepare their financial statements in accordance with the provisions of U.S. GAAP governing rate-regulated operations.

Our Sempra Mexico segment includes the operating companies of our subsidiary, IEnova, as well as certain holding companies and risk management activity. Certain business activities at IEnova are regulated by the Comisión Reguladora de Energía (Energy Regulatory Commission of Mexico) and meet the regulatory accounting requirements of U.S. GAAP. Pipeline projects under construction at IEnova that meet the regulatory accounting requirements of U.S. GAAP record the impact of AFUDC related to equity. We discuss AFUDC below and in Note 1 of the Notes to Consolidated Financial Statements in the Annual Report.

CASH, CASH EQUIVALENTS AND RESTRICTED CASH

The following table provides a reconciliation of cash, cash equivalents, and restricted cash reported on the Condensed Consolidated Balance Sheets to the sum of such amounts reported on the Condensed Consolidated Statements of Cash Flows. We provide information about the nature of restricted cash in Note 1 of the Notes to Consolidated Financial Statements in the Annual Report.

RECONCILIATION OF CASH, CASH EQUIVALENTS AND RESTRICTED CASH

(Dollars in millions)

	March 31, 2020	December 31, 2019
Sempra Energy Consolidated:		
Cash and cash equivalents	\$ 2,247	\$ 108
Restricted cash, current	23	31
Restricted cash, noncurrent	3	3
Cash, cash equivalents and restricted cash in discontinued operations	181	75
Total cash, cash equivalents and restricted cash on the Condensed Consolidated Statements of Cash Flows	\$ 2,454	\$ 217

CREDIT LOSSES

We are exposed to credit losses from financial assets measured at amortized cost, including trade and other accounts receivable and amounts due from unconsolidated affiliates. We are also exposed to credit losses from off-balance sheet arrangements through our guarantees of Cameron LNG JV's debt.

We regularly monitor and evaluate credit losses and record allowances for expected credit losses, if necessary, for trade and other accounts receivable using a combination of factors, including past-due status based on contractual terms, trends in write-offs, the age of the receivable, historical and industry trends, counterparty creditworthiness, economic conditions and specific events, such as bankruptcies. We write off financial assets measured at amortized cost in the period in which we deem they are not recoverable. We record recoveries of amounts previously written off when it is known that they will be recovered.

In connection with the COVID-19 pandemic, the California Utilities have implemented certain measures to assist customers, including suspending service disconnections due to nonpayment, waiving late payment fees for business customers, and offering

flexible payment plans for customers experiencing difficulty paying their electric or gas bills. On April 16, 2020, the CPUC approved a resolution authorizing each of the California Utilities to establish a CPPMA to track and request recovery, which is not assured, of incremental costs associated with complying with residential and small business customer relief measures implemented by the CPUC related to the COVID-19 pandemic. As of March 31, 2020, the California Utilities have evaluated the impact of the COVID-19 pandemic, including the measures described above, on their respective allowances for credit losses for customer receivables, with nominal impacts. The unique nature of the COVID-19 pandemic and the relatively short amount of time in which the California Utilities had been impacted as of March 31, 2020 result in limited support for modifying our evaluation of historical experience or forecasting future economic impacts that may or may not be experienced when calculating the allowances. Our businesses will continue to monitor economic impacts and customer payment patterns when evaluating their allowances for credit losses in future reporting periods, which may increase materially due to the effects of the COVID-19 pandemic or other factors.

We provide below allowances and changes in allowances for credit losses for trade and other accounts receivable, excluding allowances related to amounts due from unconsolidated affiliates and off-balance sheet arrangements, which we discuss separately below the table.

TRADE AND OTHER ACCOUNTS RECEIVABLE – ALLOWANCES FOR CREDIT LOSSES

(Dollars in millions)

	Sempra Energy Consolidated ⁽¹⁾	SDG&E ⁽²⁾	SoCalGas ⁽³⁾
Allowances for credit losses at December 31, 2019	\$ 29	\$ 14	\$ 15
Incremental allowance upon adoption of ASU 2016-13	1	—	—
Provisions for expected credit losses	6	3	3
Write-offs	(4)	(3)	(1)
Recoveries	1	1	—
Allowances for credit losses at March 31, 2020	\$ 33	\$ 15	\$ 17

⁽¹⁾ Balance at March 31, 2020 includes \$9 million and \$24 million in Accounts Receivable – Trade, Net and Accounts Receivable – Other, Net, respectively.

⁽²⁾ Balance at March 31, 2020 includes \$4 million and \$11 million in Accounts Receivable – Trade, Net and Accounts Receivable – Other, Net, respectively.

⁽³⁾ Balance at March 31, 2020 includes \$4 million and \$13 million in Accounts Receivable – Trade, Net and Accounts Receivable – Other, Net, respectively.

For amounts due from unconsolidated affiliates and off-balance sheet arrangements, on a quarterly basis, we evaluate credit losses and record allowances for expected credit losses, if necessary, based on credit quality indicators such as external credit ratings, published default rate studies, the maturity date of the instrument and past delinquencies. However, we do not record allowances for expected credit losses related to accrued interest receivable on loans due from unconsolidated affiliates because we write off such amounts, if any, through a reversal of interest income in the period we determine such amounts are uncollectible. In the absence of external credit ratings, we may utilize an internally developed credit rating based on our analysis of a counterparty's financial statements to determine our expected credit losses.

As we discuss below in "Transactions with Affiliates," we have loans due from unconsolidated affiliates with varying tenors, interest rates and currencies. We provide below the changes in allowances for credit losses for loans and other amounts due from unconsolidated affiliates.

AMOUNTS DUE FROM UNCONSOLIDATED AFFILIATES – ALLOWANCES FOR CREDIT LOSSES

(Dollars in millions)

	Sempra Energy Consolidated ⁽¹⁾
Allowances for credit losses at December 31, 2019	\$ —
Allowance established upon adoption of ASU 2016-13	6
Provisions for expected credit losses	1
Allowances for credit losses at March 31, 2020	\$ 7

⁽¹⁾ Balance at March 31, 2020 includes negligible amounts and \$7 million in Due from Unconsolidated Affiliates – Current and Due from Unconsolidated Affiliates – Noncurrent, respectively.

As we discuss in Note 6 of the Notes to Consolidated Financial Statements in the Annual Report, Sempra LNG has provided guarantees for a maximum aggregate amount of \$4.0 billion associated with Cameron LNG JV's debt obligations. We established a liability for credit losses of \$6 million for this off-balance sheet arrangement upon adoption of ASU 2016-13 on January 1, 2020 and we subsequently reduced this liability by \$1 million in the three months ended March 31, 2020 through a reduction to credit loss expense, which is included in O&M on the Sempra Energy Condensed Consolidated Statement of Operations. At March 31, 2020, expected credit losses of \$4 million are included in Other Current Liabilities and \$1 million are included in Deferred Credits and Other on the Sempra Energy Condensed Consolidated Balance Sheet.

CONCENTRATION OF CREDIT RISK

Credit risk is the risk of loss that would be incurred as a result of nonperformance by our counterparties on their contractual obligations. We have policies governing the management of credit risk that are administered by the respective credit departments at each of our segments and overseen by their separate risk management committees.

This oversight includes calculating current and potential credit risk on a regular basis and monitoring actual balances in comparison to approved limits. We establish credit limits based on risk and return considerations under terms customarily available in the industry. 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.

In the three months ended March 31, 2020, four customers each represented 10% or more of Sempra Mexico's revenues (including intercompany transactions with affiliates consolidated by Sempra Energy). Additionally, for the same period, certain of our unconsolidated equity method investees (Oncor Holdings, Cameron LNG JV and IMG JV) had customers that each represented 10% or more of their respective revenues.

When our development projects become operational, we rely 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 condition our decision to go forward on development projects on first obtaining these customer and supplier agreements.

INVENTORIES

The components of inventories are as follows:

INVENTORY BALANCES

(Dollars in millions)

	Natural gas		LNG		Materials and supplies		Total	
	March 31, 2020	December 31, 2019	March 31, 2020	December 31, 2019	March 31, 2020	December 31, 2019	March 31, 2020	December 31, 2019
Sempra Energy Consolidated	\$ 55	\$ 110	\$ 5	\$ 9	\$ 157	\$ 158	\$ 217	\$ 277
SDG&E	1	1	—	—	92	93	93	94
SoCalGas	32	90	—	—	47	46	79	136

WILDFIRE FUND

On July 12, 2019, the Wildfire Legislation was signed into law to address certain issues related to catastrophic wildfires in the State of California and their impact on electric IOUs. We discuss the Wildfire Legislation further in Note 1 of the Notes to Consolidated Financial Statements in the Annual Report.

In a complaint filed in U.S. District Court for the Northern District of California in July 2019, plaintiffs seek to invalidate AB 1054, which established the Wildfire Fund, based on allegations that the legislation violates federal law. The California Attorney General has moved to dismiss the complaint.

Wildfire Fund Asset

In the third quarter of 2019, SDG&E recorded a Wildfire Fund asset for its commitment to make shareholder contributions totaling \$451.5 million, measured at present value as of July 25, 2019 (the date by which both Edison and SDG&E opted to contribute to the Wildfire Fund). SDG&E is amortizing the Wildfire Fund asset to O&M on a straight-line basis over the estimated period of benefit, as adjusted for utilization by the IOUs. The estimated period of benefit of the Wildfire Fund asset is 15 years as of March 31, 2020.

We will periodically reevaluate the estimated period of benefit of the Wildfire Fund asset based on actual experience and changes in assumptions. SDG&E may recognize a reduction of its Wildfire Fund asset and record a charge against earnings in the period when there is a reduction of the available coverage due to recoverable claims from the IOUs. The reduction to the Wildfire Fund asset may be proportionate to the Wildfire Fund's consumption (i.e., recoveries for outstanding wildfire claims that are recoverable from the Wildfire Fund, net of anticipated or actual reimbursement to the Wildfire Fund by the responsible IOU, would decrease the Wildfire Fund asset and remaining available coverage). In the three months ended March 31, 2020, there were no such known claims from the IOUs requiring a reduction of the Wildfire Fund asset.

At March 31, 2020 and December 31, 2019, the current portion of the Wildfire Fund asset of \$29 million is included in Other Current Assets on Sempra Energy's Condensed Consolidated Balance Sheets and in Prepaid Expenses on SDG&E's Condensed Consolidated Balance Sheets, and the noncurrent portion of \$385 million and \$392 million, respectively, is included in Wildfire Fund on Sempra Energy's and SDG&E's Condensed Consolidated Balance Sheets. In the three months ended March 31, 2020, SDG&E recognized \$7 million of amortization of the Wildfire Fund asset.

Wildfire Fund Obligation

In the third quarter of 2019, SDG&E recorded a Wildfire Fund obligation for its commitment to make shareholder contributions totaling \$451.5 million, measured at present value as of July 25, 2019 (the date by which both Edison and SDG&E opted to contribute to the Wildfire Fund). SDG&E accretes the present value of the Wildfire Fund obligation to O&M until the liability is settled. At both March 31, 2020 and December 31, 2019, the Wildfire Fund obligation of \$12.9 million is included in Other Current Liabilities and \$86 million is included in Deferred Credits and Other on Sempra Energy's and SDG&E's Condensed Consolidated Balance Sheets. In the three months ended March 31, 2020, SDG&E recognized negligible accretion of the Wildfire Fund obligation.

CAPITALIZED FINANCING COSTS

Capitalized financing costs include capitalized interest costs and AFUDC related to both debt and equity financing of construction projects. We capitalize interest costs incurred to finance capital projects and interest at equity method investments that have not commenced planned principal operations.

The table below summarizes capitalized interest and AFUDC.

CAPITALIZED FINANCING COSTS

(Dollars in millions)

	Three months ended March 31,	
	2020	2019
Sempra Energy Consolidated	\$ 48	\$ 47
SDG&E	27	17
SoCalGas	11	11

VARIABLE INTEREST ENTITIES

We consolidate a VIE if we are the primary beneficiary of the VIE. Our determination of whether we are the primary beneficiary is based on 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 the right to receive benefits that could be significant to the VIE.

We will continue to evaluate our VIEs for any changes that may impact our determination of whether an entity is a VIE and if we are the primary beneficiary.

SDG&E

SDG&E's power procurement is subject to reliability requirements that may require SDG&E to enter into various PPAs that 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.

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 on 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.

SDG&E determined that none of its contracts resulted in SDG&E being the primary beneficiary of a VIE at March 31, 2020. In addition to tolling agreements, other variable interests involve various elements of fuel and power costs, and other components of cash flows 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 could be significant to the financial position and liquidity of SDG&E and Sempra Energy.

Sempra Texas Utilities

Our 100% interest in Oncor Holdings is a VIE that owns an 80.25% interest in Oncor. Sempra Energy is not the primary beneficiary of the VIE because of the structural and operational ring-fencing and governance measures in place that prevent us from having the power to direct the significant activities of Oncor Holdings. As a result, we do not consolidate Oncor Holdings and instead account for our ownership interest as an equity method investment. See Note 6 for additional information about our equity method investment in Oncor Holdings and restrictions on our ability to influence its activities. Our maximum exposure to loss, which fluctuates over time, from our interest in Oncor Holdings does not exceed the carrying value of our investment, which was \$11,619 million at March 31, 2020 and \$11,519 million at December 31, 2019.

Sempra Mexico

Sempra Mexico's businesses also enter into arrangements that could include variable interests. We evaluate these arrangements and applicable entities based on the qualitative and quantitative analyses described above. Certain of these entities are service or project companies that are VIEs because the total equity at risk is not sufficient for the entities to finance their activities without additional subordinated financial support. As the primary beneficiary of these companies, we consolidate them. The assets of these VIEs totaled approximately \$131 million at March 31, 2020 and \$126 million at December 31, 2019 and consisted primarily of PP&E and other long-term assets. Our maximum exposure to loss is equal to the carrying value of these assets.

Sempra LNG

Cameron LNG JV is a VIE principally due to contractual provisions that transfer certain risks to customers. Sempra Energy is not the primary beneficiary of the VIE because we do not have the power to direct the most significant activities of Cameron LNG JV, and therefore we account for our investment in Cameron LNG JV under the equity method. The carrying value of our investment, including amounts recognized in AOCI related to interest-rate cash flow hedges at Cameron LNG JV, was \$1,184 million at March 31, 2020 and \$1,256 million at December 31, 2019. Our maximum exposure to loss, which fluctuates over time, includes the carrying value of our investment and guarantees that we discuss in Note 6 of the Notes to Consolidated Financial Statements in the Annual Report.

PENSION AND OTHER POSTRETIREMENT BENEFITS

Settlement Accounting for Lump Sum Payments

In the three months ended March 31, 2020, Sempra Energy recorded settlement charges of \$5 million in net periodic benefit cost for lump sum payments from its nonqualified pension plan that were in excess of the plan's service cost plus interest cost.

Net Periodic Benefit Cost

The following three tables provide the components of net periodic benefit cost.

NET PERIODIC BENEFIT COST – SEMPRA ENERGY CONSOLIDATED

(Dollars in millions)

	Pension benefits		Other postretirement benefits	
	Three months ended March 31,			
	2020	2019	2020	2019
Service cost	\$ 33	\$ 27	\$ 5	\$ 4
Interest cost	32	35	8	9
Expected return on assets	(42)	(36)	(13)	(18)
Amortization of:				
Prior service cost (credit)	3	3	(1)	—
Actuarial loss (gain)	9	14	(3)	(2)
Settlement charges	5	—	—	—
Net periodic benefit cost (credit)	40	43	(4)	(7)
Regulatory adjustments	(28)	(36)	4	7
Total expense recognized	\$ 12	\$ 7	\$ —	\$ —

NET PERIODIC BENEFIT COST – SDG&E

(Dollars in millions)

	Pension benefits		Other postretirement benefits	
	Three months ended March 31,			
	2020	2019	2020	2019
Service cost	\$ 8	\$ 8	\$ 1	\$ 1
Interest cost	7	9	2	2
Expected return on assets	(13)	(11)	(3)	(3)
Amortization of:				
Prior service cost	1	1	—	1
Actuarial loss (gain)	1	4	(1)	(1)
Net periodic benefit cost (credit)	4	11	(1)	—
Regulatory adjustments	(3)	(11)	1	—
Total expense recognized	\$ 1	\$ —	\$ —	\$ —

NET PERIODIC BENEFIT COST – SOCALGAS*(Dollars in millions)*

	Pension benefits				Other postretirement benefits			
	Three months ended March 31,							
	2020		2019		2020		2019	
Service cost	\$	22	\$	16	\$	3	\$	3
Interest cost		22		23		6		7
Expected return on assets		(27)		(24)		(10)		(14)
Amortization of:								
Prior service cost (credit)		2		2		—		(1)
Actuarial loss (gain)		6		9		(2)		(2)
Net periodic benefit cost (credit)		25		26		(3)		(7)
Regulatory adjustments		(25)		(25)		3		7
Total expense recognized	\$	—	\$	1	\$	—	\$	—

Benefit Plan Contributions

The following table shows our year-to-date contributions to pension and other postretirement benefit plans and the amounts we expect to contribute in 2020.

BENEFIT PLAN CONTRIBUTIONS*(Dollars in millions)*

	Sempra Energy Consolidated		SDG&E		SoCalGas	
Contributions through March 31, 2020:						
Pension plans	\$	20	\$	—	\$	1
Other postretirement benefit plans		1		—		—
Total expected contributions in 2020:						
Pension plans	\$	268	\$	53	\$	154
Other postretirement benefit plans		7		—		1

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 \$413 million and \$488 million at March 31, 2020 and December 31, 2019, respectively.

EARNINGS PER COMMON SHARE

Basic EPS is calculated by dividing earnings attributable to common shares (from both continuing and discontinued operations) by the weighted-average number of common shares outstanding for the period. 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 (LOSSES) PER COMMON SHARE COMPUTATIONS

(Dollars in millions, except per share amounts; shares in thousands)

	Three months ended March 31,	
	2020	2019
Numerator for continuing operations:		
Income from continuing operations, net of income tax	\$ 867	\$ 560
Earnings attributable to noncontrolling interests	(143)	(32)
Mandatory convertible preferred stock dividends	(36)	(36)
Earnings from continuing operations attributable to common shares for basic EPS	688	492
Add back dividends for dilutive mandatory convertible preferred stock ⁽¹⁾	36	—
Earnings from continuing operations attributable to common shares for diluted EPS	\$ 724	\$ 492
Numerator for discontinued operations:		
Income (loss) from discontinued operations, net of income tax	\$ 80	\$ (42)
Earnings attributable to noncontrolling interests	(8)	(9)
Earnings (losses) from discontinued operations attributable to common shares	\$ 72	\$ (51)
Numerator for earnings:		
Earnings attributable to common shares for basic EPS	\$ 760	\$ 441
Add back dividends for dilutive mandatory convertible preferred stock ⁽¹⁾	36	—
Earnings attributable to common shares for diluted EPS	\$ 796	\$ 441
Denominator:		
Weighted-average common shares outstanding for basic EPS ⁽²⁾	292,790	274,674
Dilutive effect of stock options and RSUs ⁽³⁾	1,304	969
Dilutive effect of common shares sold forward	—	1,585
Dilutive effect of mandatory convertible preferred stock	19,831	—
Weighted-average common shares outstanding for diluted EPS	313,925	277,228
Basic EPS:		
Earnings from continuing operations	\$ 2.35	\$ 1.79
Earnings (losses) from discontinued operations	\$ 0.25	\$ (0.19)
Earnings	\$ 2.60	\$ 1.60
Diluted EPS:		
Earnings from continuing operations	\$ 2.30	\$ 1.78
Earnings (losses) from discontinued operations	\$ 0.23	\$ (0.19)
Earnings	\$ 2.53	\$ 1.59

⁽¹⁾ In the three months ended March 31, 2020, due to the dilutive effect of mandatory convertible preferred stock, the numerator used to calculate diluted EPS includes an add-back of mandatory convertible preferred stock dividends declared in that quarter.

⁽²⁾ Includes 542 and 613 average fully vested RSUs held in our Deferred Compensation Plan for the three months ended March 31, 2020 and 2019, respectively. 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.

⁽³⁾ Due to market fluctuations of both Sempra Energy common stock and the comparative indices used to determine the vesting percentage of our total shareholder return performance-based RSUs, which we discuss in Note 10 of the Notes to Consolidated Financial Statements in the Annual Report, dilutive RSUs may vary widely from period-to-period.

The potentially dilutive impact from stock options 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 for the three months ended March 31, 2020 and 2019 excludes 254,257 and 316,385 potentially dilutive shares, respectively, because to include them would be antidilutive for the period. However, these shares could potentially dilute basic EPS in the future.

The potentially dilutive impact from the forward sale of our common stock pursuant to forward sale agreements that we entered into in 2018 and fully settled by the end of 2019 is reflected in our diluted EPS calculation using the treasury stock method until settlement. After settlement, those shares are included in weighted-average common shares outstanding for basic EPS.

The potentially dilutive impact from mandatory convertible preferred stock is calculated under the if-converted method. The computation of diluted EPS for the three months ended March 31, 2020 and 2019 excludes zero and 18,601,085 potentially dilutive shares, respectively, because to include them would be antidilutive for the period. However, these shares could potentially dilute basic EPS in the future.

In January 2020, pursuant to our Sempra Energy share-based compensation plans, the Compensation Committee of Sempra Energy's Board of Directors granted 154,860 nonqualified stock options that vest over a three-year period, 258,470 performance-based RSUs and 100,972 service-based RSUs.

We discuss share-based compensation plans and related awards and the terms and conditions of Sempra Energy's equity securities further in Notes 10, 13 and 14 of the Notes to Consolidated Financial Statements in the Annual Report.

COMPREHENSIVE INCOME

The following tables present the changes in AOCI by component and amounts reclassified out of AOCI to net income, excluding amounts attributable to NCI.

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)
Three months ended March 31, 2020 and 2019				
Sempra Energy Consolidated⁽²⁾:				
Balance as of December 31, 2019	\$ (607)	\$ (215)	\$ (117)	\$ (939)
OCI before reclassifications	(138)	(154)	16	(276)
Amounts reclassified from AOCI	—	19	6	25
Net OCI	(138)	(135)	22	(251)
Balance as of March 31, 2020	\$ (745)	\$ (350)	\$ (95)	\$ (1,190)
SDG&E:				
Balance as of December 31, 2019 and March 31, 2020			\$ (16)	\$ (16)
Balance as of December 31, 2018			\$ (10)	\$ (10)
Cumulative-effect adjustment from change in accounting principle			(2)	(2)
Balance as of March 31, 2019			\$ (12)	\$ (12)
SoCalGas:				
Balance as of December 31, 2019 and March 31, 2020		\$ (13)	\$ (10)	\$ (23)
Balance as of December 31, 2018		\$ (12)	\$ (8)	\$ (20)
Cumulative-effect adjustment from change in accounting principle		(2)	(2)	(4)
Balance as of March 31, 2019		\$ (14)	\$ (10)	\$ (24)

⁽¹⁾ All amounts are net of income tax, if subject to tax, and exclude NCI.

⁽²⁾ Includes discontinued operations.

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 Condensed Consolidated Statements of Operations
	Three months ended March 31,		
	2020	2019	
Sempra Energy Consolidated:			
Financial instruments:			
Interest rate and foreign exchange instruments ⁽¹⁾	\$ 2	\$ 1	Interest Expense
	41	(3)	Other (Expense) Income, Net
Interest rate and foreign exchange instruments	—	1	Equity Earnings
Foreign exchange instruments	(2)	1	Revenues: Energy-Related Businesses
	(2)	—	Other (Expense) Income, Net
Total before income tax	39	—	
	(12)	—	Income Tax Benefit (Expense)
Net of income tax	27	—	
	(8)	(1)	Earnings Attributable to Noncontrolling Interests
	\$ 19	\$ (1)	
Pension and other postretirement benefits ⁽²⁾ :			
Amortization of actuarial loss	\$ 2	\$ 2	Other (Expense) Income, Net
Amortization of prior service cost	1	1	Other (Expense) Income, Net
Settlement charges	5	—	Other (Expense) Income, Net
Total before income tax	8	3	
	(2)	(1)	Income Tax Benefit (Expense)
Net of income tax	\$ 6	\$ 2	
Total reclassifications for the period, net of tax	\$ 25	\$ 1	
SDG&E:			
Financial instruments:			
Interest rate instruments ⁽¹⁾	\$ —	\$ 1	Interest Expense
	—	(1)	Earnings Attributable to Noncontrolling Interest
Total reclassifications for the period, net of tax	\$ —	\$ —	

⁽¹⁾ Amounts in 2019 include Otay Mesa VIE. All of SDG&E's interest rate derivative activity relates to Otay Mesa VIE.

⁽²⁾ Amounts are included in the computation of net periodic benefit cost (see "Pension and Other Postretirement Benefits" above).

For the three months ended March 31, 2020 and 2019, reclassifications out of AOCI to net income were negligible for SoCalGas.

SHAREHOLDERS' EQUITY AND NONCONTROLLING INTERESTS

Ownership interests that are held by owners other than Sempra Energy in subsidiaries or entities consolidated by us are accounted for and reported as NCI.

SoCalGas Preferred Stock

The preferred stock at SoCalGas is presented at Sempra Energy as a noncontrolling interest. Sempra Energy records charges against income related to NCI for preferred stock dividends declared by SoCalGas. We provide additional information regarding preferred stock in Note 13 of the Notes to Consolidated Financial Statements in the Annual Report.

Other Noncontrolling Interests

Sempra Mexico

In the first quarter of 2020, IEnova purchased additional shares in ICM Ventures Holdings B.V. for \$9 million, increasing its ownership from 53.7% to 82.5%. ICM Ventures Holdings B.V. owns certain permits and land where IEnova is building terminals for the receipt, storage and delivery of liquid fuels.

In the first quarter of 2019, IEnova repurchased 1,600,000 shares of its outstanding common stock held by NCI for approximately \$6 million, resulting in an increase in Sempra Energy's ownership interest in IEnova from 66.5% to 66.6%.

Sempra LNG

On March 30, 2020, Sempra LNG purchased for \$7 million the 24.6% minority interest in Liberty Gas Storage LLC, which owns 100% of LA Storage, LLC, increasing Sempra LNG's ownership in Liberty Gas Storage LLC to 100%. Prior to the purchase, the minority partner converted \$22 million in notes payable due from Sempra LNG to equity. As a result of the purchase, we recorded an increase in Sempra Energy's shareholders' equity of \$2 million for the difference between the carrying value and fair value related to the change in ownership.

In February 2019, Sempra LNG purchased for \$20 million the 9.1% minority interest in Bay Gas immediately prior to the sale of 100% of Bay Gas.

Sempra LNG and IEnova are jointly developing a proposed natural gas liquefaction project at the site of IEnova's existing ECA LNG Regasification terminal. Sempra LNG consolidates the ECA LNG JV proposed liquefaction project. Thus, Sempra Energy's NCI in IEnova's 50% interest in the proposed project is reported at Sempra LNG.

The following table provides information about noncontrolling ownership interests held by others (not including preferred shareholders) recorded in Other Noncontrolling Interests in Total Equity on Sempra Energy's Condensed Consolidated Balance Sheets.

OTHER NONCONTROLLING INTERESTS

(Dollars in millions)

	Percent ownership held by noncontrolling interests		Equity (deficit) held by noncontrolling interests	
	March 31, 2020	December 31, 2019	March 31, 2020	December 31, 2019
Sempra Mexico:				
IEnova	33.4 %	33.4 %	\$ 1,726	\$ 1,608
IEnova subsidiaries ⁽¹⁾	10.0 – 17.5	10.0 – 46.3	6	15
Sempra LNG:				
Liberty Gas Storage LLC	—	24.6	—	(13)
ECA LNG JV	16.7	16.7	14	12
Parent and other:				
PXiSE Energy Solutions, LLC	20.0	20.0	1	1
Discontinued Operations:				
Chilquinta Energía subsidiaries ⁽¹⁾	19.7 – 43.4	19.7 – 43.4	21	23
Luz del Sur	16.4	16.4	205	205
Tecsur	9.8	9.8	5	5
Total Sempra Energy			\$ 1,978	\$ 1,856

⁽¹⁾ IEnova and Chilquinta Energía have subsidiaries with NCI held by others. Percentage range reflects the highest and lowest ownership percentages among these subsidiaries.

TRANSACTIONS WITH AFFILIATES

We summarize amounts due from and to unconsolidated affiliates at Sempra Energy Consolidated, SDG&E and SoCalGas in the following table.

AMOUNTS DUE FROM (TO) UNCONSOLIDATED AFFILIATES

(Dollars in millions)

	March 31, 2020	December 31, 2019
Sempra Energy Consolidated:		
Total due from various unconsolidated affiliates – current, net of negligible allowance for credit losses at March 31, 2020 ⁽¹⁾⁽²⁾	\$ 64	\$ 32
Sempra Texas Utilities – TTHC, net of allowance for credit losses of \$1 at March 31, 2020 ⁽²⁾⁽³⁾	\$ 6	\$ —
Sempra Mexico – IMG JV – Note due March 15, 2022, net of allowance for credit losses of \$6 at March 31, 2020 ⁽²⁾⁽⁴⁾	586	742
Total due from unconsolidated affiliates – noncurrent	\$ 592	\$ 742
Total due to various unconsolidated affiliates – current	\$ (8)	\$ (5)
Sempra Mexico⁽²⁾:		
TAG Pipelines Norte, S. de. R.L. de C.V.:		
Note due December 20, 2021 ⁽⁵⁾	\$ (40)	\$ (39)
5.5% Note due January 9, 2024 ⁽⁶⁾	(65)	—
TAG JV – 5.74% Note due December 17, 2029 ⁽⁶⁾	(158)	(156)
Total due to unconsolidated affiliates – noncurrent	\$ (263)	\$ (195)
SDG&E:		
Sempra Energy	\$ (45)	\$ (37)
SoCalGas	(6)	(10)
Various affiliates	(8)	(6)
Total due to unconsolidated affiliates – current	\$ (59)	\$ (53)
Income taxes due from Sempra Energy ⁽⁷⁾	\$ 64	\$ 130
SoCalGas:		
SDG&E	\$ 6	\$ 10
Various affiliates	1	1
Total due from unconsolidated affiliates – current	\$ 7	\$ 11
Sempra Energy	\$ (49)	\$ (45)
Various affiliates	—	(2)
Total due to unconsolidated affiliates – current	\$ (49)	\$ (47)
Income taxes due from Sempra Energy ⁽⁷⁾	\$ 104	\$ 152

⁽¹⁾ Amount at March 31, 2020 includes \$23 million of outstanding principal and a negligible amount of accrued interest receivable from a U.S. dollar-denominated loan from IEnova to ESJ at a variable interest rate based on 1-month LIBOR plus 196 bps (3.54% at March 31, 2020) with a maturity date of June 30, 2020. Pursuant to the agreement, if ESJ is unable to meet certain conditions for an expansion project by May 13, 2020, IEnova and ESJ have the option to convert the loan to a 10-year note.

⁽²⁾ Amounts include principal balances plus accumulated interest outstanding.

⁽³⁾ U.S. dollar-denominated loans at fixed interest rates of 6.25% and 6.45% with maturity dates of November 5, 2028 and November 5, 2030, respectively.

⁽⁴⁾ Mexican peso-denominated revolving line of credit for up to 14.2 billion Mexican pesos or approximately \$604 million U.S. dollar-equivalent, at a variable interest rate based on the 91-day Interbank Equilibrium Interest Rate plus 220 bps (8.79% at March 31, 2020), to finance construction of the natural gas marine pipeline. At March 31, 2020, \$2 million of accrued interest receivable is included in Due From Unconsolidated Affiliates – Current.

⁽⁵⁾ U.S. dollar-denominated loan at a variable interest rate based on 6-month LIBOR plus 290 bps (4.08% at March 31, 2020).

⁽⁶⁾ U.S. dollar-denominated loan at a fixed interest rate.

⁽⁷⁾ SDG&E and SoCalGas are included in the consolidated income tax return of Sempra Energy and their respective income tax expense is computed as an amount equal to that which would result from each company having always filed a separate return.

The following table summarizes revenues and cost of sales from unconsolidated affiliates.

REVENUES AND COST OF SALES FROM UNCONSOLIDATED AFFILIATES

(Dollars in millions)

	Three months ended March 31,	
	2020	2019
Revenues:		
Sempra Energy Consolidated	\$ 12	\$ 14
SDG&E	1	1
SoCalGas	18	17
Cost of Sales:		
Sempra Energy Consolidated	\$ 11	\$ 14
SDG&E	17	20
SoCalGas	—	4

Guarantees

Sempra Energy has provided guarantees related to the financing of the Cameron LNG JV project, as we discuss in Note 6 below and in Note 6 of the Notes to Consolidated Financial Statements in the Annual Report.

OTHER (EXPENSE) INCOME, NET

Other (Expense) Income, Net on the Condensed Consolidated Statements of Operations consists of the following:

OTHER (EXPENSE) INCOME, NET

(Dollars in millions)

	Three months ended March 31,	
	2020	2019
Sempra Energy Consolidated:		
Allowance for equity funds used during construction	\$ 31	\$ 21
Investment (losses) gains ⁽¹⁾	(37)	26
(Losses) gains on interest rate and foreign exchange instruments, net	(153)	13
Foreign currency transaction (losses) gains, net ⁽²⁾	(123)	7
Non-service component of net periodic benefit credit	26	24
Penalties related to billing practices OII	—	(8)
Interest on regulatory balancing accounts, net	2	(1)
Total	\$ (254)	\$ 82
SDG&E:		
Allowance for equity funds used during construction	\$ 21	\$ 12
Non-service component of net periodic benefit credit	8	9
Interest on regulatory balancing accounts, net	2	—
Sundry, net	—	1
Total	\$ 31	\$ 22
SoCalGas:		
Allowance for equity funds used during construction	\$ 8	\$ 8
Non-service component of net periodic benefit credit	25	18
Penalties related to billing practices OII	—	(8)
Interest on regulatory balancing accounts, net	—	(1)
Sundry, net	(3)	(1)
Total	\$ 30	\$ 16

⁽¹⁾ Represents investment (losses) 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 O&M on the Condensed Consolidated Statements of Operations.

⁽²⁾ Includes losses of \$149 million and gains of \$10 million in the three months ended March 31, 2020 and 2019, respectively, from translation to U.S. dollars of a Mexican peso-denominated loan to IMG JV, which are offset by corresponding amounts included in Equity Earnings on the Condensed Consolidated Statements of Operations.

INCOME TAXES

We provide our calculations of ETRs in the following table.

INCOME TAX (BENEFIT) EXPENSE AND EFFECTIVE INCOME TAX RATES

(Dollars in millions)

	Three months ended March 31,	
	2020	2019
Sempra Energy Consolidated:		
Income tax (benefit) expense from continuing operations	\$ (207)	\$ 42
Income from continuing operations before income taxes and equity earnings	\$ 397	\$ 501
Equity (losses) earnings, before income tax ⁽¹⁾	(43)	5
Pretax income	\$ 354	\$ 506
Effective income tax rate	(58)%	8%
SDG&E:		
Income tax expense	\$ 58	\$ 5
Income before income taxes	\$ 320	\$ 182
Effective income tax rate	18 %	3%
SoCalGas:		
Income tax expense	\$ 52	\$ 19
Income before income taxes	\$ 355	\$ 283
Effective income tax rate	15 %	7%

⁽¹⁾ We discuss how we recognize equity earnings in Note 6 of the Notes to Consolidated Financial Statements in the Annual Report.

Sempra Energy, SDG&E and SoCalGas record income taxes for interim periods utilizing a forecasted ETR anticipated for the full year. Unusual and infrequent items and items that cannot be reliably estimated are recorded in the interim period in which they occur, which can result in variability in the ETR.

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 ETR. As a result, changes in the relative size of these items compared to pretax income, from period to period, can cause variations in the ETR. 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, which is non-taxable
- 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.

We record income tax (expense) benefit from the transactional effects of foreign currency and inflation. Such effects are partially mitigated by net gains (losses) from foreign currency derivatives that are hedging Sempra Mexico parent's exposure to movements in the Mexico peso from its controlling interest in IEnova.

In the three months ended March 31, 2019, SDG&E and SoCalGas recorded income tax benefits of \$31 million and \$35 million, respectively, from the release of a regulatory liability established in connection with 2017 tax reform for excess deferred income tax balances that the CPUC directed be allocated to shareholders in a January 2019 decision.

Discontinued Operations

In January 2019, our board of directors approved a plan to sell our South American businesses, as we discuss in Note 5. Prior to this decision, our repatriation estimate excluded post-2017 earnings and other basis differences related to our South American businesses. Because of our decision to sell our South American businesses, we no longer assert indefinite reinvestment of these basis differences. Accordingly, we recorded the following income tax impacts from changes in outside basis differences in our discontinued operations in South America:

- \$103 million income tax expense in 2019 related to outside basis differences existing as of the January 25, 2019 approval of our plan to sell our South American businesses; and
- \$7 million income tax benefit in 2020 compared to \$13 million income tax expense in 2019 related to changes in outside basis differences from earnings and foreign currency effects since January 25, 2019.

As of March 31, 2020, we have not changed our indefinite reinvestment assertion or repatriation plan.

NOTE 2. NEW ACCOUNTING STANDARDS

We describe below recent accounting pronouncements that have had or may have a significant effect on our financial condition, results of operations, cash flows or disclosures.

ASU 2016-13, “Measurement of Credit Losses on Financial Instruments”: ASU 2016-13, as amended by subsequently issued ASUs, changes how entities 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 receivables and 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. We adopted the standard on January 1, 2020 using a modified retrospective approach through a cumulative-effect adjustment to retained earnings. The adoption primarily impacted the expected credit losses associated with accounts receivable balances, amounts due from unconsolidated affiliates and off-balance sheet financial guarantees. There was an insignificant impact to SDG&E’s or SoCalGas’ balance sheets from adoption. The following table shows the initial (decreases) increases on Sempra Energy’s balance sheet at January 1, 2020 from adoption of ASU 2016-13.

IMPACT FROM ADOPTION OF ASU 2016-13

(Dollars in millions)

	Sempra Energy Consolidated
Accounts receivable – trade, net	\$ (1)
Due from unconsolidated affiliates – noncurrent	(6)
Deferred income tax assets	4
Other current liabilities	4
Deferred credits and other	2
Retained earnings	(7)
Other noncontrolling interests	(2)

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. We adopted ASU 2017-04 on January 1, 2020 and will apply the standard on a prospective basis to our goodwill impairment tests.

ASU 2019-12, “Simplifying the Accounting for Income Taxes”: ASU 2019-12 simplifies certain areas of accounting for income taxes. In addition to other changes, this standard amends ASC 740, “Income Taxes,” as follows:

- removes the exception to the incremental approach for intraperiod tax allocation when there is a loss from continuing operations and income or a gain from other items, including discontinued operations or other comprehensive income;
- simplifies the recognition of deferred taxes related to basis differences as a result of ownership changes in investments;

- specifies an entity is not required to allocate the consolidated amount of current and deferred tax expense to a legal entity that is not subject to tax in its separate financial statements; and
- requires an entity to reflect the effect of an enacted change in tax laws or rates in the annual ETR computation in the interim period that includes the enactment date.

For public entities, ASU 2019-12 is effective for fiscal years beginning after December 15, 2020, including interim periods therein, with early adoption permitted. The transition method related to the amendments made by ASU 2019-12 varies based on the nature of the change. We will adopt the standard on January 1, 2021 and do not expect it will have a material impact on our financial statements.

ASU 2020-04, “Facilitation of the Effects of Reference Rate Reform on Financial Reporting”: ASU 2020-04 provides optional expedients and exceptions for applying U.S. GAAP to contract modifications that replace LIBOR or another reference rate affected by reference rate reform and to hedging relationships that reference LIBOR or another reference rate that is affected or expected to be affected by reference rate reform. ASU 2020-04 is effective March 12, 2020 and can be applied through December 31, 2022, with certain exceptions for hedging relationships that continue to exist after this date, and may be applied from January 1, 2020. For contract modifications, the standard allows entities to account for modifications as an event that does not require reassessment or remeasurement (i.e., as a continuation of the existing contract). The standard also allows entities to amend their formal designation and documentation of hedging relationships affected or expected to be affected by reference rate reform, without having to de-designate the hedging relationship. Entities may elect the optional expedients and exceptions on an individual hedging relationship basis and independently from one another. We elected the optional expedients for contract modifications and the hedging expedient to disregard the potential discontinuation of a reference rate when assessing whether a hedged forecasted interest payment is probable. We are applying these expedients prospectively from January 1, 2020. We are still evaluating the remaining optional expedients and exceptions for hedging relationships.

NOTE 3. REVENUES

We discuss revenue recognition for revenues from contracts with customers and from sources other than contracts with customers in Note 3 of the Notes to Consolidated Financial Statements in the Annual Report.

In connection with the COVID-19 pandemic, the California Utilities and the CPUC have implemented certain measures to assist customers, including suspending service disconnections due to nonpayment, waiving late payment fees for business customers, and offering flexible payment plans for customers experiencing difficulty paying their electric or gas bills. Additional measures could be mandated or voluntarily implemented in the future. Under the regulatory compact applicable to the California Utilities, including decoupling of rates, recovery of uncollectible expenses, and other recovery mechanisms potentially available (including the CPPMA, which we discuss in Note 4), the California Utilities have continued to recognize revenues under ASC 606, “Revenue from Contracts with Customers,” in the three months ended March 31, 2020.

The following table disaggregates our revenues from contracts with customers by major service line and market and provides a reconciliation to total revenues by segment. The majority of our revenue is recognized over time.

DISAGGREGATED REVENUES

(Dollars in millions)

	SDG&E	SoCalGas	Sempra Mexico	Sempra Renewables	Sempra LNG	Consolidating adjustments and Parent and other	Sempra Energy Consolidated
Three months ended March 31, 2020							
By major service line:							
Utilities	\$ 1,259	\$ 1,544	\$ 20	\$ —	\$ —	\$ (19)	\$ 2,804
Energy-related businesses	—	—	198	—	12	(7)	203
Revenues from contracts with customers	\$ 1,259	\$ 1,544	\$ 218	\$ —	\$ 12	\$ (26)	\$ 3,007
By market:							
Gas	\$ 254	\$ 1,544	\$ 147	\$ —	\$ 11	\$ (23)	\$ 1,933
Electric	1,005	—	71	—	1	(3)	1,074
Revenues from contracts with customers	\$ 1,259	\$ 1,544	\$ 218	\$ —	\$ 12	\$ (26)	\$ 3,007
Revenues from contracts with customers	\$ 1,259	\$ 1,544	\$ 218	\$ —	\$ 12	\$ (26)	\$ 3,007
Utilities regulatory revenues	10	(149)	—	—	—	—	(139)
Other revenues	—	—	91	—	111	(41)	161
Total revenues	\$ 1,269	\$ 1,395	\$ 309	\$ —	\$ 123	\$ (67)	\$ 3,029

Three months ended March 31, 2019

By major service line:							
Utilities	\$ 1,236	\$ 1,528	\$ 27	\$ —	\$ —	\$ (18)	\$ 2,773
Energy-related businesses	—	—	257	4	68	(59)	270
Revenues from contracts with customers	\$ 1,236	\$ 1,528	\$ 284	\$ 4	\$ 68	\$ (77)	\$ 3,043
By market:							
Gas	\$ 239	\$ 1,528	\$ 198	\$ —	\$ 67	\$ (76)	\$ 1,956
Electric	997	—	86	4	1	(1)	1,087
Revenues from contracts with customers	\$ 1,236	\$ 1,528	\$ 284	\$ 4	\$ 68	\$ (77)	\$ 3,043
Revenues from contracts with customers	\$ 1,236	\$ 1,528	\$ 284	\$ 4	\$ 68	\$ (77)	\$ 3,043
Utilities regulatory revenues	(91)	(167)	—	—	—	—	(258)
Other revenues	—	—	99	3	73	(62)	113
Total revenues	\$ 1,145	\$ 1,361	\$ 383	\$ 7	\$ 141	\$ (139)	\$ 2,898

Remaining Performance Obligations

For contracts greater than one year, at March 31, 2020, we expect to recognize revenue related to the fixed fee component of the consideration as shown below. SoCalGas did not have any such remaining performance obligations at March 31, 2020.

REMAINING PERFORMANCE OBLIGATIONS⁽¹⁾

(Dollars in millions)

	Sempra Energy Consolidated	SDG&E
2020 (excluding first three months of 2020)	\$ 306	\$ 3
2021	402	4
2022	403	4
2023	400	4
2024	348	4
Thereafter	4,640	71
Total revenues to be recognized	\$ 6,499	\$ 90

⁽¹⁾ Excludes intercompany transactions.

Contract Balances from Revenues from Contracts with Customers

Activities within Sempra Energy's and SDG&E's contract liabilities are presented below. There were no contract liabilities at SDG&E in the three months ended March 31, 2019 or SoCalGas in the three months ended March 31, 2020 and 2019.

CONTRACT LIABILITIES

(Dollars in millions)

	Sempra Energy Consolidated	SDG&E
Balance at January 1, 2020	\$ (163)	\$ (91)
Revenue from performance obligations satisfied during reporting period	1	1
Balance at March 31, 2020 ⁽¹⁾	\$ (162)	\$ (90)
Balance at January 1, 2019	\$ (70)	
Revenue from performance obligations satisfied during reporting period	1	
Payments received in advance	(2)	
Balance at March 31, 2019	\$ (71)	

⁽¹⁾ Includes \$4 million and \$4 million in Other Current Liabilities and \$158 million and \$86 million in Deferred Credits and Other on the Sempra Energy and SDG&E Condensed Consolidated Balance Sheets, respectively.

Receivables from Revenues from Contracts with Customers

The table below shows receivable balances associated with revenues from contracts with customers on our Condensed Consolidated Balance Sheets.

RECEIVABLES FROM REVENUES FROM CONTRACTS WITH CUSTOMERS

(Dollars in millions)

	March 31, 2020	December 31, 2019
Sempra Energy Consolidated:		
Accounts receivable – trade, net	\$ 1,142	\$ 1,163
Accounts receivable – other, net	8	16
Due from unconsolidated affiliates – current ⁽¹⁾	4	5
Total	\$ 1,154	\$ 1,184
SDG&E:		
Accounts receivable – trade, net	\$ 411	\$ 398
Accounts receivable – other, net	7	5
Due from unconsolidated affiliates – current ⁽¹⁾	3	2
Total	\$ 421	\$ 405
SoCalGas:		
Accounts receivable – trade, net	\$ 669	\$ 710
Accounts receivable – other, net	1	11
Total	\$ 670	\$ 721

⁽¹⁾ Amount is presented net of amounts due to unconsolidated affiliates on the Condensed Consolidated Balance Sheets, when right of offset exists.

NOTE 4. REGULATORY MATTERS

We discuss regulatory matters in Note 4 of the Notes to Consolidated Financial Statements in the Annual Report, and provide updates to those discussions and information about new regulatory matters below.

REGULATORY ASSETS AND LIABILITIES

We show the details of regulatory assets and liabilities in the following table.

REGULATORY ASSETS (LIABILITIES)

(Dollars in millions)

	March 31, 2020	December 31, 2019
SDG&E:		
Fixed-price contracts and other derivatives	\$ 23	\$ 8
Deferred income taxes refundable in rates	(68)	(108)
Pension and other postretirement benefit plan obligations	105	103
Removal obligations	(1,999)	(2,056)
Environmental costs	45	45
Sunrise Powerlink fire mitigation	122	121
Regulatory balancing accounts ⁽¹⁾⁽²⁾		
Commodity – electric	116	102
Gas transportation	9	22
Safety and reliability	75	77
Public purpose programs	(138)	(124)
2019 GRC retroactive impacts	98	111
Other balancing accounts	124	106
Other regulatory liabilities, net ⁽²⁾	(126)	(153)
Total SDG&E	(1,614)	(1,746)
SoCalGas:		
Deferred income taxes refundable in rates	(133)	(203)
Pension and other postretirement benefit plan obligations	416	400
Employee benefit costs	44	44
Removal obligations	(719)	(728)
Environmental costs	38	40
Regulatory balancing accounts ⁽¹⁾⁽²⁾		
Commodity – gas, including transportation	(202)	(118)
Safety and reliability	315	295
Public purpose programs	(269)	(273)
2019 GRC retroactive impacts	351	400
Other balancing accounts	(155)	(7)
Other regulatory liabilities, net ⁽²⁾	(88)	(101)
Total SoCalGas	(402)	(251)
Sempra Mexico:		
Deferred income taxes recoverable in rates	83	83
Other regulatory assets	3	6
Total Sempra Energy Consolidated	\$ (1,930)	\$ (1,908)

⁽¹⁾ At March 31, 2020 and December 31, 2019, the noncurrent portion of regulatory balancing accounts – net undercollected for SDG&E was \$123 million and \$108 million, respectively, and for SoCalGas was \$375 million and \$500 million, respectively.

⁽²⁾ Includes regulatory assets earning a return.

CALIFORNIA UTILITIES

COVID-19 Pandemic Protections Memorandum Account

The COVID-19 pandemic is causing a significant impact on the economy and people's livelihoods in California. On March 4, 2020, Governor Gavin Newsom proclaimed a State of Emergency in California as a result of the threat of COVID-19. In response, on March 17, 2020, the CPUC announced that, retroactive to March 4, 2020, all energy companies under its jurisdiction, including the California Utilities, should take action to implement several emergency customer protection measures to support California customers. On April 16, 2020, the CPUC approved a resolution establishing a disaster relief plan for residential and small business customers affected by the COVID-19 pandemic. The resolution also authorizes each of the California Utilities to establish a CPPMA to track and request recovery of incremental costs associated with complying with the resolution, including, but not limited to, costs associated with suspending disconnections (such as costs that arise from customers' failure to pay). The customer relief measures are effective March 4, 2020 and shall continue for up to one year. SDG&E extended these accommodations to all of its customers and may continue to do so, while SoCalGas provides these benefits to its core gas customers. The California Utilities expect to pursue recovery in rates of the costs associated with the consumer protections that are offered in a future proceeding, subject to CPUC approval, which is not assured.

CPUC General Rate Case

The CPUC uses GRC proceedings to set rates designed to allow the California Utilities to recover their reasonable operating costs and to provide the opportunity to realize their authorized rates of return on their investments.

2019 General Rate Case

As we discuss in Note 4 of the Notes to Consolidated Financial Statements in the Annual Report, in September 2019, the CPUC issued a final decision in the 2019 GRC. The 2019 GRC FD was effective retroactive to January 1, 2019. In the third quarter of 2019, SDG&E and SoCalGas recorded the retroactive after-tax earnings impact of \$36 million and \$84 million, respectively, for the first quarter of 2019 and \$30 million and \$46 million, respectively, for the second quarter of 2019.

The 2019 GRC FD approved SDG&E's and SoCalGas' test year revenues for 2019 and attrition year adjustments for 2020 and 2021. In January 2020, the CPUC issued a final decision implementing a four-year GRC cycle for California IOUs. The California Utilities were directed to file a petition for modification to revise their 2019 GRC to add two additional attrition years, resulting in a transitional five-year GRC period (2019-2023). The California Utilities filed the petition in April 2020 and requested authorization of their post-test year ratemaking mechanism for two additional years. If adopted, the estimated incremental increase in the revenue requirement for SDG&E and SoCalGas would be approximately \$106 million and \$155 million, respectively, for 2022, and \$108 million and \$137 million, respectively, for 2023. These amounts include revenues for both O&M and capital cost attrition. The California Utilities requested a decision by the end of 2020.

The 2019 GRC FD clarified that differences between incurred and forecasted income tax expense due to forecasting differences are not subject to tracking in the income tax expense memorandum account beginning in 2019. SDG&E and SoCalGas recorded regulatory liabilities associated with the 2016 through 2018 tracked forecasting differences of \$86 million and \$89 million, respectively. In April 2020, the CPUC confirmed treatment of the two-way income tax expense memorandum account for these 2016 through 2018 balances, at which time the California Utilities released these regulatory liability balances to revenues.

CPUC Cost of Capital

In December 2019, the CPUC approved the cost of capital and rate structures (shown in the table below) for SDG&E and SoCalGas that are effective January 1, 2020 and will remain in effect through December 31, 2022. SDG&E did not propose a 2020 cost of preferred equity in this proceeding. In January 2020, SDG&E filed an advice letter to continue the cost of preferred equity for test year 2020 at 6.22%, which the CPUC approved in March 2020.

CPUC AUTHORIZED COST OF CAPITAL AND RATE STRUCTURE

SDG&E			SoCalGas		
Authorized weighting	Return on rate base	Weighted return on rate base	Authorized weighting	Return on rate base	Weighted return on rate base
45.25 %	4.59 %	2.08 %	45.60 %	4.23 %	1.93 %
2.75	6.22	0.17	2.40	6.00	0.14
52.00	10.20	5.30	52.00	10.05	5.23
100.00 %		7.55 %	100.00 %		7.30 %

The CCM was reauthorized in the 2020 cost of capital proceeding to continue through 2022. The CCM benchmark rate for the 2020 cost of capital is the average monthly utility bond index, as published by Moody's, for the 12-month period from October 2018 through September 2019. SDG&E's CCM benchmark rate, based on its filing pending approval with the CPUC, is 4.498%, based on Moody's Baa- utility bond index. SoCalGas' CCM benchmark rate, based on its filing pending approval with the CPUC, is 4.029%, based on Moody's A- utility bond index. The index applicable to each utility is based on such utility's credit rating.

The CCM benchmark rates for SDG&E and SoCalGas are the basis of comparison to determine if future measurement periods "trigger" the CCM. The 12 months ending September 2020 will be the first "CCM Period" to determine if there has been a trigger at SDG&E or SoCalGas. The trigger occurs if the change in the applicable average Moody's utility bond index relative to the CCM benchmark is larger than plus or minus 1.000%. Accordingly, if a change of more than plus or minus 1.000% occurs, SDG&E's, SoCalGas', or both utilities' authorized ROE would be adjusted, upward or downward, by one half of the difference between the CCM benchmark and the 12-month average determined during the CCM Period. In addition, the authorized recovery rate for the utilities' cost of debt and preferred equity would be adjusted to their respective actual weighted-average cost, with no change to the authorized capital structure. In the event of a CCM trigger, the CCM benchmark is also re-established. These adjustments would become effective in authorized rates on January 1 of the year following the CCM trigger.

SDG&E

FERC Formulaic Rate Filing

In October 2018, SDG&E submitted its TO5 filing to the FERC to establish its transmission revenue requirement, including rate of return, for SDG&E's FERC-regulated electric transmission operations and assets. In December 2018, the FERC issued its order accepting and suspending SDG&E's TO5 filing for five months, during which the existing TO4 rates remained in effect, and established hearing and settlement procedures. The suspension period ended on June 1, 2019, when the proposed TO5 rates took effect, subject to refund and the outcome of the rate filing. As a result, the TO4 ROE of 10.05% was the basis of SDG&E's FERC-related revenue recognition until March 2020, when the FERC approved the settlement terms that SDG&E and all settling parties reached in October 2019.

The settlement agreement provides for a ROE of 10.60%, consisting of a base ROE of 10.10% plus an additional 50 bps for participation in the California ISO. If the FERC issues an order ruling that California IOUs are no longer eligible for the additional California ISO ROE, SDG&E would refund the additional 50 bps of ROE associated with the California ISO as of the refund effective date (June 1, 2019) in this proceeding. The TO5 term is effective June 1, 2019 and shall remain in effect indefinitely, with parties having the annual right to terminate the agreement beginning in 2022.

In the first quarter of 2020, SDG&E recorded retroactive revenues of \$12 million related to 2019, and additional FERC revenues of \$17 million to conclude a rate base matter, net of certain refunds to be paid to CPUC-jurisdictional customers.

NOTE 5. ACQUISITIONS, DIVESTITURES AND DISCONTINUED OPERATIONS

We consolidate assets acquired and liabilities assumed as of the purchase date and include earnings from acquisitions in consolidated earnings after the purchase date.

ACQUISITION

Sempra Texas Utilities

TTHC

In February 2020, Sempra Texas Intermediate Holding Company LLC acquired an additional indirect 0.1975% interest in Oncor through its acquisition of a 1% interest in TTHC from Hunt Strategic Utility Investment, L.L.C., including notes receivable due from TTHC with an aggregate outstanding balance of approximately \$6 million, for a total purchase price of approximately \$23 million in cash, bringing Sempra Energy's indirect ownership in Oncor to approximately 80.45%. TTHC indirectly owns 100% of TTI, which owns 19.75% of Oncor's outstanding membership interests. At the acquisition date, we determined the fair value of the notes receivable was \$7 million based on a discounted cash flow model, and attributed \$16 million to the investment in TTHC. We account for our investment in TTHC as an equity method investment, which we discuss further in Note 6.

DIVESTITURE

Sempra LNG

In February 2019, Sempra LNG completed the sale of its non-utility natural gas storage assets in the southeast U.S. (comprised of Mississippi Hub and Bay Gas), which we classified as held for sale at December 31, 2018, to an affiliate of ArcLight Capital Partners and received cash proceeds of \$322 million, net of transaction costs. In January 2019, Sempra LNG completed the sale of other non-utility assets for \$5 million.

DISCONTINUED OPERATIONS

In January 2019, our board of directors approved a plan to sell our South American businesses. We determined that these businesses, which previously constituted the Sempra South American Utilities segment, and certain activities associated with those businesses, met the held-for-sale criteria. These businesses are presented as discontinued operations, as the planned sales represent a strategic shift that will have a major effect on our operations and financial results. We do not plan to have significant continuing involvement in or be able to exercise significant influence on the operating or financial policies of these operations after they are sold. Accordingly, the results of operations, financial position and cash flows for these businesses have been presented as discontinued operations for all periods presented.

Discontinued operations that were previously in the Sempra South American Utilities segment include our 100% interest in Chilquinta Energía in Chile, our 83.6% interest in Luz del Sur in Peru and our interests in two energy-services companies, Tecnoed and Tecsur, which provide electric construction and infrastructure services to Chilquinta Energía and Luz del Sur, respectively, as well as third parties.

On April 24, 2020, we completed the sale of our equity interests in our Peruvian businesses, including our 83.6% interest in Luz del Sur and its interest in Tecsur, to an affiliate of China Yangtze Power International (Hongkong) Co., Limited for an aggregate base purchase price of \$3.59 billion, subject to post-closing adjustments.

On October 12, 2019, we entered into a Purchase and Sale Agreement with State Grid International Development Limited to sell our equity interests in our Chilean businesses, including our 100% interest in Chilquinta Energía and Tecnoed and our 50% interest in Eletrans, for an aggregate base purchase price of \$2.23 billion, subject to customary adjustments for working capital and changes in net indebtedness and other adjustments. Chilquinta Energía also agreed to purchase the remaining 50% interest in Eletrans from Sociedad Austral de Electricidad S.A., contingent on the sale of our Chilean businesses to State Grid International Development Limited. This acquisition by Chilquinta Energía, which we do not expect would have a significant economic impact on the sale of our Chilean businesses (including the net proceeds we receive from the sale), would result in State Grid International Development Limited acquiring 100% of Eletrans. The sale of our Chilean businesses is subject to various conditions to closing, including certain Chinese regulatory approvals, but is not subject to Chilquinta Energía purchasing the remaining 50% interest in Eletrans. We expect the sale to close in the second quarter of 2020.

Summarized results from discontinued operations were as follows:

DISCONTINUED OPERATIONS

(Dollars in millions)

	Three months ended March 31,	
	2020	2019
Revenues	\$ 400	\$ 421
Cost of sales	(253)	(265)
Operating expenses	(46)	(45)
Interest and other	—	(3)
Income before income taxes and equity earnings	101	108
Income tax expense	(21)	(151)
Equity earnings	—	1
Income (loss) from discontinued operations, net of income tax	80	(42)
Earnings attributable to noncontrolling interests	(8)	(9)
Earnings (losses) from discontinued operations attributable to common shares	\$ 72	\$ (51)

The following table summarizes the carrying amounts of the major classes of assets and related liabilities classified as held for sale in discontinued operations.

ASSETS HELD FOR SALE IN DISCONTINUED OPERATIONS

(Dollars in millions)

	March 31, 2020	December 31, 2019
Cash and cash equivalents	\$ 180	\$ 74
Restricted cash ⁽¹⁾	1	1
Accounts receivable, net	316	303
Due from unconsolidated affiliates	2	2
Inventories	36	36
Other current assets	31	29
Current assets	\$ 566	\$ 445
Due from unconsolidated affiliates	\$ 60	\$ 54
Goodwill and other intangible assets	748	801
Property, plant and equipment, net	2,517	2,618
Other noncurrent assets	39	40
Noncurrent assets	\$ 3,364	\$ 3,513
Short-term debt	\$ 158	\$ 52
Accounts payable	192	201
Current portion of long-term debt and finance leases	82	85
Other current liabilities	106	106
Current liabilities	\$ 538	\$ 444
Long-term debt and finance leases	\$ 663	\$ 702
Deferred income taxes	282	284
Other noncurrent liabilities	61	66
Noncurrent liabilities	\$ 1,006	\$ 1,052

⁽¹⁾ Primarily represents funds held in accordance with Peruvian tax law.

At March 31, 2020 and December 31, 2019, \$693 million and \$551 million, respectively, of cumulative foreign currency translation losses related to our South American businesses are included in AOCI.

NOTE 6. 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. Equity earnings and losses, both before and net of income tax, are combined and presented as Equity Earnings on the Condensed Consolidated Statements of Operations. See Note 12 for information on equity earnings and losses, both before and net of income tax, by segment. See Note 1 for information on how equity earnings and losses before income taxes are factored into the calculations of our pretax income or loss and ETR.

We provide additional information concerning our equity method investments in Notes 5 and 6 of the Notes to Consolidated Financial Statements in the Annual Report.

SEMPRA TEXAS UTILITIES

Oncor Holdings

We account for our 100% ownership interest in Oncor Holdings, which owns an 80.25% interest in Oncor, as an equity method investment. Due to the ring-fencing measures, governance mechanisms, and commitments in effect, we do not have the power to direct the significant activities of Oncor Holdings and Oncor. See Note 6 of the Notes to Consolidated Financial Statements in the

Annual Report for additional information related to the restrictions on our ability to direct the significant activities of Oncor Holdings and Oncor.

In the three months ended March 31, 2020, Sempra Energy contributed \$70 million to Oncor, and Oncor Holdings distributed to Sempra Energy \$73 million in dividends.

In the three months ended March 31, 2019, Sempra Energy contributed \$56 million to Oncor, and Oncor Holdings distributed to Sempra Energy \$54 million in dividends and \$3 million in tax sharing payments.

We provide summarized income statement information for Oncor Holdings in the following table.

SUMMARIZED FINANCIAL INFORMATION – ONCOR HOLDINGS

(Dollars in millions)

	Three months ended March 31,	
	2020	2019
Operating revenues	\$ 1,072	\$ 1,016
Operating expense	(801)	(775)
Income from operations	271	241
Interest expense	(101)	(86)
Income tax expense	(28)	(23)
Net income	129	114
Noncontrolling interest held by TTI	(26)	(23)
Earnings attributable to Sempra Energy	103	91

TTHC

As we discuss in Note 5, in February 2020, Sempra Texas Intermediate Holding Company LLC, acquired a 1% interest in TTHC from Hunt Strategic Utility Investment, L.L.C. for \$23 million in cash, of which \$16 million of the fair value was attributed to our investment in TTHC. TTHC indirectly owns 100% of TTI, which owns 19.75% of Oncor’s outstanding membership interests, resulting in Sempra Energy acquiring an additional indirect 0.1975% interest in Oncor and bringing Sempra Energy’s indirect ownership in Oncor to approximately 80.45%.

SEMPRA MEXICO

IMG JV

IEnova has a 40% interest in IMG JV, a JV with a subsidiary of TC Energy Corporation, and accounts for its interest as an equity method investment. IMG JV owns and operates the Sur de Texas-Tuxpan natural gas marine pipeline, which is fully contracted under a 35-year natural gas transportation service contract with the CFE and commenced commercial operations in September 2019.

As we discuss in “Transactions with Affiliates” in Note 1, IEnova has provided IMG JV with a Mexican peso-denominated revolving line of credit to finance construction of the natural gas marine pipeline. Due to significant fluctuation of the Mexican peso and the impact of this fluctuation on the peso-denominated loan, equity earnings from IEnova’s investment in IMG JV were higher in the three months ended March 31, 2020 compared to the same period in 2019, primarily due to \$149 million of foreign currency gains in 2020 compared to \$10 million of foreign currency losses in 2019, which are offset by corresponding amounts included in Other (Expense) Income, Net on the Condensed Consolidated Statements of Operations.

We provide summarized income statement information for IMG JV in the following table.

SUMMARIZED FINANCIAL INFORMATION – IMG JV

(Dollars in millions)

	Three months ended March 31,	
	2020	2019
Operating revenues	\$ 122	\$ —
Operating expenses	(33)	—
Income from operations	89	—
Other income, net	364	41
Interest expense	(43)	(46)
Income tax benefit (expense)	10	(4)
Net income (loss)/Earnings (losses)	420	(8)

SEMPRA LNG

In the three months ended March 31, 2019, Sempra LNG invested cash of \$25 million in Cameron LNG JV. Prior to commencing commercial operations in August 2019, Sempra LNG capitalized \$13 million of interest in the three months ended March 31, 2019 related to its investment in Cameron LNG JV.

RBS SEMPra COMMODITIES

As we discuss in Note 11, in March 2020, we recorded a charge of \$100 million in Equity Earnings on Sempra Energy's Condensed Consolidated Statement of Operations for losses from our investment in RBS Sempra Commodities. We recognized a corresponding liability of \$25 million in Other Current Liabilities and \$75 million in Deferred Credits and Other for our share of estimated losses in excess of the carrying value of our equity method investment.

GUARANTEES

At March 31, 2020, Sempra LNG has provided guarantees aggregating a maximum of \$4.0 billion with an aggregate carrying value of \$2 million associated with Cameron LNG JV's debt obligations. We discuss these guarantees in Note 6 of the Notes to Consolidated Financial Statements in the Annual Report.

NOTE 7. DEBT AND CREDIT FACILITIES

LINES OF CREDIT

Primary U.S. Committed Lines of Credit

At March 31, 2020, Sempra Energy Consolidated had an aggregate capacity of \$6.7 billion in four primary U.S. committed lines of credit, which provide liquidity and support commercial paper. The principal terms of these committed lines of credit, which expire in May 2024, are described below and in Note 7 of the Notes to Consolidated Financial Statements in the Annual Report.

PRIMARY U.S. COMMITTED LINES OF CREDIT

(Dollars in millions)

	March 31, 2020			
	Total facility	Commercial paper outstanding ⁽¹⁾	Lines of credit outstanding	Available unused credit
Sempra Energy ⁽²⁾	\$ 1,250	\$ —	\$ (1,250)	\$ —
Sempra Global ⁽³⁾	3,185	(1,225)	—	1,960
SDG&E ⁽⁴⁾	1,500	—	(200)	1,300
SoCalGas ⁽⁴⁾	750	—	—	750
Total	\$ 6,685	\$ (1,225)	\$ (1,450)	\$ 4,010

⁽¹⁾ Because the commercial paper programs are supported by these lines, we reflect the amount of commercial paper outstanding as a reduction to the available unused credit.

⁽²⁾ The facility also provides for issuance of \$200 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. Subject to obtaining commitments from existing or new lenders and satisfaction of other specified conditions, Sempra Energy has the right to increase the letter of credit commitment up to \$500 million. No letters of credit were outstanding at March 31, 2020.

⁽³⁾ Commercial paper outstanding is before reductions of unamortized discount of \$1 million at Sempra Global.

⁽⁴⁾ The facility also provides for issuance of \$100 million of letters of credit on behalf of the borrowing utility with the amount of borrowings otherwise available under the facility reduced by the amount of outstanding letters of credit. Subject to obtaining commitments from existing or new lenders and satisfaction of other specified conditions, the borrowing utility has the right to increase the letter of credit commitment up to \$250 million. No letters of credit were outstanding at March 31, 2020.

Sempra Energy, SDG&E and SoCalGas each must maintain a ratio of indebtedness to total capitalization (as defined in each of the applicable credit facilities) of no more than 65% at the end of each quarter. At March 31, 2020, each entity was in compliance with this ratio and all other financial covenants under its respective credit facility.

At March 31, 2020, the \$200 million outstanding under SDG&E's line of credit was classified as long-term debt based on management's intent and ability to maintain this level of borrowing on a long-term basis either supported by this credit facility or by issuing long-term debt. This classification had no impact on SDG&E's cash flows.

Foreign Committed Lines of Credit

Our foreign operations in Mexico have additional general-purpose credit facilities aggregating \$1.9 billion at March 31, 2020. The principal terms of these credit facilities are described below.

FOREIGN COMMITTED LINES OF CREDIT

(U.S. dollar equivalent in millions)

Expiration date of facility	March 31, 2020		
	Total facility	Amounts outstanding	Available unused credit
February 2024 ⁽¹⁾	\$ 1,500	\$ (1,364)	\$ 136
April 2022 ⁽²⁾	100	(100)	—
September 2021 ⁽³⁾	280	(280)	—
Total	\$ 1,880	\$ (1,744)	\$ 136

⁽¹⁾ Five-year revolving credit facility with a syndicate of 10 lenders.

⁽²⁾ Three-year revolving credit facility with Scotiabank Inverlat, S.A. Withdrawals may be made for up to one year from April 11, 2019 in either U.S. dollars or Mexican pesos.

⁽³⁾ Two-year revolving credit facility with The Bank of Nova Scotia. Withdrawals may be made for up to two years from September 23, 2019 in U.S. dollars.

Letters of Credit

Outside of our domestic and foreign committed credit facilities, we have bilateral unsecured standby letter of credit capacity with select lenders that is uncommitted and supported by reimbursement agreements. At March 31, 2020, we had approximately \$615 million in standby letters of credit outstanding under these agreements.

TERM LOANS

In March 2020, Sempra Energy borrowed \$1,524 million, net of \$1 million of debt issuance costs, under a 364-day term loan, which has a maturity date of March 16, 2021 with an option to extend the maturity date to September 16, 2021, subject to receiving the consent of the lenders. Borrowings bear interest at benchmark rates plus 80 bps (1.72% at March 31, 2020). On April 1, 2020, Sempra Energy borrowed an additional \$75 million under the term loan.

In March 2020, SDG&E borrowed \$200 million under a 364-day term loan, which has a maturity date of March 18, 2021 with an option to extend the maturity date to September 17, 2021, subject to receiving the consent of the lenders. Borrowings bear interest at benchmark rates plus 80 bps (1.73% at March 31, 2020). SDG&E classified this term loan as long-term debt based on management's intent and ability to maintain this level of borrowing on a long-term basis by issuing long-term debt. This classification had no impact on SDG&E's cash flows.

The term loans provide Sempra Energy and SDG&E with additional liquidity outside of their respective committed lines of credit.

WEIGHTED-AVERAGE INTEREST RATES

The weighted-average interest rates on the total short-term debt at March 31, 2020 and December 31, 2019 were as follows:

WEIGHTED-AVERAGE INTEREST RATES

	March 31, 2020	December 31, 2019
Sempra Energy Consolidated	2.41%	2.31%
SDG&E	N/A	1.97
SoCalGas	N/A	1.86

LONG-TERM DEBT

SDG&E

In April 2020, SDG&E issued \$400 million of 3.32% first mortgage bonds maturing in 2050 and received proceeds of \$395 million (net of debt discount, underwriting discounts and debt issuance costs of \$5 million). SDG&E used \$200 million of the proceeds from the offering to repay borrowings on its line of credit and expects to use the remaining proceeds for working capital and other general corporate purposes, which may include the repayment of indebtedness.

SoCalGas

In January 2020, SoCalGas issued \$650 million of 2.55% first mortgage bonds maturing in 2030. We received proceeds of \$643 million (net of debt discount, underwriting discounts and debt issuance costs of \$7 million). SoCalGas used the proceeds from the offering to repay outstanding commercial paper and for other general corporate purposes.

Sempra Mexico

In November 2019, IEnova entered into a financing agreement with International Finance Corporation and North American Development Bank to finance and/or refinance the construction of solar generation projects in Mexico. Under this agreement, in April 2020, IEnova borrowed \$100 million from Japan International Cooperation Agency, with loan proceeds of \$98 million (net of debt issuance costs of \$2 million). The loan matures in November 2034 and bears interest based on 6-month LIBOR plus 150 bps. IEnova entered into a floating-to-fixed interest rate swap, resulting in a fixed rate of 2.38%.

Sempra LNG

As we discuss in “Shareholders’ Equity and Noncontrolling Interests – Other Noncontrolling Interests – Sempra LNG” in Note 1, notes payable totaling \$22 million due October 1, 2026 were converted to equity by the minority partner in Liberty Gas Storage LLC and are no longer outstanding.

NOTE 8. 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 may 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 Condensed Consolidated Balance Sheets. We have derivatives that are (1) cash flow hedges, (2) fair value hedges, 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 OCI (cash flow hedges), on the balance sheet (regulatory offsets), or recognized in earnings (fair value hedges). We classify cash flows from the principal settlements of cross-currency swaps that hedge exposure related to Mexican peso-denominated debt as financing activities and settlements of other derivative instruments as operating activities on the Condensed 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.

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 Condensed 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 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 Condensed Consolidated Statements of Operations.
- Sempra Mexico and Sempra LNG 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 Energy-Related Businesses Cost of Sales on the Condensed Consolidated Statements of Operations. Certain of these derivatives may also be designated as cash flow hedges. Sempra Mexico may also use natural gas energy derivatives with the objective of managing price risk and lowering natural gas prices at its 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 Condensed 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 and GHG allowances.

The following table summarizes net energy derivative volumes.

NET ENERGY DERIVATIVE VOLUMES

(Quantities in millions)

Commodity	Unit of measure	March 31, 2020	December 31, 2019
Sempra Energy Consolidated:			
Natural gas	MMBtu	20	32
Electricity	MWh	1	2
Congestion revenue rights	MWh	45	48
SDG&E:			
Natural gas	MMBtu	29	37
Electricity	MWh	2	2
Congestion revenue rights	MWh	45	48
SoCalGas:			
Natural gas	MMBtu	—	2

In addition to the amounts noted above, we 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 Sempra Energy and its other subsidiaries and JVs, periodically enter into interest rate derivative agreements intended to moderate our exposure to interest rates and to lower our overall costs of borrowing. 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.

The following table presents the net notional amounts of our interest rate derivatives, excluding JVs.

INTEREST RATE DERIVATIVES

(Dollars in millions)

	March 31, 2020		December 31, 2019	
	Notional debt	Maturities	Notional debt	Maturities
Sempra Energy Consolidated:				
Cash flow hedges	\$ 1,531	2020-2034	\$ 1,445	2020-2034

FOREIGN CURRENCY DERIVATIVES

We utilize cross-currency swaps to hedge exposure related to Mexican peso-denominated debt at our Mexican subsidiaries and JVs. 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 JVs 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 JVs, 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 or for inflation.

We also utilize foreign currency derivatives to hedge exposure to fluctuations in the Peruvian sol and Chilean peso related to the sale of our operations in Peru and Chile, respectively.

The following table presents the net notional amounts of our foreign currency derivatives, excluding JVs.

FOREIGN CURRENCY DERIVATIVES

(Dollars in millions)

	March 31, 2020		December 31, 2019	
	Notional amount	Maturities	Notional amount	Maturities
Sempra Energy Consolidated:				
Cross-currency swaps	\$ 306	2020-2023	\$ 306	2020-2023
Other foreign currency derivatives	1,939	2020-2021	1,796	2020-2021

FINANCIAL STATEMENT PRESENTATION

The Condensed 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 Condensed Consolidated Balance Sheets, including the amount of cash collateral receivables that were not offset, as the cash collateral was in excess of liability positions.

DERIVATIVE INSTRUMENTS ON THE CONDENSED CONSOLIDATED BALANCE SHEETS
(Dollars in millions)

	March 31, 2020			
	Other current assets ⁽¹⁾	Other long-term assets	Other current liabilities	Deferred credits and other
Sempra Energy Consolidated:				
Derivatives designated as hedging instruments:				
Interest rate and foreign exchange instruments	\$ 15	\$ —	\$ (29)	\$ (210)
Derivatives not designated as hedging instruments:				
Foreign exchange instruments	23	—	(82)	—
Associated offsetting foreign exchange instruments	(23)	—	23	—
Commodity contracts not subject to rate recovery	69	9	(69)	(11)
Associated offsetting commodity contracts	(65)	(3)	65	3
Commodity contracts subject to rate recovery	23	77	(47)	(50)
Associated offsetting commodity contracts	(2)	(2)	2	2
Associated offsetting cash collateral	—	—	13	—
Net amounts presented on the balance sheet	40	81	(124)	(266)
Additional cash collateral for commodity contracts not subject to rate recovery	37	—	—	—
Additional cash collateral for commodity contracts subject to rate recovery	19	—	—	—
Total⁽²⁾	\$ 96	\$ 81	\$ (124)	\$ (266)
SDG&E:				
Derivatives not designated as hedging instruments:				
Commodity contracts subject to rate recovery	\$ 20	\$ 77	\$ (43)	\$ (50)
Associated offsetting commodity contracts	(2)	(2)	2	2
Associated offsetting cash collateral	—	—	13	—
Net amounts presented on the balance sheet	18	75	(28)	(48)
Additional cash collateral for commodity contracts subject to rate recovery	15	—	—	—
Total⁽²⁾	\$ 33	\$ 75	\$ (28)	\$ (48)
SoCalGas:				
Derivatives not designated as hedging instruments:				
Commodity contracts subject to rate recovery	\$ 3	\$ —	\$ (4)	\$ —
Net amounts presented on the balance sheet	3	—	(4)	—
Additional cash collateral for commodity contracts subject to rate recovery	4	—	—	—
Total	\$ 7	\$ —	\$ (4)	\$ —

⁽¹⁾ Included in Current Assets: Fixed-Price Contracts and Other Derivatives for SDG&E.

⁽²⁾ Normal purchase contracts previously measured at fair value are excluded.

DERIVATIVE INSTRUMENTS ON THE CONDENSED CONSOLIDATED BALANCE SHEETS
(Dollars in millions)

	December 31, 2019			
	Other current assets ⁽¹⁾	Other long-term assets	Other current liabilities	Deferred credits and other
Sempra Energy Consolidated:				
Derivatives designated as hedging instruments:				
Interest rate and foreign exchange instruments	\$ —	\$ 3	\$ (17)	\$ (140)
Derivatives not designated as hedging instruments:				
Foreign exchange instruments	41	—	(20)	—
Associated offsetting foreign exchange instruments	(20)	—	20	—
Commodity contracts not subject to rate recovery	34	11	(41)	(10)
Associated offsetting commodity contracts	(32)	(2)	32	2
Commodity contracts subject to rate recovery	41	76	(47)	(47)
Associated offsetting commodity contracts	(6)	(3)	6	3
Associated offsetting cash collateral	—	—	14	—
Net amounts presented on the balance sheet	58	85	(53)	(192)
Additional cash collateral for commodity contracts not subject to rate recovery	43	—	—	—
Additional cash collateral for commodity contracts subject to rate recovery	25	—	—	—
Total⁽²⁾	\$ 126	\$ 85	\$ (53)	\$ (192)
SDG&E:				
Derivatives not designated as hedging instruments:				
Commodity contracts subject to rate recovery	\$ 30	\$ 76	\$ (41)	\$ (47)
Associated offsetting commodity contracts	(4)	(3)	4	3
Associated offsetting cash collateral	—	—	14	—
Net amounts presented on the balance sheet	26	73	(23)	(44)
Additional cash collateral for commodity contracts subject to rate recovery	16	—	—	—
Total⁽²⁾	\$ 42	\$ 73	\$ (23)	\$ (44)
SoCalGas:				
Derivatives not designated as hedging instruments:				
Commodity contracts subject to rate recovery	\$ 11	\$ —	\$ (6)	\$ —
Associated offsetting commodity contracts	(2)	—	2	—
Net amounts presented on the balance sheet	9	—	(4)	—
Additional cash collateral for commodity contracts subject to rate recovery	9	—	—	—
Total	\$ 18	\$ —	\$ (4)	\$ —

⁽¹⁾ Included in Current Assets: Fixed-Price Contracts and Other Derivatives for SDG&E.

⁽²⁾ Normal purchase contracts previously measured at fair value are excluded.

The table below includes the effects of derivative instruments designated as cash flow hedges on the Condensed Consolidated Statements of Operations and in OCI and AOCI:

CASH FLOW HEDGE IMPACTS

(Dollars in millions)

	Pretax (loss) gain recognized in OCI		Location	Pretax (loss) gain reclassified from AOCI into earnings	
	Three months ended March 31,			Three months ended March 31,	
	2020	2019		2020	2019
Sempra Energy Consolidated:					
Interest rate and foreign exchange instruments ⁽¹⁾	\$ (92)	\$ (3)	Interest Expense ⁽¹⁾	\$ (2)	\$ (1)
			Other (Expense) Income, Net	(41)	3
Interest rate and foreign exchange instruments	(172)	(68)	Equity Earnings	—	(1)
Foreign exchange instruments	21	(3)	Revenues: Energy-Related Businesses	2	(1)
			Other (Expense) Income, Net	2	—
Total	\$ (243)	\$ (74)		\$ (39)	\$ —

SDG&E:

Interest rate instruments ⁽¹⁾	\$ —	\$ —	Interest Expense ⁽¹⁾	\$ —	\$ (1)
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⁽¹⁾ Amounts include Otay Mesa VIE. All of SDG&E's interest rate derivative activity relates to Otay Mesa VIE. On August 14, 2019, Otay Mesa Energy Center LLC paid in full its variable-rate loan and terminated its interest rate swaps.

For Sempra Energy Consolidated, we expect that net losses of \$69 million, which are net of income tax benefit, that are currently recorded in AOCI related to cash flow hedges will be reclassified into earnings during the next 12 months as the hedged items affect earnings. SoCalGas expects that \$1 million of 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 12 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 March 31, 2020 is approximately 15 years for Sempra Energy Consolidated. The maximum remaining term for which we are hedging exposure to the variability of cash flows at our equity method investees is 20 years.

The following table summarizes the effects of derivative instruments not designated as hedging instruments on the Condensed Consolidated Statements of Operations.

UNDESIGNATED DERIVATIVE IMPACTS

(Dollars in millions)

	Location	Pretax (loss) gain on derivatives recognized in earnings	
		Three months ended March 31,	
		2020	2019
Sempra Energy Consolidated:			
Foreign exchange instruments	Other (Expense) Income, Net	\$ (114)	\$ 10
Commodity contracts not subject to rate recovery	Revenues: Energy-Related Businesses	51	—
Commodity contracts subject to rate recovery	Cost of Electric Fuel and Purchased Power	(9)	2
Commodity contracts subject to rate recovery	Cost of Natural Gas	(3)	2
Total		\$ (75)	\$ 14
SDG&E:			
Commodity contracts subject to rate recovery	Cost of Electric Fuel and Purchased Power	\$ (9)	\$ 2
SoCalGas:			
Commodity contracts subject to rate recovery	Cost of Natural Gas	\$ (3)	\$ 2

CONTINGENT FEATURES

For Sempra Energy Consolidated, SDG&E and SoCalGas, 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 March 31, 2020 and December 31, 2019 was \$5 million and \$21 million, respectively. For SoCalGas, the total fair value of this group of derivative instruments in a net liability position at both March 31, 2020 and December 31, 2019 was \$4 million. At March 31, 2020, if the credit ratings of Sempra Energy or SoCalGas were reduced below investment grade, \$5 million and \$4 million, respectively, 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 9. FAIR VALUE MEASUREMENTS

We discuss the valuation techniques and inputs we use to measure fair value and the definition of the three levels of the fair value hierarchy in Note 1 of the Notes to Consolidated Financial Statements in the Annual Report.

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 March 31, 2020 and December 31, 2019. 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 valued assets and liabilities, and their placement within the fair value hierarchy. We have not changed the valuation techniques or types of inputs we use to measure recurring fair value since December 31, 2019.

The fair value of commodity derivative assets and liabilities is presented in accordance with our netting policy, as we discuss in Note 8 under “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 in the tables below include the following (other than a \$5 million investment at December 31, 2019, measured at net asset value):

- Nuclear decommissioning trusts reflect the assets of SDG&E’s NDT, 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. 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 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 or income 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 March 31, 2020 and December 31, 2019.

RECURRING FAIR VALUE MEASURES – SEMPRA ENERGY CONSOLIDATED
(Dollars in millions)

	Fair value at March 31, 2020			
	Level 1	Level 2	Level 3	Total
Assets:				
Nuclear decommissioning trusts:				
Equity securities	\$ 299	\$ 5	\$ —	\$ 304
Debt securities:				
Debt securities issued by the U.S. Treasury and other U.S. government corporations and agencies	46	24	—	70
Municipal bonds	—	330	—	330
Other securities	—	269	—	269
Total debt securities	46	623	—	669
Total nuclear decommissioning trusts ⁽¹⁾	345	628	—	973
Interest rate and foreign exchange instruments	—	15	—	15
Commodity contracts not subject to rate recovery	—	10	—	10
Effect of netting and allocation of collateral ⁽²⁾	37	—	—	37
Commodity contracts subject to rate recovery	—	4	92	96
Effect of netting and allocation of collateral ⁽²⁾	14	—	5	19
Total	\$ 396	\$ 657	\$ 97	\$ 1,150

Liabilities:				
Interest rate and foreign exchange instruments	\$ —	\$ 298	\$ —	\$ 298
Commodity contracts not subject to rate recovery	—	12	—	12
Commodity contracts subject to rate recovery	13	4	76	93
Effect of netting and allocation of collateral ⁽²⁾	(13)	—	—	(13)
Total	\$ —	\$ 314	\$ 76	\$ 390

	Fair value at December 31, 2019			
	Level 1	Level 2	Level 3	Total
Assets:				
Nuclear decommissioning trusts:				
Equity securities	\$ 503	\$ 6	\$ —	\$ 509
Debt securities:				
Debt securities issued by the U.S. Treasury and other U.S. government corporations and agencies	46	11	—	57
Municipal bonds	—	282	—	282
Other securities	—	226	—	226
Total debt securities	46	519	—	565
Total nuclear decommissioning trusts ⁽¹⁾	549	525	—	1,074
Interest rate and foreign exchange instruments	—	24	—	24
Commodity contracts not subject to rate recovery	—	11	—	11
Effect of netting and allocation of collateral ⁽²⁾	43	—	—	43
Commodity contracts subject to rate recovery	5	8	95	108
Effect of netting and allocation of collateral ⁽²⁾	11	8	6	25
Total	\$ 608	\$ 576	\$ 101	\$ 1,285

Liabilities:				
Interest rate and foreign exchange instruments	\$ —	\$ 157	\$ —	\$ 157
Commodity contracts not subject to rate recovery	—	17	—	17
Commodity contracts subject to rate recovery	14	4	67	85
Effect of netting and allocation of collateral ⁽²⁾	(14)	—	—	(14)
Total	\$ —	\$ 178	\$ 67	\$ 245

⁽¹⁾ Excludes cash and cash equivalents.

⁽²⁾ 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.

RECURRING FAIR VALUE MEASURES – SDG&E
(Dollars in millions)

	Fair value at March 31, 2020			
	Level 1	Level 2	Level 3	Total
Assets:				
Nuclear decommissioning trusts:				
Equity securities	\$ 299	\$ 5	\$ —	\$ 304
Debt securities:				
Debt securities issued by the U.S. Treasury and other U.S. government corporations and agencies	46	24	—	70
Municipal bonds	—	330	—	330
Other securities	—	269	—	269
Total debt securities	46	623	—	669
Total nuclear decommissioning trusts ⁽¹⁾	345	628	—	973
Commodity contracts subject to rate recovery	—	1	92	93
Effect of netting and allocation of collateral ⁽²⁾	10	—	5	15
Total	\$ 355	\$ 629	\$ 97	\$ 1,081
Liabilities:				
Commodity contracts subject to rate recovery	\$ 13	\$ —	\$ 76	\$ 89
Effect of netting and allocation of collateral ⁽²⁾	(13)	—	—	(13)
Total	\$ —	\$ —	\$ 76	\$ 76

	Fair value at December 31, 2019			
	Level 1	Level 2	Level 3	Total
Assets:				
Nuclear decommissioning trusts:				
Equity securities	\$ 503	\$ 6	\$ —	\$ 509
Debt securities:				
Debt securities issued by the U.S. Treasury and other U.S. government corporations and agencies	46	11	—	57
Municipal bonds	—	282	—	282
Other securities	—	226	—	226
Total debt securities	46	519	—	565
Total nuclear decommissioning trusts ⁽¹⁾	549	525	—	1,074
Commodity contracts subject to rate recovery	1	3	95	99
Effect of netting and allocation of collateral ⁽²⁾	10	—	6	16
Total	\$ 560	\$ 528	\$ 101	\$ 1,189
Liabilities:				
Commodity contracts subject to rate recovery	\$ 14	\$ —	\$ 67	\$ 81
Effect of netting and allocation of collateral ⁽²⁾	(14)	—	—	(14)
Total	\$ —	\$ —	\$ 67	\$ 67

⁽¹⁾ Excludes cash and cash equivalents.

⁽²⁾ 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.

RECURRING FAIR VALUE MEASURES – SOCALGAS

(Dollars in millions)

	Fair value at March 31, 2020			
	Level 1	Level 2	Level 3	Total
Assets:				
Commodity contracts subject to rate recovery	\$ —	\$ 3	\$ —	\$ 3
Effect of netting and allocation of collateral ⁽¹⁾	4	—	—	4
Total	\$ 4	\$ 3	\$ —	\$ 7
Liabilities:				
Commodity contracts subject to rate recovery	\$ —	\$ 4	\$ —	\$ 4
Total	\$ —	\$ 4	\$ —	\$ 4

	Fair value at December 31, 2019			
	Level 1	Level 2	Level 3	Total
Assets:				
Commodity contracts subject to rate recovery	\$ 4	\$ 5	\$ —	\$ 9
Effect of netting and allocation of collateral ⁽¹⁾	1	8	—	9
Total	\$ 5	\$ 13	\$ —	\$ 18
Liabilities:				
Commodity contracts subject to rate recovery	\$ —	\$ 4	\$ —	\$ 4
Total	\$ —	\$ 4	\$ —	\$ 4

⁽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 table below 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⁽¹⁾

(Dollars in millions)

	Three months ended March 31,	
	2020	2019
Balance at January 1	\$ 28	\$ 179
Realized and unrealized (losses) gains	(5)	5
Settlements	(7)	(2)
Balance at March 31	\$ 16	\$ 182
Change in unrealized gains (losses) relating to instruments still held at March 31	\$ (6)	\$ 13

⁽¹⁾ Excludes the effect of the contractual ability to settle contracts under master netting agreements.

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 are the basis for valuing CRRs settling in the following year. For the CRRs settling from January 1 to December 31, the auction price inputs, at a given location, were in the following ranges for the years indicated below:

CONGESTION REVENUE RIGHTS AUCTION PRICE INPUTS

Settlement year	Price per MWh		Median price per MWh	
	\$	\$	\$	\$
2020	(3.77)	to	6.03	(1.58)
2019	(8.57)	to	35.21	(2.94)

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. 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 8.

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. The range and weighted-average price of these inputs at March 31 were as follows:

LONG-TERM, FIXED-PRICE ELECTRICITY POSITIONS PRICE INPUTS

Settlement year	Price per MWh				Weighted-average price per MWh	
2020	\$	16.51	to	\$	52.45	\$ 35.41
2019		23.25	to		81.75	42.49

A significant increase (decrease) in market electricity forward prices would result in a significantly higher (lower) fair value. We summarize long-term, fixed-price electricity position volumes in Note 8.

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 Condensed Consolidated Statements of Operations. Because unrealized gains and losses are recorded as regulatory assets and liabilities, they do not affect earnings.

Fair Value of Financial Instruments

The fair values of certain of our financial instruments (cash, accounts and notes receivable, short-term amounts 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 Condensed Consolidated Balance Sheets.

FAIR VALUE OF FINANCIAL INSTRUMENTS

(Dollars in millions)

	March 31, 2020					
	Carrying amount	Fair value				Total
		Level 1	Level 2	Level 3		
Sempra Energy Consolidated:						
Long-term amounts due from unconsolidated affiliates ⁽¹⁾	\$ 599	\$ —	\$ 627	\$ 6		\$ 633
Long-term amounts due to unconsolidated affiliates	263	—	238	—		238
Total long-term debt ⁽²⁾	21,204	—	22,049	—		22,049
SDG&E:						
Total long-term debt ⁽³⁾	\$ 5,523	\$ —	\$ 6,281	\$ —		\$ 6,281
SoCalGas:						
Total long-term debt ⁽⁴⁾	\$ 4,459	\$ —	\$ 4,894	\$ —		\$ 4,894
	December 31, 2019					
	Carrying amount	Fair value				Total
		Level 1	Level 2	Level 3		
Sempra Energy Consolidated:						
Long-term amounts due from unconsolidated affiliates	\$ 742	\$ —	\$ 759	\$ —		\$ 759
Long-term amounts due to unconsolidated affiliates	195	—	184	—		184
Total long-term debt ⁽²⁾	21,247	—	22,638	26		22,664
SDG&E:						
Total long-term debt ⁽³⁾	\$ 5,140	\$ —	\$ 5,662	\$ —		\$ 5,662
SoCalGas:						
Total long-term debt ⁽⁴⁾	\$ 3,809	\$ —	\$ 4,189	\$ —		\$ 4,189

⁽¹⁾ Before allowances for credit losses of \$7 million at March 31, 2020.

⁽²⁾ Before reductions of unamortized discount and debt issuance costs of \$228 million and \$225 million at March 31, 2020 and December 31, 2019, respectively, and excluding finance lease obligations of \$1,301 million and \$1,289 million at March 31, 2020 and December 31, 2019, respectively.

⁽³⁾ Before reductions of unamortized discount and debt issuance costs of \$47 million and \$48 million at March 31, 2020 and December 31, 2019, respectively, and excluding finance lease obligations of \$1,268 million and \$1,270 million at March 31, 2020 and December 31, 2019, respectively.

⁽⁴⁾ Before reductions of unamortized discount and debt issuance costs of \$41 million and \$34 million at March 31, 2020 and December 31, 2019, respectively, and excluding finance lease obligations of \$33 million and \$19 million at March 31, 2020 and December 31, 2019, respectively.

We provide the fair values for the securities held in the NDT related to SONGS in Note 10.

NOTE 10. SAN ONOFRE NUCLEAR GENERATING STATION

We provide below updates to ongoing matters related to SONGS, a nuclear generating facility near San Clemente, California that ceased operations in June 2013, and in which SDG&E has a 20% ownership interest. We discuss SONGS further in Note 15 of the Notes to Consolidated Financial Statements in the Annual Report.

NUCLEAR DECOMMISSIONING AND FUNDING

As a result of Edison's decision to permanently retire SONGS Units 2 and 3, Edison began the decommissioning phase of the plant. We expect the majority of the decommissioning work to take 10 years after receipt of the required permits. The coastal development permit was issued in October 2019. The Samuel Lawrence Foundation filed a writ petition under the California Coastal Act in LA Superior Court in December 2019 seeking to invalidate the permit and to obtain injunctive relief to stop decommissioning work. Major decommissioning work began in 2020. Decommissioning of Unit 1, removed from service in 1992, is largely complete. The remaining work for Unit 1 will be completed once Units 2 and 3 are dismantled and the spent fuel is removed from the site. The spent fuel is currently being stored on-site, until the DOE identifies a spent fuel storage facility and puts in place a program for the fuel's disposal, as we discuss below. SDG&E is responsible for approximately 20% of the total contract price.

In accordance with state and federal requirements and regulations, SDG&E has assets held in the NDT to fund its share of decommissioning costs for SONGS Units 1, 2 and 3. 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 NDT are invested in accordance with CPUC regulations. SDG&E classifies debt and equity securities held in the NDT as available-for-sale. The NDT assets are presented on the Sempra Energy and SDG&E Condensed Consolidated Balance Sheets at fair value with the offsetting credits recorded in noncurrent Regulatory Liabilities.

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 March 2020, SDG&E received authorization from the CPUC to access NDT funds of up to \$109 million for forecasted 2020 costs.

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 trust 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. SDG&E is awaiting the adoption of, or additional refinement to, the proposed regulations before determining whether the proposed regulations will allow SDG&E to access the NDT funds for reimbursement or payment of the spent fuel management costs incurred in 2017 and subsequent years. Further clarification of the proposed regulations could enable SDG&E to access the NDT to recover spent fuel management costs before Edison reaches final settlement with the DOE regarding the DOE's reimbursement of these costs. Historically, the DOE's reimbursements of spent fuel storage costs have not resulted in timely or complete recovery of these costs. We discuss the DOE's responsibility for spent nuclear fuel below. The IRS held public hearings on the proposed regulations in October 2017. It is unclear when clarification of the proposed regulations might be provided or when the proposed regulations will be finalized.

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 9.

NUCLEAR DECOMMISSIONING TRUSTS

(Dollars in millions)

	Cost	Gross unrealized gains	Gross unrealized losses	Estimated fair value
At March 31, 2020:				
Debt securities:				
Debt securities issued by the U.S. Treasury and other U.S. government corporations and agencies ⁽¹⁾	\$ 68	\$ 2	\$ —	\$ 70
Municipal bonds ⁽²⁾	320	12	(2)	330
Other securities ⁽³⁾	276	4	(11)	269
Total debt securities	664	18	(13)	669
Equity securities	141	185	(22)	304
Cash and cash equivalents	14	—	—	14
Total	\$ 819	\$ 203	\$ (35)	\$ 987
At December 31, 2019:				
Debt securities:				
Debt securities issued by the U.S. Treasury and other U.S. government corporations and agencies	\$ 57	\$ —	\$ —	\$ 57
Municipal bonds	270	12	—	282
Other securities	218	9	(1)	226
Total debt securities	545	21	(1)	565
Equity securities	176	339	(6)	509
Cash and cash equivalents	8	—	—	8
Total	\$ 729	\$ 360	\$ (7)	\$ 1,082

⁽¹⁾ Maturity dates are 2021-2050.

⁽²⁾ Maturity dates are 2020-2056.

⁽³⁾ Maturity dates are 2020-2072.

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 IN THE NDT

(Dollars in millions)

	Three months ended March 31,	
	2020	2019
Proceeds from sales	\$ 552	\$ 225
Gross realized gains	92	5
Gross realized losses	(5)	(2)

Net unrealized gains and losses, as well as realized gains and losses that are reinvested in the NDT, are included in noncurrent Regulatory Liabilities on Sempra Energy's and SDG&E's Condensed Consolidated Balance Sheets. We determine the cost of securities in the trusts on the basis of specific identification.

ASSET RETIREMENT OBLIGATION AND SPENT NUCLEAR FUEL

The present value of SDG&E's ARO related to decommissioning costs for the SONGS units was \$608 million at March 31, 2020. 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 ARO for all three units is based on a cost study prepared in 2017 that is pending CPUC approval. The ARO for Units 2 and 3 reflects the acceleration of the start of decommissioning of these units as a result of the early closure of the plant. SDG&E's share of total decommissioning costs in 2020 dollars is approximately \$860 million.

U.S. DEPARTMENT OF ENERGY NUCLEAR FUEL DISPOSAL

Spent nuclear fuel from SONGS is currently stored on-site in an ISFSI licensed by the Nuclear Regulatory Commission or temporarily in spent fuel pools. In October 2015, the California Coastal Commission approved Edison's application to expand the ISFSI. The ISFSI expansion began construction in 2016 and the transfer of the spent nuclear fuel from Units 2 and 3 to the ISFSI began in 2018. The ISFSI 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. Until then, SONGS owners are responsible for interim storage of spent nuclear fuel at SONGS.

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. In November 2019, Edison filed a claim for spent fuel management costs in the U.S. Court of Federal Claims for the time period from January 2017 through July 2018. It is unclear when Edison will pursue litigation claims for spent fuel management costs incurred on or after August 1, 2018. 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.

NUCLEAR INSURANCE

SDG&E and the other owners of SONGS have insurance to cover claims from nuclear liability incidents arising at SONGS. Currently, this insurance provides \$450 million in coverage limits, the maximum amount available, including coverage for acts of terrorism. In addition, the Price-Anderson Act provides an additional \$110 million of coverage. If a nuclear liability loss occurs at SONGS and exceeds the \$450 million insurance limit, this additional coverage would be available to provide a total of \$560 million in coverage limits per incident.

As a result of updated coverage assessments, the SONGS owners have nuclear property damage insurance of \$130 million, which exceeds the minimum federal requirements of \$50 million. This insurance coverage is provided through 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 \$3.5 million of retrospective premiums based on overall member claims.

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) of \$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.

NOTE 11. 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 reasonably estimate 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 March 31, 2020, loss contingency accruals for legal matters, including associated legal fees, that are probable and estimable were \$442 million for Sempra Energy Consolidated, including \$297 million for SoCalGas. Amounts for Sempra Energy Consolidated and SoCalGas include \$286 million for matters related to the Aliso Canyon natural gas storage facility gas leak, which we discuss below.

SoCalGas

Aliso Canyon Natural Gas Storage Facility Gas Leak

From October 23, 2015 through February 11, 2016, SoCalGas experienced a natural gas leak from one of the injection-and-withdrawal wells, SS25, at its Aliso Canyon natural gas storage facility in Los Angeles County. As described below in "Civil and Criminal Litigation" and "Regulatory Proceedings," numerous lawsuits, investigations and regulatory proceedings have been

initiated in response to the Leak, resulting in significant costs, which together with other Leak-related costs are discussed below in “Cost Estimates, Accounting Impact and Insurance.”

Civil and Criminal Litigation. As of April 29, 2020, 393 lawsuits, including approximately 36,000 plaintiffs, are pending against SoCalGas related to the Leak, some of which have also named Sempra Energy. All these cases, other than a matter brought by the Los Angeles County District Attorney and the federal securities class action discussed below, are coordinated before a single court in the LA Superior Court for pretrial management.

In November 2017, in the coordinated proceeding, individuals and business entities filed a Third 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, loss of consortium, wrongful death and violations of Proposition 65 against SoCalGas, with certain causes of action also naming Sempra Energy. The consolidated complaint seeks compensatory and punitive damages for personal injuries, lost wages and/or lost profits, property damage and diminution in property value, injunctive relief, costs of future medical monitoring, civil penalties (including penalties associated with Proposition 65 claims alleging violation of requirements for warning about certain chemical exposures), and attorneys’ fees. SoCalGas is engaged in settlement discussions in connection with these actions and has recorded a related accrual of \$277 million, inclusive of estimated legal costs, in Reserve for Aliso Canyon Costs on SoCalGas’ and Sempra Energy’s Condensed Consolidated Balance Sheets. The initial trial previously scheduled for June 2020 for a small number of randomly selected individual plaintiffs has been postponed, with a new trial date to be determined by the court.

In January 2017, 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). The Property Class Action asserts claims for strict liability for ultra-hazardous activities, negligence, negligence per se, violation of the California Unfair Competition Law, trespass, permanent and continuing public and private nuisance, and inverse condemnation. The Business Class Action asserts a claim for violation of the California Unfair Competition Law. Both complaints seek compensatory, statutory and punitive damages, injunctive relief and attorneys’ fees.

Three property developers filed complaints in July and October of 2018 against SoCalGas and Sempra Energy alleging causes of action for strict liability, negligence per se, negligence, continuing nuisance, permanent nuisance and violation of the California Unfair Competition Law, as well as claims for negligence against certain directors of SoCalGas. The complaints seek compensatory, statutory and punitive damages, injunctive relief and attorneys’ fees.

In October 2018 and January 2019, complaints were filed on behalf of 51 firefighters stationed near the Aliso Canyon natural gas storage facility who allege they were injured by exposure to chemicals released during the Leak. The complaints against SoCalGas and Sempra Energy assert causes of actions 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. The complaints seek compensatory and punitive damages for personal injuries, lost wages and/or lost profits, property damage and diminution in property value, and attorney’s fees.

Four shareholder derivative actions are also pending alleging breach of fiduciary duties against certain officers and certain directors of Sempra Energy and/or SoCalGas, all of which were joined in an Amended Consolidated Shareholder Derivative Complaint filed in February 2020. A fifth shareholder derivative action filed in March 2017 was dismissed in November 2019 on the grounds that the plaintiff failed to adequately plead his claims, but the court gave leave for him to amend the complaint to cure the defects.

In addition, a federal securities class action alleging violation of the federal securities laws was filed against Sempra Energy and certain of its officers in July 2017 in the U.S. District Court for the Southern District of California. In March 2018, the court dismissed the action with prejudice. The plaintiffs have appealed the dismissal.

In February 2019, the LA Superior Court approved a settlement between SoCalGas and the Los Angeles City Attorney’s Office, the County of Los Angeles, the California Office of the Attorney General and CARB of three actions filed by these entities under which SoCalGas made payments and agreed to provide funding for environmental projects totaling \$120 million, including \$21 million in civil penalties, as well as other safety-related commitments.

In September 2016, SoCalGas settled a misdemeanor criminal complaint filed in February 2016 by the Los Angeles County District Attorney’s Office against SoCalGas, pleading no contest to a charge that it failed 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). In November 2016, the LA Superior Court approved the settlement and entered judgment on the notice charge. Under the settlement, SoCalGas paid a \$75,000 fine, \$233,500 in penalties, and \$246,673 to

reimburse costs incurred by Los Angeles County Fire Department's Health and Hazardous Materials Division, as well as completed operational commitments estimated to cost approximately \$6 million. Certain individuals who objected to the settlement petitioned the Court of Appeal to vacate the judgment, contending they should be granted restitution. In July 2019, the Court of Appeal denied the petition in part, but remanded the matter to the trial court to give the petitioners an opportunity to prove damages stemming from only the three-day delay in reporting the Leak. Following the hearing, the trial court denied restitution. The alleged victims have asked the trial court to reconsider its order.

Regulatory Proceedings. In January 2016, CalGEM and the CPUC directed an independent analysis of the technical root cause of the Leak to be conducted by Blade. In May 2019, Blade released its report, which concluded that the Leak was caused by a failure of the production casing of the well due to corrosion and that attempts to stop the Leak were not effectively conducted, but did not identify any instances of non-compliance by SoCalGas. Blade concluded that SoCalGas' compliance activities conducted prior to the Leak did not find indications of a casing integrity issue. Blade opined, however, that there were measures, none of which were required by gas storage regulations at the time, that could have been taken to aid in the early identification of corrosion and that, in Blade's opinion, would have prevented or mitigated the Leak. The report also identified well safety practices and regulations that have since been adopted by CalGEM and implemented by SoCalGas, which address most of the root cause of the Leak identified during Blade's investigation.

In June 2019, the CPUC opened an OII to consider penalties against SoCalGas for the Leak, which it later bifurcated into two phases. The first phase will consider whether SoCalGas violated California Public Utilities Code Section 451 or other laws, CPUC orders or decisions, rules or requirements, whether SoCalGas engaged in unreasonable and/or imprudent practices with respect to its operation and maintenance of the Aliso Canyon natural gas storage facility or its related record-keeping practices, whether SoCalGas cooperated sufficiently with the Safety Enforcement Division (SED) and Blade during the pre-formal investigation, and whether any of the mitigation proposed by Blade should be implemented to the extent not already done. In November 2019, SED, based largely on the Blade report, alleged a total of 330 violations, asserting that SoCalGas violated California Public Utilities Code Section 451 and failed to cooperate in the investigation and to keep proper records. Hearings in the first phase of the OII have been postponed until further notice. The second phase will consider whether SoCalGas should be sanctioned for the Leak and what penalties, if any, should be imposed for any violations proven in the first phase, as well as determine the amounts of various costs incurred by SoCalGas and other parties in connection with the Leak and the ratemaking treatment or other disposition of such costs. In a January 2016 emergency proclamation, the Governor ordered the CPUC to ensure that SoCalGas covers costs related to the Leak and its response, while protecting ratepayers. In addition, CalGEM is investigating the Leak.

In February 2017, the CPUC opened a proceeding pursuant to SB 380 to determine the feasibility of minimizing or eliminating the use of the Aliso Canyon natural gas storage facility while still maintaining energy and electric reliability for the region, but excluding issues with respect to air quality, public health, causation, culpability or cost responsibility regarding the Leak. The first phase of the proceeding established a framework for the hydraulic, production cost and economic modeling assumptions for the potential reduction in usage or elimination of the Aliso Canyon natural gas storage facility. Phase 2 of the proceeding, which will evaluate the impacts of reducing or eliminating the Aliso Canyon natural gas storage facility using the established framework and models, began in the first quarter of 2019. The CPUC has indicated that it expects to issue its report for Phase 2 in 2020. In December 2019, the CPUC added a third phase of the proceeding to consider alternative means for meeting or avoiding the demand for the facility's services if it were eliminated in either 2027 or 2045.

If the Aliso Canyon natural gas storage facility were to be permanently closed, or if future cash flows from its operation were otherwise insufficient to recover its carrying value, it could result in an impairment of the facility and significantly higher than expected operating costs and/or additional capital expenditures, and natural gas reliability and electric generation could be jeopardized. At March 31, 2020, the Aliso Canyon natural gas storage facility had a net book value of \$771 million. Any significant impairment of this asset, or higher operating costs and additional capital expenditures incurred by SoCalGas that may not be recoverable in customer rates, could have a material adverse effect on SoCalGas' and Sempra Energy's results of operations, financial condition and cash flows.

Cost Estimates, Accounting Impact and Insurance. SoCalGas has incurred significant costs for temporary relocation of community residents; to control the well and stop the Leak; to mitigate the natural gas released; to purchase natural gas to replace what was lost through the Leak; to defend against and, in certain cases, settle, civil and criminal litigation arising from the Leak; to pay the costs of the government-ordered response to the Leak, including the costs for Blade to conduct the root cause analysis described above; to respond to various government and agency investigations regarding the Leak; and to comply with increased regulation imposed as a result of the Leak. At March 31, 2020, SoCalGas estimates the costs related to the Leak are \$1,408 million (the cost estimate), which includes the \$1,277 million of costs recovered or probable of recovery from insurance. This cost estimate may increase significantly as more information becomes available. A substantial portion of the cost estimate has been

paid, and \$284 million is accrued as Reserve for Aliso Canyon Costs and \$6 million is accrued in Deferred Credits and Other as of March 31, 2020 on SoCalGas' and Sempra Energy's Condensed Consolidated Balance Sheets.

Except for the amounts paid or estimated to settle certain actions, as described in "Civil and Criminal Litigation" above, the cost estimate does not include all litigation or regulatory costs to the extent it is not possible to predict at this time the outcome of these actions or reasonably estimate the costs to defend or resolve the actions or the amount of damages, restitution, or civil, administrative or criminal fines, sanctions, penalties or other costs or remedies that may be imposed or incurred. The cost estimate also does not include certain other costs incurred by Sempra Energy associated with defending against shareholder derivative lawsuits and other potential costs that we currently do not anticipate incurring or that we cannot reasonably estimate. These costs not included in the cost estimate could be significant and could have a material adverse effect on SoCalGas' and Sempra Energy's cash flows, financial condition and results of operations.

We have received insurance payments for many of the costs included in the cost estimate, including temporary relocation and associated processing costs, control-of-well expenses, costs of the government-ordered response to the Leak, certain legal costs and lost gas. We intend to pursue the full extent of our insurance coverage for the costs we have incurred. Other than directors' and officers' liability insurance, after taking into consideration the additional accrual related to litigation matters described above, we have effectively exhausted all of our insurance in this matter, except as to certain defense costs we may incur in the future, including those related to the shareholder derivative lawsuits described above. We continue to pursue other sources of insurance coverage for costs related to this matter, but we may not be successful in obtaining additional insurance recovery for any of these costs. If we are not able to secure additional insurance recovery for all or a substantial portion of these costs, if any costs we have recorded as an insurance receivable are not collected, if there are delays in receiving insurance recoveries, or if the insurance recoveries are subject to income taxes while the associated costs are not tax deductible, such amounts, which could be significant, could have a material adverse effect on SoCalGas' and Sempra Energy's cash flows, financial condition and results of operations.

As of March 31, 2020, we recorded the expected recovery of the cost estimate related to the Leak of \$511 million as Insurance Receivable for Aliso Canyon Costs on SoCalGas' and Sempra Energy's Condensed Consolidated Balance Sheets. This amount is exclusive of insurance retentions and \$766 million of insurance proceeds we received through March 31, 2020. If we were to conclude that this receivable or a portion of it is no longer probable of recovery from insurers, some or all of this receivable would be charged against earnings, which could have a material adverse effect on SoCalGas' and Sempra Energy's cash flows, financial condition and results of operations.

Sempra Mexico

Energía Costa Azul

IEnova has been engaged in a long-running land dispute relating to property adjacent to its ECA LNG Regasification facility near Ensenada, Mexico. A claimant to the adjacent property filed complaints in the federal Agrarian Court challenging the refusal of SEDATU in 2006 to issue a title to him for the disputed property. In November 2013, the federal Agrarian Court ordered that SEDATU issue the requested title and cause it to be registered. Both SEDATU and IEnova challenged the ruling, due to lack of notification of the underlying process. In May 2019, a federal court in Mexico reversed the ruling and ordered a retrial. IEnova expects additional proceedings regarding the claims.

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 the ECA LNG Regasification facility 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.

Additionally, in August 2018, a claimant filed a challenge in the federal district court in Ensenada, Baja California in relation to the environmental and social impact permits issued to ECA LNG JV for the potential liquefaction-export project in September 2017 and December 2017, respectively, to allow natural gas liquefaction activities at the ECA LNG Regasification facility. The court issued a provisional injunction in September 2018 and maintained that provisional injunction at an April 2019 hearing. In December 2018, the relevant Mexican regulators approved modifications to the environmental permit that facilitate the development of the proposed natural gas liquefaction facility by ECA LNG JV in two phases. In May 2019, the court canceled the provisional injunction. The claimant appealed the court's decision but was not successful. The claimant's underlying challenge to the permits remain pending.

Cases involving two parcels of real property have been filed against the ECA LNG Regasification facility. In one case, filed in the federal Agrarian Court in 2006, the plaintiffs seek to annul the recorded property title for a parcel on which the ECA LNG Regasification facility is situated and to obtain possession of a different parcel that allegedly sits in the same place. Another civil

complaint filed in the state court was served in April 2012 seeking to invalidate the contract by which the ECA LNG Regasification facility purchased another of the parcels, on the grounds the purchase price was unfair; the plaintiff filed a second complaint in 2013 in the federal Agrarian Court seeking an order that SEDATU issue title to her. In January 2016, the federal Agrarian Court ruled against the plaintiff. The plaintiff appealed the ruling and a partial retrial was ordered. We are awaiting a new decision from the Agrarian Court. In May 2018, the state court dismissed the civil complaint, and the plaintiff appealed but was not successful; however, the plaintiff can file a final federal appeal. IEnova expects further proceedings on these two matters.

An unfavorable final decision on these property disputes or permit challenges could materially and adversely affect our existing natural gas gasification operations and our planned natural gas liquefaction projects currently in development at the ECA LNG Regasification facility and potential ECA LNG JV liquefaction-export project.

Guaymas-El Oro Segment of the Sonora Pipeline

IEnova's Sonora natural gas pipeline consists of two segments, the Sasabe-Puerto Libertad-Guaymas segment, and the Guaymas-El Oro segment. Each segment has its own service agreement with the CFE. In 2015, the Yaqui tribe, with the exception of some members living in the Bécum community, granted its consent and a right-of-way easement agreement for the construction of the Guaymas-El Oro segment of the Sonora natural gas pipeline that crosses its territory. Representatives of the Bécum community filed a legal challenge in Mexican federal court demanding the right to withhold consent for the project, the stoppage of work in the Yaqui territory and damages. In 2016, the judge granted a suspension order that prohibited the construction of such segment through the Bécum community territory. Because the pipeline does not pass through the Bécum community, IEnova did not believe the 2016 suspension order prohibited construction in the remainder of the Yaqui territory. Construction of the Guaymas-El Oro segment was completed, and commercial operations began in May 2017.

Following the start of commercial operations of the Guaymas-El Oro segment, IEnova reported damage to the Guaymas-El Oro segment of the Sonora pipeline in the Yaqui territory that has made that section inoperable since August 23, 2017 and, as a result, IEnova declared a force majeure event. In 2017, an appellate court ruled that the scope of the 2016 suspension order encompassed the wider Yaqui territory, which has prevented IEnova from making repairs to put the pipeline back in service. In July 2019, a federal district court ruled in favor of IEnova and held that the Yaqui tribe was properly consulted and that consent from the Yaqui tribe was properly received. Representatives of the Bécum community appealed this decision, causing the suspension order preventing IEnova from repairing the damage to the Guaymas-El Oro segment of the Sonora pipeline in the Yaqui territory to remain in place until the appeals process is exhausted.

IEnova exercised its rights under the contract, which included seeking force majeure payments for the two-year period such force majeure payments were required to be made, which ended on August 22, 2019.

In July 2019, the CFE filed a request for arbitration generally to nullify certain contract terms that provide for fixed capacity payments in instances of force majeure and made a demand for substantial damages in connection with the force majeure event. In September 2019, the arbitration process ended when IEnova and the CFE reached an agreement to restart natural gas transportation service on the earlier of completion of repair of the damaged pipeline or January 15, 2020, and to modify the tariff structure and extend the term of the contract by 10 years. In January 2020, IEnova and the CFE agreed to extend the January 15, 2020 new service start date to May 15, 2020. Under the revised agreement, the CFE will resume making payments only when the damaged section of the Guaymas-El Oro segment of the Sonora pipeline is repaired. If the pipeline is not repaired by May 15, 2020 and the parties do not agree on a new service start date, IEnova retains the right to terminate the contract and seek to recover its reasonable and documented costs and lost profits. The parties are currently discussing a new service start date in the event the pipeline is not repaired by May 15, 2020, but there can be no assurance that the parties will have agreed on a new service start date if the pipeline is not repaired by that date.

If IEnova is unable to make such repairs and resume operations in the Guaymas-El Oro segment of the Sonora pipeline within this time frame or if IEnova terminates the contract and is unable to obtain recovery, there may be a material adverse impact on Sempra Energy's results of operations and cash flows and our ability to recover the carrying value of our investment. The Sasabe-Puerto Libertad-Guaymas segment of the Sonora pipeline remains in full operation and is not impacted by these developments.

Other Litigation

Sempra Energy holds an equity method investment in RBS Sempra Commodities, a limited liability partnership in the process of being liquidated. RBS, now NatWest Markets plc, our partner in the JV, paid an assessment of £86 million (approximately \$138 million in U.S. dollars) in October 2014 to HMRC for denied VAT refund claims filed in connection with the purchase of carbon credit allowances by RBS SEE, a subsidiary of RBS Sempra Commodities. RBS SEE has since been sold to J.P. Morgan Chase & Co. 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. Trial on the matter, which could include the assessment of a penalty of up to 100% of the claimed amount, has been scheduled between November 2, 2020 and December 11, 2020.

In 2015, liquidators filed a claim in the High Court of Justice against RBS and Mercuria Energy Europe Trading Limited (the Defendants) on behalf of 10 companies (the Liquidating Companies) that engaged in carbon credit trading via chains that included a company that traded directly with RBS SEE. The claim alleges that the Defendants' participation in the purchase and sale of carbon credits resulted in the Liquidating Companies' carbon credit trading transactions creating a VAT liability they were unable to pay, and that the Defendants are liable to provide for equitable compensation due to dishonest assistance and for compensation under the U.K. Insolvency Act of 1986. Trial on the matter was held in June and July of 2018. On March 10, 2020, the High Court of Justice rendered its judgment mostly in favor of the Liquidating Companies and awarded damages of approximately £45 million (approximately \$56 million in U.S. dollars at March 31, 2020), plus costs and interest, which will be determined after further proceedings.

Although the final outcome of both the High Court of Justice case and First-Tier Tribunal case remains uncertain, we recorded \$100 million in equity losses from our investment in RBS Sempra Commodities in Equity Earnings on the Sempra Energy Condensed Consolidated Statement of Operations in the three months ended March 31, 2020, which represents an estimate of our obligations to settle pending tax matters and related legal costs.

Certain EFH subsidiaries that we acquired as part of the merger of EFH with an indirect subsidiary of Sempra Energy are defendants in personal injury lawsuits brought in state courts throughout the U.S. As of April 29, 2020, 275 such lawsuits are pending with 182 such lawsuits having been served. These cases allege illness or death as a result of exposure to asbestos in power plants designed and/or built by companies whose assets were purchased by predecessor entities to the EFH subsidiaries, and generally assert claims for product defects, negligence, strict liability and wrongful death. They seek compensatory and punitive damages. Additionally, in connection with the EFH bankruptcy proceeding, approximately 28,000 proofs of claim were filed on behalf of persons who allege exposure to asbestos under similar circumstances and assert the right to file such lawsuits in the future. We anticipate additional lawsuits will be filed. None of these claims or lawsuits were discharged in the EFH bankruptcy proceeding. The costs to defend or resolve these lawsuits and the amount of damages that may be imposed or incurred could have a material adverse effect on Sempra Energy's cash flows, financial condition and results of operations.

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.

LEASES

We discuss leases further in Note 16 of the Notes to Consolidated Financial Statements in the Annual Report.

A lease exists when a contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. We determine if an arrangement is or contains a lease at inception of the contract.

Some of our lease agreements contain nonlease components, which represent activities that transfer a separate good or service to the lessee. As the lessee for both operating and finance leases, we have elected to combine lease and nonlease components as a single lease component for real estate, fleet vehicles, power generating facilities, and pipelines, whereby fixed or in-substance fixed payments allocable to the nonlease component are accounted for as part of the related lease liability and ROU asset. As the lessor, we have elected to combine lease and nonlease components as a single lease component for real estate and power generating facilities if the timing and pattern of transfer of the lease and nonlease components are the same and the lease component would be classified as an operating lease if accounted for separately.

Lessee Accounting

We have operating and finance leases for real and personal property (including office space, land, fleet vehicles, machinery and equipment, warehouses and other operational facilities) and PPAs with renewable energy and peaker plant facilities.

We provide supplemental noncash information for operating and finance leases below.

SUPPLEMENTAL NONCASH INFORMATION

(Dollars in millions)

	Three months ended March 31, 2020		
	Sempra Energy Consolidated	SDG&E	SoCalGas
Increase in operating lease obligations for right-of-use assets	\$ 19	\$ —	\$ —
Increase in finance lease obligations for investment in PP&E	20	4	16
	Three months ended March 31, 2019		
	Sempra Energy Consolidated	SDG&E	SoCalGas
Increase in operating lease obligations for right-of-use assets	\$ 552	\$ 142	\$ 117
Increase in finance lease obligations for investment in PP&E	7	4	3

Leases that Have Not Yet Commenced

SDG&E and SoCalGas have lease agreements for future acquisitions of fleet vehicles with an aggregate maximum lease limit of \$167 million. SDG&E and SoCalGas have utilized \$62 million and \$80 million, respectively, of these maximum lease limits as of March 31, 2020.

Lessor Accounting

Sempra Mexico is a lessor for certain of its natural gas and ethane pipelines, compressor stations and LPG storage facilities.

Generally, we recognize operating lease income on a straight-line basis over the lease term and evaluate the underlying asset for impairment. Certain of our leases contain rate adjustments or are based on foreign currency exchange rates that may result in lease payments received that vary from one period to the next.

We provide information below for leases for which we are the lessor.

LESSOR INFORMATION ON THE CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS – SEMPRÁ ENERGY

(Dollars in millions)

	Three months ended March 31,	
	2020	2019
Fixed lease payments	\$ 50	\$ 50
Variable lease payments	—	4
Total revenues from operating leases ⁽¹⁾	\$ 50	\$ 54
Depreciation expense	\$ 10	\$ 9

⁽¹⁾ Included in Revenues: Energy-Related Businesses on the Condensed Consolidated Statements of Operations.

OTHER CONTRACTUAL COMMITMENTS

We discuss below significant changes in the first three months of 2020 to contractual commitments discussed in Notes 1 and 16 of the Notes to Consolidated Financial Statements in the Annual Report.

Natural Gas Contracts

Sempra LNG's natural gas storage and transportation commitments have increased by \$136 million since December 31, 2019, primarily from entering into new storage and transportation contracts in the first three months of 2020. We expect future payments to decrease by \$24 million in 2020, and increase by \$23 million in 2021, \$21 million in 2022, \$19 million in 2023, \$19 million in 2024 and \$78 million thereafter compared to December 31, 2019.

LNG Purchase Agreement

Sempra LNG has a sale and purchase agreement for the supply of LNG to the ECA LNG Regasification facility. The commitment amount is calculated using a predetermined formula based on estimated forward prices of the index applicable from 2020 to 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. At March 31, 2020, we expect the commitment amount to decrease by \$135 million in 2020, \$26 million in 2021, \$35 million in 2022, \$36 million in 2023, \$43 million in 2024 and \$174 million thereafter (through contract termination in 2029) compared to December 31, 2019, reflecting changes in estimated forward prices since December 31, 2019 and actual transactions for the first three months of 2020. These LNG commitment amounts are based on the assumption that all LNG cargoes, less those already confirmed to be diverted, under the agreement are delivered. Actual LNG purchases in the current and prior years have been significantly lower than the maximum amount provided under the agreement due to the customer electing to divert cargoes as allowed by the agreement.

NOTE 12. SEGMENT INFORMATION

We have five 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 Texas Utilities* holds our investment in Oncor Holdings, which owns an 80.25% interest in Oncor, a regulated electric transmission and distribution utility serving customers in the north-central, eastern, and western and panhandle regions of Texas; our indirect, 50% interest in Sharyland Holdings, which owns Sharyland Utilities, a regulated electric transmission and distribution utility serving customers near the Texas-Mexico border; and our indirect, 1% interest in TTHC, which owns an indirect 19.75% interest in Oncor. As we discuss in Note 5 of the Notes to Consolidated Financial Statements in the Annual Report, we acquired our investment in Oncor Holdings in March 2018, Sharyland Holdings in May 2019, and TTHC in February 2020.
- *Sempra Mexico* develops, owns and operates, or holds interests in, natural gas, electric, LNG, LPG, ethane and liquid fuels infrastructure, and has marketing operations for the purchase of LNG and the purchase and sale of natural gas in Mexico.
- *Sempra LNG* develops projects for the export of LNG, holds an interest in a facility for the export of LNG, owns and operates natural gas pipelines, and buys, sells and transports natural gas through its marketing operations, all within the U.S. and Mexico. In February 2019, we completed the sale of our natural gas storage assets at Mississippi Hub and Bay Gas.

In April 2019, Sempra Renewables completed the sale of its remaining wind assets and investments. Upon completion of this sale, remaining nominal business activities at Sempra Renewables were subsumed into Parent and other and the Sempra Renewables segment ceased to exist. The tables below include amounts from Sempra Renewables up until cessation of the segment.

As we discuss in Note 5, the financial information related to our businesses that constituted the Sempra South American Utilities segment has been classified as discontinued operations for all periods presented. The information in the tables below excludes amounts from discontinued operations unless otherwise noted.

We evaluate each segment's performance based on its contribution to Sempra Energy's reported earnings and cash flows. The California Utilities operate in essentially separate service territories, under separate regulatory frameworks and rate structures set by the CPUC and the FERC. We describe the accounting policies of all of our segments in Note 1 of the Notes to Consolidated Financial Statements in the Annual Report.

The cost of common services shared by the business segments is 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 Condensed Consolidated Statements of Operations and Condensed Consolidated Balance Sheets. Amounts labeled as "All other" in the following tables consist primarily of activities of parent organizations and include certain nominal amounts from our South American businesses that did not qualify for treatment as discontinued operations.

SEGMENT INFORMATION*(Dollars in millions)*

	Three months ended March 31,	
	2020	2019
REVENUES		
SDG&E	\$ 1,269	\$ 1,145
SoCalGas	1,395	1,361
Sempra Mexico	309	383
Sempra Renewables	—	7
Sempra LNG	123	141
All other	1	—
Adjustments and eliminations	(1)	—
Intersegment revenues ⁽¹⁾	(67)	(139)
Total	\$ 3,029	\$ 2,898
INTEREST EXPENSE		
SDG&E	\$ 101	\$ 103
SoCalGas	40	34
Sempra Mexico	32	30
Sempra Renewables	—	3
Sempra LNG	16	4
All other	109	109
Intercompany eliminations	(18)	(23)
Total	\$ 280	\$ 260
INTEREST INCOME		
SDG&E	\$ 1	\$ 1
SoCalGas	1	—
Sempra Mexico	18	19
Sempra Renewables	—	10
Sempra LNG	22	14
All other	—	1
Intercompany eliminations	(15)	(24)
Total	\$ 27	\$ 21
DEPRECIATION AND AMORTIZATION		
SDG&E	\$ 201	\$ 186
SoCalGas	159	147
Sempra Mexico	47	44
Sempra LNG	2	2
All other	3	4
Total	\$ 412	\$ 383
INCOME TAX EXPENSE (BENEFIT)		
SDG&E	\$ 58	\$ 5
SoCalGas	52	19
Sempra Mexico	(307)	72
Sempra Renewables	—	(10)
Sempra LNG	23	4
All other	(33)	(48)
Total	\$ (207)	\$ 42
EQUITY EARNINGS (LOSSES)		
Equity earnings (losses), before income tax:		
Sempra Renewables	\$ —	\$ 3
Sempra LNG	57	2
All other	(100)	—
	(43)	5
Equity earnings, net of income tax:		
Sempra Texas Utilities	106	94
Sempra Mexico	200	2
	306	96

SEGMENT INFORMATION (CONTINUED)*(Dollars in millions)*

	Three months ended March 31,	
	2020	2019
EARNINGS (LOSSES) ATTRIBUTABLE TO COMMON SHARES		
SDG&E	\$ 262	\$ 176
SoCalGas	303	264
Sempra Texas Utilities	105	94
Sempra Mexico	191	57
Sempra Renewables	—	13
Sempra LNG	75	5
Discontinued operations	72	(51)
All other	(248)	(117)
Total	\$ 760	\$ 441
EXPENDITURES FOR PROPERTY, PLANT & EQUIPMENT		
SDG&E	\$ 402	\$ 356
SoCalGas	388	324
Sempra Mexico	170	85
Sempra LNG	47	18
All other	3	—
Total	\$ 1,010	\$ 783

	March 31, 2020	December 31, 2019
ASSETS		
SDG&E	\$ 20,784	\$ 20,560
SoCalGas	17,610	17,077
Sempra Texas Utilities	11,741	11,619
Sempra Mexico	10,627	9,938
Sempra LNG	3,919	3,901
Discontinued operations	3,930	3,958
All other	1,826	749
Intersegment receivables	(2,144)	(2,137)
Total	\$ 68,293	\$ 65,665
EQUITY METHOD AND OTHER INVESTMENTS		
Sempra Texas Utilities	\$ 11,735	\$ 11,619
Sempra Mexico	914	741
Sempra LNG	1,184	1,256
All other	1	6
Total	\$ 13,834	\$ 13,622

⁽¹⁾ Revenues for reportable segments include intersegment revenues of \$1 million, \$18 million, \$29 million and \$19 million for the three months ended March 31, 2020 and \$1 million, \$17 million, \$28 million and \$93 million for the three months ended March 31, 2019 for SDG&E, SoCalGas, Sempra Mexico and Sempra LNG, respectively.

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

You should read the following discussion in conjunction with the Condensed Consolidated Financial Statements and the Notes thereto and "Item 1A. Risk Factors" contained in this report, and the Consolidated Financial Statements and the Notes thereto, "Item 7. MD&A" and "Item 1A. Risk Factors" contained in the Annual Report.

OVERVIEW

Sempra Energy is a California-based energy-services holding company whose businesses invest in, develop and operate energy infrastructure, and provide electric and gas services to customers in North America. As we discuss in Note 12 of the Notes to Condensed Consolidated Financial Statements, our businesses consist of five separately managed reportable segments.

In January 2019, our board of directors approved a plan to sell our South American businesses, which were previously included in our Sempra South American Utilities segment. Our South American businesses and certain activities associated with those businesses have been presented as discontinued operations for all periods presented. Nominal activities that are not classified as discontinued operations have been subsumed into Parent and other. Our discussions below exclude discontinued operations, unless otherwise noted.

We provide additional information about discontinued operations in Note 5 of the Notes to Condensed Consolidated Financial Statements and about our reportable segments in Note 12 of the Notes to Condensed Consolidated Financial Statements in this report and in “Item 1. Business” in the Annual Report.

This report includes information for the following separate registrants:

- Sempra Energy and its consolidated entities
- SDG&E and its consolidated VIE (until deconsolidation of Otay Mesa VIE in August 2019)
- SoCalGas

References to “we,” “us,” “our” and “Sempra Energy Consolidated” are to Sempra Energy and its consolidated entities, collectively, unless otherwise indicated by the context. We refer to SDG&E and SoCalGas collectively as the California Utilities, which do not include our Texas utilities or the utility in our Sempra Mexico segment. It also does not include utilities within our South American businesses that have been presented as discontinued operations. All references in this MD&A to our reportable 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 Condensed Consolidated Financial Statements and Notes to Condensed Consolidated Financial Statements when discussed together or collectively:

- the Condensed Consolidated Financial Statements and related Notes of Sempra Energy and its subsidiaries and VIEs;
- the Condensed Consolidated Financial Statements and related Notes of SDG&E and its VIE (until deconsolidation of Otay Mesa VIE in August 2019); and
- the Condensed Financial Statements and related Notes of SoCalGas.

RESULTS OF OPERATIONS

We discuss the following in Results of Operations:

- Overall results of operations of Sempra Energy
- Segment results
- Significant changes in revenues, costs and earnings
- Impact of foreign currency and inflation rates on our results of operations

OVERALL RESULTS OF OPERATIONS OF SEMPRA ENERGY

In the three months ended March 31, 2020, we reported earnings of \$760 million and diluted EPS of \$2.53 compared to earnings of \$441 million and diluted EPS of \$1.59 for the same period in 2019. The change in diluted EPS in the three months ended March 31, 2020 included a decrease of \$(0.34) due to an increase in weighted-average common shares outstanding. Our results and diluted EPS were impacted by variances discussed in “Segment Results” below.

SEGMENT RESULTS

This section presents earnings (losses) by Sempra Energy segment, as well as Parent and other, in the three months ended March 31, 2020 and 2019, and the related discussion of the changes in segment earnings (losses) between these periods. Throughout the MD&A, our reference to earnings represents earnings attributable to common shares. Variance amounts presented are the after-tax earnings impact (based on applicable statutory tax rates), unless otherwise noted, and before NCI, where applicable.

SEMPRA ENERGY EARNINGS (LOSSES) BY SEGMENT*(Dollars in millions)*

	Three months ended March 31,	
	2020	2019
SDG&E	\$ 262	\$ 176
SoCalGas	303	264
Sempra Texas Utilities	105	94
Sempra Mexico	191	57
Sempra Renewables	—	13
Sempra LNG	75	5
Parent and other ⁽¹⁾	(248)	(117)
Discontinued operations	72	(51)
Earnings attributable to common shares	\$ 760	\$ 441

⁽¹⁾ Includes intercompany eliminations recorded in consolidation and certain corporate costs.

Due to the delay in the issuance of the CPUC's final decision in the California Utilities' 2019 GRC, the California Utilities recorded revenues in the first quarter of 2019 based on levels authorized for 2018 under the 2016 GRC. The 2019 GRC FD, which was issued by the CPUC in September 2019, was effective retroactively to January 1, 2019. The California Utilities' CPUC-authorized base revenues for the first quarter of 2020 are based on the revenues authorized for the 2019 test year plus the amount authorized for attrition for 2020. Had the 2019 GRC FD been in effect in the first quarter of 2019, SDG&E's and SoCalGas' earnings for the first quarter of 2019 would have been higher by \$36 million and \$84 million, respectively. These amounts were recorded in earnings in the third quarter of 2019. We provide additional information on the 2019 GRC FD in Note 4 of the Notes to Condensed Consolidated Financial Statements in this report and in Note 4 of the Notes to Consolidated Financial Statements in the Annual Report.

SDG&E

The increase in earnings of \$86 million (49%) in the three months ended March 31, 2020 was primarily due to:

- \$65 million higher CPUC base operating margin, net of operating expenses, including \$36 million lower CPUC base operating margin in 2019 due to the delay in the issuance of the 2019 GRC FD;
- \$38 million higher electric transmission margin, including the following impacts from the March 2020 FERC-approved TO5 settlement proceeding:
 - \$18 million to conclude a rate base matter; and
 - \$9 million favorable impact from the retroactive application of the final TO5 settlement for 2019. The settlement proceeding increased SDG&E's authorized ROE from 10.05% to 10.60%, effective June 1, 2019; and
- \$9 million higher AFUDC equity; **offset by**
- \$31 million income tax benefit in 2019 from the release of a regulatory liability established in connection with 2017 tax reform for excess deferred income tax balances that the CPUC directed to be allocated to shareholders in a January 2019 decision; and
- \$6 million amortization of Wildfire Fund asset.

SoCalGas

The increase in earnings of \$39 million (15%) in the three months ended March 31, 2020 was primarily due to:

- \$109 million higher CPUC base operating margin, net of operating expenses, including \$84 million lower CPUC base operating margin in 2019 due to the delay in the issuance of the 2019 GRC FD;
- \$21 million higher income tax benefits from flow-through items; and
- \$8 million penalties in 2019 related to the SoCalGas billing practices OII; **offset by**
- \$72 million from impacts associated with Aliso Canyon natural gas storage facility litigation; and
- \$35 million income tax benefit in 2019 from the impact of the January 2019 CPUC decision allocating certain excess deferred income tax balances to shareholders.

Sempra Texas Utilities

The increase in earnings of \$11 million (12%) in the three months ended March 31, 2020 was primarily due to higher equity earnings from Oncor Holdings in 2020, driven mainly by the impact of Oncor's acquisition of InfraREIT, Inc. in May 2019 and higher revenues due to rate updates to reflect increases in invested transmission capital, partially offset by higher operating costs and lower consumption due to weather.

Sempra Mexico

The increase in earnings of \$134 million in the three months ended March 31, 2020 was primarily due to:

- \$253 million favorable impact from foreign currency and inflation effects net of foreign currency derivatives effects, comprised of:
 - in 2020, \$326 million favorable foreign currency and inflation effects, offset by a \$91 million loss from foreign currency derivatives, and
 - in 2019, \$25 million unfavorable foreign currency and inflation effects, offset by a \$7 million gain from foreign currency derivatives; and
- \$8 million primarily due to the start of commercial operations of the Sur de Texas-Tuxpan marine pipeline at IMG JV in the third quarter of 2019; **offset by**
- \$144 million earnings attributable to NCI at IEnova in 2020 compared to \$28 million earnings in 2019; and
- \$9 million lower earnings at the Guaymas-El Oro segment of the Sonora pipeline primarily from force majeure payments that ended in August 2019.

Sempra Renewables

As we discuss in Note 5 of the Notes to Consolidated Financial Statements in the Annual Report, Sempra Renewables sold its remaining wind assets and investments in April 2019, upon which date the segment ceased to exist.

Sempra LNG

The increase in earnings of \$70 million in the three months ended March 31, 2020 was primarily due to:

- \$43 million higher equity earnings from Cameron LNG JV primarily due to Train 1 and Train 2 commencing commercial operations under their tolling agreements in August 2019 and February 2020, respectively; and
- \$42 million higher earnings from Sempra LNG's marketing operations primarily driven by changes in natural gas prices; **offset by**
- \$5 million higher liquefaction project development costs.

Parent and Other

The increase in losses of \$131 million in the three months ended March 31, 2020 was primarily due to:

- \$100 million equity losses from our investment in RBS Sempra Commodities to settle pending tax matters and related legal costs, which we discuss in Note 11 of the Notes to Condensed Consolidated Financial Statements; and
- \$19 million net investment losses in 2020 compared to \$15 million net investment gains in 2019 on dedicated assets in support of our employee nonqualified benefit plan and deferred compensation obligations.

Discontinued Operations

Discontinued operations that were previously in our Sempra South American Utilities segment include our 100% interest in Chilquinta Energía in Chile, our 83.6% interest in Luz del Sur in Peru and our interests in two energy-services companies, Tecnoed and Tecsur, which provide electric construction and infrastructure services to Chilquinta Energía and Luz del Sur, respectively, as well as third parties. Discontinued operations also include activities, mainly income taxes related to the South American businesses, that were previously included in the holding company of the South American businesses at Parent and other.

Earnings of \$72 million in the three months ended March 31, 2020 compared to losses of \$51 million for the same period in 2019 was primarily due to the following income tax impacts resulting from changes in outside basis differences in our South American businesses:

- \$103 million income tax expense in 2019 related to outside basis differences existing as of the January 25, 2019 approval of our plan to sell our South American businesses; and
- \$7 million income tax benefit in 2020 compared to \$13 million income tax expense in 2019 related to changes in outside basis differences from earnings and foreign currency effects since January 25, 2019.

SIGNIFICANT CHANGES IN REVENUES, COSTS AND EARNINGS

This section contains a discussion of the differences between periods in the specific line items of the Condensed Consolidated Statements of Operations for Sempra Energy, SDG&E and SoCalGas.

Utilities Revenues

Our utilities revenues include natural gas revenues at our California Utilities and Sempra Mexico's Ecogas and electric revenues at SDG&E. Intercompany revenues included in the separate revenues of each utility are eliminated in the Sempra Energy Condensed Consolidated Statements of Operations.

SoCalGas and SDG&E currently operate under a regulatory framework that 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 Note 3 of the Notes to Consolidated Financial Statements and in "Item 1. Business – Ratemaking Mechanisms" in the Annual Report.
- 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 or refunded in subsequent periods through rates.
- The California Utilities to recover certain expenses for programs authorized by the CPUC, or "refundable programs."

Because changes in SoCalGas' and SDG&E's cost of natural gas and/or electricity are recovered in rates, changes in these costs are offset in the changes in revenues, and therefore do not impact earnings. In addition to the changes in cost or market prices, natural gas or electric 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 4 of the Notes to Condensed Consolidated Financial Statements in this report and in Note 4 of the Notes to Consolidated Financial Statements in the Annual Report.

The California Utilities' revenues are decoupled from, or not tied to, actual sales volumes. SoCalGas recognizes annual authorized revenue for core natural gas customers using seasonal factors established in the Triennial Cost Allocation Proceeding. Accordingly, a significant portion of SoCalGas' annual earnings are recognized in the first and fourth quarters of each year. SDG&E's authorized revenue recognition is also impacted by seasonal factors, resulting in higher earnings in the third quarter when electric loads are typically higher than in the other three quarters of the year. We discuss this decoupling mechanism and its effects further in Note 3 of the Notes to Consolidated Financial Statements in the Annual Report.

The table below summarizes revenues and cost of sales for our consolidated utilities.

UTILITIES REVENUES AND COST OF SALES

(Dollars in millions)

	Three months ended March 31,	
	2020	2019
Natural gas revenues:		
SoCalGas	\$ 1,395	\$ 1,361
SDG&E	219	205
Sempra Mexico	20	27
Eliminations and adjustments	(17)	(17)
Total	1,617	1,576
Electric revenues:		
SDG&E	1,050	940
Eliminations and adjustments	(2)	(1)
Total	1,048	939
Total utilities revenues	\$ 2,665	\$ 2,515
Cost of natural gas:		
SoCalGas	\$ 278	\$ 455
SDG&E	60	79
Sempra Mexico	3	5
Eliminations and adjustments	(4)	(8)
Total	\$ 337	\$ 531
Cost of electric fuel and purchased power:		
SDG&E	\$ 231	\$ 258
Eliminations and adjustments	(2)	(2)
Total	\$ 229	\$ 256

Natural Gas Revenues and Cost of Natural Gas

The table below summarizes the 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 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)

	Three months ended March 31,	
	2020	2019
SoCalGas	\$ 2.54	\$ 3.85
SDG&E	3.75	4.60

In the three months ended March 31, 2020, Sempra Energy's natural gas revenues increased by \$41 million (3%) remaining at \$1.6 billion primarily due to:

- \$34 million increase at SoCalGas, which included:
 - \$181 million higher CPUC-authorized revenues, including \$116 million lower revenues in 2019 due to the delay in the issuance of the 2019 GRC FD, and
 - \$36 million higher recovery of costs associated with CPUC-authorized refundable programs, which revenues are offset in O&M, *offset by*
 - \$177 million decrease in cost of natural gas sold, which we discuss below; and
- \$14 million increase at SDG&E, which included:
 - \$29 million higher CPUC-authorized revenues, including \$23 million lower revenues in 2019 due to the delay in the issuance of the 2019 GRC FD, *offset by*
 - \$19 million decrease in the cost of natural gas sold, which we discuss below.

In the three months ended March 31, 2020, our cost of natural gas decreased by \$194 million (37%) to \$337 million primarily due to:

- \$177 million decrease at SoCalGas due to \$143 million from lower average natural gas prices and \$34 million from lower volumes driven by weather; and
- \$19 million decrease at SDG&E due to lower average natural gas prices and lower volumes driven by weather.

Electric Revenues and Cost of Electric Fuel and Purchased Power

In the three months ended March 31, 2020, our electric revenues, substantially all of which are at SDG&E, increased by \$109 million (12%) to \$1.0 billion, including:

- \$67 million increase in transmission operations, including the following impacts related to the March 2020 FERC-approved TO5 settlement proceeding:
 - \$26 million to settle a rate base matter, and
 - \$12 million favorable impact from the retroactive application of the final TO5 settlement for 2019; and
- \$55 million higher recovery of costs associated with CPUC-authorized refundable programs, which revenues are offset in O&M; **offset by**
- \$27 million lower cost of electric fuel and purchased power, which we discuss below.

Our utility cost of electric fuel and purchased power, substantially all of which is at SDG&E, decreased by \$27 million (11%) to \$229 million in the three months ended March 31, 2020, primarily due to a decrease in residential demand primarily from an increase in rooftop solar adoption.

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)

	Three months ended March 31,	
	2020	2019
REVENUES		
Sempra Mexico	\$ 289	\$ 356
Sempra Renewables	—	7
Sempra LNG	123	141
Parent and other ⁽¹⁾	(48)	(121)
Total revenues	\$ 364	\$ 383
COST OF SALES⁽²⁾		
Sempra Mexico	\$ 69	\$ 121
Sempra LNG	39	103
Parent and other ⁽¹⁾	(49)	(116)
Total cost of sales	\$ 59	\$ 108

⁽¹⁾ Includes eliminations of intercompany activity.

⁽²⁾ Excludes depreciation and amortization, which are presented separately on the Sempra Energy Condensed Consolidated Statements of Operations.

In the three months ended March 31, 2020, revenues from our energy-related businesses decreased by \$19 million (5%) to \$364 million primarily due to:

- \$67 million decrease at Sempra Mexico primarily due to:
 - \$49 million from the marketing business primarily from lower natural gas prices and volumes,
 - \$26 million lower revenues at TdM primarily due to lower natural gas prices and volumes, and
 - \$10 million lower revenues primarily from force majeure payments that ended in August 2019 with respect to the Guaymas-El Oro segment of the Sonora pipeline, *offset by*
 - \$14 million increase primarily due to higher volumes at the Ventika wind power generation facilities and from renewable assets placed in service in 2019; and
- \$18 million decrease at Sempra LNG primarily due to:

- \$55 million lower natural gas sales to Sempra Mexico due to lower natural gas prices and volumes and from fewer LNG cargoes sold, *offset by*
- \$44 million increase from natural gas marketing operations primarily due to changes in natural gas prices; **offset by**
- \$73 million increase primarily from lower intercompany eliminations associated with sales between Sempra LNG and Sempra Mexico.

In the three months ended March 31, 2020, the cost of sales for our energy-related businesses decreased by \$49 million (45%) to \$59 million primarily due to:

- \$64 million decrease at Sempra LNG mainly from natural gas marketing activities primarily from lower natural gas purchases; and
- \$52 million decrease at Sempra Mexico mainly associated with lower revenues from the marketing business and TdM as a result of lower natural gas prices and volumes; **offset by**
- \$67 million increase primarily from lower intercompany eliminations associated with sales between Sempra LNG and Sempra Mexico.

Operation and Maintenance

Our O&M increased by \$119 million (14%) to \$951 million in the three months ended March 31, 2020 primarily due to:

- \$133 million increase at SoCalGas primarily due to:
 - \$100 million from impacts associated with Aliso Canyon natural gas storage facility litigation, and
 - \$36 million higher expenses associated with CPUC-authorized refundable programs for which costs incurred are recovered in revenue; and
- \$24 million increase at SDG&E primarily due to:
 - \$57 million higher expenses associated with CPUC-authorized refundable programs, *offset by*
 - \$31 million lower non-refundable operating costs, including liability insurance premium costs for 2019 that were not balanced due to the delay in the 2019 GRC FD; **offset by**
- \$36 million decrease at Parent and other primarily from lower deferred compensation expense.

Other (Expense) Income, Net

As part of our central risk management function, we enter into foreign currency derivatives to hedge Sempra Mexico parent's exposure to movements in the Mexican peso from its controlling interest in IEnova. The gains/losses associated with these derivatives are included in Other (Expense) Income, Net, as described below, and partially mitigate the transactional effects of foreign currency and inflation included in Income Tax Benefit (Expense) for Sempra Mexico's consolidated entities and in Equity Earnings for Sempra Mexico's equity method investments. We also utilize foreign currency derivatives to hedge exposure to fluctuations in the Peruvian sol and Chilean peso related to the sale of our operations in Peru and Chile, respectively. We discuss policies governing our risk management in "Item 7A. Quantitative and Qualitative Disclosures About Market Risk" in the Annual Report.

Other expense, net, in the three months ended March 31, 2020 was \$254 million compared to other income, net, of \$82 million in the same period in 2019. The change was primarily due to:

- \$276 million net losses in 2020 from interest rate and foreign exchange instruments and foreign currency transactions compared to net gains of \$20 million for the same period in 2019 primarily due to:
 - \$149 million foreign currency losses in 2020 compared to \$10 million foreign currency gains in 2019 on a Mexican peso-denominated loan to IMG JV, which is offset in Equity Earnings, and
 - \$125 million losses in 2020 compared to \$10 million gains in 2019 on foreign currency derivatives as a result of fluctuation of the Mexican peso, *offset by*
 - \$11 million net gains in 2020 of foreign currency derivatives used to hedge exposure to fluctuations in the Peruvian sol and Chilean peso related to the sale of our operations in Peru and Chile; and
- \$37 million investment losses in 2020 compared to \$26 million investment gains in 2019 on dedicated assets in support of our executive retirement and deferred compensation plans; **offset by**
- \$8 million in penalties in 2019 related to the SoCalGas billing practices OII.

Income Taxes

The table below shows the income tax expense and ETRs for Sempra Energy Consolidated, SDG&E and SoCalGas.

INCOME TAX (BENEFIT) EXPENSE AND EFFECTIVE INCOME TAX RATES

(Dollars in millions)

	Three months ended March 31,	
	2020	2019
Sempra Energy Consolidated:		
Income tax (benefit) expense from continuing operations	\$ (207)	\$ 42
Income from continuing operations before income taxes and equity earnings	\$ 397	\$ 501
Equity (losses) earnings, before income tax ⁽¹⁾	(43)	5
Pretax income	\$ 354	\$ 506
Effective income tax rate	(58)%	8%
SDG&E:		
Income tax expense	\$ 58	\$ 5
Income before income taxes	\$ 320	\$ 182
Effective income tax rate	18 %	3%
SoCalGas:		
Income tax expense	\$ 52	\$ 19
Income before income taxes	\$ 355	\$ 283
Effective income tax rate	15 %	7%

⁽¹⁾ We discuss how we recognize equity earnings in Note 6 of the Notes to Consolidated Financial Statements in the Annual Report.

Sempra Energy Consolidated

Income tax benefit in the three months ended March 31, 2020 compared to an income tax expense in the same period in 2019 was due to a lower ETR and lower pretax income. The change in ETR was primarily due to:

- \$308 million income tax benefit in 2020 compared to \$23 million income tax expense in 2019 from foreign currency and inflation effects primarily as a result of fluctuation of the Mexican peso; and
- \$19 million income tax benefit in 2020 compared to \$8 million income tax expense in 2019 related to share-based compensation; **offset by**
- \$66 million total income tax benefits in 2019 from the release of regulatory liabilities at SDG&E and SoCalGas established in connection with 2017 tax reform for excess deferred income tax balances that the CPUC directed be allocated to shareholders in a January 2019 decision; and
- \$10 million income tax benefit in 2019 from a reduction in a valuation allowance against certain NOL carryforwards as a result of our decision to sell our South American businesses.

We discuss the impact of foreign currency exchange rates and inflation on income taxes below in “Impact of Foreign Currency and Inflation Rates on Results of Operations.” See Note 1 of the Notes to Condensed Consolidated Financial Statements in this report and Notes 1 and 8 of the Notes to Consolidated Financial Statements in the Annual Report for further details about our accounting for income taxes and items subject to flow-through treatment.

SDG&E

The increase in SDG&E’s income tax expense in the three months ended March 31, 2020 was due to a higher ETR and higher pretax income. The change in ETR was primarily due to \$31 million income tax benefit in 2019 from the release of a regulatory liability established in connection with 2017 tax reform for excess deferred income tax balances that the CPUC directed be allocated to shareholders in a January 2019 decision.

SoCalGas

The increase in SoCalGas’ income tax expense in the three months ended March 31, 2020 was due to a higher ETR and higher pretax income. The change in ETR was primarily due to \$35 million income tax benefit in 2019 from the release of a regulatory liability established in connection with 2017 tax reform for excess deferred income tax balances that the CPUC directed be allocated to shareholders in a January 2019 decision.

Equity Earnings

In the three months ended March 31, 2020, equity earnings increased by \$162 million to \$263 million primarily due to:

- \$171 million higher equity earnings at IMG JV, primarily due to foreign currency effects, including \$149 million foreign currency gains in 2020 compared to \$10 million foreign currency losses in 2019 on IMG JV's Mexican peso-denominated loans from its JV owners, which is fully offset in Other (Expense) Income, Net, and the start of commercial operations of the Sur de Texas-Tuxpan marine pipeline;
- \$55 million higher equity earnings at Cameron LNG JV primarily due to Train 1 and Train 2 commencing commercial operations under their tolling agreements in August 2019 and February 2020, respectively; and
- \$21 million higher equity earnings at TAG JV primarily due to higher income tax benefits in 2020; **offset by**
- \$100 million equity losses at RBS Sempra Commodities in 2020, which represents an estimate of our obligations to settle pending tax matters and related legal costs at our equity method investment.

Earnings Attributable to Noncontrolling Interests

Earnings attributable to NCI increased by \$110 million to \$151 million in the three months ended March 31, 2020 primarily due to an increase in earnings attributable to NCI at Sempra Mexico primarily from foreign currency effects as a result of fluctuation of the Mexico peso.

IMPACT OF FOREIGN CURRENCY AND INFLATION RATES ON RESULTS OF OPERATIONS

Because operations in South America and our natural gas distribution utility in Mexico 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. We discuss further the impact of foreign currency and inflation rates on results of operations, including impacts on income taxes and related hedging activity, in "Item 7. MD&A – Impact of Foreign Currency and Inflation Rates on Results of Operations" in the Annual Report.

Foreign Currency Translation

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 Consolidated's comparative results of operations. Changes in foreign currency translation rates between periods resulted in \$4 million lower earnings within discontinued operations in the first three months of 2020 compared to the same period in 2019.

Transactional Impacts

Income statement activities at our foreign operations and their JVs are also impacted by transactional gains and losses, a summary of which is shown in the table below:

TRANSACTIONAL (LOSSES) GAINS FROM FOREIGN CURRENCY AND INFLATION

(Dollars in millions)

	Total reported amounts		Transactional (losses) gains included in reported amounts	
	Three months ended March 31,			
	2020	2019	2020	2019
Other (expense) income, net	\$ (254)	\$ 82	\$ (276)	\$ 20
Income tax benefit (expense)	207	(42)	308	(23)
Equity earnings	263	101	181	(12)
Income from continuing operations, net of income tax	867	560	242	(18)
Income (loss) from discontinued operations, net of income tax	80	(42)	16	—
Earnings attributable to common shares	760	441	150	(10)

CAPITAL RESOURCES AND LIQUIDITY

OVERVIEW

The COVID-19 Pandemic

On March 11, 2020, the World Health Organization declared the COVID-19 outbreak to be a pandemic. President Donald Trump officially declared a national emergency on March 13, 2020. The COVID-19 pandemic is causing a significant impact on the economy and people's livelihoods, including substantial volatility and erosion of value in financial markets and a historic surge in unemployment claims while individuals adhere to shelter-in-place mandates and practice social distancing, and has resulted in sweeping action by governments and other authorities to help address these effects. The following describes some of these government actions and their current and anticipated impact on our businesses:

- On March 4, 2020, Governor Gavin Newsom proclaimed a State of Emergency in California as a result of the threat of COVID-19, and on March 19, 2020, the Governor imposed a California-wide shelter-in-place directive via an Executive Order that will remain in place indefinitely. The Governor's Executive Order requires all individuals living in California to stay home or at their place of residence except as needed to maintain the continuity of 16 critical infrastructure sectors. Our businesses that invest in, develop and operate energy infrastructure and provide electric and gas services to customers in California have been identified as critical infrastructure under the Executive Order.
- On March 13, 2020, the California Utilities announced that they were voluntarily instituting a suspension of all customer disconnections for nonpayment of customer bills until further notice.
- On March 17, 2020, the CPUC announced that, retroactive to March 4, 2020, all energy companies under its jurisdiction, including the California Utilities, should take action to implement several emergency customer protection measures to support California customers. The measures apply to all residential and small business customers affected by the COVID-19 pandemic and include suspending service disconnections due to nonpayment, waiving late payment fees, and offering flexible payment plans for all customers experiencing difficulty paying their electric or gas bills. Similarly, on March 26, 2020, the PUCT issued orders that require retail electric providers to offer a deferred payment plan to customers, upon request, and authorized customer assistance programs for certain residential customers of electric service. The continuation of these circumstances could result in a material reduction in payments received from our customers and a material increase in uncollectible accounts that we may not be able to recover in rates, which could have a material adverse effect on the cash flows, financial condition and results of operations for Sempra Energy, SDG&E and SoCalGas.
- On March 30, 2020, the Mexican government announced a national state of sanitary emergency, suspending all non-essential activities and urging people in Mexico to stay at home until April 30, 2020, which was subsequently extended to May 30, 2020 and may be extended further. Essential business activities that may continue to operate during the health emergency include the conservation, maintenance and repair of critical infrastructure that ensures the production and distribution of electric and gas services.
- On April 16, 2020, the CPUC approved a resolution authorizing each of the California Utilities to establish a CPPMA to track and request recovery of incremental costs associated with complying with measures implemented by the CPUC related to the COVID-19 pandemic. Although we are tracking these costs, which will include incremental amounts associated with customer nonpayments, CPUC approval is required to collect all or any portion of the balance of the CPPMA, which is not assured. Similarly, the PUCT has provided for the use of a regulatory asset accounting mechanism and a subsequent process through which regulated utility companies may seek future recovery of expenses resulting from the effects of the COVID-19 pandemic, as well as the creation of a COVID-19 Electricity Relief Program fund through which transmission and distribution utilities and retail electric providers may seek to recover a reasonable portion of the cost of providing uninterrupted services to customers facing financial hardship due to the effects of the COVID-19 pandemic. There can be no assurance, however, that our Texas utilities will be able to recover any of the costs they incur from their response to the COVID-19 pandemic through these programs or otherwise.
- On March 27, 2020, the Coronavirus Aid, Relief, and Economic Security Act (CARES Act) was enacted and signed into law in response to the COVID-19 pandemic. The CARES Act contains significant business tax provisions, including a delay of payment of employer payroll taxes and an acceleration of refunds of corporate alternative minimum tax (AMT) credits. Sempra Energy, SDG&E and SoCalGas expect to benefit from deferring payment of the employer's share of payroll taxes through the end of 2020, with half of such taxes to be paid by the end of 2021 and the other half to be paid by the end of 2022. Sempra Energy has filed a refund claim for its corporate AMT credits and expects to receive approximately \$56 million in 2020 rather than in installments through 2021.

In addition, we and other companies, including our partners, are taking steps to try to protect the health and well-being of our employees and other stakeholders. As our businesses continue to operate, our priority is the safety of our employees, customers, partners and the communities we serve. For example, we have activated our business continuity plans and continue to work closely with local, state and federal authorities to provide essential services with minimum interruption to customers and in accordance with applicable shelter-in-place orders. We have implemented precautionary measures across our businesses, including requiring employees to work remotely when possible, restricting non-essential business travel, increasing facility sanitization and communicating proper health and safety protocols to employees. Additionally, SDG&E announced that it is postponing all noncritical planned outages, while continuing with those related to public safety, emergencies and wildfire mitigation, to try to protect employees and maintain service to customers as seamlessly as possible. We also have engaged an infectious disease expert to advise us during this public health crisis. Through the end of the first quarter of 2020, these actions have not required significant outlays of capital and have not had a material impact on our results of operations, but these or other measures that we may implement in the future could have a substantial effect on our liquidity, cash flows, financial position and results of operations if circumstances related to the COVID-19 pandemic worsen or continue for an extended period of time.

The COVID-19 pandemic and its widespread effects may also impact our capital plans, liquidity and asset values. For example:

- Our capital projects and planned expenditures could experience delays due to the COVID-19 pandemic, either because we decide to postpone certain activities in an effort to preserve cash or other resources or for other reasons related to the pandemic that are beyond our control, including supply chain and contractor performance delays or delays in the issuance of required permits. Any such delay could have a material effect on our capital plans and results of operations. We discuss the potential for these delays in further detail with respect to each of our segments below.
- The decline and volatility in the financial markets has had a significant impact on certain of the markets that we typically access for working capital and other liquidity requirements. See the discussion in “Liquidity” below for more information.
- We have significant investments in several trusts to provide for future payments of pensions and other postretirement benefits and nuclear decommissioning. Although all of our trust funds’ investments are diversified and managed in compliance with applicable laws and regulations, the value of the investments in these trusts declined significantly in the second half of the first quarter of 2020 due to a decline in the equity markets and volatility in the fixed income market triggered by the COVID-19 pandemic. These markets continue to be volatile. The decrease in asset values has not affected the funds’ ability to make their required payments; however, this could change if conditions worsen or continue for an extended period. Moreover, if asset values do not recover, our funding requirements for pension and other postretirement benefit plans in 2021 may increase. Other factors may also impact funding requirements for pension and other postretirement benefit plans, including changes to discount rates, assumed rates of return, mortality tables and regulations. Funding requirements for SDG&E’s NDT could be impacted by the value of the assets as well as the timing and amount of SONGS decommissioning costs. At the California Utilities, funding requirements are generally recoverable in rates. We discuss our employee benefit plans and SDG&E’s NDT, including our investment allocation strategies for assets in these trusts, in Notes 9 and 15, respectively, of the Notes to Consolidated Financial Statements in the Annual Report.
- We perform recovery testing of our recorded asset values when market conditions indicate that such values may not be recoverable. Given the current economic environment, including the significant decline in the price of our common stock, market volatility and potential reduction in customer collections, we considered whether these events or changes in circumstances triggered the need for an interim impairment analysis for our long-lived assets, intangible assets and goodwill. We determined that, given the existing headroom in our prior quantitative tests and assessment of the impact of these conditions on our businesses, there was no triggering event as of March 31, 2020. However, as the effects of the COVID-19 pandemic continue to evolve, we will continue to assess the need to perform an interim impairment test. 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 long-lived assets, intangible assets or goodwill would have a material adverse effect on our results of operations in the period in which it is recorded.

For a further discussion of risks and uncertainties related to the COVID-19 pandemic, see below in “Item 1A. Risk Factors.”

Liquidity

We expect to meet our cash requirements through cash flows from operations, unrestricted cash and cash equivalents, proceeds from recent and planned asset sales, borrowings under our credit facilities, distributions from our equity method investments, issuances of debt, project financing and partnering in JVs. We believe that these cash flow sources, combined with available funds, will be adequate to fund our current operations, including to:

- finance capital expenditures
- meet liquidity requirements
- fund dividends
- fund new business or asset acquisitions or start-ups

- fund capital contribution requirements
- 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 reasonable access to the long-term debt markets and are not currently constrained in any significant way in their ability to borrow money at reasonable rates from commercial banks, under existing revolving credit facilities or through public offerings registered with the SEC. There have been, however, substantial disruptions caused by the COVID-19 pandemic in the commercial paper markets during the second half of the first quarter of 2020, which have historically been a primary source of working capital for Sempra Energy and the California Utilities. In addition, the capital markets in general and the availability of financing from commercial banks also have shown periods of significant distress in the second half of the first quarter of 2020 due to the COVID-19 pandemic, and our ability to access the capital markets or obtain credit from commercial banks outside of our committed revolving credit facilities could become materially constrained, especially if these conditions worsen or continue for an extended period. In addition, our financing activities and actions by credit rating agencies, as well as many other factors, could negatively 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, and potentially cost overruns, of large projects. 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. We monitor our ability to finance the needs of our operating, investing and financing activities in a manner consistent with our intention to maintain our investment-grade credit ratings and capital structure.

Available Funds

Our committed lines of credit provide liquidity and support commercial paper. As we discuss in Note 7 of the Notes to Condensed Consolidated Financial Statements, Sempra Energy, Sempra Global, SDG&E and SoCalGas each have five-year credit agreements expiring in 2024. The table below shows the amount of available funds at March 31, 2020, including available unused credit on these primary U.S. credit facilities. In addition, IEnova has \$1.9 billion in lines of credit, with approximately \$136 million available unused credit at March 31, 2020.

AVAILABLE FUNDS AT MARCH 31, 2020

(Dollars in millions)

	Sempra Energy Consolidated		SDG&E		SoCalGas	
Unrestricted cash and cash equivalents ⁽¹⁾	\$	2,247	\$	203	\$	389
Available unused credit ⁽²⁾⁽³⁾		4,010		1,300		750

⁽¹⁾ Amounts at Sempra Energy Consolidated include \$542 million held in non-U.S. jurisdictions. We discuss repatriation in Note 1 of the Notes to Condensed Consolidated Financial Statements.

⁽²⁾ Available unused credit is the total available on Sempra Energy's, Sempra Global's, SDG&E's and SoCalGas' credit facilities that we discuss in Note 7 of the Notes to Condensed Consolidated Financial Statements.

⁽³⁾ Because the commercial paper programs are supported by these lines, we reflect the amount of commercial paper outstanding as a reduction to the available unused credit.

Short-Term Borrowings

We use short-term debt primarily to meet liquidity requirements, fund shareholder dividends, and temporarily finance capital expenditures, acquisitions or start-ups. Our California Utilities use short-term debt primarily to meet working capital needs. Commercial paper, revolving lines of credit and term loans were our primary sources of short-term debt funding in the first quarter of 2020. In an effort to protect our liquidity in light of the COVID-19 pandemic, Sempra Energy, Sempra Global, SDG&E, SoCalGas and IEnova each drew amounts under their respective credit facilities in the first quarter of 2020, a substantial portion of which were repaid through terms loans obtained in the first quarter of 2020 by Sempra Energy and SDG&E. As we discuss in Note 7 of the Notes to Condensed Consolidated Financial Statements, Sempra Energy and SDG&E obtained 364-day term loans with aggregate principal amounts outstanding at March 31, 2020, of \$1,525 million and \$200 million, respectively. At March 31, 2020, SDG&E classified a total of \$400 million of its then outstanding revolving line of credit and term loan as long-term debt based on management's intent and ability to maintain this level of borrowing on a long-term basis. In April 2020, SDG&E completed a \$400 million public offering of first mortgage bonds maturing in 2050 and repaid the amounts borrowed under its revolving line of credit. On April 1, 2020, Sempra Energy borrowed an additional \$75 million under its term loan.

Credit Ratings

We provide additional information about the credit ratings of Sempra Energy, SDG&E and SoCalGas in “Item 1A. Risk Factors” and “Item 2. MD&A – Capital Resources and Liquidity” in the Annual Report.

The credit ratings of Sempra Energy, SDG&E and SoCalGas remained at investment grade levels in the first three months of 2020.

CREDIT RATINGS AT MARCH 31, 2020

	Sempra Energy	SDG&E	SoCalGas
Moody's	Baa1 with a negative outlook	Baa1 with a positive outlook	A1 with a negative outlook
S&P	BBB+ with a negative outlook	BBB+ with a stable outlook	A with a negative outlook
Fitch	BBB+ with a stable outlook	BBB+ with a stable outlook	A with a stable outlook

Our credit ratings may affect the rates at which borrowings bear interest and the commitment fees on available unused credit. A downgrade of Sempra Energy's or any of its subsidiaries' credit ratings or rating outlooks may result in a requirement for collateral to be posted in the case of certain financing arrangements and may materially and adversely affect the market prices of their equity and debt securities, the rates at which borrowings are made and commercial paper is issued, and the various fees on their outstanding credit facilities. This could make it more costly for Sempra Energy, SDG&E, SoCalGas and Sempra Energy's other subsidiaries to issue debt securities, to borrow under credit facilities and to raise certain other types of financing.

Sempra Energy has agreed that, if the credit rating of Oncor's senior secured debt by any of the three major rating agencies falls below BBB (or the equivalent), Oncor will suspend dividends and other distributions (except for contractual tax payments), unless otherwise allowed by the PUCT. Oncor's senior secured debt was rated A2, A+ and A at Moody's, S&P and Fitch, respectively, at March 31, 2020.

On April 15, 2020, Moody's placed Sempra Energy on review for downgrade.

Loans to/from Affiliates

At March 31, 2020, Sempra Energy had \$615 million in loans to unconsolidated affiliates and \$263 million in loans from unconsolidated affiliates.

California Utilities

SDG&E's and SoCalGas' operations have historically provided relatively stable earnings and liquidity. Their future performance will depend primarily on the ratemaking and regulatory process, environmental regulations, economic conditions, actions by the California legislature and the changing energy marketplace, as well as the other matters described in this report.

SDG&E and SoCalGas expect that the available unused credit from their credit facilities described above, cash flows from operations, and debt issuances will continue to be adequate to fund their respective current operations and planned capital expenditures. The California Utilities are continuing to monitor the impacts of the COVID-19 pandemic on cash flows and results of operations. Some of our customers will likely experience diminished ability to pay their electric or gas bills, leading to slower payments and higher levels of nonpayment than has been the case historically. These impacts could be significant and could require modifications to our financing plans. The California Utilities manage their capital structure and pay dividends when appropriate and as approved by their respective boards of directors.

As we discuss in Note 4 of the Notes to Condensed Consolidated Financial Statements in this report and in Note 4 of the Notes to Consolidated Financial Statements in the Annual Report, changes in balancing accounts for significant costs at SDG&E and SoCalGas, particularly a change between over- and undercollected status, including commodity and transportation balancing accounts, may have a significant impact on cash flows. 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

Wildfire Fund

In 2019, SDG&E recorded a Wildfire Fund asset for committed shareholder contributions to the Wildfire Fund. We describe the Wildfire Legislation and related accounting treatment in Note 1 of the Notes to Consolidated Financial Statements in the Annual Report.

SDG&E is exposed to the risk that the participating California electric IOUs may incur third-party wildfire claims for which they will seek recovery from the Wildfire Fund. In such a situation, SDG&E may recognize a reduction of its Wildfire Fund asset and record a charge against earnings in the period when there is a reduction of the available coverage due to recoverable claims from the IOUs. As a result, if any California electric IOU's equipment is determined to be a cause of a fire, it could have a material adverse effect on SDG&E's and Sempra Energy's financial condition and results of operations up to the carrying value of our Wildfire Fund asset. In addition, the Wildfire Fund could be completely exhausted due to fires in the other California electric IOUs' service territories, by fires in SDG&E's service territory or by a combination thereof. In the event that the Wildfire Fund is materially diminished, exhausted or terminated, SDG&E will lose the protection afforded by the Wildfire Fund, and as a consequence, a fire in SDG&E's service territory could cause a material adverse effect on SDG&E's and Sempra Energy's cash flows, results of operations and financial condition.

SoCalGas

SoCalGas' performance will also depend on the resolution of legal, regulatory and other matters concerning the Leak at the Aliso Canyon natural gas storage facility, which we discuss further in Note 11 of the Notes to Condensed Consolidated Financial Statements in this report, and in "Item 1A. Risk Factors" in the Annual Report.

Aliso Canyon Natural Gas Storage Facility Gas Leak

From October 23, 2015, through February 11, 2016, SoCalGas experienced a natural gas leak from one of the injection-and-withdrawal wells, SS25, at its Aliso Canyon natural gas storage facility located in Los Angeles County. In February 2016, CalGEM confirmed that the well was permanently sealed.

Cost Estimates, Accounting Impact and Insurance. At March 31, 2020, SoCalGas estimates the costs related to the Leak are \$1,408 million (the cost estimate). This cost estimate may increase significantly as more information becomes available. A substantial portion of the cost estimate has been paid, and \$284 million is accrued as Reserve for Aliso Canyon Costs and \$6 million is accrued in Deferred Credits and Other as of March 31, 2020 on SoCalGas' and Sempra Energy's Condensed Consolidated Balance Sheets.

Except for the amounts paid or estimated to settle certain actions, the cost estimate does not include all litigation or regulatory costs to the extent it is not possible to predict at this time the outcome of these actions or reasonably estimate the costs to defend or resolve the actions or the amount of damages, restitution, or civil, administrative or criminal fines, sanctions, penalties or other costs or remedies that may be imposed or incurred. The cost estimate also does not include certain other costs incurred by Sempra Energy associated with defending against shareholder derivative lawsuits and other potential costs that we currently do not anticipate incurring or that we cannot reasonably estimate. These costs not included in the cost estimate could be significant and could have a material adverse effect on SoCalGas' and Sempra Energy's cash flows, financial condition and results of operations.

We have received insurance payments for many of the costs included in the cost estimate, including temporary relocation and associated processing costs, control-of-well expenses, costs of the government-ordered response to the Leak, certain legal costs and lost gas. We intend to pursue the full extent of our insurance coverage for the costs we have incurred. Other than directors' and officers' liability insurance, after taking into consideration the additional accrual related to litigation matters described in Note 11 of the Notes to Condensed Consolidated Financial Statements, we have effectively exhausted all of our insurance in this matter, except as to certain defense costs we may incur in the future, including those related to the shareholder derivative lawsuits. We continue to pursue other sources of insurance coverage for costs related to this matter, but we may not be successful in obtaining additional insurance recovery for any of these costs. If we are not able to secure additional insurance recovery for all or a substantial portion of these costs, if any costs we have recorded as an insurance receivable are not collected, if there are delays in receiving insurance recoveries, or if the insurance recoveries are subject to income taxes while the associated costs are not tax deductible, such amounts, which could be significant, could have a material adverse effect on SoCalGas' and Sempra Energy's cash flows, financial condition and results of operations.

As of March 31, 2020, we recorded the expected recovery of the cost estimate related to the Leak of \$511 million as Insurance Receivable for Aliso Canyon Costs on SoCalGas' and Sempra Energy's Condensed Consolidated Balance Sheets. This amount is exclusive of insurance retentions and \$766 million of insurance proceeds we received through March 31, 2020. If we were to conclude that this receivable or a portion of it is no longer probable of recovery from insurers, some or all of this receivable would be charged against earnings, which could have a material adverse effect on SoCalGas' and Sempra Energy's cash flows, financial condition and results of operations.

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. The Aliso Canyon natural gas storage facility is the largest SoCalGas storage facility and an important element of SoCalGas' delivery system. As a result of the Leak, SoCalGas suspended injection of natural gas into the Aliso Canyon natural gas storage facility beginning in October 2015 and, following a comprehensive safety review and authorization by CalGEM and the CPUC's Executive Director, resumed limited injection operations in July 2017.

During the suspension period, SoCalGas advised the California ISO, California Energy Commission, CPUC and Pipeline and Hazardous Materials Safety Administration of its concerns that the inability to inject natural gas into the Aliso Canyon natural gas storage facility posed a risk to energy reliability in Southern California. The CPUC has issued a series of directives to SoCalGas specifying the range of working gas to be maintained in the Aliso Canyon natural gas storage facility as well as protocols for the withdrawal of gas, to help ensure safe and reliable natural gas service, while helping to maintain stable energy prices in Southern California. Limited withdrawals of natural gas from the facility were made in 2018, 2019 and 2020 to augment natural gas supplies during critical demand periods.

In February 2017, the CPUC opened a proceeding pursuant to SB 380 to determine the feasibility of minimizing or eliminating the use of the Aliso Canyon natural gas storage facility. If the Aliso Canyon natural gas storage facility were to be permanently closed, or if future cash flows from its operation were otherwise insufficient to recover its carrying value, it could result in an impairment of the facility and significantly higher than expected operating costs and/or additional capital expenditures, and natural gas reliability and electric generation could be jeopardized. At March 31, 2020, the Aliso Canyon natural gas storage facility had a net book value of \$771 million. Any significant impairment of this asset, or higher operating costs and additional capital expenditures incurred by SoCalGas that may not be recoverable in customer rates, could have a material adverse effect on SoCalGas' and Sempra Energy's results of operations, financial condition and cash flows.

Sempra Texas Utilities

Oncor's business is capital intensive, and it relies on external financing as a significant source of liquidity for its capital requirements. In the past, Oncor has financed a substantial portion of its cash needs from operations and with proceeds from indebtedness. In the event that Oncor fails to meet its capital requirements, we may be required to make additional capital contributions to Oncor, or if Oncor is unable to access sufficient capital to finance its ongoing needs, we may elect to make additional capital contributions to Oncor which could be substantial and which would reduce the cash available to us for other purposes, could increase our indebtedness and could ultimately materially adversely affect our results of operations, financial condition and prospects. In that regard, our commitments to the PUCT prohibit us from making loans to Oncor. As a result, if Oncor requires additional financing and cannot obtain it from other sources, we may elect to make a capital contribution to Oncor.

Oncor's ability to pay dividends may be limited by factors such as its credit ratings, regulatory capital requirements, debt-to-equity ratio approved by the PUCT and other restrictions. In addition, Oncor will not pay dividends if a majority of Oncor's independent directors or any minority member director determines it is in the best interests of Oncor to retain such amounts to meet expected future requirements.

Sempra Mexico

Sempra Mexico is currently building or developing terminals for the receipt, storage, and delivery of liquid fuels in the new port of Veracruz and vicinity of Mexico City, Puebla, Topolobampo, Manzanillo, and Ensenada. Sempra Mexico is also developing new solar facilities in Juárez, Chihuahua, and Benjamin Hill, Sonora, through which it will supply renewable energy to several private companies. We expect the projects to commence commercial operations on various dates in 2020 and 2021, but these expected commencement dates could be delayed by worsening or extended disruptions of project construction or development caused by the COVID-19 pandemic. See “Item 1A. Risk Factors” below. We expect to fund these capital expenditures and investments, operations and dividends at IEnova with available funds, including credit facilities, and funds internally generated by the Sempra Mexico businesses, as well as funds from project financing, sales of securities, interim funding from the parent or affiliates, and partnering in JVs. Sempra Mexico is continuing to monitor the impacts of the COVID-19 pandemic on cash flows and results of operations.

As we discuss in Note 11 of the Notes to Condensed Consolidated Financial Statements, IEnova received force majeure payments for the Guaymas-El Oro segment of the Sonora pipeline from August 2017 to August 2019. Under an agreement between IEnova and the CFE, the CFE will resume making payments only when the damaged section of the Guaymas-El Oro segment of the Sonora pipeline is repaired. If the pipeline is not repaired by May 15, 2020 and the parties do not agree on a new service start date, IEnova retains the right to terminate the contract and seek to recover its reasonable and documented costs and lost profits. The parties are currently discussing a new service start date in the event the pipeline is not repaired by May 15, 2020, but there can be no assurance that the parties will have agreed on a new service start date if the pipeline is not repaired by that date. If IEnova is unable to make such repairs (which have not commenced) and resume operations in the Guaymas-El Oro segment of the Sonora pipeline or if IEnova terminates the contract and is unable to obtain recovery, there may be a material adverse impact on Sempra Energy’s results of operations and cash flows and our ability to recover the carrying value of our investment.

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 “Item 1A. Risk Factors” in the Annual Report.

Sempra LNG

Sempra LNG develops and builds natural gas liquefaction facilities and is pursuing the development of five strategically located LNG projects in North America with a long-term goal of enabling the delivery of natural gas to the largest world markets. We expect Sempra LNG to require funding for the development and expansion of its portfolio of projects, which may be financed through a combination of operating cash flows, funding from the parent, project financing and participating in JVs, including ECA LNG JV with IEnova.

North American natural gas prices, when in decline, negatively affect profitability at Sempra LNG. Also, a reduction in projected global demand for LNG could result in increased competition among those developing projects in an environment of declining LNG demand, such as the Sempra Energy-sponsored LNG export initiatives. Our LNG projects currently under development could be delayed by the worldwide economic slowdown as a result of the COVID-19 pandemic, by the current uncertainty in the global oil and gas markets as a result of the unprecedented decline in oil prices or by a combination of these factors. For a discussion of these risks and other risks involving changing commodity prices, see “Item 1A. Risk Factors” in the Annual Report and in “Item 1A. Risk Factors” below.

Cameron LNG JV Three-Train Liquefaction Project (Phase 1)

Sempra LNG, through its interest in Cameron LNG JV, is constructing a three-train natural gas liquefaction export facility with an expected export capability of 12 Mtpa of LNG. Construction on the three-train liquefaction project began in the second half of 2014 under an EPC contract with a JV between CB&I, LLC (as assignee of CB&I Shaw Constructors, Inc.), a wholly owned subsidiary of McDermott International, Inc., and Chiyoda International Corporation, a wholly owned subsidiary of Chiyoda Corporation. The majority of the construction is project-financed at the JV, with most or all of the remainder of the capital requirements provided by the project partners, including Sempra Energy, through equity contributions under the project equity agreements. We expect that our remaining equity requirements to complete the project will be met by a combination of our share of cash generated from the first two liquefaction trains that have commenced operations and, if required, additional cash contributions. Sempra Energy signed guarantees for 50.2% of Cameron LNG JV’s financing obligations for a maximum amount of up to \$4.0 billion. The guarantees will terminate upon satisfaction of certain conditions, including all three trains achieving financial completion by September 30, 2021 (with up to an additional 365-day extension beyond such date permitted in cases of force majeure). However, if Cameron LNG JV fails to satisfy the financial completion criteria, a demand could be made under the guarantee for Sempra Energy’s 50.2% share of Cameron LNG JV’s obligations under the financing arrangements then due and payable, which could have a material adverse impact on Sempra Energy’s liquidity.

Cameron LNG JV achieved commercial operations of Train 1 and Train 2 under its tolling agreements in August 2019 and February 2020, respectively. We expect Train 3 will commence commercial operations in the third quarter of 2020. However, the expected commencement of Train 3's commercial operations could be delayed by worsening or extended disruptions of project construction and commissioning caused by the COVID-19 pandemic.

Large-scale construction projects such as 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, severe weather events, global pandemics, substantial construction delays and increased costs. In addition, once completed, the facility may be subject to design flaws, equipment failures and other operational issues, which could cause the facility to suspend operations or operate at a reduced capacity.

Cameron LNG JV has a lump-sum, turnkey EPC contract, and if the contractor becomes unwilling or unable to perform according to the terms and timetable of the EPC contract, the project could face substantial construction delays and potentially significantly increased costs. In January 2020, McDermott International, Inc. filed for bankruptcy protection under Chapter 11 of the U.S. bankruptcy code. McDermott International, Inc. has stated that it expects all of its projects, including the three-train liquefaction project at Cameron LNG JV, to continue on an uninterrupted basis. However, we cannot be certain the Cameron LNG JV project will not be interrupted. If the contractor defaults under the EPC contract due to the bankruptcy of McDermott International, Inc. or for any other reason, such default could result in Cameron LNG JV's engagement of a substitute contractor. The inability to complete the project in a timely manner or within our current expectations, cost overruns, and the other risks described above could have a material adverse effect on our business, results of operations, cash flows, financial condition, credit ratings and/or prospects.

For a discussion of our investment in Cameron LNG JV, JV financing, Sempra Energy guarantees, the risks discussed above and other risks relating to the development of the Cameron LNG JV liquefaction project that could adversely affect our future performance, see Note 6 of the Notes to Consolidated Financial Statements and "Item 1A. Risk Factors" in the Annual Report.

Proposed Cameron Liquefaction Expansion (Phase 2)

Cameron LNG JV has received the major permits and FTA and non-FTA approvals necessary to expand the current configuration of the Cameron LNG JV liquefaction project beyond Phase 1. The permits obtained for Phase 2 include up to two additional liquefaction trains and up to two additional full containment LNG storage tanks (one of which was permitted with the original three-train project).

Expansion of the Cameron LNG liquefaction facility beyond the first three trains is subject to certain restrictions and conditions under the JV 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 the partners, including with respect to the equity investment obligation of each partner. Discussions among all the Cameron LNG JV partners have been taking place regarding how an expansion may be structured and we expect that discussions will continue. There can be no assurance that the Cameron LNG JV members will unanimously agree on an expansion structure, which, if not accomplished in a timely manner, could materially and adversely impact the development of the expansion project. In light of this, we are unable to predict whether or when Cameron LNG JV might be able to move forward on expansion of the Cameron LNG liquefaction facility beyond the first three trains.

In November 2018, Sempra Energy and TOTAL S.A. entered into an MOU that provides a framework for cooperation for the development of the potential Cameron LNG JV expansion project and the potential ECA LNG JV liquefaction-export project that we describe below in “ECA LNG JV Liquefaction Export Project.” The MOU contemplates TOTAL S.A. potentially contracting for up to approximately 9 Mtpa of LNG offtake across these two development projects and provides TOTAL S.A. the option to acquire an equity interest in the proposed ECA LNG JV project. In addition, in October 2019, Sempra Energy and Mitsui & Co., Ltd. entered into an MOU that provides a framework for potential offtake by Mitsui & Co., Ltd. from the potential Cameron LNG JV expansion project and the second phase of the potential ECA LNG JV project, as well as Mitsui & Co., Ltd.’s potential acquisition of an equity interest in the second phase of the potential ECA LNG JV project. In May 2020, Sempra Energy and Mitsubishi Corporation entered into an MOU that provides a framework for development of and potential offtake by Mitsubishi Corporation from the potential Cameron LNG JV expansion project. The ultimate participation of and offtake by TOTAL S.A., Mitsui & Co., Ltd. and Mitsubishi Corporation remains subject to negotiation and finalization of definitive agreements, among other factors, and TOTAL S.A., Mitsui & Co., Ltd. and Mitsubishi Corporation have no commitment to participate in and offtake from the projects.

The development of the potential Cameron LNG expansion project is subject to numerous other risks and uncertainties, including securing binding customer commitments; obtaining a number of permits and regulatory approvals; securing financing; negotiating and completing suitable commercial agreements, including a definitive EPC contract, equity acquisition and governance agreements; reaching a final investment decision; and other factors associated with this potential investment. For a discussion of these risks, see “Item 1A. Risk Factors” in the Annual Report.

ECA LNG JV Liquefaction Export Project

Through a JV agreement, Sempra LNG and IEnova are developing a proposed natural gas liquefaction project at IEnova's existing ECA LNG Regasification facility. The proposed liquefaction facility project, which is planned for development in two phases (a mid-scale project referred to as ECA LNG JV Phase 1 and a large-scale project referred to as ECA LNG JV Phase 2), is being developed to provide buyers with direct access to west coast LNG supplies. The ECA LNG Regasification facility currently has profitable long-term regasification contracts for 100% of the regasification facility's capacity through 2028, making the decisions on whether and how to pursue the ECA LNG JV Phase 2 liquefaction project dependent in part on whether the investment in a large-scale liquefaction facility would, over the long term, be more beneficial financially than continuing to supply regasification services under our existing contracts. We do not believe that the development of ECA LNG JV Phase 1 will disrupt operations at the ECA LNG Regasification facility.

In March 2019, ECA LNG JV received two authorizations from the DOE to export U.S.-produced natural gas to Mexico and to re-export LNG to non-FTA countries from its ECA LNG JV Phase 1 project, a one-train natural gas liquefaction export facility with a nameplate capacity of 3.25 Mtpa and initial offtake capacity of approximately 2.5 Mtpa, and its ECA LNG JV Phase 2 project, each of which is in development.

On February 27, 2020, we entered into an EPC contract with TechnipFMC for the engineering, procurement and construction of ECA LNG JV Phase 1. We have no obligation to move forward on the EPC contract, and we may release TechnipFMC to perform portions of the work pursuant to limited notices to proceed. We plan to fully release TechnipFMC to perform all of the work to construct ECA LNG JV Phase 1 only after we reach a final investment decision with respect to the project and after certain other conditions are met. The total price of the EPC contract for ECA LNG JV Phase 1 is estimated at approximately \$1.5 billion. We estimate that capital expenditures for ECA LNG JV Phase 1 will approximate \$1.9 billion, including capitalized interest and project contingency. The actual cost of the EPC contract and the actual amount of these capital expenditures may differ, perhaps substantially, from our estimates.

In November 2018, Sempra LNG and IEnova signed Heads of Agreements with affiliates of TOTAL S.A., Mitsui & Co., Ltd. and Tokyo Gas Co., Ltd. for ECA LNG JV Phase 1 in respect of LNG sales of approximately 2.5 Mtpa in the aggregate. In April 2020, ECA LNG JV executed definitive 20-year LNG sale and purchase agreements with Mitsui & Co., Ltd. and an affiliate of TOTAL S.A. for approximately 0.8 Mtpa of LNG and 1.7 Mtpa of LNG, respectively. Each agreement remains subject to certain customary conditions of effectiveness, including our final investment decision for the project.

We continue to work towards reaching a final investment decision for ECA LNG JV Phase 1 in the second quarter of 2020. However, this project is contingent on the receipt of an export permit from the Mexican government. The closure of non-essential activities in Mexico in response to the COVID-19 pandemic has added to the uncertainty of the timing of the receipt of this permit and could delay our final investment decision beyond the second quarter of 2020.

The development of both the ECA LNG JV Phase 1 and ECA LNG JV Phase 2 projects is subject to numerous risks and uncertainties, including obtaining binding customer commitments for Phase 2; the receipt of a number of permits and regulatory approvals; obtaining financing; negotiating and completing suitable commercial agreements, including a definitive EPC contract for Phase 2, equity acquisition and governance agreements, LNG sales agreements and gas supply and transportation agreements; reaching a final investment decision; and other factors associated with this potential investment. In addition, as we discuss in Note 11 of the Notes to Condensed Consolidated Financial Statements, an unfavorable decision on certain property disputes and permit challenges could materially and adversely affect the development of these projects. For a discussion of these risks, see "Item 1A. Risk Factors" in the Annual Report.

Port Arthur LNG Liquefaction Project

Sempra LNG is developing a proposed natural gas liquefaction project on a greenfield site that it owns in the vicinity of Port Arthur, Texas, located along the Sabine-Neches waterway. Sempra LNG received authorizations from the DOE in August 2015 and May 2019 that collectively permit the LNG to be produced from the proposed Port Arthur LNG project to be exported to all current and future FTA and non-FTA countries.

In April 2019, the FERC approved the siting, construction and operation of the proposed Port Arthur LNG liquefaction facility, along with certain natural gas pipelines, including the Louisiana Connector Pipeline, that could be used to supply feed gas to the liquefaction facility, assuming the project is completed.

On February 28, 2020, we entered into an EPC contract with Bechtel for the proposed Port Arthur LNG liquefaction project. The EPC contract contemplates the construction of two liquefaction trains with a nameplate capacity of approximately 13.5 Mtpa, two LNG storage tanks, a marine berth and associated loading facilities and related infrastructure necessary to provide liquefaction services. We have no obligation to move forward on the EPC contract, and we may release Bechtel to perform portions of the work pursuant to limited notices to proceed. We plan to fully release Bechtel to perform all of the work to construct the Port Arthur LNG liquefaction project only after we reach a final investment decision with respect to the project and after certain other conditions are met, including obtaining project financing. If we issue the full notice to proceed by July 15, 2020, the price under the fixed-price EPC contract is estimated to be approximately \$8.9 billion. This does not include costs associated with changes to the project's scope or the occurrence of certain events that would entitle Bechtel to relief under the contract, including customary events for similar agreements of this type such as force majeure events, certain changes in law, the discovery of certain differing site conditions, and certain delays to the work that we may cause. If we issue the full notice to proceed after July 15, 2020, the price will be subject to price escalations. If the full notice to proceed is not issued by October 15, 2020, then the EPC contract, including the price, will be subject to renegotiation. Any changes to the EPC contract will require the agreement of both parties, which cannot be assured.

In December 2018, Polish Oil & Gas Company (PGNiG) and Port Arthur LNG entered into a definitive 20-year agreement for the sale and purchase of 2 Mtpa of LNG per year from the Port Arthur LNG liquefaction project. Under the agreement, LNG purchases by PGNiG from Port Arthur LNG will be made on a free-on-board basis, with PGNiG responsible for shipping the LNG from the Port Arthur facility to the final destination. Port Arthur LNG will manage the gas pipeline transportation, liquefaction processing and cargo loading. The agreement is subject to certain conditions precedent, including Port Arthur LNG making a positive final investment decision within certain agreed timelines. The failure of these conditions precedent to be satisfied or waived within the agreed timelines could result in the termination of the agreement.

In May 2019, Aramco Services Company and Sempra LNG signed a Heads of Agreement for the negotiation and finalization of a definitive 20-year LNG sale and purchase agreement for 5 Mtpa of LNG offtake. The Heads of Agreement also includes the negotiation and finalization of a 25% equity investment in the project. In January 2020, Aramco Services Company and Sempra LNG signed an Interim Project Participation Agreement, which sets forth certain mechanisms for the parties to work towards receipt of corporate approvals to enter into and proceed with the transaction, execution of the transaction agreements and the fulfillment or waiver of the conditions precedent contemplated by these agreements, making a final investment decision and other pre-final investment decision activities. The Heads of Agreement and Interim Project Participation Agreement do not obligate the parties to ultimately execute any agreements or participate in the project.

In February 2020, Sempra LNG filed a FERC application for the siting, construction and operation of a second phase at the proposed Port Arthur LNG facility, including the potential addition of two liquefaction trains.

In November 2019, Port Arthur LNG commenced the relocation and upgrade of approximately three miles of highway where the Port Arthur LNG liquefaction project would be located.

We continue to work on completing all necessary milestones so that we are prepared to make a final investment decision for the proposed Port Arthur LNG liquefaction project when appropriate. The impact of the COVID-19 pandemic on the global economy and the current uncertainty in the financial and energy markets has delayed the expected timing of our final investment decision from 2020 to 2021.

Development of the Port Arthur LNG liquefaction project is subject to a number of risks and uncertainties, including obtaining additional customer commitments; completing the required commercial agreements, such as equity acquisitions and governance agreements, LNG sales agreements and gas supply and transportation 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. For a discussion of these risks, see "Item 1A. Risk Factors" in the Annual Report.

Discontinued Operations

As we discuss in Note 5 of the Notes to Condensed Consolidated Financial Statements, in January 2019, our board of directors approved a plan to sell our South American businesses. On April 24, 2020, we completed the sale of our equity interests in our Peruvian businesses for an aggregate base purchase price of \$3.59 billion, subject to post-closing adjustments. In October 2019, we entered into an agreement to sell our equity interests in our Chilean businesses for an aggregate base purchase price of \$2.23 billion, subject to customary adjustments for working capital and changes in net indebtedness and other adjustments. We expect the sale to close in the second quarter of 2020, subject to satisfaction of conditions to closing.

Our utilities in South America have historically provided relatively stable earnings and liquidity. We intend to use the proceeds from the sales to focus on capital investment in North America to support additional growth opportunities and strengthen our balance sheet by reducing debt. We expect the cash provided by earnings from our capital investment will exceed the absence of cash flows from these discontinued operations. However, there can be no assurance that we will derive these anticipated benefits. Further, there can be no assurance that we will be able to redeploy the capital that we obtain from such sales, if completed, in a way that would result in cash flows or earnings exceeding those historically generated by these businesses.

SOURCES AND USES OF CASH

The following tables include only significant changes in cash flow activities for each of our registrants.

CASH FLOWS FROM OPERATING ACTIVITIES

(Dollars in millions)

Three months ended March 31,	Sempra Energy Consolidated	SDG&E	SoCalGas
2020	\$ 1,318	\$ 498	\$ 757
2019	951	443	376
Change	\$ 367	\$ 55	\$ 381
Net increase in Reserve for Aliso Canyon Costs primarily due to \$276 higher accruals and \$98 lower payments	\$ 375		\$ 375
Higher net income, adjusted for noncash items included in earnings	169	\$ 109	121
Change in long-term GHG obligations	49		42
Higher distributions of earnings from Oncor Holdings	19		
Net increase in Insurance Receivable for Aliso Canyon Costs primarily due to \$176 higher accruals offset by \$19 insurance proceeds received	(156)		(156)
Deferred revenue due to the TCJA at the California Utilities in 2019	(43)	(20)	(23)
Change in intercompany activities with discontinued operations	(31)		
Change in net undercollected regulatory balancing accounts (including long-term amounts in regulatory assets)		(46)	47
Other	10	12	(25)
Change in net cash flows from discontinued operations	(25)		
	\$ 367	\$ 55	\$ 381

CASH FLOWS FROM INVESTING ACTIVITIES*(Dollars in millions)*

Three months ended March 31,	Sempra Energy Consolidated	SDG&E	SoCalGas
2020	\$ (1,181)	\$ (402)	\$ (388)
2019	(610)	(356)	(324)
Change	\$ (571)	\$ (46)	\$ (64)
Net proceeds from the February 2019 sale of Sempra LNG's non-utility natural gas storage assets	\$ (322)		
Increase in capital expenditures	(227)	\$ (46)	\$ (64)
Other	(27)		
Change in net cash flows from discontinued operations	5		
	\$ (571)	\$ (46)	\$ (64)

CASH FLOWS FROM FINANCING ACTIVITIES*(Dollars in millions)*

Three months ended March 31,	Sempra Energy Consolidated	SDG&E	SoCalGas
2020	\$ 2,114	\$ 97	\$ 10
2019	(381)	(75)	(67)
Change	\$ 2,495	\$ 172	\$ 77
Increase (decrease) in short-term debt, net	\$ 1,630	\$ (27)	\$ (564)
Higher issuances of long-term debt	1,048	400	649
Higher issuances of commercial paper and other short-term debt with maturities greater than 90 days	267		
Higher payments on long-term debt and finance leases	(503)		
Higher payments for commercial paper and other short-term debt with maturities greater than 90 days	(93)		
Higher common dividends paid		(200)	
Other	(10)	(1)	(8)
Change in net cash flows from discontinued operations mainly due to a net increase in short-term debt	156		
	\$ 2,495	\$ 172	\$ 77

Capital Expenditures and Investments and Acquisitions**EXPENDITURES FOR PP&E AND INVESTMENTS AND ACQUISITIONS***(Dollars in millions)*

	Three months ended March 31,	
	2020	2019
SDG&E	\$ 402	\$ 356
SoCalGas	388	324
Sempra Texas Utilities	86	56
Sempra Mexico	170	85
Sempra LNG	47	56
Parent and other	3	—
Total	\$ 1,096	\$ 877

The amounts and timing of capital expenditures and certain investments are generally subject to approvals by various regulatory and other governmental and environmental bodies, including the CPUC, the FERC and the PUCT. Excluding discontinued operations, in 2020, we expect to make capital expenditures and investments of approximately \$5.7 billion, a decrease from the \$5.9 billion summarized in “Item 7. MD&A – Capital Resources and Liquidity” in the Annual Report. The decrease is primarily attributable to Phase 1 of the ECA LNG JV liquefaction export project at Sempra LNG.

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

We view 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 discuss these accounting policies in “Item 7. MD&A” in the Annual Report.

We describe our significant accounting policies in Note 1 of the Notes to Consolidated Financial Statements in the Annual Report. We follow the same accounting policies for interim reporting purposes.

NEW ACCOUNTING STANDARDS

We discuss the relevant pronouncements that have recently been issued or become effective and have had or may have an impact on our financial statements and/or disclosures in Note 2 of the Notes to Condensed Consolidated Financial Statements.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We provide disclosure regarding derivative activity in Note 8 of the Notes to Condensed Consolidated Financial Statements. We discuss our market risk and risk policies in detail in “Item 7A. Quantitative and Qualitative Disclosures About Market Risk” in the Annual Report.

COMMODITY PRICE RISK

In the first quarter of 2020, there were no significant changes in our exposure to commodity price risk.

INTEREST RATE RISK

The table below shows the nominal amount of our debt:

NOMINAL AMOUNT OF DEBT⁽¹⁾

(Dollars in millions)

	March 31, 2020			December 31, 2019		
	Sempra Energy Consolidated	SDG&E	SoCalGas	Sempra Energy Consolidated	SDG&E	SoCalGas
Short-term:						
California Utilities	\$ —	\$ —	\$ —	\$ 710	\$ 80	\$ 630
Other	5,744	—	—	2,798	—	—
Long-term:						
California Utilities fixed-rate	\$ 9,582	\$ 5,123	\$ 4,459	\$ 8,949	\$ 5,140	\$ 3,809
California Utilities variable-rate	400	400	—	—	—	—
Other fixed-rate	10,485	—	—	11,561	—	—
Other variable-rate	746	—	—	746	—	—

⁽¹⁾ After the effects of interest rate swaps. Before the effects of acquisition-related fair value adjustments and reductions for unamortized discount and debt issuance costs, and excluding finance lease obligations.

An 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. Earnings are affected by changes in interest rates on short-term debt and variable long-term debt. If weighted-average interest rates on short-term debt outstanding at March 31, 2020 increased or decreased by 10%, the change in earnings over the next 12-month period ended March 31, 2021 would be approximately \$14 million. If interest rates increased or decreased by 10% on all variable-rate long-term debt at March 31, 2020, after considering the effects of interest rate swaps, the change in earnings over the next 12-month period ended March 31, 2021 would be approximately \$2 million.

FOREIGN CURRENCY AND INFLATION RATE RISK

We discuss our foreign currency and inflation exposure in “Item 2. MD&A – Impact of Foreign Currency and Inflation Rates on Results of Operations” in this report and in “Item 7. MD&A – Impact of Foreign Currency and Inflation Rates on Results of Operations” in the Annual Report. At March 31, 2020, there were no significant changes to our exposure to foreign currency rate risk since December 31, 2019.

ITEM 4. CONTROLS AND PROCEDURES

EVALUATION OF DISCLOSURE CONTROLS AND PROCEDURES

Sempra Energy, SDG&E and SoCalGas maintain disclosure controls and procedures designed 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 SEC and is accumulated and communicated to the management of each company, including each respective principal executive officer and principal 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 possible controls and procedures.

Under the supervision and with the participation of the principal executive officers and principal financial officers of Sempra Energy, SDG&E and SoCalGas, each such company’s management evaluated the effectiveness of the design and operation of its disclosure controls and procedures as of March 31, 2020, the end of the period covered by this report. Based on these evaluations, the principal executive officers and principal 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 as of such date.

INTERNAL CONTROL OVER FINANCIAL REPORTING

There have been no changes in Sempra Energy's, SDG&E's or SoCalGas' 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.

PART II – OTHER INFORMATION

ITEM 1. 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 10 and 11 of the Notes to Condensed Consolidated Financial Statements in this report and in Notes 15 and 16 of the Notes to Consolidated Financial Statements in the Annual Report, or (2) referred to in "Item 7. MD&A" in the Annual Report.

ITEM 1A. RISK FACTORS

When evaluating our company and its subsidiaries, you should consider carefully the risk factors and all other information contained in this report, including the factors discussed above in “Item 2. MD&A” and in this section, and in the other documents we file with the SEC, including the factors disclosed in “Item 1A. Risk Factors” in the Annual Report. Except as set forth below, there have been no material changes from the risk factors as previously disclosed in the Annual Report. Any of the risk factors and other information discussed in this report or any of the risk factors disclosed in “Item 1A. Risk Factors” in the Annual Report, as well as additional risks and uncertainties not currently known to us or that we currently deem to be immaterial, could materially and adversely affect our businesses, cash flows, results of operations, financial condition, prospects and/or the trading prices of our securities or those of our subsidiaries.

Risks Related to All Sempra Energy Businesses

Our business faces risks related to the COVID-19 pandemic.

The COVID-19 pandemic is currently materially impacting countries, communities, supply chains and markets around the world. The U.S. economy is experiencing a significant slowdown and claims for unemployment are increasing to historic levels. To date, the COVID-19 pandemic has not had a material impact on our results of operations. However, we are conducting business with substantial modifications to employee travel, employee work locations, and virtualization or cancellation of certain business activities, among other modifications. If these or other similar measures were to increase or continue for an extended period, we could experience employee absenteeism, decreased efficiency and productivity by our workforce and other similar impacts that could jeopardize our ability to sustain operations and satisfy compliance requirements. We also have observed other companies, including our current and prospective counterparties, customers and partners, as well as many governments, including our regulators and other governing bodies that affect our businesses, taking precautionary, preemptive and responsive actions to address the effects of the COVID-19 pandemic, and they may take further actions that alter their normal operations. These actions by third parties could impact our operations, results, liquidity and ability to pursue capital projects and strategic initiatives. For example, the CPUC has requested that all energy companies under its jurisdiction take action to implement several emergency customer protection measures to support California customers. The measures apply to all residential and small business customers affected by the COVID-19 pandemic and include suspending service disconnections due to nonpayment, waiving late payment fees, and offering flexible payment plans for all customers experiencing difficulty paying their electric or gas bills. These actions could result in a material reduction in payments received from our customers and a material increase in uncollectible accounts that we may not be able to recover in rates, which could have a material adverse effect on the cash flows, financial condition and results of operations for Sempra Energy, SDG&E and SoCalGas.

In addition, the economic slowdown caused by the COVID-19 pandemic, together with the increase of the supply of oil in world markets, has caused a material and unprecedented decline in oil prices and the demand for energy. These conditions, as well as potential disruptions of construction and development activity if our project counterparties implement or are required to implement stay-at-home or limited workforce measures in response to the pandemic, could result in increased competition among LNG project developers and substantial delays of some of our LNG and other projects currently under development. With respect to Phase 1 of the Cameron LNG JV liquefaction project currently under construction, although the project is considered a critical infrastructure project and is 99.5% complete, the impacts of the COVID-19 pandemic could cause unanticipated delays in completing the project.

Further, the COVID-19 pandemic has adversely affected conditions in the capital markets and may adversely affect our cost of and access to capital, including from the capital markets generally, from commercial paper markets and from commercial banks. Although Sempra Energy, SDG&E and SoCalGas are not currently constrained in any significant way in their ability to borrow money at reasonable rates, these circumstances could change if conditions worsen or continue for an extended period, which could have a material negative effect on our results of operations and on our strategic initiatives and prospects. To date, the COVID-19 pandemic has resulted in a slowdown of our capital spending, which could worsen if conditions deteriorate or fail to improve in the near term and which could have a material adverse effect on Sempra Energy’s, SDG&E’s and SoCalGas’ results of operations and prospects.

We will continue to actively monitor the effects of the COVID-19 pandemic and may take further actions that alter our business operations as may be required by federal, state or local authorities, or that we determine are in the best interests of our employees, customers, partners and suppliers. However, we cannot at this time predict the extent to which the COVID-19 pandemic will further impact our liquidity, financial condition, results of operations and prospects.

ITEM 6. EXHIBITS

The exhibits listed below relate to each registrant as indicated. Unless otherwise indicated, the exhibits that are incorporated by reference herein were filed under File Number 1-14201 (Sempra Energy), File Number 1-40 (Pacific Lighting Corporation), File Number 1-03779 (San Diego Gas & Electric Company) and/or File Number 1-01402 (Southern California Gas Company).

Exhibit Number	Exhibit Description	Filed or Furnished Herewith	Incorporated by Reference		
			Form	Exhibit or Appendix	Filing Date
EXHIBIT 3 -- ARTICLES OF INCORPORATION AND BYLAWS					
<i>Sempra Energy</i>					
3.1	Amended and Restated Articles of Incorporation of Sempra Energy effective May 23, 2008.		10-K	3.1	02/27/20
3.2	Bylaws of Sempra Energy (as amended through April 14, 2020).		8-K	3.1	04/14/20
3.3	Certificate of Determination of the 6% Mandatory Convertible Preferred Stock, Series A, of Sempra Energy (including the form of certificate representing the 6% Mandatory Convertible Preferred Stock, Series A), filed the Secretary of State of the State of California and effective January 5, 2018.		8-K	3.1	01/09/18
3.4	Certificate of Determination of the 6.75% Mandatory Convertible Preferred Stock, Series B, of Sempra Energy (including the form of certificate representing the 6.75% Mandatory Convertible Preferred Stock, Series B) filed with the Secretary of State of the State of California and effective July 11, 2018.		8-K	3.1	07/13/18
<i>San Diego Gas & Electric Company</i>					
3.5	Amended and Restated Articles of Incorporation of San Diego Gas & Electric Company effective August 15, 2014.		10-K	3.4	02/26/15
3.6	Bylaws of San Diego Gas & Electric Company (as amended through October 26, 2016).		10-Q	3.1	11/02/16
<i>Southern California Gas Company</i>					
3.7	Restated Articles of Incorporation of Southern California Gas Company effective October 7, 1996.		10-K	3.01	03/28/97
3.8	Bylaws of Southern California Gas Company (as amended through January 30, 2017).		8-K	3.1	01/31/17
EXHIBIT 10 -- MATERIAL CONTRACTS					
<i>Sempra Energy</i>					
10.1*	Engineering, Procurement and Construction Contract, dated as of February 28, 2020, between Port Arthur LNG, LLC, PALNG Common Facilities Company, LLC (but only for the limited purpose set forth therein), and Bechtel Oil, Gas and Chemicals, Inc.	X			
<i>Management Contract or Compensatory Plan, Contract or Arrangement</i>					
<i>Sempra Energy/San Diego Gas & Electric/Southern California Gas Company</i>					
10.2	Severance Agreement and Mutual Release, dated March 30, 2020, between Sempra Energy and George Bilicic.	X			
10.3	Form of Sempra Energy 2019 Long-Term Incentive Plan 2020 Nonqualified Stock Option Award Agreement.		10-K	10.5	02/27/20
10.4	Form of Sempra Energy 2019 Long-Term Incentive Plan 2020 Time-Based Restricted Stock Unit Award - Three Year Ratable Vest.		10-K	10.6	02/27/20
10.5	Form of Sempra Energy 2019 Long-Term Incentive Plan 2020 Performance-Based Restricted Stock Unit Award - EPS Growth Performance Measure.		10-K	10.7	02/27/20
10.6	Form of Sempra Energy 2019 Long-Term Incentive Plan 2020 Performance-Based Restricted Stock Unit Award - Relative to Shareholder Return Performance Measure - S&P 500 Index.		10-K	10.8	02/27/20
10.7	Form of Sempra Energy 2019 Long-Term Incentive Plan 2020 Performance-Based Restricted Stock Unit Award - Relative Total Shareholder Return Performance Measure - S&P 500 Utilities Index.		10-K	10.9	02/27/20

* Portions of the exhibit have been omitted in accordance with applicable SEC rules.

Exhibit Number	Exhibit Description	Filed or Furnished Herewith
EXHIBIT 31 -- SECTION 302 CERTIFICATIONS		
<i>Sempra Energy</i>		
31.1	Certification of Sempra Energy's Principal Executive Officer pursuant to Rules 13a-14 and 15d-14 of the Securities Exchange Act of 1934.	X
31.2	Certification of Sempra Energy's Principal Financial Officer pursuant to Rules 13a-14 and 15d-14 of the Securities Exchange Act of 1934.	X
<i>San Diego Gas & Electric Company</i>		
31.3	Certification of San Diego Gas & Electric Company's Principal Executive Officer pursuant to Rules 13a-14 and 15d-14 of the Securities Exchange Act of 1934.	X
31.4	Certification of San Diego Gas & Electric Company's Principal Financial Officer pursuant to Rules 13a-14 and 15d-14 of the Securities Exchange Act of 1934.	X
<i>Southern California Gas Company</i>		
31.5	Certification of Southern California Gas Company's Principal Executive Officer pursuant to Rules 13a-14 and 15d-14 of the Securities Exchange Act of 1934.	X
31.6	Certification of Southern California Gas Company's Principal Financial Officer pursuant to Rules 13a-14 and 15d-14 of the Securities Exchange Act of 1934.	X
EXHIBIT 32 -- SECTION 906 CERTIFICATIONS		
<i>Sempra Energy</i>		
32.1	Certification of Sempra Energy's Principal Executive Officer pursuant to 18 U.S.C. Sec. 1350.	X
32.2	Certification of Sempra Energy's Principal Financial Officer pursuant to 18 U.S.C. Sec. 1350.	X
<i>San Diego Gas & Electric Company</i>		
32.3	Certification of San Diego Gas & Electric Company's Principal Executive Officer pursuant to 18 U.S.C. Sec. 1350.	X
32.4	Certification of San Diego Gas & Electric Company's Principal Financial Officer pursuant to 18 U.S.C. Sec. 1350.	X
<i>Southern California Gas Company</i>		
32.5	Certification of Southern California Gas Company's Principal Executive Officer pursuant to 18 U.S.C. Sec. 1350.	X
32.6	Certification of Southern California Gas Company's Principal Financial Officer pursuant to 18 U.S.C. Sec. 1350.	X
EXHIBIT 101 -- INTERACTIVE DATA FILE		
101.INS	XBRL Instance Document - the instance document does not appear in the Interactive Data file because its XBRL tags are embedded within the Inline XBRL document.	X
101.SCH	Inline XBRL Taxonomy Extension Schema Document.	X
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document.	X
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document.	X
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document.	X
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document.	X
EXHIBIT 104 -- COVER PAGE INTERACTIVE DATA FILE		
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101).	

SIGNATURES

Sempra Energy:

Pursuant to the requirements 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)

Date: May 4, 2020 By: /s/ Peter R. Wall

Peter R. Wall
Senior Vice President, Controller and
Chief Accounting Officer (Duly Authorized Officer)

San Diego Gas & Electric Company:

Pursuant to the requirements 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)

Date: May 4, 2020 By: /s/ Bruce A. Folkmann

Bruce A. Folkmann
Senior Vice President, Controller, Chief Financial Officer and Chief
Accounting Officer (Duly Authorized Officer)

Southern California Gas Company:

Pursuant to the requirements 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)

Date: May 4, 2020 By: /s/ Mia L. DeMontigny

Mia L. DeMontigny
Vice President, Controller, Chief Financial Officer and Chief
Accounting Officer (Duly Authorized Officer)

CERTAIN INFORMATION IN THIS DOCUMENT HAS BEEN OMITTED BECAUSE IT BOTH (I) IS NOT MATERIAL AND (II) WOULD LIKELY CAUSE COMPETITIVE HARM TO SEMPRA ENERGY IF PUBLICLY DISCLOSED. INFORMATION THAT HAS BEEN OMITTED ON THAT BASIS IS DENOTED IN THIS DOCUMENT AS “[***].”

CERTAIN INFORMATION IN THIS DOCUMENT HAS BEEN OMITTED BECAUSE ITS DISCLOSURE WOULD CONSTITUTE AN UNWARRANTED INVASION OF PERSONAL PRIVACY. INFORMATION THAT HAS BEEN OMITTED ON THAT BASIS IS DENOTED IN THIS DOCUMENT AS [###].

ENGINEERING, PROCUREMENT AND CONSTRUCTION CONTRACT

NUMBER 4188P000092

BETWEEN

PORT ARTHUR LNG, LLC,

**PALNG COMMON FACILITIES COMPANY, LLC
(FOR THE PURPOSES DESCRIBED HEREIN)**

AND

BECHTEL OIL, GAS AND CHEMICALS, INC.

RELATING TO THE

PORT ARTHUR LIQUEFACTION PROJECT

Dated as of

February 28, 2020

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ENGINEERING, PROCUREMENT AND CONSTRUCTION CONTRACT

This **ENGINEERING, PROCUREMENT AND CONSTRUCTION CONTRACT** is entered into as of February 28, 2020 (the “**Effective Date**”), between PORT ARTHUR LNG, LLC, a Delaware limited liability company (“**Owner**”), PALNG COMMON FACILITIES COMPANY, LLC, a Delaware limited liability company (“**Common Facilities Owner**”), but only for the limited purposes set forth herein, and BECHTEL OIL, GAS AND CHEMICALS, INC., a Delaware corporation (“**Contractor**”). Contractor, Owner and Common Facilities Owner are each referred to herein from time to time as a “**Party**” and together as the “**Parties**”.

RECITALS

WHEREAS, Owner and the Common Facilities Owner desire to develop and construct a large-scale natural gas treatment, gas processing and liquefaction facility, including two (2) LNG Trains, two (2) LNG Tanks, with an option for a third LNG Tank, two (2) marine Berths and associated loading facilities, NGL extraction, storage and delivery facilities, cryogenic pipelines and infrastructure, utilities and facilities necessary to provide liquefaction services (the “**LNG Facility**”).

WHEREAS, Owner, Common Facilities Owner and Contractor have previously entered into the Engineering and Design Services Agreement dated as of August 6, 2018 (together with any Work Authorizations issued thereunder, the “**EDSA**”), whereby Contractor has provided and will provide the engineering and other services described therein, and pursuant to which Contractor has, among other things, developed the Contract Price and the Baseline CPM Schedule.

WHEREAS, Owner, Common Facilities Owner and Contractor have previously entered into the Site Works Services Agreement dated as of December 20, 2019 (together with any Work Authorizations issued thereunder, the “**SWSA**”), whereby Contractor has provided and will provide certain Site preparation and other on-Site services described therein, and pursuant to which Contractor has, among other things, developed the Contract Price and the Baseline CPM Schedule.

WHEREAS, Owner and Common Facilities Owner desire to engage Contractor to, and Contractor, itself and through its Suppliers, desires to, provide the engineering, procurement, construction, pre-commissioning, commissioning, start-up, testing and operating services for the LNG Facility, subject to terms and conditions set forth herein. as described herein on a fixed, separated price basis.

NOW, THEREFORE, in consideration of the premises and the agreements herein contained and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, Owner, Common Facilities Owner and Contractor hereby agree as follows:

Article 1

INTRODUCTION, DEFINITIONS AND INTERPRETATION

1.1 **Agreement Structure.** This Agreement consists of the Terms and Conditions (Articles 1 through 23) and the Appendices attached hereto (Appendix A through Appendix TT) and the Attachments thereto, each of which is incorporated herein by this reference.

1.2 **Definitions.** The following capitalized terms have the respective meanings set forth below, unless the context requires otherwise: “**313 Agreement**” means the Agreement for Limitation on Appraised Value of Property for School District Maintenance and Operations Taxes, dated as of October 24, 2016 (as modified, supplemented, or amended from time to time, the), by and among Sabine Pass Independent School District, Owner and the Common Facilities Owner (as successor in interest to Port Arthur LNG Holdings, LLC), together with the related approval of the 313 Agreement by the Texas Comptroller of Public Accounts, dated October 13, 2016, and the related Certificate for a Limitation on Appraised Value issued by the Texas Comptroller of Public Accounts to Owner and the Common Facilities Owner (as successor in interest to Port Arthur LNG Holdings, LLC) on May 16, 2016 under the provisions of Texas Tax Code Chapter 313.

“**AAA**” means the American Arbitration Association.

“**AAA Rules**” means the Construction Industry Arbitration Rules and Mediation Procedures (Including Procedures for Large, Complex Construction Disputes) of the AAA.

“**Abandonment**” means prior to Substantial Completion, Contractor has at any time stopped, suspended, or refused to perform all or substantially all of the remaining Work under this Agreement (including a significant reduction in Contractor Personnel performing Work to such a degree that objectively evidences the intent not to complete the Work) if such stoppage, suspension or refusal continues for five (5) consecutive Days or longer and, after notice from Company, Contractor fails to confirm, within five (5) Days of such notice, its intent to resume performance of the Work within a period of time reasonably acceptable to Owner, and Contractor fails to resume such performance within such agreed time; provided that Abandonment shall not include stoppage, suspension or refusal to perform the Work for which Contractor has the express right to do so under the Agreement.

“**Acceleration Plan**” has the meaning set forth in Section 4.4.4.

“**Affiliate**” means, with respect to any Person, any other Person which directly or indirectly controls, is controlled by or is under common control with such Person. For purposes of this definition, “control” (including, with correlative meanings, the terms “controlled by” and “under common control with”) means the possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of a Person, whether through the ownership of voting securities or otherwise. Without limiting the foregoing, ownership of fifty percent (50%) or more of the equity interests of each class holding voting rights shall be deemed

to be control of a Person. Notwithstanding the foregoing, Parent, the members of Parent and their respective Affiliates shall be considered Affiliates of Owner and Common Facilities Owner for purposes of this Agreement.

“**Agreement**” means this Engineering, Procurement and Construction Contract, and all Appendices and Attachments hereto and thereto, as amended from time to time in accordance with the terms of this Agreement.

“**Applicable Codes and Standards**” means those codes and standards that are applicable to the Liquefaction Project, the LNG Facility or the Work, under Applicable Laws and as set forth in Appendix A, Appendix B or the Deliverables.

“**Applicable Laws**” means (a) all laws, statutes, rules, regulations, ordinances, codes, Applicable Codes and Standards required under Applicable Laws, and executive orders or proclamations by the U.S. President that are enforceable by Governmental Authorities against the Parties; (b) rules of common law, and judgments, decisions, interpretations, orders, directives; (c) all Permits and requirements or conditions contained in any Permit, including any condition on or with respect to the issuance, maintenance, renewal or transfer of any Permit; (d) all Import Laws; and (e) any injunctions, writs, decrees, stipulations, or awards of any applicable Governmental Authority or duly authorized official, court or arbitrator thereof, in each case, now existing or, without limiting what may constitute a Change In Law, which may be enacted or issued after the Effective Date, and that are applicable to the Parties, the Liquefaction Project, the LNG Facility, the Site, any other location where the Work is performed, or this Agreement or the performance or enforcement hereof.

“**Archeological Finds**” means discoveries of subsurface fossils, antiquities, biofacts, cultural artifacts, cultural landscapes, or other archaeological materials or similar items, required to be reported to any Governmental Authority or protected under Applicable Laws, and which are not disclosed by Owner (including the location thereof) or otherwise known to Contractor prior to [***].

“**As-Built Drawings**” means redlined Drawings as prepared in the field that show all current “as-built” conditions, as required under Attachment A-1 to Appendix A and Appendix U.

“**Audit Period**” has the meaning set forth in Section 2.23.2(a).

[***].

“**Baseline CPM Schedule**” means the Level III detailed resource work-hour loaded critical path method schedule that incorporates all of the Key Date Items and reflects the Milestones, as attached hereto as Appendix E-2.

“**Basis of Design**” means the basis of design and parameters of the Liquefaction Project and the Work as set forth in Appendix B.

“**Books and Records**” has the meaning set forth in Section 2.23.1.

“**Berth**” means each berth at the LNG Facility for the berthing and Loading of LNG Tankers.

“**Bridging LNTP**” means the Limited Notice to Proceed authorizing Contractor to proceed with performance of the scope of the Work as set forth in Attachment NN-1 to Appendix NN.

“**Bridging LNTP Date**” means the date on which Owner issues the Bridging LNTP.

“**British Thermal Unit**” and “**Btu**” means a unit of thermal energy equal to the amount of heat required to raise one (1) pound of pure water one (1) degree Fahrenheit at Standard Conditions for LNG, or Standard Conditions for Natural Gas, as the case may be.

“**Business Day**” means each calendar day, Monday through Friday, excluding U.S. federal banking holidays.

“**CAD**” has the meaning set forth in Section 2.25.7.

“**Capital Spare Parts**” has the meaning set forth in Section 2.14.3.

“**Cargo**” means a quantity of LNG expressed in MMBtu to be Loaded onto an LNG Tanker at the LNG Facility.

“**Central Time**” means U.S. Central Standard Time, as may be adjusted for daylight savings.

“**Change in Law**” means the enactment, adoption, promulgation or imposition of any new Applicable Laws with different terms, or the repeal, amendment, or change to, including the binding interpretation, enforcement or application by any Governmental Authority of, any Applicable Laws that occurs after the date that is [***], which, for purposes of this Agreement with respect to Taxes, shall include only newly enacted or increases or decreases in Taxes for which Contractor is responsible for under this Agreement and that are not otherwise excluded below. Notwithstanding the foregoing, a Change in Law shall not include any such enactment, adoption, promulgation, imposition or repeal, amendment, or change in binding interpretation, enforcement or application: (a) in accordance with a proposed regulatory change that was published prior to the date that is sixty (60) Days prior to [***] but not yet made effective; (b) that (i) increases or decreases any Taxes, or establishes, imposes or assesses any new Taxes, on corporate income or profits/losses, or on Construction Equipment; [***]; (iv) any increase or decrease in, or the establishment, imposition or assessment of new, Texas Sales and Use Taxes, Customs Duties or property Taxes for which Contractor is not entitled to reimbursement, in each case either because (A) with respect to property Taxes only, title has not passed to Owner pursuant to Section 11.1.1; or (B) as described in Sections 2.12.4, 7.1, 7.3.2, 7.4 or 7.5.2, including Taxes on (1) the real property of Owner; and (2) Equipment and materials to be incorporated into, affixed to, or installed into the LNG Facility; (c) with respect to any purported change in enforcement or application by a Governmental Authority which is within the discretionary authority of such Governmental Authority where such change in enforcement or

application is triggered by or is in reaction to the fault, act or omission of a member of the Contractor Group; or (d) to the extent such enactment, adoption, promulgation, imposition or repeal, amendment, or change in binding interpretation, enforcement or application results wholly or partially from the act or omission of the Party or Affiliates of the Party claiming the Change in Law, or the affected Party's or its Affiliates' noncompliance with any Applicable Laws (other than such non-compliance resulting from a separate Excusable Event or event of Force Majeure).

“Change Order” means a written order authorizing a change in the Work, or an adjustment to the Contract Price, the Milestones, the Payment Schedule, the Key Date Schedule, including the Guaranteed Substantial Completion Dates, or the Guaranteed Performance Levels, as applicable, as a result of the occurrence of one of the events described in Section 8.2.1 or 8.3.1, as agreed in a document substantially in the form of either Appendix F-1, if required to be signed by both of the Parties, or Appendix F-2, if signed solely by Owner in accordance with Section 8.6.

“CIMTAS” means Cimtas Boru Imalatlari ve Ticaret Limited Sirke.

“Claim” or **“Claims”** means any and all claims or actions, threatened or filed, that directly or indirectly relate to the matters in question, including all Losses, whether incurred by settlement or otherwise, and whether such claims or actions are threatened or filed prior to or after the expiration or earlier termination of this Agreement, subject to any applicable statutes of limitation.

“Claim Submission Deadline” means with respect to the occurrence of any Claim Submission Event, the date that is [***] Days after Contractor first became aware, or should have become aware, of the occurrence of the applicable Claim Submission Event; provided, that in the case of the occurrence of any such event, if Contractor submits a preliminary Claim to Owner within such [***] Day period, together with an explanation for why Contractor requires additional time to prepare a final Claim submission, the Claim Submission Deadline shall be extended for the period of time that Contractor reasonably demonstrates is necessary to prepare the final Claim submission, but in any event to no more than [***] Days after Contractor first became aware, or should have become aware, of the occurrence of the Claim Submission Event; provided, however, that notwithstanding anything to the contrary in the foregoing:

(a) [***]; and

(b) [***].

“Claim Submission Event” has the meaning set forth in Section 8.3.1.

“CO Cost Threshold” means [***].

“Commission” and **“FERC”** means the U.S. Federal Energy Regulatory Commission, or any successor agency having jurisdiction over the LNG Facility and the provision of services by Owner from such LNG Facility.

“**Common Facilities**” means those portions of the Work that are used or are constructed to be used by more than one (1) LNG Train, including the Equipment and facilities described in Appendix SS.

“**Common Facilities Owner**” has the meaning set forth in the Preamble.

“**Comparable Facilities**” means domestic or international LNG facilities of a size, type and design comparable to the LNG Facility.

“**Competitors**” means any of the following, including their Affiliates, [***]; provided, however, that notwithstanding that a Person is included in the foregoing list, Competitors shall not include (a) any such Person or its Affiliates that the Parties have agreed will act as Owner’s Engineer, subject to such Persons entering into a confidentiality agreement with Owner with substantially similar terms to those stated in Section 14.2; (b) any Person who has an equity interest in the Liquefaction Project; and (c) any individual who serves on the governing body of Owner or any of its Affiliates.

“**Completions Database**” has the meaning set forth in Section 9.1.3.

“**Confidential Information**” means either or both of Contractor Confidential Information and Owner Confidential Information, as the context requires.

“**Construction Equipment**” means the equipment, machinery, structures, scaffolding, materials, tools, supplies, consumables, systems and temporary buildings, in each case owned, rented or leased by Contractor or its Subcontractors for use in accomplishing the Work, but not intended for incorporation into the LNG Facility.

“**Contract Price**” means the fixed, separated price for all Stages of the Work as indicated in Appendix C, including any Work performed under a Limited Notice to Proceed, in each case as adjusted from time to time under the provisions of this Agreement.

“**Contractor**” has the meaning set forth in the Preamble.

“**Contractor Confidential Information**” means: (a) data and information disclosed by Contractor or another member of the Contractor Group in the course of performing the Work and that has clearly been identified in writing by the Disclosing Party as being confidential; provided, however, that in no event shall Contractor Confidential Information include any of the Work Product (other than Non-Technical Documents) even if marked as confidential; (b) the Non-Technical Documents; or (c) financial information of Contractor or any other member of the Contractor Group, whether or not marked and identified in writing as confidential.

“**Contractor Event of Default**” has the meaning set forth in Section 19.3.1.

“**Contractor Group**” means Contractor, its Affiliates, its Suppliers, and its and their respective directors, officers, employees (including agency personnel), consultants, agents and Invitees, but does not include any Owner Group member.

“**Contractor Guarantee**” means a guarantee executed by the Contractor Guarantor in favor of Owner and the Common Facilities Owner in the form attached hereto as Appendix Y.

“**Contractor Guarantor**” means Bechtel Global Energy, Inc., a Delaware corporation.

“**Contractor Guarantor Letter of Credit**” has the meaning set forth in Section 17.3.

“**Contractor Guarantor Minimum Net Worth**” has the meaning set forth in Section 17.3.

“**Contractor HSSE Program**” has the meaning set forth in Section 2.18.2.

“**Contractor Indemnified Parties**” means Contractor and its Affiliates and each of their respective officers, directors, shareholders, employees, agents and advisers.

“**Contractor Intellectual Property**” has the meaning set forth in Section 12.3.

“**Contractor Key Dates**” means the Key Date Items that are obligations of Contractor hereunder and are identified as “Contractor Key Dates” on Appendix E-1.

“**Contractor Lien**” means any Lien on the Work, the Site, the LNG Facility, the Liquefaction Project or other property of Owner or the Common Facilities Owner or any part thereof or interest therein, created by any member of Contractor Group or otherwise arising as a consequence of Contractor’s performance of the Work.

“**Contractor-Furnished Items**” means all the Equipment, including spare parts, furnished by or on behalf of Contractor and its Suppliers to perform the Work and intended to be incorporated into the LNG Facility.

“**Contractor Mitigation Plan**” means the mitigation plan implemented by Contractor as described in Appendix VV.

“**Contractor Permits**” means each and every Permit other than the Owner Permits that is required by any Applicable Laws or that is otherwise necessary for the performance of the Work, including all Permits listed as Contractor Permits on Appendix J-2 and all:

- (a) Permits required to be maintained in Contractor’s or a Supplier’s name;
- (b) building Permits required for the construction of the LNG Facility;
- (c) labor or health standard Permits and approvals reasonably related to construction of the LNG Facility;
- (d) business Permits reasonably related to the conduct of the operations of Contractor and all Subcontractors in the State of Texas and any other location where such Permits may be required;

(e) Permits, approvals, consents or agreements from or with any Person necessary (including all contractors' licenses, engineering licenses and related documents) (i) for the performance by Contractor of the Work or its warranty obligations hereunder; (ii) for the transportation or importation of Equipment; or (iii) for the transportation or importation of Construction Equipment;

(f) Permits for the temporary Work, disposal Permits necessary to perform Contractor's Scope of Work, road use Permits necessary to perform Contractor's Scope of Work, Permits related to the use, storage and disposal of Hazardous Materials brought onto the Site by or on behalf of any member of Contractor Group, and Permits issued pursuant to any building, mechanical, electrical, plumbing or similar Applicable Codes and Standards; and

(g) Permits, visas, approvals and certifications necessary for Contractor's employees to legally perform the Work in the State of Texas (including documentation of citizenship or legal residency in the U.S.).

"Contractor Representative" means that Person or Persons designated by Contractor as the Senior Project Manager on Appendix H or in accordance with Section 2.6.1.

"Corrective Work" has the meaning set forth in Section 10.3.1.

"CPM Schedule" means the most recent Level III critical path method schedule provided by Contractor that meets the requirements of Section 4.4.1 and Appendix S.

"Credit Rating" means for any Person the senior unsecured long term Dollar debt rating of such Person (without any form of credit enhancement), as determined by Moody's or Standard & Poor's.

"Creditworthy Bank" means a commercial bank having at the applicable time: (a) combined total assets of at least [***]; and (b) a Credit Rating of: (i) A- or better from Standard & Poor's; or (ii) A3 or better from Moody's; or (iii) if such bank has a Credit Rating at such time from both Standard & Poor's and Moody's, A- or better from Standard & Poor's and A3 or better from Moody's.

"Critical Path Item(s)" means the items identified as critical path items on the CPM Schedule.

"Customs Duties" means U.S. import Taxes, customs duties, antidumping duties, countervailing duties, quotas, tariff-rate quotas, quantitative restrictions and other tariffs, duties, or restrictions imposed under any statutory authority, including Section 232 of the Trade Expansion Act of 1962 (as amended), Section 301 of the Trade Act of 1974 (as amended), Section 201 of the Trade Act of 1974 (as amended), and any additional or different tariffs or quotas on certain imported products and materials imposed by executive orders or proclamations by the U.S. President that constitute Applicable Laws.

"Daily Quantity" has the meaning set forth in Section 9.5.3(d).

“**Day**” means a period of twenty-four (24) consecutive hours commencing at midnight Central Time on any calendar day.

“**Defect**” means any failure of the Work to comply with the standards set out in Section 10.1.1.

“**Defective**” means that the applicable Work contains a Defect.

“**Delay LD Cap**” means an amount equal to [***] for Stage I, and an amount equal to [***] for Stage II.

“**Delay Liquidated Damages**” means any or all of the: (a) Stage I Delay Liquidated Damages; or (b) Stage II Delay Liquidated Damages.

“**Deliverable**” means any documentation or written information required to be delivered to Owner pursuant to this Agreement, including the Drawings and Specifications and design Deliverables as described in Attachment A-1 to Appendix A, the Plans, and the reports, manuals, schedules and related information, logs, data books, calculations, models, simulations, manufacturers’ drawings and data as described herein.

“**Direct Agreement**” has the meaning set forth in Section 2.29.1.

“**Disclosing Party**” means the Party that has disclosed Confidential Information hereunder in accordance with Article 14, or on whose behalf Confidential Information has been disclosed, and to whom confidentiality obligations are owed with respect to such Confidential Information pursuant to Article 14.

“**Dispute**” has the meaning set forth in Article 20.

“**Dispute Notice**” has the meaning set forth in Section 20.1.

“**Disputing Parties**” has the meaning set forth in Article 20.

“**DOE**” means the U.S. Department of Energy (or a successor regulatory agency).

“**Dollars**” and “**\$**” means the lawful currency of the U.S.

“**Drawings**” means the graphic and pictorial documents (in written or electronic format) showing the design, location and dimensions of the Work, generally including plans, elevations, sections, details, lists, data sheets and diagrams, which are prepared as a part of and during the performance of the Work.

“**EDSA**” has the meaning set forth in the Recitals.

“**EDSA/SWSA Funding**” means funding to (a) maintain staffing in the home office and at the Site through [***] consistent with the staffing level as of [***], or consistent with the staffing level as of [***] if after such date; and (b) maintain the delivery dates of the [***]

assuming the FNTF Date occurs on or before [***], or [***], as applicable under Attachment NN-1 or NN-2 to Appendix NN.

“**Effective Date**” means the date identified in the opening Preamble of this Agreement and upon which this Agreement shall become effective and the Parties shall be bound.

“**Emissions Guarantee**” means the guarantee with respect to emissions as described in Section 3.1 of Appendix G.

“**Entergy**” means Entergy Texas, Inc. and its successors or assigns.

“**Environmental Plan**” shall mean the Port Arthur Liquefaction Project Environmental Plan as set forth in Attachment A-2 to Appendix A, to the extent applicable to the Work, and the policies and procedures described therein with respect to discoveries of Archeological Finds or Pre-Existing Hazardous Materials.

“**Equipment**” means any and all materials, supplies, equipment and facilities, of whatever nature, including each LNG Tank, intended to become a permanent part of the LNG Facility.

“**Event of Default**” means either a Contractor Event of Default or an Owner Event of Default.

“**Exchange Rate**” means the last published rate expressed in terms of foreign currency units per one (1) Dollar as quoted by Bloomberg FX Fixings, as applicable, for the last Business Day immediately preceding the Day on which the conversion is deemed to be made.

“**Extended Bid Validity Date**” has the meaning set forth in Section 4.1.4(b).

“**Excepted Risk**” means (i) war (whether declared or undeclared), civil war, act of terrorism, blockade, insurrection; or (ii) ionizing radiation, or contamination by radioactivity from nuclear fuel, or from any nuclear waste from the combustion of nuclear fuel properties of any explosive nuclear assembly or nuclear component thereof; or (iii) Named Windstorms which result in loss or damage in excess of the sublimits with respect to Named Windstorms under the Contractor’s All Risk property insurance policy(ies) obtained by Contractor pursuant to and in accordance with Article 16 and Appendix MM, and then only to the extent of such excess.

“**Excusable Event**” means the occurrence of: (a) an Owner-Caused Delay; (b) a Change In Law; or (c) an Unforeseen Excused Site Condition; provided, that Excusable Event shall not include any event of Force Majeure.

“**Extended Warranty Items**” has the meaning set forth in Section 10.2.2.

“**Feed Gas**” means Natural Gas that is provided to be used for processing to produce LNG, not including Fuel Gas.

“**Feed Gas Specifications**” means the pressure, temperature and quality specifications for Feed Gas set forth in Table 6 of Appendix B, and the Process Basis of Design (PAL-T-PRO-BOD-00-GEN-0002) as referenced in Appendix B.

“**FEIS**” means the final environmental impact statement for the Liquefaction Project.

“**FERC Order**” means Order No. 167 FERC ¶ 61,052 issued by the FERC on April 18, 2019 with respect to the FERC Construction and Operating Authorization issued under Section 3 of the Natural Gas Act, as set forth in Appendix J-1.

“**Final Acceptance**” means, with respect to a Stage, that the following conditions have been satisfied for the applicable Stage:

(a) Substantial Completion of such Stage shall have occurred;

(b) such Stage shall have satisfied the Noise Guarantee, or if the Performance Tests for such Stage failed to demonstrate that such Stage satisfied the Noise Guarantee, FERC shall have agreed that Contractor has demonstrated to FERC’s satisfaction through the Noise Model or other information that such Stage satisfies the Noise Guarantee;

(c) Contractor shall have completed all Punch List Items with respect to such Stage in accordance with this Agreement, unless Owner has notified Contractor in accordance with Section 9.9.4 that Owner has elected to complete the Punch List Items with respect to such Stage;

(d) Contractor shall have satisfied each of the Guaranteed Performance Levels, except to the extent that a Guaranteed Performance Levels Correction Period and a GPL Correction Plan is in effect in accordance with Section 9.10.2; provided that with respect to any Guaranteed Performance Levels for which a Guaranteed Performance Levels Correction Period and GPL Correction Plan is in effect, such Stage shall meet the Emissions Guarantees and the Minimum Performance Standards for such Guaranteed Performance Levels based on the last Performance Test conducted with respect to such Guaranteed Performance Levels;

(e) Contractor shall have fully complied with its obligations under Section 2.11.10 following Substantial Completion of a Stage, including the removal of all of Contractor’s and Suppliers’ personnel, supplies, equipment, Hazardous Materials for which Contractor is responsible under Section 2.17.2 or 2.17.3, waste materials, rubbish and temporary facilities from the areas of the Site related to that Stage, except for such personnel and Construction Equipment needed to fulfill Contractor’s obligations during the Warranty Period, as agreed to by Owner;

(f) all warranty Work identified prior to the date of Final Acceptance shall have been completed, or the Parties shall have agreed on a plan for completion of such warranty Work in accordance with Article 10;

(g) to the extent that the Warranty Period, as extended, has expired, Contractor shall have assigned to Owner all Supplier warranties required to be assigned to Owner as of such date pursuant to Section 10.2.1;

(h) all Record As-Built Drawings for such Stage shall have been completed and issued by Contractor, and delivered to Owner;

(i) with respect to such Stage, Owner shall have received: (i) all Deliverables required by Appendix A; and (ii) all test data and other technical information and Deliverables required under this Agreement;

(j) with respect to such Stage, Owner shall have received final O&M Manuals and instruction books as are necessary to operate the LNG Facility with respect to such Stage in a safe, efficient and effective manner, including as specified in Appendix U;

(k) Owner shall have received from Contractor each Contractor Permit, if any, that is required for continuous use and operation of such Stage (all such Permits to be in Owner's name or to have been assigned to Owner, in accordance with Applicable Laws) and, to the extent any Contractor Permit is required to be "closed out" or a similar process is required by the applicable Governmental Authority, Contractor shall have complied with all such requirements for such Contractor Permits;

(l) no Contractor Event of Default shall exist; and

(m) all of Contractor's representations and warranties contained in Sections 13.1.6, 13.1.7, 13.1.10 and 23.13 shall be true and correct, or shall be cured to be true and correct, and Contractor shall have performed its obligations under its covenants and agreements in Section 23.13.

"Final Acceptance Certificate" means a certificate substantially in the form of Appendix CC.

"Final Acceptance Date" means, with respect to a Stage, the date on which Final Acceptance of such Stage occurs: (a) as set forth on a Final Acceptance Certificate that has been countersigned by Owner; (b) as determined in accordance with Article 20; or (c) as otherwise agreed by the Parties.

"Final Completion" means that the following conditions have been satisfied:

(a) Final Acceptance of each of Stage I and Stage II shall have occurred;

(b) if a Guaranteed Performance Levels Correction Period was in effect for a Stage, such Guaranteed Performance Levels Correction Period shall have expired as to such Stage, and, based on the results of the last Performance Tests conducted with respect to such Stage, such Stage shall have either (i)(A) met the Emissions Guarantees and all of the Guaranteed Performance Levels applicable to such Stage pursuant to Appendix G; or (B) met the Emissions Guarantees and satisfied at least the Minimum Performance Standard with respect to

all Guaranteed Performance Levels for which Contractor has not achieved the Guaranteed Performance Levels; and
(ii) Contractor shall have paid all applicable Performance Liquidated Damages in accordance with Section 9.10.6;

(c) all warranty Work identified prior to the date of Final Completion shall have been completed, or the Parties shall have agreed on a plan for completion of such warranty Work in accordance with Article 10;

(d) to the extent that the Warranty Period, as extended, has expired, Contractor shall have delivered to Owner for its acceptance a copy of the assignment of all Supplier warranties required to be assigned to Owner, assigned by Contractor, as of such date pursuant to Section 10.2.1;

(e) Owner shall have received from Contractor the final statement with respect to Texas Sales and Use Taxes in accordance with Section 7.5.3;

(f) Owner shall have received a statement from Contractor summarizing and reconciling all invoices submitted prior to the date of this Final Completion Certificate, payments and Change Orders;

(g) Contractor shall have fully complied with its obligations under Section 2.11.10, including the removal of all of Contractor's and Suppliers' personnel, supplies, equipment, Hazardous Materials for which Contractor is responsible under Section 2.17.2 or 2.17.3, waste materials, rubbish and temporary facilities from the Site, except for such personnel and Construction Equipment needed to fulfill Contractor's obligations during the Warranty Period, as agreed to by Owner;

(h) Owner shall have received from Contractor and each Major Supplier a Final Lien and Claim Waiver, or a Final Unconditional Lien and Claim Waiver, as applicable, covering all of the Work in accordance with Section 6.3.5 or 6.6;

(i) an affidavit of completion of the Work that complies with the requirements of Texas Prop. Code Section 53.106 and is otherwise in form and substance acceptable to Owner shall have been filed in the records of Jefferson County of the State of Texas no later than ten (10) Days after the Final Acceptance Date of the last Stage to achieve Final Acceptance, and Contractor shall have provided Owner with a copy of such recorded affidavit;

(j) no Contractor Event of Default shall exist; and

(k) all of Contractor's representations and warranties contained in Sections 13.1.6, 13.1.7, 13.1.10 and 23.13 shall be true and correct, or shall have been cured to be true and correct, and Contractor shall have performed its obligations under its covenants and agreements in Section 23.13.

"Final Completion Certificate" means a certificate substantially in the form of Appendix DD.

“**Final Completion Date**” means the date on which Final Completion occurs: (a) as set forth on a Final Completion Certificate that has been countersigned by Owner; (b) as determined in accordance with Article 20; or (c) as otherwise agreed by the Parties.

“**Final Invoice**” has the meaning set forth in Section 6.6.

“**Final Lien and Claim Waiver**” means the waiver and release provided to Owner by Contractor or a Major Supplier in accordance with the requirements of Section 6.6, which shall be in the form of Appendix GG-1 for Contractor and in the form of Appendix GG-2 for such Major Supplier, or, if another form is required under Applicable Law for a final lien and claim waiver to accomplish the waivers and releases contemplated by Appendix GG-1 or Appendix GG-2, as applicable, in the form required under Applicable Law.

“**Final Loading Window**” has the meaning set forth in Section 9.6.3.

“**Final Unconditional Lien and Claim Waiver**” means the unconditional waiver and release provided to Owner by Contractor or a Major Supplier in accordance with the requirements of Section 6.6, which shall be in the form of Appendix HH-1 for Contractor and in the form of Appendix HH-2 for such Major Supplier, or, if another form is required under Applicable Law for a final unconditional lien and claim waiver to accomplish the waivers and releases contemplated by Appendix HH-1 or Appendix HH-2, as applicable, in the form required under Applicable Law.

“**First Source Referral Agreement**” means the First Source Referral Agreement dated June 12, 2019 between Owner and the City of Port Arthur.

“**First-Tier Supply Contract**” has the meaning set forth in Section 2.7.3(b).

“**Fixed Asset Schedule**” has the meaning set forth in Section 7.6.

“**ENTP Date**” means the date, subject to Section 6.2.6, on which the Full Notice to Proceed as issued by Owner becomes effective in accordance with its terms, which effective date shall be set forth in the Full Notice to Proceed when issued by Owner and which date shall in any event shall not be any sooner than five (5) Business Days after the date on which Owner issues the Full Notice to Proceed.

“**Force Majeure**” means any event that meets all of the following criteria: (a) the event and its effects are not within the reasonable control, directly or indirectly, of the Party affected, and, in the case of Contractor, is beyond the reasonable control of the Contractor Group (it being understood that if an event is within the reasonable control of an affected Person, the direct consequences thereof shall also be deemed to be within such Person’s reasonable control); (b) the event and its effects are unavoidable or could not be prevented, overcome or removed by the commercially reasonable efforts and due diligence of the Party claiming the Force Majeure event (and, in the case of Contractor, the Suppliers), including the expenditure of reasonable sums of money or the pursuit of alternative means of performance; and (c) the event and its effects do not

result from such Party's negligence or fault (or, in the case of Contractor, the negligence or fault of the Suppliers);

provided that and subject to the event meeting all of the criteria described above, Force Majeure events include:

- (i) Unusually Severe Weather, earthquake, landslide, or other acts of God;
- (ii) fire, explosion, accident, destruction of facilities, plant or Equipment, structural collapse or chemical contamination, in each case in the case of Contractor or any Supplier not being due to:
 - (A) Defects in the LNG Facility or any Equipment;
 - (B) the failure to construct the LNG Facility in accordance with this Agreement; or
 - (C) damage to or destruction of the LNG Facility due to the actions or omissions of Contractor or any Supplier;
- (iii) act of war (whether declared or undeclared), invasion, armed conflict, revolution, sabotage, terrorism or threat thereof, piracy on the high seas, perils of the sea which could not be reasonably foreseen and guarded against, in each case, as probable incidents of the intended voyage, riot, civil war, blockade, embargo, expropriation or confiscation by a Governmental Authority (other than as a result of any violation of Applicable Law), insurrection, acts of public enemies, civil disturbances, epidemics or pandemics;
- (iv) national or regional strikes, lockouts or other industrial disturbances that are not solely directed at Contractor or a Supplier(s), or both; and
- (v) delays by a Governmental Authority in issuing a Permit, but only to the extent such delay was not due to the acts or omissions of Contractor or its Suppliers;

provided, however, that the Parties expressly agree that the following shall not constitute Force Majeure:

- (1) the non-availability or lack of funds or failure to pay money when due;
- (2) economic hardship, including Contractor's ability to sell its services at a higher or more advantageous price than the Contract Price;
- (3) the cost, shortage or unavailability of labor;

(4) the mere shortage of Equipment (including delays of Vendors in supplying same) and commodities or materials or normal wear and tear or flaws in materials or breakdowns in equipment, unless caused by circumstances that are themselves Force Majeure events;

(5) strikes, lockouts or other industrial disturbances other than those described in subclause (iv) above;

(6) all weather conditions and events caused by or resulting from any weather conditions, including due to acts of God, other than Unusually Severe Weather;

(7) the condition of the Site or any Site Conditions encountered by Contractor or a Supplier, but without limiting the rights of Contractor hereunder with respect to Unforeseen Excused Site Conditions and excluding physical conditions of the Site created as a result of a Force Majeure Event;

(8) general economic or industry conditions that increase the cost of the Work or otherwise impact the performance of the Work;

(9) the mere declaration of an emergency or disaster by any Governmental Authority; provided that the underlying circumstance or event that led to such declaration may itself constitute a Force Majeure event if the event satisfies the definition of a Force Majeure event;

(10) late delivery of Equipment, unless caused by circumstances that are themselves Force Majeure events;

(11) failure of any of Contractor's Suppliers to perform, unless caused by circumstances that are themselves Force Majeure events; and

(12) any matter reviewed and deemed accepted by Contractor pursuant to Section 2.4, but without limiting the rights of Contractor hereunder with respect to Unforeseen Excused Site Conditions.

“Foreign Currency Amount” has the meaning set forth in Section 6.9.

“Foreign-Trade Zone” or **“FTZ”** means a foreign-trade zone under the Foreign-Trade Zones Act of 1934 (19 U.S.C. 81a-81u), as amended to date.

“Fuel Gas” means Natural Gas to be used in connection with the performance of the Work that is intended to be consumed by Equipment.

“Full Cargo” has the meaning set forth in Section 9.6.1.

“Full Notice to Proceed” means a notice to be delivered by Owner to Contractor that Contractor may commence the performance of all of the Work, in the form provided in Appendix JJ.

“**Fully Functional**” means native electronic files prepared using the software as described in Appendix U that has not been corrupted, is virus-free and malware-free, and is not password protected.

“**GAAP**” means generally accepted accounting principles, consistently applied.

“**General Services Subcontracts**” means (a) Subcontracts under which the relevant Subcontractor: (i) does not supply Equipment or other Contractor-Furnished Items; (ii) does not provide services or perform any part of the Work that is a necessary precursor (including Subcontracts for grading or welding services) to successfully install the Equipment or other Contractor-Furnished Items; and (iii) is not an Affiliate of Contractor; and (b) such Subcontract: (i) is fully assignable to Owner without the consent of the Subcontractor that is a party to such Subcontract in the event Contractor is terminated pursuant to this Agreement for any reason; and (ii) the value of such Subcontract, in the aggregate based on all Supply Contracts with each such Subcontractor and its Affiliates, is less than [***].

“**Geotechnical Reports**” means the geotechnical data described in Table 3 of Appendix B.

“**Good Engineering and Construction Practices**” or “**GECP**” means the generally accepted practices, methods, skills, care, techniques and standards employed in the LNG industry, that are commonly used by a skilled and experienced Person exercising that degree of professional skill, diligence and judgment that would ordinarily be expected to be used in prudent engineering, procurement and construction to safely design, construct, pre-commission, commission, start-up and test Comparable Facilities, in accordance with Applicable Laws and Applicable Codes and Standards, as such practices and methods are appropriate in the circumstances for the LNG Facility and the Liquefaction Project.

“**Governmental Authority**” means: (a) any governmental body, or any subdivision, agency, court, commission (including the Commission) or authority thereof, of any nation or state, region or local jurisdiction, or any quasi-governmental body exercising any regulatory or taxing authority thereunder, including with respect to the United States, the United States Coast Guard, U.S. Citizenship and Immigration Services, U.S. Immigration and Customs Enforcement, Transportation Safety Administration, including PHMSA, U.S. Customs and Border Protection and the U.S. Department of Homeland Security; and (b) the Sabine Neches Navigation District.

“**Government Official**” means an official of a Governmental Authority, a candidate for political office, an official of a political party, a political party and an employee of a public international organization.

“**GPL Correction Plan**” has the meaning set forth in Section 9.10.2.

“**Guaranteed Performance Levels**” means for each Stage the guaranteed performance levels for the LNG Production Rate, the Fuel Consumption Rate, Specific Power Consumption, Electric Power Consumption Rate and the Ship Loading Rate, each as described in Appendix G.

“Guaranteed Performance Levels Correction Period” has the meaning set forth in Section 9.10.2.

“Guaranteed Stage I Substantial Completion Date” has the meaning set forth in Section 4.2.1(a).

“Guaranteed Stage II Substantial Completion Date” has the meaning set forth in Section 4.2.1(b).

“Guaranteed Substantial Completion Date” means, as the context provides, either the Guaranteed Stage I Substantial Completion Date, or the Guaranteed Stage II Substantial Completion Date, and **“Guaranteed Substantial Completion Dates”** means the Guaranteed Stage I Substantial Completion Date and the Guaranteed Stage II Substantial Completion Date, collectively.

“Hazardous Materials” means any substance that under Applicable Laws is considered to be hazardous or toxic or is or may be required to be remediated, including: (a) any petroleum or petroleum products, radioactive materials, asbestos in any form that is or could become friable, transformers or other equipment that contain dielectric fluid containing polychlorinated biphenyls and processes and certain cooling systems that use chlorofluorocarbons; (b) any chemicals, materials or substances which are now or hereafter become defined as or included in the definition of “hazardous substances,” “hazardous wastes,” “hazardous materials,” “extremely hazardous wastes,” “restricted hazardous wastes,” “toxic substances,” “toxic pollutants,” or any words of similar import pursuant to Applicable Laws; or (c) any other chemical, material, substance or waste, exposure to which is now or hereafter prohibited, limited or regulated by any Governmental Authority, or which may be the subject of liability for damages, costs or remediation.

“HAZOP” means hazardous operations.

“HUB/DBE Suppliers” has the meaning set forth in Section 2.7.10.

“Impact Notice” has the meaning set forth in Section 18.2.2.

“Import Law” means all U.S. import laws, regulations, tariffs, duties and restrictions, that impose additional or different Customs Duties from those Customs Duties in effect [***], and all other such measures adopted by Governmental Authorities with jurisdiction over such matters.

“Indemnitee” means an Owner Indemnified Party or a Contractor Indemnified Party, as the case may be.

“Indemnitor” means a Party required to provide indemnification to an Indemnitee under this Agreement.

“Independent Engineer” means any technical consultant, environmental consultant or engineering firm appointed to represent the Lenders.

“Infrastructure Relocation” means the relocation of the portion of Texas State Highway 87 which is presently located on part of the Site.

“Initial Production Date” means, for each LNG Train, the first Day that LNG is produced by such LNG Train and delivered to an LNG storage tank during the commissioning and start-up of such LNG Train under this Agreement.

“Initial Tanker” has the meaning set forth in Section 9.6.5.

“Integrated Digital Asset Management System” means the digital asset management system that Owner will implement and Contractor will support as part of the Work in accordance with the requirements of Appendix II.

“Intellectual Property” means patents, trademarks, service marks, copyrights, applications for any of the preceding, any foreign counterparts to and divisionals, provisionals, reversions, continuations, continuations-in-part, reissues, reexaminations, renewals and extensions of any of the foregoing, trade secrets and other forms of comparable property rights protected by any Applicable Laws.

“Interim Lien and Claim Waiver” means the waiver and release provided to Owner by Contractor or a Major Supplier in accordance with the requirements of Section 6.3.5, which shall be in the form of Appendix EE-1 for Contractor and in the form of Appendix EE-2 for such Major Supplier, or, if another form is required under Applicable Law for an interim lien and claim waiver to accomplish the waivers and releases contemplated by Appendix EE-1 or Appendix EE-2, as applicable, in the form required under Applicable Law.

“Interim Unconditional Lien and Claim Waiver” means the unconditional waiver and release provided to Owner by Contractor or a Major Supplier in accordance with the requirements of Section 6.3.5, which shall be in the form of Appendix FF-1 for Contractor and in the form of Appendix FF-2 for such Major Supplier, or, if another form is required under Applicable Law for an interim unconditional lien and claim waiver to accomplish the waivers and releases contemplated by Appendix FF-1 or Appendix FF-2, as applicable, in the form required under Applicable Law.

“Invitee” means a third party invited to the Site by a Party in connection with the Work. Owner’s Invitees shall not include any Contractor Group members and the Other Contractors. Contractor’s Invitees shall not include any Owner Group members.

“Invoice” means Contractor’s request for a payment pursuant to Section 6.3.1 and pursuant to Section 6.6 for final payment, which invoice shall be in the form of Appendix V-1 for Milestone Payments and Progress Payments, and Appendix V-2 for final payment.

“ISO” means the International Organization for Standardization and the standards developed by such organization, as applicable.

“**Key Date Item(s)**” means a discrete portion of the Work to be completed by the applicable date set forth in the Key Date Schedule.

“**Key Date Schedule**” means the listing of dates attached as Appendix E-1, including the Guaranteed Substantial Completion Dates, describing the dates of completion of each Key Date Item and for completion of the Work by Contractor, as amended from time to time in accordance with this Agreement.

“**Key Personnel**” has the meaning set forth in Section 2.6.1.

“**KPIs**” means the key performance indicators associated with compliance with Contractor’s obligations under the Local Engagement Program and Section 2.7.10, as developed by the Parties in accordance with Appendix WW.

“**Late Payment Rate**” means, with respect to any payment due hereunder, the lesser of: (a) the sum of (i) the rate of interest published as the “prime rate” for Dollars in *The Wall Street Journal*, on the payment due date, and then on the first Business Day of each Month thereafter in which such Late Payment Rate applies until the applicable payment is made, plus (ii) two hundred (200) basis points; and (b) the maximum rate of interest allowed by Applicable Laws.

“**Lenders**” means the lenders, export credit agencies, multilateral institutions, bond investors, noteholders, underwriters, hedge providers and other entities or institutions who provide or commit to provide any portion of any financing to develop and construct the LNG Facility or any portion or Stage thereof, and any Lenders’ Agent acting on behalf of such lenders, export credit agencies, multilateral institutions, bond investors, noteholders, underwriters, hedge providers and other entities or institutions.

“**Lenders’ Agent**” means any representative, collateral agent, trustee, agent or other designee acting on behalf of any Lender in connection with any financing of the LNG Facility or any portion or Stage thereof.

“**Letter of Credit**” has the meaning set forth in Section 17.2.

“**License**” means the Liquefaction Technology License and a sublicense of BASF SE technology.

“**Licensor**” means each of the Liquefaction Technology Licensor and BASF SE.

“**Lien**” means any mortgage, pledge, lien, charge, adverse claim, proprietary right, collateral assignment, security interest, title retention, preferential right or trust arrangement or any other security agreement or arrangement having the effect of security, including worker’s, mechanic’s, vendor’s, materialmen’s, laborers’, subcontractors’ and vendors’ liens.

“**Limited Notice to Proceed**” or “**LNTP**” means a notice issued by Owner and signed by Contractor authorizing Contractor to commence performing the Work as described in the notice, in the form as set forth in Appendix NN.

“**Liquefaction Project**” means the development, construction and completion of the LNG Facility.

“**Liquefaction Technology License**” means the license agreement contained within the purchase agreement between Contractor and the Liquefaction Technology Licensor with respect to the process technology utilized in the LNG Trains.

“**Liquefaction Technology Licensor**” means Air Products and Chemicals, Inc.

“**Liquefied Natural Gas**” and “**LNG**” means Natural Gas in a liquid state at a temperature that is at or below its point of boiling and at or near atmospheric pressure.

“**LNG Production Schedule**” has the meaning set forth in Section 9.6.1.

“**LNG Specifications**” means those Specifications for LNG set forth in Appendix B.

“**LNG Tank**” means each of the LNG storage tanks that will be procured and installed as part of the Work.

“**LNG Tanker**” means any ocean-going vessel used by Owner, a customer of the LNG Facility or their respective designees for the transportation of LNG.

“**LNG Facility**” has the meaning set forth in the Recitals.

“**LNG Train**” means a Natural Gas pre-treatment and LNG liquefaction unit.

“**Load**” or other derivatives means the receipt, loading or transport of a quantity of LNG from the LNG Facility, utilizing LNG Tankers.

“**Loading Window**” has the meaning set forth in Section 9.6.1.

“**Local Engagement Program**” has the meaning set forth in Section 2.7.10.

“**Local Labor**” has the meaning set forth in Section 2.7.10.

“**Local Suppliers**” has the meaning set forth in Section 2.7.10.

“**Losses**” means, without limiting the application of Article 21, any and all liabilities (including liabilities arising out of the application of the doctrine of strict liability), obligations, losses, damages, penalties, claims, actions, suits, judgments, costs, expenses and disbursements, whether any of the foregoing be founded or unfounded (including legal fees and expenses, costs of investigation, and experts’ fees and court costs), and whether arising in equity, at common law, or by statute, or under the law of contracts, torts or property, of whatsoever kind and nature, including claims for property damage, personal injury (including emotional distress) and economic loss, and whether or not involving damage to the Equipment, the LNG Facility or the Site.

“Major Purchase Order” means any Purchase Order entered into with any Person that is either: (a) a Purchase Order having an aggregate value in excess of [***]; or (b) one (1) of multiple Purchase Orders with one (1) Vendor that have an aggregate value in excess of [***].

“Major Subcontract” means any Subcontract with any Person that is either: (a) a Subcontract having an aggregate value in excess of [***]; or (b) one (1) of multiple Subcontracts with one (1) Subcontractor that have an aggregate value in excess of [***].

“Major Subcontractor” means any Subcontractor with whom Contractor or another Subcontractor enters, or intends to enter, into a Major Subcontract.

“Major Supplier” means any Major Subcontractor or Major Vendor.

“Major Supply Contract” means any Major Subcontract or Major Purchase Order.

“Major Vendor” means any Vendor with whom Contractor enters, or intends to enter, into a Major Purchase Order.

“Material Adverse Change” has the meaning set forth in Section 17.3.

“Maximum Liability Cap” means an amount equal to [***], which amount shall be increased by [***] of the amount of the related adjustment to the Contract Price in connection with the exercise of any Scope Options.

“Maximum LNTP Payment Amount” means the maximum amount that Owner may be obligated to pay to Contractor for the performance of Work pursuant to a Limited Notice to Proceed, as set forth in the Limited Notice to Proceed, and which, if this Agreement is terminated prior to the FNTP Date, shall include the cancellation costs as set forth in the Limited Notice to Proceed.

“Mechanical Completion” or **“Mechanically Complete”** means with respect to a System that:

(a) the construction Work with respect to such System shall have been completed except for Punch List Items that are permitted to be completed subsequently in accordance with Section 9.9.1, such System shall have been pre-commissioned in accordance with the pre-commissioning plan as agreed pursuant to Section 9.1.1, and such System shall have been turned over from Contractor's construction group to Contractor's commissioning and start-up group;

(b) all Punch List A Items with respect to such System shall have been completed;

(c) installation of all Equipment that is part of such System, including piping and instruments, shall have been completed such that commissioning and start-up operations will not be adversely affected, and (i) insurance requirements; and (ii) requirements of

Applicable Laws and in accordance with GECP, in each case with respect to commissioning and start-up of such System, shall have been satisfied;

(d) all mechanical seals, permanent packing and accessories with respect to such System shall have been installed as required, except as restricted by commissioning activities;

(e) all temporary supports, bracing or other foreign objects that were installed in Equipment that is part of such System to prevent damage during shipment, storage or erection shall have been removed;

(f) the System shall have been (i) cleared and available for commissioning and start-up activities; and (ii) chemically cleaned and flushed where required;

(g) all temporary filters, strainers, blinds and screens shall have been removed and Equipment that is part of such System shall have been restored, except in each case where such items are necessary for commissioning and start-up activities;

(h) all inner packing materials (such as sand, gravel, balls and saddles) shall have been properly installed with respect to such System as specified by the relevant Supplier's recommendations;

(i) all mixed bed containing chemicals, resins, desiccants, catalysts or other operating materials with respect to such System shall have been properly installed as specified by the relevant Supplier's recommendations;

(j) all Equipment and subsystems that are part of such System shall have been hydro or pneumatically tested, lubricated and all preservation requirements shall have been performed, maintained and recorded, and continuity and loop checks for all instrumentation and controls, including hazard controls and security components, shall have been completed, to verify that they have been correctly installed;

(k) construction completion turnover packages for such System shall have been prepared with sign-offs from Contractor's construction group and Contractor's commissioning and start-up group and shall contemporaneously have been made available to Owner; and

(l) commissioning procedures for such System shall have been finalized in accordance with Section 9.3.4(a) and are ready for use by Contractor.

“Mechanical Completion Certificate” means a certificate in the form of Appendix Z.

“Mechanical Completion Date” means, with respect to a Stage, the date on which the last System has achieved Mechanical Completion in accordance with Section 9.2.2.

“Milestone” means a discrete portion of the Work identified as a Milestone on the Payment Schedule.

“**Milestone Payment**” means the portion of the Contract Price allocated to achievement of each Milestone on the Payment Schedule.

“**Minimum Performance Standards**” means for each Stage the performance levels for the LNG Production Rate, Fuel Consumption Rate, Specific Power Consumption, Electric Power Consumption Rate and the Ship Loading Rate set out in Appendix G.

“**MMBtu**” means one million (1,000,000) Btu.

“**Month**” means the period beginning on the first calendar day of a calendar month and ending immediately prior to the beginning of the first calendar day of the next succeeding calendar month.

“**Month Look-Ahead Schedule**” has the meaning set forth in Appendix S.

“**Monthly Status Reports**” has the meaning set forth in Section 2.22.1(d).

“**Moody’s**” means Moody’s Investor Services, Inc. or any successor rating agency thereof.

“**Named Windstorms**” means an atmospheric disturbance marked by high winds, with or without precipitation, including such events as hurricanes, typhoons, monsoons, cyclones, rainstorms, tempests, hailstorms, tornados, or any combination of the foregoing events, which in each case is identified by name by any meteorological Governmental Authority, such as the U.S. National Weather Service, National Hurricane Center or the National Oceanic and Atmospheric Administration, including any resulting flood, tidal, wave action or water damage.

“**Natural Gas**” means any hydrocarbon or mixture of hydrocarbons consisting primarily of methane and other paraffinic hydrocarbons and non-combustible gases in a gaseous state.

“**Natural Gas Transfer Point**” means any point of interconnection between any Natural Gas pipeline and the LNG Facility.

“**NGL**” means liquid and liquefied heavy hydrocarbons, consisting primarily of pentane and heavier hydrocarbons, separated from the Feed Gas and delivered as a separate product from the LNG produced by the LNG Trains.

“**Noise Guarantee**” means the guarantee with respect to noise levels as described in Section 3.2 of Appendix G.

“**Noise Model**” means the model and methodology developed by Contractor, to demonstrate that the noise contributed from Stage I or the LNG Facility, as applicable, does not exceed the Noise Guarantee, as part of Contractor’s noise test procedures in accordance with Appendix G.

“**Non-Bridging LNTP**” means the Limited Notice to Proceed authorizing Contractor to proceed with performance of the scope of the Work as set forth in Attachment NN-2 to Appendix NN.

“**Non-Bridging LNTP Date**” means the date on which Owner issues the Non-Bridging LNTP.

“**Non-Technical Documents**” means (a) the Project Execution Plan; (b) the Information Management Plan as set forth in Appendix II (including the Attachments thereto); (c) any estimating or pricing methodologies or estimating or pricing information of Contractor or its Subcontractors relating to the Work, including the Contract Price; (d) inspection and test plans (ITPs); and (e) native files of the Baseline CPM Schedule and CPM Schedule; provided that native files shall not mean PDF format copies of the Baseline CPM Schedule or CPM Schedule.

“**Non-Verified Information**” means the information as described in Appendix N.

“**O&M Manuals**” means the operation and maintenance and procedures manuals to be developed by Contractor or an Affiliate thereof in respect of each Stage as set forth in Appendix U.

“**Operating Personnel**” has the meaning set forth in Section 2.16.1.

[***].

“**Other Contractors**” means all other Persons (including contractors and subcontractors) with whom Owner or any Owner Group member, or any of Owner Group’s Other Contractors, enters into a contract or agreement for the acquisition of goods, services, utilities or technology, (but not including Contractor Group members or Owner) that perform any physical work or activities at the Site.

“**Owner**” has the meaning set forth in the Preamble.

“**Owner Change Order Review Period**” has the meaning set forth in Section 8.5.4.

“**Owner Confidential Information**” has the meaning set forth in Section 14.1.

“**Owner Event of Default**” has the meaning set forth in Section 19.4.1.

“**Owner Group**” means Owner, the Common Facilities Owner, Parent and the immediate shareholders or members of Parent, the Affiliates of each of the preceding Persons, the Owner’s Engineer, the Lenders, the Independent Engineer, and the Other Contractors and its and their respective directors, officers, managers, employees (including any individuals other than Competitors engaged by Owner as part of its staff augmentation plans, subject to such Persons entering into a confidentiality agreement with Owner), consultants, agents and Invitees, but in no event shall Owner Group include any Contractor Group member.

“**Owner HSSE Program**” means those health, safety, security and environmental plans and procedures of Owner as described in Appendix QQ, as those plans and procedures may be updated from time to time in accordance with this Agreement.

“**Owner Indemnified Parties**” means Owner, the Common Facilities Owner, Parent and the immediate shareholders or members of Parent, the Affiliates of each of the preceding Persons, Owner’s Engineer, the Lenders and the Independent Engineer, and such Persons’ respective directors, officers, managers, employees (including agency personnel), consultants, agents and Invitees.

“**Owner Intellectual Property**” has the meaning set forth in Section 12.4.

“**Owner Permits**” means each and every Permit listed a on Appendix J-1, together with such other Permits as Owner shall obtain in accordance with Section 2.10.2.

“**Owner Representative**” means the individual appointed by Owner under Section 3.4 or any substitute appointed in accordance with Section 3.4.

“**Owner-Caused Delay**” means the occurrence of any of the following, other than as a result of or due to the acts or omissions of Contractor or any other member of the Contractor Group: (a) Owner’s failure to perform any of the obligations of Owner set forth in the Key Date Schedule by the date specified therein; provided, however, that if Contractor’s notice delivered to Owner pursuant to Section 9.5.3 does not require delivery of Feed Gas (including for use as Fuel Gas) until after the date by which Owner is scheduled to deliver the first Feed Gas under the Key Date Schedule, the date set forth in the Key Date Schedule shall automatically be adjusted to the latest date on which Contractor requests the first delivery of such Feed Gas; (b) Owner’s request under Section 2.24.5(b) for Contractor to uncover Work that has been properly covered, if the covered Work is found to be in accordance with the terms of this Agreement upon inspection; (c) Owner’s failure to witness inspections and tests that have been expressly designated as hold points where Contractor may not proceed with the inspection or test unless Owner is present; provided that Contractor has provided notice to Owner of such inspections and tests in accordance with Section 2.24; (d) Owner’s refusal to submit an application pursuant to Section 2.10.2(c) within thirty (30) days after Contractor’s submission to Owner of documentation or information or Owner’s unreasonable rejection of, such submission for a modification or amendment to an Owner Permit prepared by Contractor in accordance with Section 2.10.2; provided that such submission for modification or amendment (i) is complete, includes all supporting documentation required by the applicable Governmental Authority and otherwise complies with the requirements of Applicable Laws; and (ii) amends or modifies only those aspects of the Owner Permit as Owner had previously agreed; (e) Owner’s failure to allow Contractor to perform Work on a Stage which has achieved Substantial Completion in accordance with a schedule and plan for performance of such Work that has been accepted by Owner pursuant to Section 2.11.2; (f) Owner’s failure to respond to a Mechanical Completion Certificate for a Stage, a Ready for Start-Up Certificate for a Stage, or a Substantial Completion Certificate for a Stage, within the period provided in Section 9.2.2, 9.4.2 or 9.8, respectively; (g) Owner’s suspension of the Work under Section 19.2 or Section 4.1.1; (h) any change to or errors or inaccuracies in any Non-Verified Information; (i) subject to Contractor having

identified its off-Site laydown area within Jefferson County, Texas prior to the Bridging LNTP Date, Owner's failure to designate Contractor's off-Site laydown area within Jefferson County, Texas as part of the FTZ or the FTZ, once activated, does not include Contractor's selected laydown yard(s) in Jefferson County, Texas; (j) subject to Contractor's compliance with the requirements of Section 2.28, delays to the performance of the Work caused by Other Contractors performing work on the Site; provided that Contractor has promptly notified Owner of such delay in accordance with Section 2.28, Owner has had a reasonable opportunity to attempt to resolve the situation with the Other Contractor, and the Other Contractor continues to interfere with Contractor's performance of the Work; (k) the circumstances set forth in Sections 2.8.5, 2.17.5, 2.18.4 and 2.18.7; (l) Contractor's correction of Work in connection with Section 2.21.1 at Owner's request that is subsequently determined not to have been Defective; and (m) [***].

"Owner-Furnished Information" has the meaning set forth in Section 3.3.1.

"Owner's Engineer" means Wood Group, Moffatt and Nichols, Burns and McDonnell, WorleyParsons Limited (or its Affiliate), Faithful and Gould, and KBR, Inc. (or its Affiliate); provided that KBR, Inc. (or its Affiliate) shall only be an Owner's Engineer with respect to information management matters (including with respect to the matters discussed in Appendices U and II (including any Attachments thereto)), and other technical consultation, but not including construction support, and shall not have access to the Non-Technical Documents other than Contractor's information management plan.

"Parent" means Port Arthur Liquefaction Holdings, LLC, a Delaware limited liability company, the direct owner of 100% of the equity interests in Owner.

"Party" and **"Parties"** has the meaning set forth in the Preamble.

"Payment Schedule" means the schedule that sets out the payments to be made to Contractor upon the completion of various Milestones and progress of the Work, as set forth in Appendix D.

"Performance Conditions" means the "average gas" and "average ambient temperature" conditions as set forth in Appendix B.

"Performance Liquidated Damages" has the meaning set forth in Appendix G.

"Performance LD Cap" means for Stage I, an amount equal to [***], and for Stage II, an amount equal to [***], in each case as adjusted in connection with any Change Orders that adjust the Guaranteed Performance Levels, as applicable.

"Performance Test" means each test (including any repetition thereof) to be performed by Contractor to demonstrate the ability of a Stage to satisfy the Emissions Guarantee, the Noise Guarantee and the Guaranteed Performance Levels as set forth in Sections 3 and 5 of Appendix G.

“Performance Test Procedures” has the meaning set forth in Section 9.7.1.

“Permits” means all permits, authorizations, variances, approvals, registrations, certificates of legal status, certificates of occupancy, orders or other approvals or licenses granted or issued by any Governmental Authority having jurisdiction over the LNG Facility or matters covered by this Agreement, including the Contractor Permits and the Owner Permits and any conditions thereof or thereto. **“Permits”** shall also include (a) the Permit application; (b) supporting and technical information replied upon by the relevant Governmental Authority to issue a Permit; (c) the environmental impact statement regarding the LNG Facility and the Liquefaction Project; and (d) other records and reports reviewed by the relevant Governmental Authority, in each case to the extent that a Permit or order granting or issuing such Permit includes a condition requiring compliance with such application, information, statement or records or reports.

“Person” means any individual, firm, corporation, trust, partnership, limited liability company, association, joint venture, other business enterprise or any Governmental Authority.

“PHMSA” means the Pipeline and Hazardous Materials Safety Administration.

“Pipeline” means any Natural Gas pipeline that interconnects with any Natural Gas Transfer Point.

“Piping Special Supports” has the meaning set forth in Section 12.2.3.

“Plans” means the Project Execution Plan, the Contractor HSSE Program, the Quality Assurance Plan, the plans for performance of the Work as described in Attachment W-1 to Appendix W, and any other plan required pursuant to this Agreement with respect to the execution of the Work and Contractor’s performance of its obligations hereunder.

“Pre-Existing Hazardous Materials” means any Hazardous Materials present on the Site, including those portions of the Sabine Neches Waterway where Work is performed, prior to Contractor’s entry thereupon.

“Pre-FNTP Claim Notice” has the meaning set forth in Section 18.2.5(b).

“Pre-FNTP Claim Period” has the meaning set forth in Section 18.2.5(b).

“Pre-FNTP Claims” has the meaning set forth in Section 18.2.5(b).

[***].

[***].

[***].

“Project Execution Plan” means the plan and each component plan thereof prepared by Contractor and set forth in Appendix W for the execution of the Work and Contractor’s

performance of its obligations under this Agreement throughout the performance of the Work, as amended from time to time in accordance with Section 2.4.6.

“**Project Schedule**” means the Key Date Schedule and the CPM Schedule.

[***].

“**psia**” means a unit of pressure equal to pounds per square inch absolute.

“**Punch List**” means a list of all Punch List Items.

“**Punch List A Items**” has the meaning set forth in Section 9.9.1(a).

“**Punch List B Items**” has the meaning set forth in Section 9.9.1(b).

“**Punch List C Items**” has the meaning set forth in Section 9.9.1(c).

“**Punch List D Items**” has the meaning set forth in Section 9.9.1(d).

“**Punch List Items**” means those items or components of the Work identified in accordance with Section 9.9, which are Punch List A Items, Punch List B Items, Punch List C Items and Punch List D Items, as applicable.

“**Purchase Order**” means any contract entered into by Contractor or a Supplier with a Vendor for the supply of Contractor-Furnished Items.

“**Qualifying Job**” means a permanent full-time job maintained by Contractor or a Major Subcontractor that: (a) requires at least 1,600 hours of work a year; (b) is not transferred from one area in Texas to another area in Texas; (c) is not created to replace a previous employee; (d) is covered by a group health benefit plan for which the Contractor or Major Subcontractor offers to pay at least eighty percent (80%) of the premiums or other charges assessed for employee-only coverage under the plan, regardless of whether an employee may voluntarily waive the coverage; and (e) pays at least one hundred ten percent (110%) of the average weekly wage for manufacturing jobs in Jefferson County, Texas.

“**Quality Assurance Plan**” has the meaning set forth in Section 2.20.1.

“**Ready for Start-Up of a Stage**” or “**RFSU of a Stage**” means, with respect to all of the Systems of an applicable Stage, that the following conditions have been satisfied for such Stage:

(a) the Mechanical Completion Date for such Stage shall have occurred;

(b) Contractor and Owner have agreed on the Punch List Items that may be completed following Ready for Start-Up of such Stage in accordance with Section 9.9.1;

(c) all pre-commissioning and commissioning activities for the Systems within such Stage, as set forth in the commissioning and start-up plan as finalized pursuant to

Section 9.3.4, shall have been successfully completed, and the control system for such Stage shall have been tested and shall be operational in accordance with the commissioning and start-up plan as finalized pursuant to Section 9.3.4;

(d) all applicable safety and fire protection requirements shall have been met, and all applicable safety and fire protection systems with respect to such Stage shall have been installed and shall be operable pursuant to all Applicable Laws and in accordance with GECP;

(e) all field test and inspection records applicable to the Systems within such Stage, including electrical and instrumentation test and inspection records, and those relating to relay settings and instrument calibration, shall have been made available to Owner as and when prepared;

(f) all mechanical and electrical safety devices with respect to the Stage shall have been field tested, adjusted and sealed where necessary;

(g) all Equipment that is part of the Systems within such Stage shall have been cleaned, leak checked, lubricated and functional tests for all instrumentation and controls, including hazard controls, security components, and cause and effects tests, shall have been completed, to verify that they have been correctly installed;

(h) all Systems within such Stage into which hydrocarbons are to be introduced shall have been purged;

(i) painting shall have been sufficiently completed with respect to such Stage to support LNG production without interference and all portions of such Stage that will be inaccessible during operation shall have been painted;

(j) insulation of the Systems within such Stage shall have been sufficiently completed so that (i) start-up operations will not be adversely affected; and (ii) the Stage is in compliance with all insurance requirements, Applicable Laws and GECP;

(k) no temporary lighting shall remain standing in areas where operators must work to start-up and operate the Stage, except as agreed to by Contractor's and Owner's operations teams, taking into consideration safe operation of the plant, GECP and compliance with Applicable Laws; scaffolding shall have been removed except for such scaffolding that is specifically required for safe operation;

(l) a pre start-up and safety review with respect to the Systems or groups of Systems within such Stage shall have been performed in accordance with the requirements set forth in Appendix Q;

(m) Performance Test protocols, including with respect to commissioning demonstration tests, emissions tests and other Performance Tests shall have been prepared by Contractor and accepted by Owner in accordance with Section 9.7.1;

(n) the Operating Personnel shall have completed the training program as required to be completed prior to Ready for Start-Up pursuant to Appendix P, and records verifying the completion of the training program and related testing of such Operating Personnel in accordance with Section 2.16.2 shall have been delivered to Owner;

(o) Owner shall have received the O&M Manuals for the Systems within such Stage required to be delivered at or prior to Ready for Start-Up pursuant to Appendix U;

(p) all procedures, plans and reviews that are required pursuant to this Agreement for the introduction of hydrocarbons and start-up of the Systems within such Stage shall have been finalized or conducted, as applicable, in accordance with this Agreement, and all Permits that are required for the introduction of hydrocarbons and start-up of the Systems within such Stage in accordance with Applicable Laws have been obtained;

(q) all turnover packages and all Vendors' and other manufacturers' instructions and drawings relating to Equipment that is included in the Stage, including Equipment preservation and records, shall have been transmitted to Owner as per the agreed format and numbers in accordance with Appendix U; and

(r) all requirements of Applicable Laws that must be completed or satisfied prior to the introduction of hydrocarbons and the start-up of the Systems within such Stage shall have been fulfilled, including the installation of security fencing in accordance with Appendix QQ.

“Ready for Start-Up Certificate” means a certificate in the form of Appendix AA.

“Ready for Start-Up Date” means, with respect to a Stage, the date on which Ready for Start-Up of such Stage occurs: (a) as set forth on a Ready for Start-Up Certificate that has been countersigned by Owner; (b) as determined in accordance with Article 20; or (c) as otherwise agreed by the Parties.

“Receiving Party” means any Party that receives Confidential Information hereunder in accordance with Article 14 and is subject to an obligation to hold such Confidential Information confidential pursuant to Article 14.

“Record As-Built Drawings” means, with respect to a Stage, final, record As-Built Drawings the Stage, as required under Attachment A-1 to Appendix A and Appendix U.

“Recovery Plan” has the meaning set forth in Section 4.4.2.

“Region” has the meaning set forth in Section 2.7.10.

“Release” means the release, “threatened release” (as contemplated by the Comprehensive Environmental Response, Compensation, and Liabilities Act - CERCLA) discharge, deposit, injection, dumping, spilling, leaking or placing of any solid or Hazardous Material into the environment so that such solid or Hazardous Material or any constituent thereof

may enter the environment, or be emitted into the air or discharged into any waters, including ground waters under Applicable Laws.

“Request for Arbitration” has the meaning set forth in Section 20.4.1.

“Required Plan Provisions” means the provisions in each Plan that have been identified therein as those provisions that Contractor shall not change, adjust, alter, modify or amend without Owner’s prior written approval.

“Sabine Neches Waterway” means that deep water navigable waterway, located in southeast Texas and Calcasieu Parish, Louisiana and including parts of the Neches River, Sabine River, Sabine Lake, and Taylor Bayou, administered by the Sabine Neches Navigation District.

“Scope of Work” means the description of the Work to be performed as set forth in Appendix A, and as modified from time to time by Change Orders or executed amendments to this Agreement.

“Scope Option” shall mean each option for additional Work as described in Appendix C, and as more particularly described in the related attachments to Appendix C as specified therein.

“Site” means those areas where the LNG Facility will be located and where Contractor may perform Work, including for use as laydown areas, as shown in greater detail in Appendix L, as it shall be updated pursuant to Section 2.11.7.

“Site Conditions” means the physical and other conditions at the Site and the surrounding area as a whole, including the Sabine Neches Waterway, and including conditions relating to the environment, transportation, access, waste disposal, handling and storage of materials, the availability and quality of electric power, the availability and quality of water, the availability and quality of roads, the availability and quality of labor personnel and local work and labor rules, climatic conditions and seasons, topography, air and water quality conditions, raw water conditions, ground surface conditions, surface soil conditions, sound attenuation, subsurface geology, nature and quantity of surface and subsurface materials that are encountered (including, without limiting Contractor’s rights with respect to Unforeseen Excused Site Conditions, Hazardous Materials, and the subsurface conditions of the Sabine Neches Waterway and the nature and quantity of subsurface materials that may be encountered during the performance of the Work, including during dredging and construction of the marine berths and material offloading facility that are part of the Work or in connection with any temporary docks that Contractor otherwise utilizes during performance of the Work), the geological and subsurface conditions of the Site, all other local and other conditions which may be material to Contractor’s performance of its obligations under this Agreement, and the location of underground utilities, equipment and facilities.

“Specifications” means those documents consisting of the written requirements and philosophies for Equipment, standards and workmanship for the Work and performance of related services as referenced in Appendix B or to be developed by Contractor as part of the Work in accordance with Attachment A-1 to Appendix A.

“**Stage**” means any or both of Stage I or Stage II, as the context requires.

“**Stage I**” means the first phase of the Work to be designed, procured and constructed and to achieve Substantial Completion under this Agreement (or, before it achieves Substantial Completion, the first such phase of the Work scheduled to achieve Substantial Completion according to the Project Schedule), and includes a Natural Gas liquefaction unit, a comparably-sized Natural Gas pretreatment unit and the Common Facilities, all as further set forth in this Agreement.

“**Stage I Delay Liquidated Damages**” has the meaning set forth in Section 4.3.1(a).

“**Stage II**” means the second phase of the Work to be designed, procured and constructed and to achieve Substantial Completion under this Agreement (or, before it achieves Substantial Completion, the second such phase of Work scheduled to achieve Substantial Completion according to the Project Schedule), and includes a Natural Gas liquefaction unit and a comparably-sized Natural Gas pretreatment unit, all as further set forth in this Agreement.

“**Stage II Delay Liquidated Damages**” has the meaning set forth in Section 4.3.1(b).

“**Standard & Poor’s**” means Standard & Poor’s Corporation or any successor rating agency thereof.

“**Standard Conditions for LNG**” means a pressure base of fourteen point six nine six (14.696) psia at a base temperature of sixty degrees Fahrenheit (60°F) under ideal gas conditions.

“**Standard Conditions for Natural Gas**” means a pressure base of fourteen point seven three (14.73) psia at a base temperature of sixty degrees Fahrenheit (60°F) under real gas conditions.

“**Structural Works Defect**” means, for the purpose of the extended Warranty Period as described in Section 10.4, any Defect in the engineering, procurement or construction of the LNG Facility, or components thereof, relating to the structural capacity, integrity or suitability of any load-bearing Equipment, buildings, structures, roads, jetties, Berths, or other foundations or underlying civil work for any portion of the LNG Facility that are part of the Work which: (a) materially and adversely affects the structural integrity of all or a part of any load bearing structures; or (b) results in the partial or total collapse of any portion of the LNG Facility.

“**Subcontract**” means any subcontract (including any Purchase Order) of any tier entered into between Contractor and a Subcontractor, or a Subcontractor and a Subcontractor.

“**Subcontractor**” means any Person (including any Licensor) engaged by Contractor, or any of Contractor’s Suppliers of any tier, to perform any of the Work or to whom Contractor otherwise delegates performance of any of the Work, but excluding Vendors.

“**Substantial Completion**” means, with respect to a Stage, that the following conditions have been satisfied with respect to the applicable Stage:

(a) Mechanical Completion and Ready for Start-Up of all of the Systems within such Stage shall have occurred and the requirements of Sections 9.9.2(a), 9.9.2(b) and 9.9.2(e) shall have been satisfied;

(b) all of the Work for such Stage shall have been completed without Defects, except for Punch List D Items included on the Punch List as accepted by Owner in accordance with Section 9.9.1, and with respect to the Noise Guarantee, Contractor's obligations under Section 9.10.3;

(c) each Performance Test of such Stage shall have been Successfully Run during the last attempt of that Performance Test commenced by Contractor, including any Performance Tests required under Section 9.7.4(b), and all temporary filters, fine mesh strainers, piping systems, blinds and screens and other items temporarily installed to facilitate commissioning or start-up of such Stage shall have been removed and such Stage shall have been returned to full operation;

(d) Contractor shall have Successfully Run the Performance Test to demonstrate that such Stage satisfies the Noise Guarantee, and such Stage shall satisfy the Noise Guarantee or, if the Performance Test fails to demonstrate that such Stage satisfies the Noise Guarantee, Contractor, using Contractor's Noise Model, shall demonstrate to Owner that such Stage satisfies the Noise Guarantee;

(e) such Stage shall satisfy the Emissions Guarantees and either: (i) such Stage shall satisfy all of the Guaranteed Performance Levels applicable to such Stage in accordance with Appendix G; or (ii) (A) such Stage shall satisfy at least the Minimum Performance Standard with respect to all Guaranteed Performance Levels for which such Stage has not achieved the Guaranteed Performance Levels; and (B) Contractor shall have posted a Letter of Credit in an amount, or increased the existing Letter of Credit by an amount, covering all applicable Performance Liquidated Damages in accordance with Section 9.10.1;

(f) with respect to Stage II only, Contractor shall have demonstrated by appropriate surveys or other means reasonably acceptable to Owner, that the berm height, and the depth of the underwater material offloading facilities and Berth and jetty, as applicable, meets the requirements of the Basis of Design;

(g) Contractor shall have paid all Delay Liquidated Damages that have accrued in accordance with this Agreement;

(h) special tools and other items to be provided by Contractor under this Agreement that are necessary for the operation of such Stage shall have been turned over to Owner;

(i) a complete set of As-Built Drawings for such Stage in the form and format and as otherwise required pursuant to Attachment A-1 to Appendix A and Appendix U shall have been turned-over to Owner, except for modifications to those As-Built Drawings required to reflect Punch List D Items to be completed after Substantial Completion;

(j) the final Fixed Asset Schedule completed with respect to such Stage shall have been delivered to Owner in accordance with Section 7.6;

(k) the Operating Personnel have completed all aspects of the training program as described in Appendix P, and records verifying the completion of the training program and testing of such Operating Personnel in accordance with Section 2.16.2 shall have been delivered to Owner;

(l) a first fill of all applicable consumables for the Equipment that is part of such Stage shall have been provided, together with refills of applicable consumables for such Equipment as necessary to meet requirements of the applicable Suppliers of the Equipment;

(m) Contractor shall have obtained the release of all Liens relating to the LNG Facility that have been recorded as of such date in accordance with Section 2.9, and Interim Lien and Claim Waivers, Interim Unconditional Lien and Claim Waivers, Final Lien and Claim Waivers and Final Unconditional Lien and Claim Waivers, as applicable, shall have been delivered by Contractor and all Major Suppliers in accordance with Section 6.3.5;

(n) Owner shall have received the operating spare parts as required under Section 2.14.2 and the Capital Spare Parts as required under Section 2.14.3;

(o) Owner shall have received the O&M Manuals, as redlined, prepared by Contractor or a Vendor, as applicable, as required to be delivered to Owner on or before Substantial Completion of such Stage pursuant to Appendix U;

(p) Owner shall have received from Contractor each Contractor Permit, if any, that is required to be obtained by Contractor that is necessary for Owner to operate the LNG Facility with respect to such Stage in accordance with all Applicable Laws, and such Permits shall be in Owner's name or shall have been assigned to Owner, in accordance with Applicable Laws; and

(q) Contractor shall have delivered a copy of the assignment of the Liquefaction Technology License and the License with BASF, SE with respect to such Stage, signed by the respective Licensor and Contractor, to Owner (and Owner's designees), Owner (and its designees) shall hold such Licenses in their respective names, and the Licenses shall be in full force and effect.

“Substantial Completion Certificate” means a certificate substantially in the form of Appendix BB.

“Substantial Completion Date” means, with respect to a Stage, the date on which Substantial Completion of such Stage occurs: (a) as set forth on a Substantial Completion Certificate that has been countersigned by Owner; (b) as determined in accordance with Article 20; (c) the date on which Owner declares Substantial Completion has occurred in accordance with Section 11.2.3; or (d) as otherwise agreed by the Parties; provided, however, that, subject to Contractor's rights under Article 20, for purposes of Sections 10.1.3 and 11.3, the

Substantial Completion Date of a Stage shall be deemed to have occurred on the date on which Owner countersigns the Substantial Completion Certificate for such Stage, notwithstanding the date of Substantial Completion set forth in such certificate.

“Successfully Run” means:

(a) that the Performance Test was completed in accordance with the conditions and requirements for the proper performance of such Performance Test set forth in Appendix G, the Performance Test Procedures, and the other provisions of this Agreement applicable to such Performance Test; and

(b) the requirements of Section 9.9.2(d) have been satisfied.

“Supplier” means any Subcontractor or Vendor.

“Supply Contract” means any Subcontract or Purchase Order.

“Suspension Notice” has the meaning set forth in Section 19.4.2(a).

“SWSA” has the meaning set forth in the Recitals.

“System” means a part of the LNG Facility that is encompassed in specific boundaries as defined on P&IDs or other Drawings to distinguish it from the LNG Facility as a whole, as determined in accordance with Section 9.1.2.

“Target Substantial Completion Date” means with respect to each Stage, the date on which Contractor is scheduled to achieve Substantial Completion of such Stage, as shown on the CPM Schedule as the “Target Substantial Completion Date.” [***].

“Taxes” means:

(a) income tax, gross receipts tax, profits tax, employment tax, unemployment tax, withholding tax, social security tax, contractor tax, sales tax, property tax, consumption tax, value added tax, use tax, excise tax, turnover tax, capital tax, occupational tax, works tax, import tax, export tax, license tax, personnel tax, services tax and any and all other taxes (including taxes measured by wages earned by employees of Contractor or any Supplier); and

(b) import and export taxes other than Customs Duties, Customs Duties, port charges or taxes on barge deliveries (or similar maritime transport deliveries via water vessel), fees and contributions payable to any Governmental Authority on any item or service that is part of the Work or the LNG Facility,

in each of case (a) or (b) whether such tax, duty, fee or contribution is normally included in the price of such item or service or is normally stated separately, together with any and all penalties, interest and additions thereto.

“**Tax Abatements**” mean, collectively, the following (as each may be extended or amended from time to time): (a) that certain Abatement Agreement for Property Located in the Reinvestment Zone entered into among Jefferson County, Owner and the Common Facilities Owner pursuant to Section 312.401 of the Texas Tax Code, dated March 25, 2019; (b) that certain Abatement Agreement for Property Located in the Reinvestment Zone entered into among Sabine Pass Port Authority, Owner and the Common Facilities Owner pursuant to Section 312.401 of the Texas Tax Code, dated April 3, 2019; (c) that certain Abatement Agreement for Property Located in the Reinvestment Zone entered into among Sabine Neches Navigation District, Owner and the Common Facilities Owner pursuant to Section 312.401 of the Texas Tax Code, dated August 13, 2019; (d) that certain Industrial District Agreement entered among the City of Port Arthur, Owner and the Common Facilities Owner dated June 4, 2019; (e) the First Source Referral Agreement; and (f) the 313 Agreement.

“**Technical Licensor Information**” means the data and information provided by a Licensor with respect to the Technology provided by such Licensee.

“**Technology**” means the technology covered by each License, respectively.

“**Termination Notice**” has the meaning set forth in Section 19.4.2(b).

“**Texas Sales and Use Taxes**” means all sales and use taxes imposed by the State of Texas, its counties or political subdivisions.

“**Third Party Claim**” has the meaning set forth in Section 15.5.1.

“**Third Party Proprietary Work Product**” has the meaning set forth in Section 12.3.

“**Three Week Look-Ahead Schedule**” has the meaning set forth in Appendix S.

[***].

“**Train 1 First Production Window**” has the meaning set forth in Section 9.5.1(a).

“**Train 1 Second Production Window**” has the meaning set forth in Section 9.5.1(b).

“**Train 1 Third Production Window**” has the meaning set forth in Section 9.5.1(c).

“**Tribunal**” has the meaning set forth in Section 20.4.2.

“**TWIC Card**” has the meaning set forth in Section 2.18.6(c).

“**Unforeseen Excused Site Condition**” means an Archaeological Find or Pre-Existing Hazardous Materials discovered on the Site after the Effective Date, or subsurface man-made objects not identified in the Owner-Furnished Information or the Geotechnical Reports.

“**Unusually Severe Weather**” means: (a) tornadoes (as identified in the Storm Events Database maintained by the National Oceanic and Atmospheric Administration’s National

Centers for Environmental Information); (b) Named Windstorms or catastrophic flooding that shut down access to the Site or directly impact the Site or other locations, if any, where fabrication Work is being performed; or (c) any other weather event for which local officials call for mandatory public evacuations at the Site.

“**U.S.**” means the United States of America.

“**Vendors**” means the suppliers of any tier of Contractor-Furnished Items, as applicable, pursuant to a Purchase Order, that do not perform a significant component of any of the Work that they are performing at the Site.

“**Warranty Manager**” means the Person who has been designated by Contractor in a written notice to Owner to serve as Contractor’s Warranty Manager for the purposes of Section 10.3.3.

“**Warranty Period**” has the meaning set forth in Section 10.1.3.

“**Warranty Work**” means the Work performed during any Warranty Period pursuant to Article 10.

“**Week**” means a seven (7) Day period beginning on a Sunday and ending at the end of the immediately following Saturday.

“**Weekly Status Reports**” has the meaning set forth in Section 2.22.1(c).

“**Work**” has the meaning set forth in Section 2.1.1.

“**Work Product**” has the meaning set forth in Section 12.1.1.

1.3 Acronyms, Terms and Symbols. Certain acronyms, terms and symbols used in this Agreement are defined in Appendix K.

1.4 Interpretation.

1.4.1 Precedence. The provisions of this Agreement, including the Appendices, shall be construed as consistent rather than conflicting to the extent possible. In the event of an irresolvable conflict between the main body of this Agreement or any Appendix and a provision contained within the main body of this Agreement or another Appendix, the following order of precedence shall govern (multiple items in a priority shall have equal order of precedence):

(a) the main body of this Agreement;

(b) Appendices C (and all Attachments thereto), D (and all Attachments thereto), E-1, E-2, KK and NN (and all Attachments thereto);

(c) Appendix G;

- (d) Appendix B;
- (e) Appendix A (and all Attachments thereto);
- (f) Appendices J-1, J-2, J-3, MM and TT;
- (g) Appendices I (and all Attachments thereto), Q, S (and all Attachments thereto), U (and all Attachments thereto), VV and WW;
- (h) Appendices F-1, F-2, L (and all Attachments thereto), M, N, T-1, T-2, V-1, V-2, W, X, Y, Z, AA, BB, CC, DD, EE-1, EE-2, FF-1, FF-2, GG-1, GG-2, HH-1, HH-2, OO-1, OO-2, PP, SS and UU;
- (i) Appendices H, II, JJ, LL and QQ;
- (j) Appendices P, Q, R, RR; and
- (k) Appendix K.

1.4.2 Precedence of Technical Documents. The order of precedence governing the Deliverables and other technical documentation shall be:

- (a) Permits
- (b) Project Specifications
- (c) Project Data Sheets and Drawings
- (d) Purchase Orders

In the event of a conflict between any part of the Agreement and any Technical Document, or among any of the Technical Documents, Contractor shall notify Owner of such conflict using a written request for information and the Parties shall meet to resolve the conflict. If any ambiguities, discrepancies or inconsistencies are identified among any of the Appendices, the Technical Documents or any of the attachments thereto, that cannot be resolved pursuant to the order of precedence set forth in this Section 1.4, then the more specific obligation that is consistent with the order of precedence set forth in this Section 1.4 shall control.

1.4.3 Headings and Subheadings. All headings and subheadings are for reference only and shall not be used to construe any provision of this Agreement.

1.4.4 Undefined Terms. If a term is used in this Agreement but it is not defined herein, such term should be ascribed: (a) its meaning as used in the international LNG industry, if there is a generally accepted usage in that industry; and (b) otherwise, it's generally accepted English language meaning.

1.4.5 References to Lenders, Lenders' Agent and Independent Engineer. This Agreement shall be construed so as to allow the Lenders, the Lenders' Agent and any Independent Engineer access to all aspects of the Work and Confidential Information (not including Contractor's financial information, pricing information or proprietary cost data; provided that the foregoing shall not limit the rights of such Persons to access the Contract Price or any pricing information contained in any Change Order Request or Change Order) that Owner has the right to witness, inspect, observe, access or review hereunder. Subject to Section 23.9 and the rights of the Lenders, the Lenders' Agent and the Independent Engineer pursuant to the Direct Agreement and any similar agreement to be entered into by Contractor directly with Lenders or Lenders' Agent, and Owner in accordance with Section 2.29, the provisions in this Agreement that permit the Lenders, the Lenders' Agent and the Independent Engineer access to the Site and any other location where the Work is performed, and, among other things, to witness tests, attend meetings, receive reports and be present during testing and inspections of the Work wherever such inspections or tests take place, shall not be deemed or construed to impose an obligation on Contractor to delay any Work, including any inspections or tests, or to grant any of the Lenders, the Lenders' Agent or the Independent Engineer the right to make any decision with respect to the Work on behalf of Owner. Contractor acknowledges that the Lenders may appoint more than one Independent Engineer and that references to "Independent Engineer" throughout this Agreement are understood to mean more than one.

1.4.6 Other Principles of Interpretation. Unless the context requires otherwise: (a) the gender (or lack of gender) of all words used in this Agreement includes the masculine, feminine, and neuter; (b) words used or defined in the singular include the plural and vice versa; (c) references to the Preamble, any Recitals, Articles and Sections refer to the Preamble, Recitals, Articles and Sections of this Agreement, as same may be amended from time to time pursuant to an amendment entered into in accordance with the terms hereof; (d) references to Applicable Laws or any Applicable Codes and Standards refer to such Applicable Laws or Applicable Codes and Standards as may be amended from time to time and, with respect to Applicable Laws, all rules and regulations promulgated thereunder, and references to particular provisions of Applicable Laws or Applicable Codes and Standards include any corresponding provisions of any succeeding Applicable Laws or Applicable Codes and Standards; (e) references to any other agreement are to that agreement as amended or supplemented from time to time; (f) references to "include", "includes" and "including" means include, includes or including without limitation to the matters described; (g) terms defined in this Agreement are used throughout this Agreement and in any Appendices hereto as so defined; (h) "shall" and "will" have equal force and effect; (i) the reservation of a right by a Party herein in any correspondence or other communication between the Parties shall not constitute a denial of any Claim made or position taken by the other Party; (j) unless expressly provided to the contrary, references in this Agreement containing terms such as "hereof", "herein", "hereto", "hereby", "hereinafter", and other terms of like import are not limited in applicability to the specific provision within which such references are set forth but instead refer to this Agreement taken as a whole; and (k) except to the extent expressly stated otherwise in this Agreement, Owner's right to review, inspect and comment on the Work shall not require Contractor to delay the Work beyond the period allowed for review, inspection and comment.

ARTICLE 2

CONTRACTOR'S RESPONSIBILITIES

2.1 Work.

2.1.1 General. Contractor shall, in consideration of the Contract Price payable in accordance with this Agreement, provide or perform the Work, or cause the Work to be provided or performed, in accordance with the terms of this Agreement. The "**Work**" means all of the work, duties, responsibilities, jobs, services, engineering, design, procurement services and other activities previously performed or provided by or on behalf of Contractor under the EDSA or the SWSA, and all obligations, work, duties, responsibilities, jobs, services, goods, Equipment, Deliverables, engineering, and activities to be performed or provided by, or on behalf of, Contractor under this Agreement, without regard to whether the Work is performed under a Limited Notice to Proceed or after issuance of the Full Notice to Proceed, as follows:

(a) the further development and completion of the engineering and design of the LNG Facility, including the preparation of all Drawings and Specifications in accordance with the engineering and design as reflected in the Scope of Work and Basis of Design, as approved by Owner pursuant to the EDSA;

(b) the complete fabrication and construction of the LNG Facility, all erection and installation of Equipment, and all commissioning, start-up (including calibration, inspection, and start-up operation) and testing included in or required for the LNG Facility;

(c) the interconnection of the LNG Facility with applicable Pipelines and permanent utilities, including interconnections with any new or upgraded facilities to be constructed by Entergy;

(d) all construction activities and services necessary to fully construct the LNG Facility, including construction utilities and necessary preparation of the Site (and any other location where any part of the Work is performed), including soil stabilization of the Site, Site preparation, including design and construction of suitable drainage systems during construction, construction of a pioneer construction dock and a permanent materials offloading facilities dock (which Contractor may use during construction), construction of a heavy haul road, excavation and grading and proper disposal of all excavated materials and furnishing of fill materials if and as required in connection with performance of the Work;

(e) procurement and supply of all supplies, materials, goods, consumables, tools, temporary facilities, including offices and warehouses, vehicles, equipment and machinery, for incorporation into the LNG Facility, or necessary to conduct the Work but which do not form a permanent part of the LNG Facility;

(f) supply of all work forces, including all skilled and unskilled labor, supervisory, quality assurance and support service personnel required to perform the Work, other than the Operating Personnel to be furnished pursuant to Section 3.6 for use in Contractor's pre-

commissioning, commissioning, testing and start-up efforts, and the training of Operating Personnel;

(g) all activities and services necessary to permit the receipt at the tie-in points as described in the EPC Interface Management Plan as set forth in Appendix W, including the Drawings referenced therein, with respect to Fuel Gas, Feed Gas and utilities for the Work;

(h) procurement, rental or lease of any lay-down areas, easements, access rights or other real estate necessary or desirable for Contractor to perform its obligations hereunder that Contractor determines it requires in addition to the Site; and

(i) all activities, services and items specifically described in, or reasonably inferable from, Appendix A, Appendix B or elsewhere in this Agreement;

in each case in accordance with the requirements of this Agreement, including the Project Schedule and the Project Execution Plan, and whether or not such activities, services or items are specifically identified in Appendix A or the other portions of this Agreement, such that the LNG Facility is fully functional and capable of being operated in accordance with Applicable Laws, GECP and the terms of this Agreement, but in any case excluding the items and activities that Owner is expressly required to provide under Article 3.

2.1.2 Simultaneous Operation Requirement. Without limiting the foregoing, Contractor shall perform the Work such that the LNG Facility and the Equipment satisfy the applicable provisions of the Scope of Work and Basis of Design, including designing, procuring and constructing the Common Facilities such that all LNG Trains installed in the LNG Facility may be operated simultaneously and independently at the design conditions set forth in this Agreement.

2.2 Independent Contractor. In the performance of this Agreement, Contractor is an independent contractor and none of Contractor, Suppliers or their employees or Invitees are agents, employees or Invitees of Owner. The entire performance, operation, management and direction of the Work and, except to the extent this Agreement expressly provides otherwise (including pursuant to Sections 2.6 and 2.7), all staffing, Supplier selection, means, methods, techniques, sequencing and procedures for coordinating all portions of the Work shall be under the exclusive control, command and direction of Contractor; nonetheless, Contractor shall comply with all provisions, terms and conditions of this Agreement, including the Specifications and Plans, and the fact that Contractor is an independent contractor shall not relieve it from its responsibility to fully, completely and safely perform and deliver the Work and cause the Suppliers and its and their respective personnel to safely perform and deliver the Work in compliance with this Agreement. Contractor shall be solely responsible for the payment of labor employed or hired by Contractor, whether on contract or other status, including all social benefits, compensation, termination payments, and all benefits of whatever description required by Contractor's employment policies or practices.

2.3 Performance Standards and Compliance with Applicable Laws. Contractor shall perform the Work in accordance with: (a) all Applicable Laws; (b) the terms of this Agreement; (c) the plans and policies established pursuant to Sections 2.18 and 2.20; and (d) GECP (except to the extent such Good Engineering and Construction Practices are in conflict with any of clauses (a), (b) or (c), in which case such clause (a), (b) or (c) shall prevail).

2.4 Contractor's Acknowledgments.

2.4.1 Site. Prior to the Effective Date, Contractor has inspected the Site and reviewed the Geotechnical Reports, and acknowledges and agrees that it:

(a) has assessed all Site Conditions at and around the Site that will affect Contractor's conduct of the Work thereupon, including natural and man-made conditions;

(b) has satisfied itself that the Site is sufficient for Contractor to engineer, procure, construct, pre-commission, commission, start-up, test and operate the LNG Facility for the Contract Price, in accordance with GECP and the requirements of this Agreement, including Applicable Laws, the Emissions Guarantee, the Noise Guarantee and the Guaranteed Performance Levels (subject to Section 9.10), and so as to achieve Substantial Completion of each Stage by the applicable Guaranteed Substantial Completion Date, including, without limiting the generality of the foregoing, that:

(i) the size, shape, location and condition of the Site are adequate for Contractor's performance of the Work;

(ii) the Site includes additional space that is adequate for Contractor's temporary office, including temporary offices of Owner (in accordance with Section 2.5.3(c)), warehouse, craft change rooms and shop buildings, storage of Equipment, employee parking and other Work lay-down and staging purposes;

(iii) there is sufficient access to the Site to transport personnel and all necessary Equipment and Construction Equipment; and

(iv) sufficient labor force (both in quantity and quality) and professional services will be available for Contractor's performance of the Work in accordance with the requirements of this Agreement.

(c) is solely responsible for design and construction of suitable drainage systems during performance of the Work on the Site to avoid flooding at the Site which could interrupt the construction activities and cause damage to the Equipment, including piping and other material, stored or installed at the Site, and including proper Site preparation construction planning to minimize water entrapment, ponding, and flooding in some areas which could interrupt the construction activities, or damage stored Equipment.

Accordingly, with the exception of Unforeseen Excused Site Conditions or events of Force Majeure that impact the Site (or the area around the Site), and subject to

Contractor's rights to a Change Order pursuant to Sections 8.3.1(r) and 8.3.1(s), Contractor hereby agrees that it shall have no right to claim or seek an increase in the Contract Price or an adjustment to the Key Date Schedule with respect to physical conditions at or around the Site, including the Site Conditions, and hereby waives and releases Owner from and against such claims. Contractor affirms that it has the skills and experience necessary to review and assess the Site, the Site Conditions and the Site in light of the different aspects of the Work. OWNER MAKES NO GUARANTY OR WARRANTY, EXPRESS OR IMPLIED, AS TO THE SITE. CONTRACTOR EXPRESSLY ACKNOWLEDGES AND AGREES THAT THE INFORMATION SET FORTH IN THE BASIS OF DESIGN WITH RESPECT TO THE SITE IS PROVIDED FOR PURPOSES OF THE DESIGN AND ENGINEERING OF THE LIQUEFACTION PROJECT, AND IN NO WAY CONSTITUTES A REPRESENTATION, WARRANTY OR GUARANTY AS TO CONDITIONS THAT CONTRACTOR MAY ENCOUNTER DURING THE PERFORMANCE OF THE WORK. THIS SECTION 2.4.1 SHALL NOT LIMIT CONTRACTOR'S RIGHTS TO MAKE CLAIMS FOR RELIEF UNDER SECTION 8.3 AND ARTICLE 18 IN CONNECTION WITH UNFORESEEN EXCUSED SITE CONDITIONS, OR IN THE CASE OF THE OCCURENCE OF AN EVENT OR CIRCUMSTANCE GIVING RISE TO A CHANGE ORDER UNDER SECTIONS 8.3.1(r) AND 8.3.1(s), OTHER EXCUSABLE EVENTS OR EVENTS OF FORCE MAJEURE THAT OCCUR DURING THE PERFORMANCE OF THE WORK.

2.4.2 Owner-Furnished Information. CONTRACTOR ACKNOWLEDGES, AND SHALL CAUSE ITS SUPPLIERS TO AGREE, THAT: (a) WITHOUT LIMITING WHAT CONSTITUTES AN OWNER-CAUSED DELAY, OWNER MAKES NO WARRANTIES, EXPRESS OR IMPLIED, TO CONTRACTOR OR SUCH SUPPLIER OR ANY OTHER PERSON, AS TO THE ACCURACY, SUFFICIENCY OR CONTENT OF THE OWNER-FURNISHED INFORMATION OR THE OPINIONS THEREIN CONTAINED OR EXPRESSED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE; AND (b) NEITHER CONTRACTOR, THE SUPPLIERS NOR ANY OTHER PERSON MAY RELY ON THE OWNER-FURNISHED INFORMATION, AND THAT NONE OF SUCH PERSONS SHALL HAVE A CLAIM AGAINST OWNER WITH RESPECT TO THE OWNER-FURNISHED INFORMATION, EXCEPT FOR SUCH INFORMATION THAT HAS BEEN SPECIFICALLY DESIGNATED AS NON-VERIFIED INFORMATION IN APPENDIX N. NOTWITHSTANDING ANYTHING TO THE CONTRARY HEREIN, CONTRACTOR SHALL NOT BE REQUIRED TO VERIFY OR BE DEEMED TO HAVE VERIFIED ANY OF THE NON-VERIFIED INFORMATION.

2.4.3 Scope of Work and Basis of Design. Contractor has drafted and prepared the Scope of Work and Basis of Design with care and hereby acknowledges and agrees that, the attached Scope of Work and the Basis of Design in Appendix A and Appendix B and all documents referenced therein and attachments thereto, are accurate, adequate and complete for Contractor to conduct the Work for the Contract Price, by the Guaranteed Substantial Completion Date for each Stage set forth in the Baseline CPM Schedule, and in accordance with GECP and all requirements of this Agreement, including Applicable Laws, and subject to Section 9.10, the Emission Guarantee, the Noise Guarantee, and the Guaranteed Performance

Levels. Notwithstanding anything to the contrary herein, Contractor has not verified and shall not verify the Non-Verified Information.

2.4.4 Incorporation of the EDSA and SWSA Work. Contractor acknowledges and agrees that upon Owner's issuance of the Full Notice to Proceed hereunder, or if issued the issuance of the Bridging LNTP, all of the work, duties, responsibilities, jobs, services, engineering, design, procurement services and other activities previously performed or provided by or on behalf of Contractor under the EDSA or the SWSA shall be part of the Work for all purposes of this Agreement, and that therefore Contractor is fully responsible under this Agreement for all such work, duties, responsibilities, jobs, services and other activities performed under the EDSA or the SWSA as if it had been performed under this Agreement. Notwithstanding the foregoing, until earlier of the date of issuance of the Bridging LNTP or the FNTP Date, any work, duties, responsibilities, jobs, services, engineering, design, procurement services and other activities performed or provided by or on behalf of Contractor under the EDSA or the SWSA shall be governed by the terms of the EDSA or the SWSA, as applicable.

2.4.5 Applicable Laws and GECP. Contractor acknowledges and agrees that, subject to Contractor's rights in connection with a Change in Law, it can conduct the Work for the Contract Price, in accordance with the Project Execution Plan and by the Guaranteed Substantial Completion Date for each Stage, and in accordance with GECP and all requirements of this Agreement, including Applicable Laws, the Emissions Guarantee, the Noise Guarantee and the Guaranteed Performance Levels (subject to Section 9.10). Without limiting Contractor's rights under Section 8.3, Contractor shall perform the Work using GECP and in accordance with Applicable Laws, whether or not such Applicable Laws or GECP came into effect before or after the Effective Date or during the performance of the Work.

2.4.6 Plans; Required Plan Provisions. Contractor shall perform the Work in accordance with the Project Execution Plan and the other Plans as described herein. Contractor may update the Project Execution Plan and the other Plans from time to time to reflect updates or modifications or amendments or other changes that Contractor determines are desirable or necessary in connection with the Work; provided, however, that (a) Contractor shall furnish such updates, modifications, amendments or other changes to Owner clearly showing the revisions made to such Plan; and (b) Contractor shall not implement any update, modification, amendment or other change to the Required Plan Provisions of any Plan without Owner's prior written approval, not to be unreasonably withheld or delayed. Within fifteen (15) Business Days after Owner receives any proposed updates, modifications, amendments or other changes to any Required Plan Provisions, Owner shall accept or reject and provide any comments to such updates, modifications, amendments or other changes to the Required Plan Provisions. Contractor shall promptly respond to Owner's comments to any proposed updated, modified, amended or otherwise changed Required Plan Provisions, and resubmit such updates, modifications, amendments or other changes to Owner for acceptance. If Owner provides comments to any other provisions of the updated, modified, amended or changed Plan that are not Required Plan Provisions, Contractor shall consider such comments in good faith. Owner's review of and any comments provided to the Plans and the Required Plan Provisions pursuant to

this Section 2.4.6 shall not in any way relieve Contractor of its responsibility regarding the execution of the Work and the performance of Contractor's obligations hereunder.

2.5 Appointment of Authorized Representatives; Periodic Meetings; Owner Access.

2.5.1 Contractor Representative. Contractor hereby appoints Bhupesh Thakkar to be the Contractor Representative. At all times hereunder, the Contractor Representative shall simultaneously serve as Contractor's Senior Project Manager. The Contractor Representative shall have full authority to act on Contractor's behalf under this Agreement; provided, that Contractor Representative shall not be entitled to amend this Agreement without further written authorization from Contractor. Contractor may from time to time by notice to Owner remove any person from his appointment as Contractor Representative and appoint another person in his or her place with effect from a date to be specified in the notice in accordance with Section 2.6.1. Contractor shall ensure that there is an individual appointed to act as Contractor Representative in accordance with Section 2.5.1 at all times until it has fully performed its warranty obligations as described in Article 10.

2.5.2 Periodic Meetings. Contractor shall hold periodic progress and schedule monitoring meetings as described in Appendix S and as Owner may reasonably request, including meetings in connection with Disputes, Change Order requests or claims made by Suppliers. The Contractor Representative or the individual designated by the Contractor Representative to attend the meeting, the Contractor planning and scheduling representative, and as appropriate or necessary, other Contractor employees and Suppliers, shall attend such meetings. At Owner's election, the meetings may be attended by the Owner Representative or the individual designated by the Owner Representative to attend the meeting, the Owner planning and scheduling representative, representatives of Owner's Engineer, and any equity participant in Owner or Common Facilities Owner. The meetings may also be attended by any authorized representative or agent of the Lenders, the Independent Engineer and, subject to Contractor's consent, not to be unreasonably withheld or delayed, any other Invitees of Owner (including, where invited by Owner, its customers).

2.5.3 Owner Access. The respective employees, consultants and representatives of Owner, including Owner's Engineer, equity investors in Owner or the Common Facilities Owner, the Other Contractors (subject to Section 2.28), the Independent Engineer and any Lender shall (a) at all times have a right of access to the Site; and (b) have a right of access during normal business hours and upon reasonable advance notice to Contractor, to any Supplier location off of the Site where Work is being conducted, including locations where Equipment is being manufactured or such materials are being prepared for incorporation into the LNG Facility, so that representatives of such Persons, as applicable, may inspect production and observe tests, subject to such Persons complying with the applicable policies and procedures of Contractor (or the applicable Supplier) with respect to safety and security while at such location. Other Persons, including Competitors, invited by Owner shall be provided the access as described in this Section 2.5.3, subject to compliance with such policies and procedures, and upon reasonable advance notice to Contractor.

(a) Contractor shall provide the accommodations in accordance with Section 2.5.3(b). Contractor shall also cause its Major Suppliers to provide reasonable accommodations as are necessary for Owner's representatives to exercise Owner's rights and responsibilities under this Agreement, and to the Independent Engineer and any Lenders, including reasonable temporary work spaces. With respect to Suppliers that are not Major Suppliers, Contractor shall use commercially reasonable efforts to cause such Suppliers to make work space available for one (1) to two (2) individuals upon Owner's reasonable request. If a Supplier requests payment of additional costs to provide such temporary accommodations, Contractor shall notify Owner. If Owner nevertheless requires Contractor to obtain such temporary accommodations for Owner, the additional costs, if any, charged by the Suppliers with respect to such accommodations shall be an Owner cost.

(b) From and after the issuance of a Limited Notice to Proceed, or the Full Notice to Proceed, as applicable, until the completion of engineering activities for Stage II, Contractor shall provide in Contractor's office at 3000 Post Oak Blvd., Houston, Texas, up to eleven (11) furnished offices and fifty eight (58) furnished cubicles, parking spaces, access to kitchen/break area and rest rooms, one (1) dedicated conference room with projection capabilities to accommodate up to twenty (20) people, access to at least one (1) other conference room that will accommodate up to eight (8) people, telephones for each office, cubicle and conference room and secure paper disposal. Contractor will also provide up to nine (9) furnished offices and one (1) furnished cubicle for twelve (12) Months after completion of engineering activities for Stage II. Upon Owner's request, Contractor shall provide additional furnished offices and furnished cubicles at a rate of [***] per Month and [***] per Month, respectively. The office space and facilities shall be available for use by Owner's and personnel of Owner's Engineer's and Lender's representatives, as designated by Owner. Contractor shall provide equivalent office space and support for up to five (5) of Owner's and Owner's Engineer's personnel at such other offices or locations of Contractor and its Affiliates described in the Project Execution Plan where the Work will be performed when such personnel are present at those locations. All costs for furnishing such office space and supplies and otherwise complying with the requirements of this Section 2.5.3(b) are included in the Contract Price.

(c) From and after the Bridging LNTP Date, Contractor shall, or shall cause its Suppliers that establish temporary furnished offices at the Site to, allow Owner to utilize up to three (3) furnished work spaces in such Suppliers' temporary facilities. From and after the FNTP Date, Contractor shall provide temporary furnished office facilities at the Site to accommodate up to ninety five (95) of Owner's personnel. Such temporary facilities will include a main temporary office facility sized to accommodate up to sixty (60) individuals, including offices for twenty five (25) individuals, four (4) bull pen offices (each sized to accommodate six (6) individuals), two (2) cubicles for Owner's document management and control and storage, access to kitchen/break area (with dining space for twenty (20) individuals) and rest rooms, and two (2) conference rooms to accommodate up to forty (40) people. The temporary furnished office facilities shall also include three (3) standard double-wide trailers, consisting of two (2) offices, one conference room on each end of the trailer and open cubicle space in between the conference rooms. Contractor shall install electrical distribution lines and T-1 internet line to each temporary office. These temporary facilities shall be available for use by Owner's and

personnel of Owner's Engineer's and Lender's representatives, as designated by Owner. Once Owner's administration building is completed and Owner's personnel have moved out of the temporary office facilities, Contractor shall no longer have any obligation to maintain such temporary office facilities but shall provide Owner with sufficient space at the Site so that Owner may install its own temporary office facilities at that location. Contractor will provide all necessary utilities for such temporary office facilities, regardless of whether Contractor or Owner is furnishing the temporary office facilities. Contractor shall also provide two (2) twenty foot (20") Conex storage units for Owner's use near the main Owner's temporary offices, and shall provide parking spaces for Owner vehicles, including twenty five (25) parking spaces located at the main Owner temporary office building that are signed as being reserved for Owner, and additional parking in the parking lot for such temporary office facilities area. The obligation to maintain such temporary office facilities or the space for Owner to locate its own temporary office facilities at the Site, as applicable, as contemplated in this Section 2.5.3 shall continue until Substantial Completion of Stage II.

(d) Contractor shall maintain at the Site and at Contractor's office at 3000 Post Oak Blvd., Houston, Texas 77056, a complete and current collection of all issued for construction (IFC) drawings and related technical documentation prepared in connection with the Work, which shall be available for inspection by Owner, the Independent Engineer and the Lenders.

(e) Owner's inspection or failure to inspect any aspect of the performance of the Work shall not be deemed to constitute acceptance or approval of the Work or excuse or limit any of Contractor's obligations under this Agreement, including those under Article 10.

2.6 Employees and Key Personnel.

2.6.1 Key Personnel. Appendix H sets forth an organization chart with respect to Contractor's personnel working on the Liquefaction Project and identifies the key personnel from Contractor's organization who will be assigned to the Work ("**Key Personnel**"). Key Personnel shall be devoted to the Liquefaction Project for all of the time which is necessary to perform the Work and in any event during the periods of time specified in Appendix H, with the performance of the Work being a first priority of such Key Personnel. Contractor shall not remove any of the Key Personnel and if Contractor does so without obtaining Owner's prior written approval and none of the circumstances for resignations, death, illness or disability set forth in the penultimate sentence of this Section 2.6.1 apply, Contractor shall: (a) pay Owner an amount equal to [***]. Except with respect to replacement of the Senior Project Manager, Owner shall have the right to consent to the individual that will replace the removed Key Personnel, which acceptance shall not be unreasonably withheld. All requests for the substitution of Key Personnel shall include an explanation and reason for the request and the resumes of professional education and experience, which shall include a minimum of two (2) candidates of suitable qualifications and experience for any Key Personnel position other than the Senior Project Manager. Should Owner accept the replacement Key Personnel, Contractor shall, to the extent reasonably possible, allow for an overlap of at least two (2) Weeks during

which both the Key Personnel to be replaced and the new Key Personnel shall work together. If any Key Personnel resigns or is no longer available to perform the Work due to illness, death or disability, or is terminated and no longer employed or engaged in any capacity by Contractor or its Affiliates, Contractor shall nominate replacements for such Key Personnel within five (5) Business Days. For the avoidance of doubt, acceptance of new Key Personnel shall not constitute approval for removal of such Key Personnel, and the requirements of this Section 2.6.1 shall apply with respect to individuals identified as Key Personnel under all circumstances, including removal or reassignment of individuals under the circumstances as described in Section 2.6.2. **WITHOUT OTHERWISE LIMITING OWNER'S RIGHTS UNDER THIS AGREEMENT WITH RESPECT TO CONTRACTOR'S PERFORMANCE OF THE WORK, PAYMENTS MADE BY CONTRACTOR PURSUANT TO THIS SECTION 2.6.1 SHALL BE THE SOLE AND EXCLUSIVE REMEDY OF OWNER AND COMMON FACILITIES OWNER FOR CONTRACTOR'S REMOVAL OF KEY PERSONNEL IN VIOLATION OF THIS SECTION 2.6.1.**

2.6.2 All Personnel. Contractor's personnel assigned to perform any of the Work shall be skilled and qualified to perform the work assigned to such Person, and Contractor shall require that its Suppliers assign the Work to personnel that are skilled and qualified to perform the work assigned to such Person. Contractor agrees to promptly remove or reassign (or to require any Subcontractor to remove or reassign) from its services in connection with the Work any Person performing Work who does not meet the foregoing requirements. In addition, Owner may request that Contractor remove from the Work or the Site any personnel of Contractor or any of its Suppliers (including Key Personnel) who, in the reasonable opinion of Owner are unsafe or incompetent in the performance of his or her duties. In such event, Contractor shall, and shall cause its Suppliers to, immediately upon receipt of such a request, remove such personnel from Owner's property and from performance of the Work or the Site. Such personnel shall not thereafter be allowed on Owner's property, the Site or to perform any of the Work, without the prior written acceptance of Owner. **CONTRACTOR HEREBY RELEASES THE OWNER INDEMNIFIED PARTIES FROM AND AGAINST ANY AND ALL CLAIMS, CAUSES OF ACTION, DAMAGES, LOSSES, COST AND EXPENSES (INCLUDING ALL ATTORNEYS' FEES AND LITIGATION EXPENSES) AND LIABILITIES, OF WHATSOEVER KIND OR NATURE, WHICH MAY DIRECTLY OR INDIRECTLY ARISE OR RESULT FROM CONTRACTOR OR ANY SUPPLIER TERMINATING THE EMPLOYMENT OF OR REMOVING FROM THE WORK ANY SUCH PERSON FOLLOWING A REQUEST BY OWNER TO HAVE SUCH PERSON REMOVED FROM THE WORK.** Contractor shall promptly replace such discharged Person with a suitably qualified and experienced Person, at Contractor's expense.

2.6.3 Mandatory Briefings. In addition to such meetings as Contractor determines are necessary, Contractor shall, in formal briefings designed by Contractor for such purpose, instruct Contractor personnel, all Subcontractors and their respective personnel that are performing Work at the Site, on the terms and requirements of the Environmental Plan (including the role and authority of environmental inspectors as may be appointed by Owner pursuant to the Environmental Plan), safety and environmental protection policies and procedures for Work at

the Site, and the terms and requirements of the Permits and Applicable Laws, and all Contractor personnel shall comply with such policies and procedures, Permits and Applicable Laws.

2.6.4 Videos and Photographs. Contractor and Owner will regularly utilize drones or other means to take aerial photographs or videos of the Site during the performance of the Work. The Parties may also from time to time take other photographs or videos of the Work, the Site using other means. All use of drones and photography shall be in compliance with Applicable Law. To the maximum extent possible under Applicable Law, Contractor shall require each of its employees, and shall require its Subcontractors to require each of their respective employees, to acknowledge and agree that to the extent such employee is present at the Site and is included in any video or photograph taken by Owner or Contractor or their representatives or Invitees of the activities at the Site, such employee grants and releases to Contractor and Owner the right to record or photograph such employee while at the Site and to use and reproduce such recordings or photographs as Owner and Contractor (to the extent permitted under this Agreement) may determine is appropriate in connection with the Work and the Liquefaction Project, including posting such videos and photographs on the internet or other electronic media. Notwithstanding anything to the contrary in the foregoing, any photographs posted by Contractor on the internet or other electronic media shall not be identifiable as related to the Liquefaction Project unless permitted to do so in writing by Owner.

2.7 Supply Contracts and Suppliers.

2.7.1 Suppliers. Owner acknowledges and agrees that Contractor intends to have portions of the Work accomplished by Suppliers pursuant to written Supply Contracts between Contractor and such Suppliers, and that such Suppliers may have certain portions of the Work performed by other Suppliers. The provisions of any Supply Contract shall not relieve Contractor of any obligations to perform the Work or of its responsibility for each Supplier. Contractor shall be fully responsible to Owner for the acts and omissions of all Suppliers and of Persons directly or indirectly used by any of them in the performance of the Work to the same extent that Contractor is responsible to Owner under this Agreement for its own acts or omissions. **NO SUPPLIER IS INTENDED TO BE OR SHALL BE DEEMED TO BE A THIRD-PARTY BENEFICIARY OF THIS AGREEMENT.**

(a) All Suppliers shall be reputable, qualified firms with an established safety record and a record of successful performance in their respective trades performing identical or substantially similar work. To the extent necessary to perform the Work, Owner agrees that Contractor may allow the Suppliers to access the Site pursuant to the access rights granted to Contractor under this Agreement.

(b) Contractor shall and shall cause all of its Suppliers to comply with the International Labour Organization's conventions regarding forced labor and child labor, including the International Labour Organization Minimum Age Convention and Forced Labour Convention (and any Applicable Laws promulgated under either of these conventions). Forced, bonded (including debt bondage) or indentured labor, involuntary prison labor, slavery or trafficking of individuals shall not be used by Contractor or any of its Suppliers that perform any part of the Work. Child labor as defined by the International Labour Organization shall not be

used by Contractor or any Supplier. Compensation paid to Contractor's and its Supplier's personnel shall comply with all Applicable Laws regarding employment and labor, including those relating to minimum wages, overtime hours and legally mandated benefits. Contractor and each of the Suppliers shall maintain a safe and healthy work environment at any location where the Work is performed, in accordance with the International Labour Organization Guidelines on Occupational Safety and Health and all Applicable Laws regarding the safety of the work environment, and shall operate their facilities where the Work is performed in compliance with all local Applicable Laws regarding the environment, health and safety. Without limiting the foregoing, Contractor shall, and shall cause all of its Suppliers that perform any part of the Work in the United States to, comply with all Applicable Laws of the United States with regards to labor and employment when employing labor in connection with the Work. If there is a conflict between any Applicable Laws or any of the other standards or guidelines described in this Section 2.7.1(b), Contractor and the Suppliers shall be required to meet the highest of the performance standards that are in conflict.

(c) Contractor shall, and shall use commercially reasonable efforts to require each Supplier (including CIMTAS, but excluding other Affiliates of Contractor and Suppliers that are only party to General Services Subcontracts with respect to the Work), to permit Contractor to monitor compliance by such Suppliers with the requirements of Section 2.7.1(b), and to allow Contractor to conduct unannounced audits to verify compliance with the requirements of Section 2.7.1(b) of each such Supplier that performs any part of the Work. Contractor shall perform audits to verify compliance with the requirements of Section 2.7.1(b) of such Suppliers at Owner's reasonable request. With respect to Suppliers performing any part of the Work on the Site, Owner shall also have the right to request Contractor to conduct unannounced audits of such Suppliers to verify compliance with the requirements of Section 2.7.1(b), and Owner and the Lenders' representatives (including the Independent Engineer) may participate in such audit with Contractor. Such monitoring and audit activities may include inspection of facilities, gathering information from such Person's personnel, and reviewing relevant documentation and records.

2.7.2 Award of Supply Contracts for Portions of the Work; Copies of Major Supply Contracts.

(a) Without the prior written consent of Owner:

(i) Neither Contractor nor any of its Affiliates shall enter into Supply Contracts with respect to the portions of the Work identified on Appendix I with any Supplier other than the accepted Suppliers for such Work as identified therein;

(ii) Contractor shall not allow its specified Suppliers for the Scope of Work as described on Attachment I-1 to Appendix I to procure any Equipment listed on Attachment I-1 to Appendix I from any Supplier except from the accepted Suppliers of such Equipment as identified thereon;

(iii) Neither Contractor nor any of its Affiliates shall, and Contractor shall not allow any Supplier that procures any of the Equipment packages identified

on Attachment I-2 to Appendix I to, procure any of the Equipment packages listed on Attachment I-2 to Appendix I, or any of the components of such Equipment packages as identified on Attachment I-2 to Appendix I, from any Supplier except the accepted Suppliers of such Equipment as identified in Appendix I; or

(iv) Neither Contractor nor any of its Affiliates shall allow Suppliers to enter into or issue Supply Contracts with or to lower tier Suppliers to a First-Tier Supply Contract that is a Major Supply Contract if the value of the Supply Contracts with such lower tier Suppliers (in the aggregate based on all Supply Contracts with each such lower tier Supplier and its Affiliates) is equal to or exceeds twenty five percent (25%) of the value of such First-Tier Supply Contract; provided, that the prior written consent of Owner shall not be required with respect to a Supply Contract with a lower tier Supplier that is identified as an accepted Supplier on Appendix I for the portion of the Work to be performed pursuant to that lower tier Supply Contract.

Notwithstanding anything to the contrary in the foregoing, the prior written consent of Owner shall not be required with respect to General Services Subcontracts. In determining the value of a First-Tier Supply Contract and any lower tier Supply Contracts for the purposes of this Section 2.7.2, the value of any raw materials or consumables procured under any such Supply Contracts shall be included in the calculation of the value of such Supply Contracts, and the value of any Supply Contracts that are solely for the supply of raw materials or consumables shall be included when calculating the aggregate value of multiple Supply Contracts with a Supplier and its Affiliates.

(b) Notwithstanding anything to the contrary herein, Contractor shall, provide Owner with drafts of: (i) the Licenses; and (ii) Supply Contracts with Baker Hughes, while Contractor is negotiating the terms and conditions of such Supply Contracts and Licenses with the respective Supplier or Licensor (provided that the actual price and payment terms, and other commercial terms related to liquidated damages provisions, performance security and limits of liability may be redacted from such copies except to the extent such terms are or will be applicable to Owner following assignment of such Supply Contract or License at Substantial Completion). Without limiting the foregoing, Contractor shall not redact any License fees that are or may be owed following Substantial Completion or any payment terms related thereto. With respect to the Licenses and Supply Contracts referenced in this Section 2.7.2(b), Contractor shall provide Owner with a full and complete Fully Functional PDF copy of the proposed final Supply Contract or License, including all attachments, specifications and performance guarantees, redacted only as permitted in this Section 2.7.2(b), of each such Supply Contract or License no less than ten (10) Business Days before Contractor expects to award, issue or sign such Supply Contract or License. Owner shall use commercially reasonable efforts to respond to Contractor as soon as practically possible and in any event within ten (10) Business Days after receiving such copy. Contractor shall not issue, award or sign the Licenses and Supply Contracts referenced in this Section 2.7.2(b) with any such Vendor during such ten (10) Business Day period without Owner's prior written consent. Once signed, Contractor shall not amend the Licenses to adversely affect or limit the Technology License provided thereunder without Owner's prior written consent.

(c) When issuing any requests for quotations or similar documents to potential Suppliers for the procurement of Contractor-Furnished Items or any Equipment that include any seismic requirements, and when issuing any Supply Contracts for the procurement for such items, Contractor shall include only those seismic requirements referenced in the Design Criteria for Structures and Foundations (Document No. PAL-PJT-CIV-DEC-00-X-0002) and Basic Engineering Design Data (Document No. PAL-PJT-PRO-BOD-00-GEN-0002), and shall not include any other conflicting seismic requirements in any such requests for quotation or Supply Contracts.

2.7.3 Terms of Certain Supply Contracts.

(a) Except for (i) Supply Contracts between Contractor and [***], and (ii) with respect to any other Supply Contracts with a value of less than [***] (as calculated based on the aggregate value of all Supply Contracts to which a Supplier or any of its Affiliates is a party), Contractor shall, and shall cause its Affiliates that enter into First-Tier Supply Contracts to, include the following ((i) through (x) below) in all such First-Tier Supply Contracts, and shall cause its other Suppliers to include the following ((i) through (x) below) in each Supply Contract entered into in connection with the Work by such Supplier; provided that Contractor shall only be required to use commercially reasonable efforts to include the provisions as stated in subclauses (i), (ii), (iii), (viii) and (ix) of this Section 2.7.3(a):

(i) provisions to preserve and protect the rights of Owner under this Agreement and to the Work to be performed to the extent applicable to such Supply Contract;

(ii) require the Supplier to agree, and to cause its Suppliers of all tiers to agree, to provisions consistent with Section 2.23 and Section 2.24, and require such Supplier to agree, and to cause its Suppliers of all tiers to agree, that Owner may audit, inspect and copy documents and interview personnel, in the presence of Contractor's representatives, to the same extent as Owner may do so as to Contractor under Section 2.23.2;

(iii) require such Supplier to comply with requirements consistent with Section 2.7.10 and Section 2.29;

(iv) require such Supplier to provide lien subordinations and lien releases in accordance with Sections 2.9.1, 6.3.5 and 6.6;

(v) require such Supplier to cooperate with the FTZ requirements in accordance with Section 7.3;

(vi) require such Supplier to agree to suspension and termination rights consistent with Sections 19.1, 19.2 and 19.3;

(vii) require such Supplier to agree to terms consistent with Section 23.13, and to terms consistent with Section 11.1 and Article 12 to the extent applicable to such Supply Contract;

(viii) provide that Owner or any Lender (or its designee) may, by written notice to the other parties thereto but without their consent, take-over such Supply Contract in the event of a termination of this Agreement in accordance with Article 19, and, following any such termination and prior to any such take-over, shall be entitled at their option to step-in and cure a default of Contractor under such Supply Contract;

(ix) include provisions in form and substance similar to those set forth in Section 20.4 (except Section 20.4.5), and require such Supplier to agree to arbitration and consolidation of disputes in accordance with Section 20.7; and

(x) in the case of BASF SE: (A) Owner may by written notice and without consent, take assignment of such License in the event of the termination of this Agreement; and (B) such License shall not terminate notwithstanding any breach or termination of the applicable Master License Agreement between Contractor or its Affiliate and BASF SE, whether such breach occurs before or after assignment of such License to Owner.

In determining the value of any Supply Contract for the purposes of this Section 2.7.3, the value of any raw materials or consumables procured under such Supply Contract shall be included in the calculation of the value of such Supply Contract, and the value of any Supply Contract with the same Supplier that is solely for the supply of raw materials or consumables, shall be included when calculating the aggregate value of multiple Supply Contracts with a Supplier and its Affiliates.

(b) Contractor shall cause all Supply Contracts (i) between (A) Contractor and any Supplier; or (B) any Affiliate of Contractor and any Supplier (each, a “**First-Tier Supply Contract**”), to include warranties consistent with the warranties provided by Contractor hereunder (to the extent appropriate for the scope of supply) that shall be assignable to Owner in accordance with Section 10.2.1; and (ii) with respect to the Extended Warranty Items, to provide a Warranty Period that meets the requirements of Section 10.2.2.

2.7.4 Supply Contracts with Affiliates. With respect to any and all Work performed by an Affiliate of Contractor, Contractor hereby agrees that Contractor shall be fully responsible for such Affiliate and the performance of such Work by such Affiliate as if the Affiliate were the Contractor hereunder. Notwithstanding anything to the contrary in Section 2.7.2, 2.7.3, 2.7.5 or 2.7.6, Supply Contracts between Contractor and Affiliates of Contractor that are wholly (one hundred percent (100%)) directly or indirectly owned by Contractor, the Contractor Guarantor, or any Person that directly or indirectly owns the equity interests of the Contractor Guarantor, need not comply with the requirements of Section 2.7.2(a)(iv), 2.7.3, 2.7.5 or 2.7.6 and which shall not be assignable to Owner upon termination of this Agreement; provided, that with respect to Work identified on Appendix I, the Supply Contract with such Affiliate is for performance of Work for which such Affiliate is identified as an acceptable Supplier on Appendix I; provided, further, that the foregoing shall not limit the application of Sections 2.7.2, 2.7.3, 2.7.5 and 2.7.6 to CIMTAS or to Supply Contracts between Affiliates of Contractor (including CIMTAS) and other Suppliers. Accordingly, if during the performance of the Work, an Affiliate of Contractor that is performing the Work changes its circumstances such that it is no longer wholly (one hundred percent (100%)) directly or

indirectly owned by Contractor, the Contractor Guarantor or any Person that directly or indirectly owns the equity interests of the Contractor Guarantor, Contractor shall enter into a Supply Contract with such non-Affiliate that complies with the requirements of Sections 2.7.2, 2.7.3 and 2.7.5, which shall be assignable to Owner upon termination of this Agreement, and shall comply with the requirements of Section 2.7.6 with respect to such Supply Contract.

2.7.5 Terms of All Supply Contracts. All Work performed by any Supplier is to be performed in accordance with the requirements of this Agreement pertaining to conduct of the applicable Work. Subcontracted Work shall be accomplished pursuant to a written agreement between Contractor and the relevant Supplier, or between a Supplier and another Supplier. Contractor shall not, and shall not permit any of the Suppliers to, include pay-if-paid or pay-when-paid type provisions in any Supply Contract. Each Supply Contract shall, so far as reasonably practicable and as applicable to the scope of the Work to be performed under such Supply Contract, be consistent with the provisions of this Agreement, and shall, in addition to the requirements of Section 2.7.3 and where applicable to the scope of the Work to be performed under such Supply Contract, contain provisions that:

(a) require the Subcontractor to comply with the terms consistent with Section 2.3 and Section 2.17;

(b) require such Subcontractor to comply with the requirements consistent with Section 2.28;

(c) require such Subcontractor to agree to the provisions consistent with Section 2.8.3;

(d) require such Subcontractor to either enroll in the Contractor-provided insurance program or provide and maintain adequate insurance in accordance with the requirements of Article 16;

(e) require such Subcontractor to comply with the policies and rules set forth in or produced pursuant to Section 2.18 and Section 2.20; and

(f) obligate such Subcontractor specifically to consent to terms consistent with this Section 2.7.5 and Section 2.7.6.

2.7.6 Copies of Supply Contracts. Contractor shall provide to Owner in downloadable (by Owner in its offices), read-only, but otherwise Fully Functional files, PDF copies of each Supply Contract for Equipment intended to be incorporated into the LNG Facility with a value greater than [***]; provided that Contractor may redact the actual price and payment terms, and other commercial terms related to liquidated damages provisions, performance security and limits of liability, before making such copies available to Owner. In addition, in accordance with Appendix U, Contractor shall provide to Owner downloadable (by Owner in its offices), read-only, but otherwise in Fully Functional files, PDF copies of the technical requirements sections (including specifications, descriptions and tag numbers/stock code) of all other Supply Contracts for the provision of Contractor-Furnished Items.

2.7.7 Relationship with Suppliers. Nothing contained herein shall create any contractual relationship between any Supplier and Owner. Owner shall have no obligation to pay, or to cause the payment of, any monies to any Supplier or any other Person acting through, under or on behalf of Contractor.

2.7.8 Misconduct by Suppliers. If Owner notifies Contractor that a Supplier is failing to comply in any material respect with Applicable Laws, GECP, or the policies and procedures produced pursuant to Section 2.18 or Section 2.20, or that a Supplier otherwise persists in any conduct which is prejudicial to safety, health or the protection of the environment, Contractor shall consult with Owner in good faith regarding the actions that Contractor will take to cause such Supplier to comply with such policies or procedures or cease such conduct. Nothing herein shall be deemed to limit Contractor's responsibility under this Agreement as a result of the acts or omissions of Suppliers.

2.7.9 Ethical Business Dealings. Contractor shall not, and shall provide that its Suppliers and agents or employees of any of them shall not: (a) pay any commissions or fees, or grant any rebates, to any employee, officer or consultant of Owner or its Affiliates, or to immediate family members of any of them; (b) favor employees, officers or consultants of Owner or its Affiliates or their immediate family members with gifts or entertainment of any significant cost or value; or (c) without Owner's prior written acceptance, enter into any business arrangements with employees, officers or consultants of Owner or its Affiliates, or their immediate family members.

2.7.10 Use of Local Suppliers and Labor. Contractor understands the importance of utilizing Suppliers, located in Jefferson County, Texas, the City of Port Arthur, Texas and otherwise from the local region comprised of Orange, Hardin, Jasper, Newton, Liberty, Tyler and Chambers Counties, as well as the Bolivar Peninsula area of Galveston County, Texas, (the "**Region**"), including any such Suppliers that are Minority or Women Owned Businesses, Historically Under Utilized Businesses or Disadvantaged Business Enterprises ("**HUB/DBE Suppliers**") as described in the Tax Abatements (collectively, "**Local Suppliers**"), and employing qualified craft labor and other qualified personnel from County, City, and otherwise from the Region ("**Local Labor**"). Contractor has read the Tax Abatements, and agrees to comply with the provisions of the Tax Abatements to the extent applicable to Contractor with respect to the use of Local Suppliers and Local Labor. Owner will provide Contractor with any extensions or amendments to the Tax Abatements that Owner enters into from time to time. Contractor shall use commercially reasonable efforts to utilize Local Suppliers, and employ Local Labor in the performance of the Work at the Site (or related thereto), and shall require its Major Subcontractors that perform Work at the Site to use commercially reasonable efforts to do the same. In using commercially reasonable efforts, Contractor shall not be required to award a Subcontract to a Local Supplier if, in Contractor's reasonable judgment, such Local Supplier's bid is significantly more expensive than other bids received or if awarding a Subcontract to a Local Supplier would result in significant added expense, substantial inconvenience or sacrifice of operating efficiency. In each case where a Local Supplier has bid for, but was not awarded a Subcontract for any of the foregoing reasons and such Subcontract is in excess of [***], then Contractor shall list such Subcontract in its Monthly Status Report, indicating the date of the

latest update, but such list shall only be updated on a quarterly basis, in accordance with Attachment S-2 to Appendix S, together with the applicable reason for not awarding the Subcontract to the Local Supplier. In connection therewith, Contractor shall prepare and implement a program (the “**Local Engagement Program**”) to encourage the utilization of Local Suppliers and Local Labor, including by: (a) setting goals for identifying opportunities for involvement of Local Suppliers and Local Labor; (b) developing and implementing an outreach process with businesses and trade organizations based in the Region, to identify and attract possible business interest of Local Suppliers; (c) working with Owner to provide job listing information to the City of Port Arthur in accordance with the First Source Referral Agreement; (d) a pre-qualification process to enable Contractor to assess the suitability, qualifications and financial capability of Persons resident within the Region to become a Local Supplier or provide Local Labor; (e) a bidding process inclusive of qualified Local Suppliers on subcontract bid lists early in the procurement process; (f) a monitoring process to provide statistical reporting as and in the format reasonably requested by Owner on opportunities and utilization; and (g) identifying opportunities to collaborate on apprenticeship or other training programs with local educational institutions within the Region. Contractor shall provide the Local Engagement Plan to Owner for review and acceptance (not to be unreasonably withheld) as soon as practicable after the Bridging LNTP Date or the FNTP Date, whichever is earlier, and in any event by the earlier of (i) thirty (30) Days after such date. The Local Engagement Program will include KPIs with associated liability of up to [***] in the aggregate as determined and calculated in accordance with Appendix WW. Notwithstanding anything to the contrary in this Agreement, Owner’s sole and exclusive remedy, and Contractor’s sole and exclusive liability, for Contractor’s failure to comply with the Tax Abatements, this Section 2.7.10, the Local Engagement Program or the KPIs shall be the payment of liquidated damages as set forth in Appendix WW and Owner’s withholding rights under Section 6.2.2(b), and Contractor shall not be liable for any Tax Abatement benefit that either Owner or Common Facilities Owner did not obtain from the applicable Governmental Authorities or any Tax Abatements fines or assessments.

2.8 Construction Equipment.

2.8.1 Responsibility for Construction Equipment. Contractor shall furnish all Construction Equipment necessary and appropriate for the completion of the Work in compliance with this Agreement. Contractor shall only bring Construction Equipment onto the Site that is in good operating condition, with all safety gear in good working order, and shall maintain such Construction Equipment in good and safe working order, and repair and replace such Construction Equipment, as necessary to keep such Construction Equipment in good and safe working order, in accordance with Applicable Laws, manufacturers’ recommendations and GECF. Contractor shall and shall cause its Subcontractors to maintain inspection reports and maintenance logs at the Site for all Construction Equipment, in each case for which it is customary under GECF or recommended or required by the manufacturer of such Construction Equipment for Contractor to obtain such inspection reports and maintain such logs, and all such reports and logs shall be available for Owner’s review at any time. Notwithstanding anything to the contrary contained in this Agreement, Contractor shall be responsible for damage to or destruction or loss of, from any cause whatsoever, all such Construction Equipment.

2.8.2 Use of Affiliate Construction Equipment Upon Termination. If Owner terminates this Agreement pursuant to Article 19, all Construction Equipment that is (i) owned by Contractor or any Affiliate of Contractor that is wholly (one hundred percent (100%)) directly or indirectly owned by Contractor, the Contractor Guarantor, or any Person that directly or indirectly owns the equity interests of the Contractor Guarantor; or (ii) after such termination, remains under contract with, Contractor or by any Affiliate of Contractor and is not assigned to Owner in accordance with Section 2.8.3 or 19.7, and is then located (or at the time of any Contractor Event of Default was located) at the Site, in each case, shall be removed from the Site by Contractor.

2.8.3 Terms in Lease Agreements for Construction Equipment. Contractor shall require all lease agreements for Construction Equipment (other than lease agreements with its Affiliates) to permit assignment of any such lease agreement to Owner pursuant to the requirements of this Section 2.8.3 if Owner terminates this Agreement pursuant to Section 19.3. Any such lease agreement shall provide for the following:

(a) Within seven (7) Days after the date on which a termination of this Agreement by Owner pursuant to Section 19.3 has become effective, Owner may:

(i) notify the Supplier of any such Construction Equipment that such lease is assigned to Owner pursuant to this Section; and

(ii) undertake to pay all lease or hire charges in respect thereof from such date on the same terms in all respects as the same was leased to Contractor or its Subcontractor except that Owner shall be entitled to permit the use thereof by any other contractor employed by Owner for the purpose of completing the Work.

(b) Upon receipt of Owner's notice and agreement described in Section 2.8.3(a), the owner of such Construction Equipment shall lease to Owner such Construction Equipment on the terms described in Section 2.8.3(a)(ii).

(i) If Owner enters into any agreement for the lease of any Construction Equipment pursuant to Section 2.8.3, all sums properly paid by Owner under the provisions of any such agreement and all expenses properly incurred by Owner (including stamp duties) in entering into such an agreement shall be deemed to be part of the cost of completing the Work in the event of the termination of this Agreement pursuant to Section 19.3.

(ii) Contractor, upon request made by Owner at any time in relation to any item of Construction Equipment (other than lease agreements with its Affiliates), shall promptly provide Owner with the name and address of the owner thereof and certify that the agreement for the hire of such Construction Equipment contains a provision in accordance with the requirements of Section 2.8.3.

2.8.4 Failure to Remove Construction Equipment. If any item of Construction Equipment that Owner does not rent or lease under this Agreement, including Construction

Equipment described in Section 2.8.2, remains at the Site after the termination of this Agreement, or after Final Completion, then Owner may:

- (a) return any such items that are the property of Contractor or its Affiliates to such Person at Contractor's expense;
- (b) return any such items that are not the property of Contractor or its Affiliates to the Supplier thereof at Contractor's expense;
- (c) move such Construction Equipment to a location which does not interfere with the performance of the Work by others;

and all charges and expenses of and in connection with the return or movement (including the reasonable storage costs) of such Construction Equipment shall be a debt due from Contractor to Owner and Contractor shall reimburse Owner for such charges and expenses within thirty (30) Days after receipt of Owner's request for reimbursement.

2.8.5 Certain Owner Rights with Respect to Equipment Safety. Should Owner at any time observe any Construction Equipment that is unsafe or being operated in an unsafe manner, or in a manner that may, if continued, become unsafe, then Owner shall have the right (but not the obligation) to require Contractor to stop operating such Construction Equipment until such time as the Construction Equipment has been rendered safe to the reasonable satisfaction of Owner; provided, however, that at no time shall Contractor be entitled to an adjustment of the Contract Price or Key Date Schedule based on such work stoppage. Notwithstanding anything to the contrary in the foregoing, if Contractor disagrees with any order to stop operation of Construction Equipment that it receives from Owner, and Contractor notifies Owner of such disagreement, Owner and Contractor shall each promptly escalate such disagreement to a higher supervisory level, up to the level of the Contractor Representative and Owner Representative, as applicable. If after such escalation, Owner continues to enforce the stop order and it is later determined that the Construction Equipment was safe to operate and such stop order delayed the performance of the Work by more than four (4) hours, such stop order shall constitute an Owner-Caused Delay for the purposes of this Agreement.

2.9 Liens.

2.9.1 Contractor Liens. Contractor hereby, to the extent permitted by Applicable Laws, subordinates any mechanics' and materialmen's or other Liens that may be brought by Contractor against any or all of the Work, the Site, the LNG Facility or any other property of Owner or the Common Facilities Owner to any Liens granted in favor of any Lender or its representative, whether such Lien in favor of such Person is created, attached or perfected prior to or after any such Contractor Liens, and shall require its Suppliers to similarly subordinate their Lien rights. Contractor agrees to comply with reasonable requests of Owner for supporting documentation required by any Lender or Lender representative, including any necessary Lien subordination agreements, affidavits or other documents that may be required to demonstrate that Owner's property, the Common Facilities Owner's property, the LNG Facility

and the Site are free from Liens arising out of the furnishing of Work under this Agreement (including any Subcontract).

2.9.2 Supplier Liens. Contractor shall be solely responsible for payment of all its obligations and the payment by its Suppliers of their obligations. Contractor shall keep Owner's property, the Common Facilities Owner's property, the LNG Facility and the Site free of Liens filed by its Affiliates, and, subject to Owner having paid undisputed amounts due hereunder to Contractor as of such date, Contractor shall keep Owner's property, the Common Facilities Owner's property, the LNG Facility and the Site free of Liens filed by its other Suppliers. If a Lien is filed against Owner's property, the Common Facilities Owner's property, the LNG Facility or the Site by an Affiliate of Contractor or another Supplier, Contractor will (in the case of Suppliers other than an Affiliate of Contractor, subject to Owner having paid undisputed amounts due hereunder to Contractor as of such date), promptly commence appropriate action to remove such Lien, and shall thereafter diligently pursue the release of such Lien in accordance with this Section 2.9.

2.9.3 Release or Discharge of Lien. Subject to Owner having paid undisputed amounts due hereunder to Contractor as of such date, if any Contractor Lien that is filed against the Owner's property, the Common Facilities Owner's property, the LNG Facility or the Site as a result of the Work is not removed within fifteen (15) Business Days after it is filed, Contractor shall (a) furnish a bond in accordance with Tex. Property Code Ann. Chapter 53, Subchapter H (§53.171, *et. seq.*) to obtain the release of such Lien; and (b) defend any action (i) based on any theory that Contractor or any of its Suppliers or any of Contractor's Affiliates failed to properly pay its applicable employees as agreed or otherwise in accordance with Applicable Law; or (ii) which may result in the assertion of a Contractor Lien or other similar remedy in connection with the performance of the Work. Owner may audit Contractor's relevant Books and Records if a Contractor Lien or other similar remedy is asserted and Contractor does not as soon as practicable secure the release of the same, whether by posting a bond or otherwise. If Contractor fails to remove or discharge any Lien within the required fifteen (15) Business Day period, then Owner may, in its sole and absolute discretion and in addition to any other rights that it has under this Agreement, remove or discharge such Contractor Lien using whatever means Owner, in its sole and absolute discretion, deems appropriate, including posting of a bond or payment of settlement amounts that Owner in its sole and absolute discretion deems appropriate. Subject to Owner having paid undisputed amounts due hereunder to Contractor as of such date, Contractor shall reimburse Owner, or Owner may withhold sufficient amounts to reimburse Owner, for all Claims and expenses (including court costs, attorneys' fees and other litigation costs), and including contractual liability to any Person for any of the above, on account of or which may be incurred by any member of the Owner Group in connection with the removal or discharge of such Contractor Lien.

2.9.4 Affidavit of Completion. No later than thirty (30) Days prior to the scheduled Substantial Completion Date of Stage II, Contractor shall prepare and submit to Owner for review and acceptance, an affidavit of completion of the Work that complies with the requirements of Texas Prop. Code §53.106 and is otherwise in form and substance acceptable to Owner. Contractor shall respond to any comments that Owner may provide within ten (10) Days

after Contractor receives such comments. Once Owner accepts the proposed affidavit, Owner shall sign such affidavit and Contractor shall file such affidavit of completion in the records of Jefferson County of the State of Texas no later than ten (10) Days after the Final Acceptance Date of the last Stage to achieve Final Acceptance, and shall on the same date as the affidavit is filed (but subject to Owner having provided Contractor with a list of Persons that have sent a notice of Lien liability to Owner or requested a copy of the affidavit of completion), send a copy of the affidavit to any Supplier that is or Person on the list provided by Owner and provide Owner with a copy of such recorded affidavit no later than five (5) Days after such filing.

2.10 Contractor Permits; Owner Permits.

2.10.1 Contractor Permits. Contractor shall obtain and maintain all Contractor Permits, including those identified or described in Appendix J-2, on or before the date that they are required for performance of the Work in accordance with the Project Schedule.

2.10.2 Owner Permits.

(a) Without limiting Contractor's rights under Section 8.3.1, Contractor shall cooperate with and shall provide reasonable assistance to Owner in obtaining and maintaining any Owner Permits, including preparing and developing supporting drawings, models, documentation and other information requested by the FERC, PHMSA or other Governmental Authorities (such as in connection with the FERC-approved Implementation Plan) pursuant to or in connection with any Owner Permit, consistent with, or reasonably inferable from, Contractor's Permitting Plan. Contractor shall collect and provide data and other information reasonably available to Contractor required for any applications for the Owner Permits and any amendments or modifications to such Permits that Owner determines has become necessary during the performance of the Work or are requested by the FERC, PHMSA or other Governmental Authorities.

(b) With respect to any clarifications to the Owner Permits, including any applicable amendments, modifications or variances to the Owner Permits, as described on Appendix J-3, Owner shall obtain such amendment, modification or variance as Owner determines is necessary or appropriate.

(c) Where any amendments or modifications to an Owner Permit is required due to a Contractor-initiated change or modification to the engineering and design of the LNG Facility after [***], Contractor shall promptly notify Owner in writing at the time that such change to the engineering or design is proposed. To the extent that Owner agrees to such change and agrees to obtain the necessary amendment or modification of the relevant Owner Permits in connection with such change, Contractor shall prepare the necessary engineering and other technical documentation for such amendments or modifications, and submit the same to Owner for review and comment. Once Owner has no further comments to the proposed documentation, Owner shall submit an application to amend or modify the relevant Owner Permit to the applicable Governmental Authority. Any delays in issuance of such Permits shall not constitute an Owner-Caused Delay except to the extent expressly provided in clause (d) of the definition of Owner Caused Delay, or otherwise serve as the basis for a Change Order (but without limiting

Contractor's rights with respect to a Change in Law). Contractor may request that Owner request expedited reviews of modifications or amendments to Owner Permits. To the extent that Contractor makes such a request and other Owner Permit applications, or amendments or modifications of Owner Permits, are delayed as a result of the applicable Governmental Authority expediting its review as requested, any delays related to issuance of such delayed Owner Permit or amendment or modification shall not constitute an Owner-Caused Delay or serve as the basis of a Change Order.

(d) Contractor understands that the Owner Permits may require the satisfaction of conditions for the continuing performance of the Work, and that Owner's ability to maintain such Permits and satisfy such conditions, including obtaining further approvals or authorizations from Governmental Authorities such as FERC and PHMSA for the performance of the Work, is in part dependent on Contractor's reasonable assistance and cooperation. Contractor acknowledges and agrees that the Baseline CPM Schedule includes customary time for FERC and PHMSA reviews and inspections and that the requirements of Governmental Authorities with respect to the Owner Permits shall not serve as the basis for a Change Order, unless such approvals or authorizations from such Governmental Authorities are received more than sixty (60) Days after Contractor's submission of complete and accurate supporting documentation to Owner. Contractor shall be responsible for providing the necessary engineering and technical information and preparing supporting documentation for Owner to demonstrate that the Owner Permit conditions are satisfied. The Parties intend that the supporting documentation to be provided by Contractor will be consistent with or reasonably inferable from the documentation that is contemplated in Contractor's Permitting Plan as of the Effective Date, but acknowledge that the relevant Governmental Authority may require additional or different documentation. In such case, Contractor shall provide such documentation as is reasonably available to Contract, and Contractor's Permitting Plan may be updated accordingly from time to time as the Parties agree. Contractor shall submit to Owner a complete and accurate package of engineering and technical documentation in accordance with the relevant Owner Permit for each such further approval or authorization, no less than sixty (60) Days prior to the date receipt of such approval or authorization is required in order to avoid delays to the performance of the Work, or such shorter period of time as Owner and Contractor agree are appropriate under the circumstances of the required approval or authorization. Owner shall endeavor to submit such package for approval or authorization within fourteen (14) Business Days after Contractor's submission of same to Owner. Notwithstanding anything to the contrary in the foregoing, the Parties acknowledge and agree that the sixty (60) Day requirement in the foregoing does not apply in the case of engineering and technical documentation that is submitted in response to Condition No. 30(b) of the FERC Order. Contractor shall respond to any Owner comments, provide additional documentation reasonably available to Contractor requested by an applicable Governmental Authority, assist Owner in responding to questions or requests for further information from the applicable Governmental Authorities, and coordinate with Owner so that any such further approvals or authorizations are obtained in time so as to not delay performance of the Work in accordance with this Agreement. Any delay by Owner in obtaining any such further approval or authorization due to Contractor's failure to provide such assistance or to reasonably cooperate with Owner with respect to the permitting process shall not constitute an Owner-Caused Delay for the purposes of this Agreement.

(i) Contractor shall promptly notify Owner of any conflict or discrepancy between or among the Owner Permits, the Basis of Design, the Scope of Work and the design of the LNG Facility (other than as identified on Appendix J-3) as and when such conflicts or discrepancies are identified, and confer with Owner to determine how Owner desires to resolve such conflicts. If Owner elects to resolve the conflict by amending or modifying an Owner Permit, Contractor will provide assistance in accordance with the applicable provisions of this Section 2.10.2.

(e) Contractor and Owner shall regularly schedule meetings to review the schedule for submission of Permit applications, establish priorities, and monitor progress on the preparation of Permit applications and issuance of Permits. Both Parties shall use commercially reasonable efforts to provide the other Party with relevant information and Permit applications at least thirty (30) Days prior to the submission date of a Permit application.

(f) During the course of obtaining the Contractor Permits, Contractor and Owner shall meet as mutually agreed to determine which, if any, of the Contractor Permits will be necessary for Owner to operate each Stage of the LNG Facility following Substantial Completion. If any such Contractor Permits are identified, such Contractor Permits shall be obtained in Owner's name, where applicable and subject to the other provisions of this Section 2.10, or assigned or transferred to Owner at Substantial Completion of the relevant Stage. Any necessary modification or amendment to such Contractor Permits that must be made following Substantial Completion with respect to Owner's operation of the LNG Facility after Substantial Completion shall be Owner's responsibility.

(g) To the extent a Permit that is identified following the Effective Date as being required for operation of the LNG Facility is not listed as a Contractor Permit or Owner Permit on Appendix J-2 or Appendix J-1, respectively, and such Permit is legally required to be issued in Owner's name, such Permit shall be an Owner Permit for purposes of this Section 2.10 and Contractor shall cooperate with and shall provide reasonable assistance to Owner until Substantial Completion of the applicable Stage in obtaining and maintaining such Permits, including preparing and developing supporting documentation and other information reasonably available to Contractor that is requested by the Governmental Authorities, in a timely manner so as to not delay the review or issuance of such Permit by the applicable Governmental Authority.

2.10.3 Interactions with Governmental Authorities. Contractor shall at all times cooperate and coordinate with Owner with respect to all interactions with Governmental Authorities related to the Work or the Liquefaction Project. Specifically, without limiting the foregoing, Contractor shall:

(a) dedicate an individual to coordinate with Owner to expedite the development of responses to technical queries from Governmental Authorities such as FERC and PHMSA, and the submission of supporting documentation necessary to satisfy Permit conditions so that Owner can obtain further approvals or authorizations for the continued performance of the Work;

(b) notify Owner of Contractor's intent to obtain or renew any Contractor Permit at least five (5) Business Days in advance of such filing wherever practicable or otherwise as soon as practicable;

(c) copy Owner on all filings, applications and written correspondence with any Governmental Authority as such relates to Contractor's execution of the Work;

(d) invite Owner to attend and participate in each meeting between Contractor and any Governmental Authority relating to the Work;

(e) if Contractor encounters any issue or problem with any Governmental Authority in connection with the Work or any of Contractor's obligations hereunder, (i) promptly notify Owner thereof; and (ii) coordinate and cooperate fully with Owner to solve such issue or problem; and

(f) promptly notify Owner (which notice shall include a copy of the relevant correspondence from the applicable Governmental Authority) if Contractor or any Supplier receives any notice of violation or similar notification from a Governmental Authority which asserts or alleges any breach or violation of any Permit.

Notwithstanding the foregoing, Contractor acknowledges and agrees that:

(g) inspections or reviews by Governmental Authorities may extend for a number of days and Contractor and the relevant Suppliers of Work being inspected or reviewed must be available to and reasonably cooperate with Owner and representatives of such Governmental Authorities during the period of the inspection or review, and respond promptly to requests of representatives of Governmental Authorities that relate to the Work, so as to facilitate such inspection or review;

(h) no such cooperation or coordination nor provision of any assistance or advice by Owner shall reduce, diminish or otherwise affect any obligation of Contractor hereunder; and

(i) Without limiting Contractor's rights with respect to an Excusable Delay, Contractor shall not be entitled to a Change Order as a result of any such cooperation or coordination or provision of assistance or advice provided in accordance with this Section 2.10.3, regardless of whether Owner is successful in addressing any issue or problem.

2.11 Use of the Site.

2.11.1 Use of the Site. From and after the FNTP Date and until Substantial Completion of Stage II, Contractor shall, subject to the other provisions of this Section 2.11, Section 2.28 and Appendix M, be entitled to full use of the Site for the conduct of the Work in compliance with the terms of this Agreement such that Contractor may progress with construction on a continuous basis without material interruption or interference. Subject to Sections 2.5.3 and 14.1, Contractor shall not allow any Persons (other than Contractor's or any

Supplier's employees or officers) to access the Site except directly in connection with the performance of the Work, without providing prior written notice to Owner of the identity of such Persons. Thereafter, Contractor shall be entitled to use the Site as reasonably necessary to fulfill its obligations under Section 2.11.10, but in any event for no longer than thirty (30) Days after the Final Acceptance Date of Stage II, after which Contractor shall have no further right to access or use the Site except in accordance with Article 10. Contractor acknowledges and agrees that (a) following the initial introduction of hydrocarbons in Stage I, access to Stage I and the Common Facilities may be further restricted in accordance with Permit requirements; (b) following Substantial Completion of Stage I, access to the controlled areas related to Stage I and the Common Facilities: (i) for the purpose of completing any unfinished and planned Work, shall be on the terms set forth in Section 2.11.2(a); and (ii) for the purpose of performing unplanned Work, including Punch List Items and any Corrective Work, shall be on the terms set forth in Section 2.11.2(b); and (c) after Substantial Completion of a Stage, Owner's operating procedures and the Owner HSSE Program shall apply to all Work performed on the areas of the Site and the LNG Facility that are controlled by Owner following Substantial Completion of that Stage, in addition to any further procedures adopted by Contractor.

2.11.2 Use of the Site After Stage I Has Achieved Substantial Completion.

(a) Planned Activities. Contractor shall provide Owner with notice in writing of the expected dates for performance of Work on a Stage after such Stage has achieved Substantial Completion in accordance with Appendix M, including providing the updates as described therein. Contractor shall submit a detailed written plan to Owner for Owner's review and comment or acceptance at such time as described in Appendix M, for the performance of Work that may interfere with operation of a Stage that has achieved Substantial Completion. Contractor's plan shall minimize, to the greatest extent reasonably possible, interference with the operation of any Stage that has achieved Substantial Completion, and shall identify any such interference that may occur. Once Contractor's plan is accepted by Owner, Contractor shall perform such Work in accordance with such plan. Owner shall permit Contractor with access when and as set forth in such approved plan.

(b) Unplanned Activities. No Work shall be performed on any part of a Stage that has already achieved Substantial Completion except in accordance with Appendix M. During the performance of the Work, if a situation arises that requires Work to be performed on a Stage that has achieved Substantial Completion in addition to that planned pursuant to Section 2.11.2(a), or if Contractor intends or desires to perform any aspect of the Work which Contractor reasonably believes has the potential of interfering with the operation of a Stage that has achieved Substantial Completion, in each case other than the Work planned in accordance with Section 2.11.2(a) and Appendix M, Contractor shall follow the procedures for preparation and submission of a plan for unplanned activities set forth in Appendix M. Such plans shall provide for the performance of such Work in a manner that minimizes, to the greatest extent reasonably possible, interference with the operation of any Stage that has achieved Substantial Completion, and shall identify any such interference that may occur. Contractor shall submit such plan to Owner for review and comment or acceptance, and once such plan is accepted by Owner, Contractor shall perform such Work in accordance with such plan.

Notwithstanding Owner's agreement to the schedule and the plan for the performance of such Work, Owner may, in its sole and absolute discretion, subsequently prohibit the performance of such Work on such scheduled date, and Contractor shall work with Owner to develop a new plan and date for performing such Work in accordance with this Section 2.11.2(b).

(c) Plan Requirements. In addition to the requirements set forth in Section 2.11.2(a), Section 2.11.2(b) or Appendix M, as applicable, Contractor shall specifically note in each plan prepared pursuant to Section 2.11.2(a) or Section 2.11.2(b), any interconnection activities or other portions of the Work that would involve shutting down or curtailing production of LNG or NGLs for any Stage that has achieved Substantial Completion, or would diminish the capacity or performance of the Common Facilities in any manner.

2.11.3 Other Locations. Contractor shall carry out the Work so as not to interfere unnecessarily or improperly with, or damage, any access to, use or occupation of, public or private roads and footpaths or properties whether in the possession of Owner or of any other Person. Contractor shall liaise with, and ascertain the requirements of, all Governmental Authorities in relation to vehicular access to and egress from the Site and access via waterways, and shall comply with those requirements. Contractor shall so organize the Work as to minimize, and if required by any Governmental Authorities having jurisdiction over such roads or footpaths, avoid, vehicular travel during peak travel time on public roads, such as (but not limited to) school start and finish times. Contractor shall use commercially reasonable efforts, in accordance with GECP, to prevent damage to any highway or bridge by any traffic of Contractor or any Supplier and in particular, but without limitation, shall: (a) select routes, obtain all Contractor Permits from, and post any and all bonds for potential damage required by, relevant Governmental Authorities; and (b) choose and use vehicles and restrict and distribute loads so that any traffic interference or damage to roads and bridges which may arise from the moving of equipment and materials to and from the Site shall be limited as far as reasonably possible, consistent with those standards. Contractor shall maintain all access routes so as to minimize dust and dirt accumulation on public roads adjacent to the Site, as well as within the Site. Contractor shall be deemed to have satisfied itself as to and shall be fully responsible for the routing for delivery of heavy or large loads to the Site. Contractor shall implement appropriate traffic control measures with respect to the performance and delivery of the Work, including those required under Applicable Laws. As between Owner and Contractor, Contractor shall be fully responsible for all Claims made by third parties for damages, losses, costs, expenses and charges arising out of damage to roads, bridges and other third-party property caused by Contractor or any Supplier during performance of the Work and shall promptly restore at its own cost and expense such property to the condition it was in before such damage to the extent required by such third-party Claim. Contractor shall and shall cause its Suppliers to coordinate and conduct the performance of the Work so as to not interfere with or disrupt the use and peaceful enjoyment of any property adjacent to the Site. For the avoidance of doubt, Contractor and Suppliers conducting the Work in accordance with Applicable Laws and Permits shall not be deemed to disrupt the use and peaceful enjoyment of any property adjacent to the Site. Where the nature of the Work is such as to require the use by Contractor of waterborne transport or Contractor's or any Supplier's use any of the waterways, Contractor shall and shall cause its Suppliers to, coordinate with the applicable Governmental Authorities so as to avoid, or

minimize to the extent possible, any interference by Contractor or its Suppliers with the access by and use of the waterways by other Persons, and shall comply with all Applicable Laws during use of waterborne transport or any other use of waterways in connection with the performance of the Work. Contractor shall promptly address any complaints from the local communities and harbors and waterways arising from any such damage or interference described in this [Section 2.11.3](#) in an expedient and professional manner. Contractor shall ensure that the construction dock complies with the terms of the Owner Permits, as applicable, and all other Applicable Laws. Contractor acknowledges that busy harbors, waterways and jetties and the use of such facilities by other Persons shall not constitute a Force Majeure event or an Owner-Caused Delay.

2.11.4 [Owner Agreements](#). At all times during the performance of the Work at the Site, Contractor shall comply, and shall cause all Subcontractors performing Work at the Site to comply, with the requirements of the leases, easement and other rights affecting Owner's or the Common Facilities Owner's real property as set forth in [Appendix LL](#), including allowing third parties to access the Site in accordance with such rights.

2.11.5 [Pipeline Crossings Rights-of-Way](#). Contractor shall provide Owner with the design of the pipeline crossings in the locations as depicted on [Attachment L-4](#) to [Appendix L](#) as Owner reasonably requires in order to obtain the necessary rights-of-way for such pipeline crossings in accordance with [Section 3.14](#). In designing the crossings, Contractor shall design the crossing such that it would not cause any adverse effect on the utilities, and such design shall be subject to approval by the utilities.

2.11.6 [Off-Site Laydown Yard Lease](#). Contractor's lease agreement with respect to its selected off-Site laydown yard in Jefferson County, Texas shall be assignable to Owner at Owner's request without the consent of the landlord upon a termination of this Agreement. If Owner requests assignment of such lease in connection with the termination of this Agreement, Contractor shall provide Owner with a true, correct and complete copy of such lease.

2.11.7 [Location of Site Boundaries](#). Prior to issuance of the Full Notice to Proceed, Contractor shall physically locate in the field the coordinates and the boundaries of the areas of the Site as shown on [Attachment L-1](#) and [Attachment L-5](#). Once such coordinates and boundaries are physically located in the field, Contractor shall notify Owner so that Owner may review the staked locations. If any of the boundaries of the areas of the Site as shown on [Attachment L-1](#), as located by Contractor in the field, encroach or infringe on any easements, rights-of-way or other property interests used or held by third parties, or areas of the Owner Property reserved for other uses by Owner, and Owner determines that the boundaries of the areas of the Site as shown on [Attachment L-1](#) must be moved, Owner and Contractor shall cooperate to re-locate the applicable boundaries of the areas of the Site as shown on [Attachment L-1](#). Once the Parties have agreed on the physical locations of the boundaries of the areas of the Site depicted on [Attachment L-1](#), Contractor shall survey such boundaries and prepare a survey depicting all boundaries of the areas of the Site and submit the same to Owner for review and approval. Once Owner approves the survey, the Parties shall amend the

Agreement by revising Attachment L-1 by replacing it with the agreed survey which shall thereafter define the Site for all purposes under this Agreement.

2.11.8 No Commercial Activities. Neither Contractor nor its Subcontractors nor its or their employees shall establish any commercial activity or issue concessions or permits of any kind to third parties for establishing commercial activities on the Site or any other lands owned, leased or otherwise controlled by Owner; provided, that lunch wagons and vending machines may be permitted upon prior written acceptance by Owner.

2.11.9 Hunting, Fishing and Firearms. Contractor shall cause its personnel not to, and shall cause each member of Contractor Group to cause its personnel not to, hunt, fish or carry any weapons, firearms or other similar items at the Site or any other property owned, leased or controlled by Owner or any of its Affiliates, including the Common Affiliates Owner. Owner may inspect the personnel of any member of Contractor Group to confirm compliance with this Section 2.11.9. Contractor shall notify its personnel and shall require each member of Contractor Group to notify its personnel that a violation of this Section 2.11.9 may result in prosecution under Applicable Laws, including Applicable Laws related to trespassing or the possession of weapons, firearms and other similar items.

2.11.10 Clean-Up. Contractor shall, to Owner's reasonable satisfaction, at all times and in a professional manner in accordance with all Applicable Laws, appropriately manage and remove and dispose of all waste materials or rubbish caused by the activities of Contractor or any of its Subcontractors. Without limitation of the foregoing or limiting Contractor's obligations, Contractor shall clean up all such waste materials or rubbish at Owner's request with reasonable notice. As soon as practicable following Substantial Completion of a Stage, Contractor shall remove, at its own cost, all of its equipment, materials and other items not constituting part of the LNG Facility and remove all waste material and rubbish (but not including Pre-Existing Hazardous Materials) from the areas of the Site related to that Stage. As soon as practicable after completion of all of the Punch List Items with respect to both Stages, or upon Owner's election to complete the Punch List Items under Section 9.9.4, Contractor shall, and shall cause the Suppliers to, remove, at Contractor's cost, all waste material and rubbish (but not including Pre-Existing Hazardous Materials) and all of Contractor's or such Supplier's equipment, materials and other items not constituting part of the LNG Facility, and restore the Site (to the extent applicable) in accordance with all Permits and this Agreement. In the event of Contractor's failure to comply with any of the foregoing, Owner, having given Contractor five (5) Days' notice and Contractor having failed to commence and thereafter diligence pursue a cure for such failure to comply, may accomplish the same at Contractor's expense.

2.12 Roads; Shipping and Storage; Laydown Areas; Importing Equipment.

2.12.1 Roads and Site Access Infrastructure. Contractor shall be responsible for providing or constructing any access roads, haul roads, docks, or other site access infrastructure necessary for Contractor to transport materials, including Equipment and Construction Equipment, to the Site. Contractor shall use the locations of entrances onto the Site as identified in the Owner Permits. Any activities of Contractor in connection with the foregoing that require Contractor to access to, or that may cause interference with the operation of, any Stage that has

achieved Substantial Completion, including any potential interference with traffic in the Sabine Neches Waterway, shall be subject to the requirements of Section 2.11.2.

2.12.2 Shipping and Storage.

(a) Contractor shall, as part of the Work: (i) arrange for complete handling of all Equipment, including inspection, expediting, quality assurance, shipping, loading, unloading, FTZ admission, customs clearance, receiving, and storage; (ii) make all necessary arrangements for tugs, escort services and any other arrangements necessary for the use of waterborne transport of any items, including Equipment, to the Site; and (iii) construct and maintain the heavy haul road for use in transporting items delivered to the materials offloading facility as described in Appendix A, until Substantial Completion of Stage II occurs and care, custody and control of Stage II has been transferred to Owner. Contractor has provided Owner with a shipping Plan as part of the Project Execution Plan that lays out the methodology and logistics of transporting the Equipment, the Construction Equipment and all other items and materials incorporated into the LNG Facility as part of the Work or used in connection with or necessary to conduct the Work but which do not form a permanent part of the LNG Facility, which Contractor shall follow in shipping all Equipment to the Site. If Contractor determines that any access roads over which it will transport items, including Equipment, to the Site, must be widened or otherwise improved under applicable requirements of the Department of Transportation, FERC or other Governmental Authorities in connection with Contractor's proposed use, Contractor shall be responsible to obtain any Permit or prepare any applications to modify any Owner Permit and, subject to Owner's rights with respect to the Owner Permits, submit such application and obtain the necessary modifications to such Owner Permit, and subject to Contractor's rights with respect to a Change in Law, shall bear the risk of delay with respect to issuance of any such Permit or modification.

(b) All Equipment, including operating spare parts and Capital Spare Parts, and other items comprising part of the Work stored at a location other than the Site or with respect to which title has passed to Owner under this Agreement shall be segregated from other goods and shall be clearly marked as "**Property of Port Arthur LNG, LLC**" or "**Property of PALNG Common Facilities Company, LLC**," as applicable. Contractor shall be solely responsible for the preservation and maintenance of all Equipment, including operating spare parts and Capital Spare Parts, Construction Equipment and any other items of the Work, whether stored in any warehouse, stored on or off the Site, or installed in the LNG Facility, until transfer of care, custody and control of the respective Stage to Owner in accordance with Section 11.2, as applicable. Without limiting the generality of the foregoing or the requirements of the Quality Assurance Plan, Contractor shall store all Equipment, including operating spare parts and Capital Spare Parts, and shall maintain all Equipment while in storage, in accordance with the requirements of the applicable Supplier's requirements for the preservation and maintenance of the relevant Equipment, and the requirements of the Scope of Work, Applicable Laws, if any, and any insurance programs related to such Equipment.

(c) Contractor shall not store any imported Equipment which is imported through the FTZ and for which Owner is responsible for Customs Duties in accordance

with Section 7.3 in any location other than a location designated as part of a FTZ. Notwithstanding the foregoing, Equipment that is not imported or is not eligible to be imported through the FTZ, or which is necessary for fabrication of modular components and must be stored at the modularization yards utilized by Contractor in Louisiana, notwithstanding that such modularization yards are not designated as a FTZ, may be stored off the Site at such modularization yards or other locations as may be permissible under the Owner Permits.

(d) In any event, if Contractor elects to store any component or item of Equipment at any location other than the Site, Contractor shall: (i) prior to or concurrently with placing any component or item of Equipment into storage at any location other than the Site, tag the Equipment as provided in Section 2.12.2(b); (ii) on a quarterly basis (as of the end of each calendar quarter), provide written notice of the storage location of any component or item of Equipment where the value of the item of Equipment, or the item of Equipment of which such component is a part of, exceeds [***], specifying in such notice the components or items of Equipment currently stored at such location; (iii) provide a quarterly inventory (as of the end of each calendar quarter) to Owner of all components or items of Equipment in storage with values as described in subclause (ii) of this Section 2.12.2(d), specifying the location of each such component and item of Equipment; and (iv) provide Owner with reasonable access to each such storage location and such components or items of Equipment to allow Owner or its designee to inspect such components or items of Equipment for the purpose of verifying Contractor's compliance with the requirements of Section 2.12.2(b) and this Section 2.12.2(d). The notices and quarterly inventories provided by Contractor pursuant to this Section 2.12.2(d) shall be provided in the form and format as described in Attachment S-4 to Appendix S.

(e) References to the Equipment or any component or item thereof in this Section 2.12.2 shall in all cases include operating spare parts and Capital Spare Parts.

2.12.3 Laydown Areas. All of the off-Site laydown areas that Contractor will utilize during performance of the Work are defined in Contractor's Project Execution Plan. Contractor shall not utilize any other off-Site laydown areas in connection with the performance of the Work without obtaining Owner's prior written approval to the use of such laydown area; provided, however, if a proposed off-Site laydown area complies with the Owner Permits and complies with the requirements of Section 7.3, then Contractor shall notify Owner in advance in writing of the use of such other off-Site laydown area, but need not obtain Owner's prior written approval.

2.12.4 Importing Equipment. Contractor shall make all arrangements, including the processing of all documentation, necessary to import Equipment and any other equipment and other items necessary to perform the Work into the U.S., and shall coordinate with the applicable Governmental Authorities in achieving clearance of U.S. customs for all such Equipment and other items. Equipment and other Contractor-Furnished Items for which Owner is responsible for Customs Duties pursuant to this Agreement shall be imported through a FTZ in accordance with Section 7.3. If the FTZ is not designated as of the date on which Contractor is importing the relevant Equipment, then Contractor shall import the relevant Equipment and Customs Duties will be paid by the Parties in accordance with Section 7.3 regardless of the fact

that the FTZ has not been designated. If the designated FTZ for the Liquefaction Project does not include Contractor's selected off-Site laydown yard in Jefferson County, Texas, Contractor may nevertheless import the Equipment and store it at the selected off-Site laydown yard as may be permissible under the Owner Permits and, subject to Contractor having notified Owner in writing that it has entered into an option to lease such selected off-Site laydown yard on or prior to March 31, 2020, Owner will reimburse Contractor for Customs Duties. If Equipment or any Contractor-Furnished Items for which Owner is responsible for Customs Duties pursuant to this Agreement are imported through a FTZ location other than the FTZ for the Site, Contractor shall comply with Applicable Laws when transporting such Equipment or Contractor-Furnished Items to the Site so that such Equipment or Contractor-Furnished Items are still eligible to utilize the FTZ for the Site. Without limiting the requirements of Section 2.12.2(a) or this Section 2.12.4, Contractor shall as part of its shipping plan identify the proposed locations and other relevant logistics and timing of the importation of any Equipment into the U.S. and shall notify Owner of any changes in the location of import or other relevant logistics or timing of the importation of any Equipment as promptly as practicable.

2.13 Fuel, Utilities and Consumable Items.

2.13.1 Fuel. Contractor shall provide all fuel, including installation of all connections, necessary for the performance of the Work, and including costs of Permits and usage (other than the Fuel Gas and Feed Gas to be provided by Owner under Section 3.8).

2.13.2 Utilities. Contractor shall provide all utilities (e.g., electricity, water, communication, cable, telephone, waste and sewer), including installation of all connections and substations, necessary for the performance of the Work and as necessary for all office trailers to be provided by Contractor hereunder as part of its Work (whether for use by Contractor, Owner or any Subcontractor), and including costs of Permits and usage, except that Owner shall provide electricity to the extent specifically set forth in Section 3.2. Contractor shall not, and shall prohibit its Subcontractors from, utilizing any electricity provided by Owner pursuant to Section 3.2 for any purposes other than to supply permanent power to Equipment, substation buildings and other parts of the LNG Facility as necessary during pre-commissioning, commissioning, start-up and testing of each Stage. Contractor affirms that it has reviewed and familiarized itself with the quality and quantity of electrical power to be supplied by Entergy as described in Appendix B, and the LNG Facility shall be designed such that the LNG Facility shall be capable of producing LNG as contemplated under this Agreement, including Appendix A and Appendix B.

2.13.3 Consumable Items. Contractor shall provide or cause to be provided all necessary consumables (other than the Feed Gas to be provided by Owner under Section 3.8) as required in connection with construction, commissioning and start-up of the LNG Facility. A "first fill" schedule that sets forth the amount of consumables to be supplied by Contractor to provide a complete or full first fill, and the name of the Suppliers providing such consumables, shall be proposed by Contractor and submitted to Owner on or before three hundred sixty five (365) Days before the scheduled date of Ready for Start-Up of Stage I, for Owner's review. At all times while Contractor maintains a diesel vehicle fueling station on the Site, Contractor shall

allow Owner to gas-up up to twelve (12) of Owner's ATV vehicles at Contractor's vehicle fueling station, as part of the Contract Price.

2.13.4 Minimizing Feed Gas Flaring, Venting and Loss. Without limiting the provisions of Appendix M, during the performance of the Work, Contractor shall use safe and reasonable efforts to minimize the amount of LNG lost and to minimize the amount of Feed Gas used prior to Substantial Completion of each Stage that is consumed by flaring, venting or loss, giving consideration, however, to completion of the Work, including Performance Tests, by the Guaranteed Substantial Completion Date of such Stage.

2.14 Spare Parts; Special Tools.

2.14.1 Commissioning Spare Parts. Contractor shall provide all pre-commissioning, commissioning, testing and start-up spare parts necessary for each Stage to achieve Substantial Completion in accordance with this Agreement. The cost associated with all Work related to such pre-commissioning, commissioning, testing and start-up spare parts is included in the Contract Price, including the cost to procure and furnish such spare parts and the actual purchase price of such spare parts.

2.14.2 Operating Spare Parts. With respect to operating spare parts for the Equipment for use after Substantial Completion, no later than five hundred fifty (550) Days after the FNTP Date, Contractor shall deliver to Owner for Owner's review and comment a detailed list of the manufacturer- and Contractor-recommended operating spare parts for each applicable item of Equipment necessary for operating such Equipment (including components and systems of such Equipment). If Contractor is not able to obtain the necessary information with respect to the recommended operating spare parts from a Supplier by such date due to the Supplier's inability to identify the recommended operating spare parts based on the progress of the relevant Purchase Order, Contractor shall notify Owner as to the date by which such operating spare parts shall be identified. In any event, Contractor shall deliver the required information with respect to the recommended operating spare parts from such Suppliers by no later than seven hundred (700) Days after the FNTP Date. The list shall consist of spare parts to support two (2) years of normal operation, and shall include details of each proposed operating spare part to fully enable its procurement (including the manufacturer, ordering contact information, pricing, lead-time for ordering such part, complete item description, part number, quantity to order based on manufacturer's recommendation and a separate column indicating the quantity recommended by Contractor based on its experience for each part necessary for operating such Equipment (including components and systems of such Equipment)). The list shall contain an interchangeability matrix for the operating spare parts indicating which operating spare parts may be used across different items of Equipment. Owner shall have forty-five (45) Business Days to comment on such operating spare parts list. Contractor shall update such list and provide a revised list to Owner within thirty (30) Business Days after receipt of comments from Owner to such list. Owner shall then have ten (10) Business Days to respond to Contractor identifying the operating spare parts, if any, that Owner wishes Contractor to procure as part of its execution of a Purchase Order. Prior to execution of the applicable Purchase Orders, or addendums or releases to Purchase Orders that were previously placed, under which such

operating spare parts will be ordered, Contractor shall deliver the pricing and schedule for the operating spare parts to be ordered under each such Purchase Order to Owner (but Contractor may redact the other commercial terms related to liquidated damages provisions, performance security and limits of liability, before making such copies available to Owner). The cost associated with all Work related to the two (2) years' operating spare parts is included in the Contract Price, except for the actual purchase price, property taxes associated with storage if Owner agrees in the applicable Change Order that such operating spare parts will not be delivered directly to the Site, and delivery costs of such operating spare parts (which, subject to Contractor's compliance with the timely preparation and delivery of the list of operating spare parts in accordance with this Section 2.14.2, and timely placement of the Purchase Order, may include costs to expedite delivery so that the operating spare parts are delivered prior to Substantial Completion of the Stage for which such operating spare parts are being procured). In the event Owner requests in writing that Contractor procure any operating spare parts for Owner, Contractor shall be entitled to a Change Order to the extent provided in Section 8.3.1(a). The operating spare parts so requested by Owner shall be delivered to the Site (or to another location reasonably requested by Owner) as a condition of Substantial Completion of the relevant Stage. Contractor shall maintain, and update as necessary, a spreadsheet listing all of the operating spare parts ordered and delivered, that includes detailed information regarding the operating spare parts delivered, including the manufacturer, complete item description, part number, quantity ordered, and amount paid for such operating spare parts, in a format mutually agreed by the Parties to allow Owner to upload such list into Owner's inventory management system in advance of delivery of such operating spare parts.

2.14.3 Capital Spare Parts. Contractor shall, as part of the Work, procure the spare parts identified on Appendix TT (the "**Capital Spare Parts**"). If during further development of the design and engineering of the project and during procurement, Contractor or Owner determines that additional, fewer or different Capital Spare Parts would be appropriate or are necessary, the Parties shall notify each other, discuss the reasons for the change and update the list of Capital Spare Parts as agreed by Owner. In no event shall Contractor update, modify or change the list of Capital Spare Parts except as agreed in writing by Owner. At FNTP, Contractor shall deliver to Owner detailed information regarding each proposed Capital Spare Part with respect to its procurement (including the manufacturer, ordering contact information, complete item description, pricing, part number, quantity ordered or to be ordered, including components and systems of such Equipment). Contractor shall notify Owner no less than ten (10) Days in advance of when Contractor will place Purchase Orders for the procurement of any Capital Spare Parts, identifying which Capital Spare Parts are being ordered and quantities, and the date on which such Purchase Order is scheduled to be issued. If Owner notifies Contractor that Owner does not want to purchase a Capital Spare Part no later than three (3) Business Days before such Purchase Order is scheduled to be issued, Contractor shall not include such Capital Spare Parts in its applicable Purchase Orders. The cost associated with all Work related to the procurement of the Capital Spare Parts is included in the Contract Price, along with a provisional sum for the estimated purchase price and delivery costs of such Capital Spare Parts as set forth in Appendix C. In the event the actual purchase price and delivery costs of the Capital Spare Parts differs from the provisional sum set forth in Appendix C, Contractor shall submit a Change Order request to Owner in accordance with Section 8.3.1(b). The Capital Spare Parts shall be

delivered to the Site (or to another location reasonably requested by Owner) as a condition of Substantial Completion, but in any event no earlier than sixty (60) Days before the scheduled Substantial Completion Date. Contractor shall maintain, and update as necessary, a spreadsheet listing all of the Capital Spare Parts ordered and delivered, that includes detailed information regarding the Capital Spare Parts delivered, including the manufacturer, complete item description, part number, quantity ordered, and amount paid for such Capital Spare Parts, in a format mutually agreed by the Parties to allow Owner to upload such list into Owner's inventory management system in advance of delivery of such Capital Spare Parts.

2.14.4 Contractor Use of Owner Spare Parts. Contractor shall not utilize any of the operating spare parts procured by Contractor pursuant to Section 2.14.2 or otherwise procured by Owner, or any Capital Spare Parts, in the course of performing the Work without Owner's prior written consent. In the event Contractor utilizes any such spare parts, Contractor shall supply Owner free of charge with spare parts equivalent in quality and quantity of such spare parts used by Contractor (which shall be new except as otherwise agreed by Owner), from the original manufacturer of the spare parts used, or otherwise as agreed to be Owner, soon as possible following Contractor's use of such spare parts, or shall reimburse Owner for the complete replacement costs incurred by Owner to replace such spare parts.

2.14.5 Special Tools. No later than the date that is seven hundred thirty (730) Days prior to the Guaranteed Substantial Completion Date for Stage I, Contractor shall deliver to Owner a list of the special tools, based on Suppliers' recommendations, that Contractor intends to acquire in connection with the Liquefaction Project, for Owner's review, comment and acceptance, such acceptance not to be unreasonably withheld. Such list shall include only one set of such special tools for the Liquefaction Project. Owner shall have the right to use the special tools for the operation of Stage I, but shall return the special tools to Contractor and Contractor will maintain possession of the special tools until Substantial Completion of Stage II. Contractor shall maintain a tracking system that identifies the special tools being used by Owner for operation of Stage I following Substantial Completion of Stage I.

2.15 Materials at the Site. Contractor shall dispose of water, soil, rock, gravel, sand, minerals, timber, and any other materials developed or obtained in the excavation or other operations of Contractor or any Supplier on the Site in accordance with Applicable Laws, except for Pre-Existing Hazardous Materials, and except that Owner may take title to, use or dispose of any minerals developed or obtained by Contractor on the Site. Contractor may use in the Work soil developed or obtained on the Site for fill purposes. Contractor may only use any such materials if Contractor determines that they comply with the requirements of this Agreement and are suitable for the purposes for which Contractor is using them. OWNER HEREBY EXPRESSLY DISCLAIMS, AND CONTRACTOR ACKNOWLEDGES THAT OWNER IS NOT MAKING, ANY REPRESENTATION OR WARRANTY, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WITH RESPECT TO ANY SUCH MATERIALS.

2.16 Personnel Training.

2.16.1 Contractor's Obligation. As part of the Work, operating personnel engaged by Owner or an Affiliate of Owner (including operators, maintenance personnel, safety, engineering and other operating support personnel), as designated by Owner in its sole and absolute discretion ("**Operating Personnel**") shall be given training designed and administered by Contractor at its expense, which shall be based on the program requirements contained in Appendix P. The anticipated number of Operating Personnel that will be trained by Contractor is set forth in Appendix P. Owner will update the number of Operating Personnel that will be available for training by notice to Contractor in accordance with Section 3.6.1; provided that the number of Operating Personnel to be trained shall not exceed the anticipated number set forth in Appendix P. The training provided by Contractor shall include instruction for the Operating Personnel in the operation and routine maintenance of each item of Equipment in accordance with Appendix P. As part of the training, Contractor shall provide the Operating Personnel with full access to the LNG Facility during commissioning, testing and start-up of each item of Equipment, including each LNG Train. Training shall be provided by personnel who have actual experience in the subject area and who, in Contractor's and the relevant Supplier's reasonable judgment, as applicable, are otherwise qualified to provide such training, subject to Owner's review and acceptance. Training shall take place at such locations and at such times as agreed upon by the Parties. Contractor shall provide Owner and the Operating Personnel with the training materials as described in Appendix P.

2.16.2 Implementation of Training Program. Contractor shall complete the training of the Operating Personnel on or before the date as described in Section 2.5 of Appendix P. Contractor's training program shall include testing of the Operating Personnel to verify that each of the Operating Personnel: (a) (i) has completed the training program and passed the tests administered as part of that program; and (ii) is fully qualified to perform the work covered under the training program; or (b) has failed to complete the training program or failed the tests administered as part of the program and is not qualified to perform the work covered under the training program. Contractor shall provide Owner with the evaluations, test results and other information to be provided to Owner in accordance with Appendix P.

2.17 Environmental Compliance; Hazardous Materials and Explosives.

2.17.1 Environmental Compliance. Without limitation of Section 2.3, Contractor is responsible for ensuring that the Work is performed using GECP and in compliance with all provisions of this Agreement, all Applicable Laws regarding the environment, and in compliance with the Contractor HSSE Program policies and procedures regarding the environment; provided that if there is a conflict between Applicable Laws and GECP, Applicable Laws shall govern. Contractor shall, and shall cause each of its Suppliers to, cause its and their respective personnel to comply with the Environmental Plan, the Owner Permits, Applicable Laws and such policies and procedures. Contractor shall follow the requirements of the Environmental Plan, the Owner Permits, Applicable Laws and such policies and procedures pursuant to Section 2.18 in performing any Work on the Site in areas in which Owner has disclosed to Contractor that Archeological Finds or Pre-Existing Hazardous Materials have been identified, if any.

2.17.2 Limitation on Hazardous Materials. Contractor shall not, nor shall it permit or allow any Supplier to, bring any Hazardous Materials on the Site except as provided in this Section 2.17.2. Contractor and its Suppliers may bring onto the Site such Hazardous Materials as are necessary to perform the Work using GECP so long as Contractor and its Suppliers do so in compliance with all provisions of this Agreement, Applicable Laws regarding the environment, and the Contractor HSSE Program policies and procedures regarding the environment, including those policies and procedures related to the transportation, storage and disposal of Hazardous Materials. Contractor shall bear all responsibility and liability for Hazardous Materials brought onto the Site by or on behalf of Contractor or its Suppliers.

2.17.3 Handling of Hazardous Materials. Contractor shall, at its sole cost and expense, safely store, use and dispose of all non-hazardous wastes and Hazardous Materials that Contractor or any of its Suppliers bring onto the Site, including non-hazardous wastes that Contractor generates during performance of the Work and Hazardous Materials that Contractor generates during performance of the Work from Hazardous Materials brought onto the Site by Contractor or any of its Suppliers. All such non-hazardous waste and Hazardous Materials shall be disposed at disposal facilities not located on the Site and that are permitted to receive such non-hazardous waste and Hazardous Materials, as applicable, in compliance with all Applicable Laws regarding the environment, and the Contractor HSSE Program policies and procedures regarding the environment. Contractor shall keep accurate records of the disposal of non-hazardous waste from the Site. Contractor shall also keep accurate records of Hazardous Materials disposed from the Site, and provide Owner with copies of all transportation and disposal records of all Hazardous Materials disposed of by Contractor. Contractor shall report to Owner any violation of or failure to comply with the requirements of Section 2.17 by Contractor or any other member of the Contractor Group, as soon as reasonably possible after having knowledge thereof and in no event later than twenty-four (24) hours thereafter. Contractor shall promptly, and in accordance with all Applicable Laws, remediate any Release of any Hazardous Materials that Contractor or any of its Suppliers bring onto the Site, including any Release of Hazardous Materials generated during performance of the Work from such Hazardous Materials.

2.17.4 Discovery of Archeological Finds or Pre-Existing Hazardous Materials. Contractor shall not disturb any Archeological Find or Pre-Existing Hazardous Materials the presence of which was disclosed by Owner or otherwise known to Contractor pursuant to the FERC resource report or the Geotechnical Reports or otherwise known to Contractor prior to the Effective Date pursuant to work conducted under the EDSA or the SWSA. If Contractor should encounter or Release any Archeological Find or Pre-Existing Hazardous Materials on the Site, Contractor shall promptly cease working in the affected area, notify Owner of such occurrence or encounter and take such other actions as described in the Environmental Plan with respect to any such discovery (except that Contractor shall not handle test, treat, transport, dispose of or remediate Pre-Existing Hazardous Materials). Contractor shall proceed, to the extent reasonably possible in the event of such discovery of an Archeological Find or Pre-Existing Hazardous Materials, with other portions of the Work unless otherwise directed by Owner. Work in the affected area shall be resumed after the Archeological Find has been addressed or the Pre-Existing Hazardous Materials have been removed or rendered harmless or appropriate safety measures have been taken, as applicable, by Owner in accordance with Applicable Laws.

2.17.5 Right to Stop Work. Should Owner at any time observe Contractor, or any of its Subcontractors, performing any part of the Work in a manner that does not comply with the Environmental Plan or the environmental requirements of Appendix Q, or in a manner that may, if continued, fail to comply with the Environmental Plan or the environmental requirements of Appendix Q, Owner shall have the right (but not the obligation) to require Contractor to stop such portion of the Work, as applicable, until such time as the manner of performing the Work complies with the Environmental Plan or the environmental requirements of Appendix Q to the reasonable satisfaction of Owner; provided, however, that at no time shall Contractor be entitled to an adjustment of the Contract Price or Key Date Schedule based on such work stoppage. Notwithstanding anything to the contrary in the foregoing, if Contractor disagrees with any order to stop the Work due to failure to comply with the Environmental Plan or the environmental requirements of Appendix Q that it receives from Owner, and Contractor notifies Owner of such disagreement, Owner and Contractor shall each promptly escalate such disagreement to a higher supervisory level, up to the level of the Contractor Representative and Owner Representative, as applicable. If after such escalation, Owner continues to enforce the stop order and it is later determined that the Work was being performed in accordance with the Environmental Plan and the environmental requirements of Appendix Q, as applicable, and such stop order delayed the performance of the Work by more than four (4) hours, such stop order shall constitute an Owner-Caused Delay for the purposes of this Agreement.

2.17.6 Explosives. Contractor acknowledges and agrees that the use of explosives is not necessary or desirable for the performance of the Work, and as a result thereof Contractor shall not, and shall not permit any of its Subcontractors to, utilize explosives in any part of the Work, with the exception of the use of powder-actuated tools or similar devices where, by design, the tool is powered from an explosive charge, in accordance with GECP.

2.18 HSSE Plans and Policies; Site Rules; Security.

2.18.1 Safety. Contractor shall take all necessary safety and other precautions to protect persons and property from injury, illness or damage arising out of the performance of the Work. Without limitation of Section 2.3, Contractor is solely responsible for ensuring that the Work is performed using GECP in a safe manner and in compliance with all provisions of this Agreement, and Applicable Laws, regarding worker health and safety, including the Occupational Safety and Health Act of 1970 (84 U.S. §§ 1590 et seq.) and any state plans approved thereunder, and regulations thereunder, to the extent applicable. In addition, when Contractor conducts operations on any portion of the Site over which Owner has care, custody and control pursuant to this Agreement, Contractor shall comply with the Owner HSSE Program. Contractor shall comply at all times with all of Owner's Site-specific orientation and training requirements, which shall be made available to Contractor upon request. Contractor shall inspect the places where any of its employees, contract workers, agents, or Subcontractors are or may be present on the Site, and shall promptly take action to correct conditions which are or may become an unsafe place of employment.

2.18.2 HSSE Plan and Program.

(a) Attached as Appendix Q is Contractor's health, safety, security and environmental plan and program (the "**Contractor HSSE Program**"). The Contractor HSSE Program is consistent with GECP and complies with Applicable Laws and the other requirements of this Section 2.18, and includes, among other things: (i) a drug testing program that meets U.S. Department of Transportation drug and alcohol testing requirements applicable to Contractor's personnel performing Work on any Stage which has achieved Substantial Completion; (ii) policies and procedures regarding the transportation, storage and disposal of Hazardous Material for which Contractor is responsible under this Agreement; (iii) an environmental and social management plan that is consistent with the Environmental Plan, including any Permit conditions regarding mitigation of any biodiversity impacts or other environmental impacts; (iv) a water and waste management plan, including a management strategy for contaminated land; (v) an emergency response plan covering Contractor's response to emergencies during performance of the Work on the Site; (vi) policies and procedures to maintain compliance with applicable Permits during dredging and construction of the marine berths and the materials offloading facility, including, if applicable, establishing any monitoring programs that may be required by applicable Permits or otherwise under Applicable Laws; (vii) compliance with the requirements of any insurers that provide any of the coverage maintained by Contractor; (viii) Contractor perform a root cause analysis of any reportable incident or series of accidents, injuries or lost time incidents, whether similar in type or not, that indicate the Site is becoming less safe; and (ix) security policies and procedures, including with regard to the security of the Site, the Work, and as otherwise described in Section 2.18.5.

(b) Contractor shall prepare and provide Owner with a copy of a labor and working conditions policy with respect to on-Site labor and the Site, and set standards for the design and operation of temporary housing, if any, for Contractor's labor force, in each case that complies with all Applicable Laws. Contractor's labor policy shall also include a plan to mitigate the impacts and effects of the influx of a sizeable temporary workforce on the local communities and the area around the Site. Contractor shall provide Owner with such labor policy prior to the date on which construction activities, other than site preparation activities, commence at the Site.

(c) Contractor shall implement the Contractor HSSE Program and such other Plans and programs as contemplated under this Section 2.18 and shall assume all costs associated with compliance therewith. Any updates, modifications, amendments or other changes to the Contractor HSSE Program shall be furnished to Owner and shall be subject to review and approval in accordance with Section 2.4.6.

(d) In addition to the Contractor HSSE Program and such other Plans and programs, when working on any portion of the Site over which Owner has care, custody and control in accordance with this Agreement, Contractor shall comply with the Owner HSSE Program. Owner may update the Owner HSSE Program by providing written notice to Contractor to address any health, safety, security and environmental requirements that Owner deems necessary, including by adding requirements to the Owner HSSE Program to address

areas of the LNG Facility after Substantial Completion of each Stage. If Owner modifies the Owner HSSE Program prior to Substantial Completion of a Stage and such modification adversely impacts Contractor's costs or schedule to perform the Work, Contractor shall, subject to Section 8.4, have the right to a Change Order in accordance with Section 8.3.1(o).

(e) In the event of any conflict between any of Contractor's applicable health, safety and environmental plans and programs, the more specific requirement will prevail. When Contractor is performing Work that is subject to Owner HSSE Program, in the event of a conflict between any of Contractor's applicable Plans and the Owner HSSE Program, the requirement containing the stricter performance standard will prevail. Contractor shall promptly notify Owner if it determines that there is a conflict between any of Contractor's Plans and Owner's health, safety, security and environmental plans and programs.

2.18.3 Implementation of HSSE Practices. Contractor shall appoint one (1) or more (as appropriate) safety and environmental representative(s) acceptable to Owner who shall be stationed at the Site during any period in which Work is being performed at the Site, and shall have responsibility to correct unsafe conditions or unsafe acts associated with the Work and the LNG Facility as soon as possible, act on behalf of Contractor on safety, health, security and environmental matters, and participate in periodic health, safety, security and environmental meetings with Owner after Work has commenced at the Site. Contractor further agrees to provide or cause to be provided necessary training and safety equipment to its employees, contract workers and Subcontractors, and to the employees, contract workers and subcontractors of Owner or the Other Contractors entering the Site, to ensure their compliance with the foregoing health, safety, security and environmental rules and standards, and enforce the use of such training and equipment. Contractor shall maintain accident, injury and any other Books and Records with respect to safety, health, security and environmental matters as required by Applicable Laws or any additional Books and Records with respect thereto as may be required under this Agreement. Contractor's classification of any accidents, injuries or lost time incidents shall comply with OSHA and other applicable Governmental Authorities reporting practices and policies.

2.18.4 Certain Owner Rights with Respect to Safety. Should Owner at any time observe Contractor, or any of its Subcontractors, performing the Work in an unsafe manner, or in a manner that may, if continued, become unsafe, then Owner shall have the right (but not the obligation) to require Contractor to stop the affected Work activity and coordinate with Contractor until such time as the manner of performing such Work has been rendered safe, to the reasonable satisfaction of Owner; provided, however, that at no time shall Contractor be entitled to an adjustment of the Contract Price or Key Date Schedule based on such work stoppage. Notwithstanding anything to the contrary in the foregoing, if Contractor disagrees with any order to stop the Work due to safety concerns that it receives from Owner, and Contractor notifies Owner of such disagreement, Owner and Contractor shall each promptly escalate such disagreement to a higher supervisory level, up to the level of the Contractor Representative and Owner Representative, as applicable. If after such escalation, Owner continues to enforce the stop order and it is later determined that the Work was being performed safely or was rendered

safe, and such stop order delayed the performance of the Work by more than four (4) hours, such stop order shall constitute an Owner-Caused Delay for the purposes of this Agreement.

2.18.5 Security.

(a) Contractor shall be responsible for the security, fencing, guarding and lighting of the Site until Substantial Completion of Stage II, and shall hire guards and watchmen as reasonably required to control access and egress to and from the Site, and to watch and guard the Site so as to prevent loss or damage to the LNG Facility and Equipment and prevent unauthorized personnel from entering the Site for those portions for which Contractor is responsible; provided, however, that following the transfer, care, custody and control of Stage I to Owner in accordance with this Agreement, Owner shall be responsible for security within those portion of the Site for which care, custody and control has been transferred to Owner. Prior to commencing any Work on the Site, as part of the Work, Contractor shall have completed the training of its security personnel, including training on the use of force, and implemented its security Plan with respect to the Site as agreed to as part of the Contractor HSSE Program. Contractor's security Plan shall comply with the requirements of this Agreement, requires the coordination of Contractor's security program with Owner's security requirements and policies, including coordination with Owner's security team, and complies with the safety and security requirements of all Applicable Laws, including, as applicable, 33 C.F.R. Part 127, 49 C.F.R. 193.2905(a), 49 C.F.R. 193.2913, 33 C.F.R. Part 105, and 33 C.F.R. 127.709; provided that Contractor shall not be required to make material modifications to its security Plan except for those reasonably necessary to address imminent threats to safety or security.

(b) As part of the Work, Contractor shall furnish, construct and install the permanent security system for the LNG Facility. Upon Substantial Completion of Stage I, Owner shall take over the permanent security system and shall implement the Owner HSSE Program with respect to accessing and performing Work on Stage I, while Contractor retains responsibility for security with respect to other areas of the Site. Upon Substantial Completion of Stage II, the Site shall be fully incorporated into the security perimeter maintained by Owner and thereafter access thereto, and Work therein, will be subject to Owner's site safety and security requirements and other obligations under this Agreement with respect to performing Work at the Site.

2.18.6 Compliance with Federal Regulatory Requirements.

(a) All Work performed hereunder shall comply with the minimum federal safety standards for the design, installation, inspection, testing, construction, extension, operation, replacement, and maintenance of facilities contained in Title 49 of the Code of Federal Regulations (C.F.R.), Parts 192 (to the extent applicable) and 193 and in 33 C.F.R. Part 127. Contractor shall comply with requirements of the Operator Qualification Program that are outlined in 49 C.F.R. Part 193 Subpart H and 49 C.F.R. Part 195 Sub-Part G of C.F.R. Part 195, where applicable.

(b) Without limiting the generality of Section 2.18.6(a), Contractor shall participate in inspections and reviews required by Governmental Authorities, including

FERC and PHMSA, from time to time during performance of the Work. Contractor shall appoint an individual to coordinate with Owner and to serve as a single point of contact with Contractor with respect to all such matters, and acknowledges and agrees that it shall provide personnel from the appropriate disciplines as requested by Owner or a Governmental Authority to participate in such inspections and reviews.

(c) Contractor shall implement and utilize a permit to work system during construction, pre-commissioning, commissioning and start-up of the LNG Facility utilizing forms and procedures as specified in the Contractor HSSE Program. Contractor shall administer the permit to work system under the Contractor HSSE program until Substantial Completion, and Contractor shall allow for a reasonable transition to incorporate Owner's requirements for permits to work used in an operating plant under the Owner HSSE Program for use once hydrocarbons are introduced into a Stage for LNG production (which, for purposes of clarity, will occur after RFSU and prior to Substantial Completion). Each Contractor or Supplier employee, contract worker or representative needing access to a "secure area" (as that term is defined in the regulations of the U.S. Coast Guard and Transportation Security Administration) of the Site shall have valid Transportation Worker Identification Credentials ("**TWIC Card**"). In addition, each such employee, contract worker or representative performing Work on the Site shall have a valid TWIC Card when, and to the extent, all or portions of the Site become regulated by the Transportation Security Administration, which, in any event, shall be no later than when such portion of the Site is incorporated into the security perimeter pursuant to Section 2.18.5. Contractor acknowledges that it has fully investigated such Owner's access requirements and procedures, as well as its site safety and security rules and procedures, and has taken such requirements, rules and procedures into account in preparing the Project Execution Plan and planning the Work to be performed in accordance with the Project Schedule. As such, Contractor shall not be entitled to a Change Order as a result of its and its Suppliers' personnel's compliance (or failure to comply) with such access, safety and security requirements, rules and procedures.

(d) Contractor shall, and shall cause its Suppliers to, attend training by Owner as required by Applicable Laws, including such training as is required by the Commission.

2.18.7 Certain Owner Rights with Respect to Security. Should Owner at any time observe Contractor, or any of its Suppliers, failing to comply with Contractor's security plan, as accepted by Owner as part of the Contractor HSSE Program, or if Contractor or its Suppliers are acting or omitting to act in a manner that may, if it continued, fail to comply with such security plan, then Owner shall have the right (but not the obligation) to require Contractor to comply with such security plan and to stop the affected Work activity until such time as Contractor has corrected its implementation of such security plan and Contractor and its Suppliers, as applicable, are once again in compliance with such security plan; provided, that at no time shall Contractor be entitled to an adjustment of the Contract Price or Key Date Schedule based on such work stoppage. Notwithstanding anything to the contrary in the foregoing, if Contractor disagrees with any order that it receives from Owner to stop the Work for failure to comply with such security plan, and Contractor notifies Owner of such disagreement, Owner and

Contractor shall each promptly escalate such disagreement to a higher supervisory level, up to the level of the Contractor Representative and Owner Representative, as applicable. If after such escalation, Owner continues to enforce the stop order and it is later determined that the Contractor was in compliance with, and would be in compliance with, such security plan, and such stop order delayed the performance of the Work by more than four (4) hours, such stop order shall constitute an Owner-Caused Delay for the purposes of this Agreement.

2.18.8 Local Community Relations. Contractor understands the importance of maintaining good relations with the communities located near the Site and the LNG Facility, and shall endeavor to emphasize the importance of good community relations to its Subcontractors, and its and their respective employees and other Persons under Contractor's supervision on the Site. Contractor shall cooperate and coordinate with Owner in Owner's outreach efforts to the local communities and the State of Texas, including, as requested by Owner, by participating in public meetings, meetings with Governmental Authorities and Owner's other outreach activities; provided that Contractor's personnel shall not, without Contractor's prior consent, be asked by Owner to provide testimony at any such meetings. Among other things, Contractor shall establish a grievance and complaint mechanism for use by the local communities around the Site, and shall maintain a log at the Site of any grievances or complaints received by Contractor from whatever source and promptly notify Owner of same. Owner shall have the right to review Contractor's grievance and complaint logs at any time upon request. Contractor shall coordinate and cooperate with Owner in resolving any grievances or complaints as soon as reasonably possible and in a manner that does not delay or adversely impact performance of the Work, whether submitted to Contractor or to Owner.

2.18.9 HSSE Monitoring and Audit Rights. Without limiting any of its other rights of inspection, review, acceptance or audit hereunder, Owner and its designees (but not including Competitors), including representatives of any of Owner's insurers, shall have the right to from time to time as determined in Owner's sole and absolute discretion, monitor Contractor's performance of the Work, and review, inspect and audit Contractor's Books and Records related to Contractor's or Subcontractor's compliance with the Contractor HSSE Program, Owner's HSSE Program, as applicable, Applicable Laws and any other requirements of this Section 2.18. Without limiting Owner's rights to stop work in accordance with Section 2.18.4 and Section 2.18.7, Owner shall minimize interference with the performance of the Work during such inspections, reviews and audits to the extent reasonably possible. Contractor shall and shall cause its Subcontractors to cooperate with Owner and its designees when engaged in a monitoring program or during any such inspections, reviews or audits, and shall develop and implement a corrective action plan, in the event such inspections, reviews or audits indicate the Contractor HSSE Program, Contractor or its Subcontractors are not in compliance with the Contractor HSSE Program or the requirements of this Section 2.18, as applicable. Owner's monitoring, review, inspection or audit, or Owner's failure to monitor or to conduct a review, inspection or audit Contractor's compliance with the requirements of this Section 2.18, shall in no way affect Contractor's obligations hereunder.

2.19 Emergencies. In the event of any emergency endangering life or property or the environment in any way relating to the Work, the LNG Facility, the Site or otherwise, Contractor

shall: (a) take such action as may be reasonable and necessary to prevent, avoid or mitigate injury, damage or loss; and (b) as soon as possible, report any such incidents, including Contractor's response thereto, in writing to Owner. If Contractor has not taken reasonable precautions for the safety of the public or the protection of the Work, the LNG Facility or the Site, and such failure creates an emergency requiring immediate action, then Owner, with or without notice to Contractor may, but shall be under no obligation to, take reasonable action as required to address such emergency. All reasonable costs of taking of any such action by Owner shall be reimbursed by Contractor. Owner's taking of, or failure to take any action, or providing any directions with respect to an emergency, shall not alter Contractor's obligations, responsibilities or liability hereunder.

2.20 Quality Assurance/Quality Control Plan.

2.20.1 Implementation of Quality Assurance Plan. Attached as Appendix R is a quality assurance/quality control procedure and plan and Supplier source inspection plan detailing Contractor's system, including quality plans and procedures, to direct and control its organization with regard to quality (the "**Quality Assurance Plan**"). Contractor's Quality Assurance Plan as set forth in Appendix R shall be consistent with Applicable Laws, ISO 9001 criteria, Applicable Codes and Standards and GECP. Contractor shall perform the Work in compliance with the Quality Assurance Plan and assume all costs associated with compliance therewith. Contractor shall cause each of its Suppliers to implement a quality assurance program that complies with the Quality Assurance Plan as applicable to the Work that such Supplier performs, including the implementation and maintenance of a rigorous inspection program, maintaining daily logs of inspections performed in compliance therewith, and the implementation and adherence to the "build it clean, build it tight" requirements of the Quality Assurance Plan.

2.20.2 Modifications. Any updates, modifications, amendments or other changes to the Quality Assurance Plan shall be furnished to Owner and shall be subject to review and approval in accordance with Section 2.4.6.

2.20.3 Records. As part of the Quality Assurance Plan (including the Supplier source inspection plan contained therein), Contractor agrees that it shall keep a daily log of inspections that it or any Supplier subject to such inspection plan performs. Contractor shall make a copy of Books and Records related to the Quality Assurance Plan, including the daily logs of inspections performed, available at the Site for Owner's and any Lender's (including the Independent Engineer's) review.

2.20.4 Quality of Equipment. Contractor shall only use Equipment for the Work as specified in or as is otherwise consistent with this Agreement. All Equipment shall be fabricated, applied, installed, connected, operated (during start-up and testing), cleaned and conditioned in a manner that meets or exceeds the written instructions of the applicable Vendor.

2.21 Correction of Work in Progress.

2.21.1 Correction of Work in Progress. Upon Contractor becoming aware of a Defect, Contractor shall, as part of the Work, correct such Defective Work, whether by repair, replacement or otherwise. If during the course of conduct of the Work, Owner reasonably believes that any Work is Defective, Owner may provide written notice to Contractor identifying and describing with reasonable specificity that portion of the Work that Owner believes is Defective. If Contractor believes the Work is not Defective, Contractor shall notify Owner, including notice as to when a final determination as to whether the Work is Defective must be made so as to avoid impacting the scheduled performance of the Work. During the period before such determination must be made, the Parties shall work together in good faith to resolve any disagreements or reach resolution regarding such Work. Contractor shall determine when Defects are corrected; provided, however, that (a) Contractor shall promptly correct Defects (i) as necessary to prevent voiding or limiting of any Supplier warranties, including correction of Defects related to the preservation of Equipment as required by the manufacturer's specifications or written recommendations, (ii) if such Defective Work presents an imminent threat to safety, health or the environment, or the structural integrity of an item or component of a Stage or the LNG Facility; (iii) if such Defective Work directly impacts any Other Contractor's work to tie-in to the LNG Facility; and (b) correction of Defective Work identified prior to Substantial Completion of a Stage will be completed before Substantial Completion of the applicable Stage unless such Defective Work is included on the agreed Punch List as a Punch List D Item. If there is a disagreement about whether the Work is Defective and the Parties have not reached resolution, without limiting Contractor's right to Dispute whether the Work is Defective, Contractor shall correct such Defect if requested by Owner while pursuing any such Dispute in accordance with the timing set forth in the foregoing sentence as applicable to such Defect. Contractor shall implement a management of change process and track rework to correct Defects during the courses of the Work in accordance with Appendix S. If Contractor fails to correct Defective Work in accordance with subclause (a) above, Owner may, in its sole and absolute discretion, upon no less than ten (10) Business Days prior written notice to Contractor, either correct or remove and replace such Defective Work and Contractor shall pay Owner the costs to correct such Defective Work within thirty (30) Days after receipt of Owner's invoice for such costs and expenses.

2.21.2 Deviations. If Contractor or Owner determines that any of the Work is Defective, and would if completed be Defective, and such Defect or potential Defect: (a) does not or is not reasonably likely to result in the Work or the LNG Facility failing to satisfy any Applicable Laws or the conditions of any Permits; and (b) would otherwise satisfy the requirements to be a Punch List D Item, the Parties shall meet within seven (7) Days of when such Defect is identified or proposed to find a remedy for such deviation or non-conformance. If the Parties agree on a remedy for such Defective Work that modifies the scope of the Work or includes any adjustments to the Contract Price or the Key Date Schedule, Owner shall issue a Change Order, which shall be in the form of Appendix F-1, and such Change Order shall become binding on the Parties as part of this Agreement upon execution thereof by the Parties. Agreed remedies for such Defects or potential Defects shall constitute a waiver of the relevant requirements of this Agreement only so far as mutually agreed and in no event shall such agreed

remedies constitute an adjustment or change or modification of any relevant Specification, the Basis of Design or any other requirement of this Agreement.

2.22 Reports.

2.22.1 Contractor Reports. Contractor shall provide Owner and, if so requested by Owner, Lenders' Agent, with an electronic copy of progress reports and such other information as reasonably requested by Owner, including the following:

- (a) formal minutes and any action items for all status and other Project-related meetings within four (4) Business Days following such meeting;
- (b) safety or environmental incident reports within twenty-four (24) hours after the occurrence of any such incident (including "near miss" incidents where no individual was injured or property was damaged), except for any safety or environmental incident involving a significant non-scheduled event such as LNG or Natural Gas releases, fires, explosions, mechanical failures (not including minor or insignificant failures), unusual over-pressurizations or major injuries which shall be provided to Owner within two (2) hours of the occurrence of such incident where possible and if not possible, within twenty-four (24) hours and in any event no later than notices are provided to any Governmental Authority; provided, however, notification shall be provided to Owner as promptly as practicable by all reasonably practical methods if any safety or environmental incident threatens public or employee safety, causes significant property damage, or interrupts the Work; provided, further, that Contractor shall not be required to provide Owner with any attorney-client privileged reports;
- (c) Weekly status reports generally reporting on the progress of the Work ("**Weekly Status Reports**") containing the information described in Attachment S-2 to Appendix S, which shall be provided one (1) Day prior to the Weekly status meeting and shall cover all activities up to the cutoff date as described in Appendix S. Contractor shall arrange for the electronic distribution of the Weekly Status Report as Owner may reasonably request;
- (d) Monthly status reports generally reporting on the progress of the Work ("**Monthly Status Reports**") containing the information described in Attachment S-2 to Appendix S. Contractor shall provide the Monthly Status Report no later than five (5) Days after the end of each Month, and the Monthly Status Report shall cover activities up through the end of the previous Month (which for the purposes of this Section 2.22.1(d) shall end as of the second to last Friday of each Month). Contractor shall arrange for the electronic distribution of the Monthly Status Report as Owner may reasonably request; and
- (e) promptly upon completion of the last foundation for Stage II, Contractor shall send Owner a written notice stating that the last foundation for Stage II has been completed.

2.22.2 Access to Site Records. Without limiting Owner's rights under Section 2.23, during the performance of the Work at the Site, Owner shall have the right to have access to and to review all of Contractor's daily reports, logs and records that Contractor

maintains at the Site, for purposes of Owner's reviews related to HSSE, quality and Equipment inventory and preservation.

2.22.3 No Notice; Owner Not Bound by Reports. Notwithstanding anything to the contrary in any minutes, reports or other documentation delivered by Contractor under Section 2.22.1, Owner shall not be bound by any such documents, shall not be required to take any actions based on any such documents, and shall not be deemed to have consented to or accepted the contents of any such documents. In no event shall any such minutes, reports or other documentation, or any comments or statements made by the Contractor Representative or other Contractor personnel, or any Supplier personnel, during any meeting or otherwise in connection with any such minutes, reports or documentation, constitute notice to Owner for any purpose under this Agreement.

2.23 Books, Records and Audits.

2.23.1 Maintenance of Books and Records. Contractor shall keep full and detailed books, construction logs, records, daily reports, accounts, schedules, payroll records, receipts, statements, correspondence, vouchers, memoranda, electronic files, job cost reports, accounting records, written policies and procedures, Supplier or sub-consultant files, external correspondence, change order files (including non-privileged documentation covering negotiated settlements), and other pertinent documents related to the Work and as may be required under Applicable Laws or this Agreement (collectively "**Books and Records**"). Contractor shall maintain all such Books and Records in accordance with GAAP applicable in the U.S. and shall retain all such Books and Records for a minimum period of four (4) years after the Final Completion Date, or such greater period of time as may be required under Applicable Laws. To the extent Contractor does not have any of the foregoing information (if audited by Owner), Contractor shall certify the same in writing to the extent requested by Owner.

2.23.2 Audit.

(a) Upon reasonable notice, until the fourth anniversary of the Final Completion Date, and with respect to any matters related to Taxes (including the Tax Abatements) until the expiration of the constitutional or statutory period in which an applicable Governmental Authority may audit Owner (each such period, an "**Audit Period**"), Owner, any Lender, and any of their representatives and consultants (excluding any Competitors), including the Independent Engineer, shall have the right to audit or to have audited the Books and Records with respect to: (i) ensuring that Contractor is using GECP and acting in compliance with any and all Applicable Laws, including any documents relating to safety (in accordance with Section 2.18.9), security, quality or Permits relating to the Liquefaction Project, the LNG Facility or the Work; (ii) any amounts billed on a provisional basis and later reconciled to actual amounts, or billed under cost reimbursable or unit price Change Orders, or that are otherwise reimbursed or are reimbursable under this Agreement, such as certain Taxes, Customs Duties and hedging costs; provided that such other reimbursable items do not include the fixed price components of the Contract Price or disputed amounts subject to Appendix XX; (iii) claims for amounts due and payable under Section 19.1.1 or otherwise due to any suspension or termination of the Work or this Agreement; (iv) Contractor's information submitted in the Monthly Status Reports with

respect to Local Labor, Local Suppliers and Qualifying Jobs, information in connection with the Tax Abatements as set forth in Section 2.7.10; or (v) Taxes pursuant to Section 7.5.4; provided, however, notwithstanding anything herein to the contrary, such Persons shall not have the right to audit or have audited the Books and Records in connection with the internal composition of any compensation that is fixed in amount hereunder (including the composition of any markups, unit rates or fixed percentages or multipliers specified in this Agreement). Any Owner consultant or other contractor performing any such audit shall be required to enter into a reasonable and customary non-disclosure agreement with Contractor before such consultant or contractor may audit any of the Books and Records, and any such Person shall be governed by the provisions in Section 14.2.1 (including entering into confidentiality agreements with Owner to the extent required under Section 14.2.1) before such other Person may audit any of the Books and Records.

(b) When requested by Owner during any applicable Audit Period, Contractor shall provide the auditors permitted to audit pursuant to Section 2.23 with reasonable access to all of the Books and Records, including providing such Persons with copies of all such Books and Records in the format as maintained or as required under this Agreement to be maintained by Contractor (including scanned versions of hardcopy documents and electronic copies of native electronic data files), organized in a manner consistent with Contractor's records, during normal business hours, and Contractor's personnel shall reasonably cooperate with such auditors to effectuate the audit or audits hereunder. The auditors shall have the right to copy all such Books and Records (including hard copy and electronic data), subject to the use and disclosure rights under the applicable confidentiality agreements required in Section 2.23.2, at Owner's expense. Contractor shall bear at its own cost and expense all costs incurred by it in assisting Owner with audits performed pursuant to this Section 2.23.2.

(c) Except as otherwise provided in Article 20, the restrictions in this Section 2.23.2 to the audit rights of Owner, the Lenders or their consultants or representatives (excluding Competitors), including the Independent Engineer, shall not limit or restrict any rights such Persons have under Applicable Laws with respect to discovery in any arbitration or litigation arising out of or related to this Agreement or the Contractor Guarantee.

(d) Owner shall conduct any such audit at its own cost and expense. In all events, Contractor shall reimburse Owner for overpayments made to Contractor.

(e) Nothing in this Section 2.23 shall be deemed to limit or otherwise affect Owner's rights to have access to and to review Contractor's reports, logs and records in connection with the safety and quality of the Work performed or as otherwise permitted under this Agreement.

2.24 Inspections and Testing.

2.24.1 Generally. Contractor shall conduct all inspections of the Work in accordance with the inspection and testing plan prepared by Contractor or Suppliers in accordance with Appendix R. Contractor shall provide notices or status updates to Owner of testing and inspections in accordance with Section 2.24.3 and Section 2.24.4, as applicable

depending on whether such test or inspection will be conducted on the Site or off-Site. Owner shall have the opportunity to witness any such inspection. Owner's Engineer and any equity participant in Owner or Common Facilities Owner shall also have the opportunity to witness any such inspection. Other Persons, including customers, that are Invitees of Owner may observe or witness any such testing or inspections, on Site or off-Site, subject to Contractor's prior consent, not to be unreasonably withheld or delayed. Owner will be entitled to monitor all aspects of the Work, including the fabrication shops and construction means, methods, techniques, sequences and procedures for coordinating all portions of the Work. Inspection or failure to inspect any or all of the Work by Owner shall not constitute acceptance of the same or act in any way to release Contractor from any or all of its obligations and liabilities hereunder, it being the intent of the Parties that Contractor shall remain responsible for performance of the Work in accordance with the requirements of this Agreement, including attainment of the Guaranteed Performance Levels.

2.24.2 Inspection and Test Plans. In addition to conducting the Performance Tests, the Performance Test Procedures and requirements that are described in Section 9.7, Contractor shall, during the course of performing the Work, perform, or cooperate and assist in the performance of, all tests and inspections of the Work or portions thereof that are: (a) required under any Applicable Laws or by any Vendor in writing; (b) in accordance with the Specifications; or (c) in accordance with GECP. Contractor shall develop detailed inspection and test plans, by discipline, with respect to off-site (factory) and on-Site inspections and tests, including with respect to Work performed at fabrication or module yards. Such plans shall include all notifications required to be provided to Owner, including notifications with respecting the activities and testing described in Appendix T-1 and the activities and testing described in Appendix T-2. Such plans shall be provided to Owner for information. Contractor shall implement and follow the inspection and test plan in connection with the performance of the Work. The tests, inspections or activities that shall be hold points where Contractor may not proceed unless Owner is present, or Owner has waived the requirement to be present in writing, are designated on Appendix T-1 and Appendix T-2, as applicable.

2.24.3 On-Site Testing and Activities. Contractor shall provide Owner with weekly inspection and testing tracker of anticipated on-Site inspections and testing, including anticipated on-Site activities and tests as described on Appendix T-2, and Owner shall be included in Contractor's standard distribution method to be notified of any updates or schedule modifications of such activities, inspections or tests; provided that Owner shall be provided notice at least twenty four (24) hours in advance of any schedule modification. Owner, Lenders' Agent and the Independent Engineer, as well as Owner's Engineer and any equity participant in Owner or Common Facilities Owner, may observe the performance of any such test and activity or inspection, and review the results of such tests and inspections. Such Persons, as well as Owner's Engineer and any equity participant in Owner or Common Facilities Owner may also observe the performance of any other on-Site test and inspection. Contractor shall not be required to delay any such test or inspection in the event any such Persons are not present at the notified time and location unless such test or inspection has been expressly designated as a hold point in connection with the inspection and test plan covering such Work.

2.24.4 Off-Site Testing and Inspections. Contractor shall provide Owner, Lenders' Agent and the Independent Engineer with no less than ten (10) Business Days written notice (or such other advance written notice as provided in Appendix T-1) of the scheduled dates for the conduct of, and opportunity to witness, the off-site (factory acceptance and other) tests as described on Appendix T-1. Once Contractor notifies Owner of the scheduled date for the conduct of a tests as described on Appendix T-1, Contractor shall not conduct such test on an earlier date or re-schedule the test to an earlier date without prior agreement of Owner, and if Contractor delays conduct of a test, Contractor shall notify Owner as soon as practicable of the re-scheduled date. If the schedule for the conduct of any such tests changes or re-testing is required, Contractor shall provide Owner, Lenders' Agent and the Independent Engineer with written notice of the revised schedule, or the schedule for re-testing, as applicable, as promptly as practicable. Contractor shall not be required to delay any such test or inspection in the event any such Persons are not present at the notified time and location unless such test or inspection has been expressly designated as a hold point in connection with the inspection and test plan covering such Work. With respect to the tests identified on Appendix T-1, Contractor shall provide Owner with copies of all off-site test results once each Month, or earlier upon Owner's reasonable request, whether or not any Owner Group member witnesses such test. With respect to any off-site testing of Equipment or components thereof not listed on Appendix T-1, Contractor shall provide Owner with copies of off-site test results upon Owner's reasonable request. Owner's Engineer and any equity participant in Owner or Common Facilities Owner, shall also have the right to witness off-site tests and receive copies of all off-site test results to the same extent as Owner. Owner shall communicate any questions or comments relating to such off-site testing or inspections to Contractor rather than directly to Vendors.

2.24.5 Uncovering.

(a) No portion of the Work that has been designed as a hold point pursuant to the inspection and test plan agreed to by the Parties shall be covered contrary to the requirements of this Agreement and prior to giving Owner reasonable opportunity to inspect such portion of the Work, subject where applicable to the provisions of Section 2.24.3 or 2.24.4. If any such portion of the Work should be covered contrary to the foregoing sentence, it must, if required in writing by Owner, be uncovered for inspection and subsequently be recovered, all at Contractor's expense.

(b) At any time prior to Substantial Completion if Owner reasonably believes that a portion of the Work is Defective, Owner may request that Owner or the Independent Engineer be afforded the opportunity to inspect a portion of the Work which has been properly covered (i.e., Owner has been given a reasonably opportunity to inspect such portion of the Work before it was covered, subject where applicable to the provisions of Section 2.24.3 or 2.24.4), and Contractor shall uncover the same. If the Work that is uncovered is determined to be Defective, Contractor shall bear the costs of such covering and uncovering and the costs to bring the applicable portion of the Work into conformance with the terms of this Agreement. If the Work that is uncovered as a result of Owner's request is not Defective, Owner's request shall be an Owner-Caused Delay.

2.24.6 No Obligation to Inspect. Neither Owner's, Lender's Agent's nor the Independent Engineer's right to conduct inspections under this Section 2.24 obligates Owner, Lender's Agent or the Independent Engineer to do so. Neither the exercise by Owner, Lender's Agent or the Independent Engineer of any such right, nor any failure on the part of Owner, Lender's Agent or the Independent Engineer to discover or reject Defective Work, shall be construed to imply an acceptance of such Defective Work or a waiver of such Defect.

2.25 Design and Engineering Work.

2.25.1 General. Contractor shall, as part of the Work, perform, or cause to be performed, all design and engineering Work necessary so that the Work meets the requirements of this Agreement and is otherwise capable of achieving the Guaranteed Performance Levels while meeting the Emission Guarantees and the Noise Guarantee. All design Work shall be performed by Persons who are (a) engineers or other professionals qualified, experienced and competent in the disciplines of the design for which they are responsible; and (b) hold the professional licenses required under Applicable Laws to design the Work.

2.25.2 Drawings and Specifications. The Drawings and Specifications shall be delivered to Owner in Fully Functional files and shall conform and comply with the requirements of this Agreement, including the Scope of Work, Basis of Design, Applicable Laws, and GECP.

2.25.3 Review Process.

(a) Periodic Reviews. During the development of the Drawings and Specifications, Contractor shall periodically conduct reviews of the design and engineering in progress with Owner in accordance with Appendix A, Attachment A-1 to Appendix A, and Appendix U, and provide Owner with the opportunity to provide comments during such reviews. Such reviews may be conducted at Contractor's office located in Houston, Texas, at any of its Supplier's offices, or remotely by electronic internet access, as the Parties agree.

(b) Submission by Contractor. Contractor shall submit copies of the Drawings and Specifications and other Deliverables to Owner for formal review, comment, or acceptance in accordance with Attachment A-1 to Appendix A and Appendix U.

(c) Review Periods. Owner shall have up to ten (10) Business Days from its receipt of Drawings and Specifications and other Deliverables submitted in accordance with Section 2.25.3(b) or Section 2.25.3(e) to issue written comments (which may include mark-ups of Drawings) or written acceptances of such Drawings and Specifications to Contractor.

(d) No Owner Response. If Owner does not issue any comments, proposed changes or written acceptance or rejections within such time periods, Contractor may proceed with the development of such Drawings and Specifications and any construction relating thereto, but Owner's lack of comments or acceptance, if applicable, shall in no event constitute an acceptance, approval or waiver by Owner with respect to the Drawings and Specifications received.

(e) Rejection by Owner. In the event that Owner rejects the Drawings or Specifications, Owner shall provide Contractor with a written statement of the reasons why such Drawing or Specification does not comply with this Agreement or does not comply with the version of the applicable Drawing last accepted by Owner (except as modified in accordance with Section 2.25.4), within the time period required for Owner's response under Section 2.25.3(c). Contractor shall respond to Owner's statement and, as applicable, shall provide Owner with revised and corrected Drawings and Specifications as soon as possible thereafter. Owner's rights with respect to the issuing of comments, proposed changes or acceptances or rejections of such revised and corrected Drawings or Specifications shall be governed by the procedures specified in this Section 2.25.3; provided, that Contractor shall not be entitled to any extensions of time to the Key Date Schedule, an adjustment to the Contract Price or any other adjustment as a result of the need for such revisions and corrections. If Contractor disagrees that such Drawing or Specification fails to comply with the Agreement, or does not comply with the version of the applicable Drawing last accepted by Owner (except as modified in accordance with Section 2.25.4), contrary to Owner's rejection, then in accordance with Section 8.5.1, Contractor shall identify any resulting change in the Change Request Log.

(f) Acceptance or Non-Response by Owner. Upon Owner's written acceptance of the Drawings and Specifications, or if Owner does not issue any comments, proposed changes or written acceptances or rejections of such Drawings and Specifications pursuant to Section 2.25.3(c), such Drawings and Specifications shall be the Drawings and Specifications that Contractor shall use to construct the Work; provided, that Owner's review or acceptance of any Drawings and Specifications (or Owner's lack of comments or written rejection thereof) shall not in any way be deemed to limit or in any way alter Contractor's responsibility to perform and complete the Work in accordance with the requirements of this Agreement.

2.25.4 Technical Deviations. During the performance of the Work, Contractor shall utilize a technical deviation protocol to address any modifications or changes to any Specifications, which shall provide for notice to and prior approval of Owner of any such pending modifications or changes (not to be unreasonably withheld) before such modification or change is utilized in the Liquefaction Project, and shall be subject to Section 2.21.2, as applicable.

2.25.5 Management of Change. Contractor shall prepare a management of change procedure ("MOC") for Owner review and approval. Any changes to piping and instrument diagrams (P&IDs) following completion of the hazard and operability analysis shall be managed through implementation of Contractor's MOC procedure. HAZOP reviews for any changes which have safety or operability implications will be conducted with Owner participation and documented in the HAZOP LOPA Reports as MOC addendums.

2.25.6 Design Licenses. Contractor shall perform, or cause to be performed, all design and engineering Work using GECP and in accordance with Applicable Laws, and all Drawings and Specifications and design and engineering Work shall be signed and stamped by design professionals licensed in accordance with Applicable Laws.

2.25.7 CAD Drawings. Unless otherwise expressly provided under this Agreement, all Drawings and Record As-Built Drawings prepared by Contractor or its Suppliers under this Agreement shall be prepared using computer aided design (“CAD”), in such formats and delivered in accordance with Appendix U.

2.25.8 As-Built Drawings. During construction, Contractor shall keep a redlined, marked, up-to-date set of As-Built Drawings on the Site as required under Appendix U. Contractor shall deliver to Owner the As-Built Drawings for each Stage in accordance with Appendix U. The Record As-Built Drawings shall be delivered by Contractor for each Stage no later than one hundred twenty (120) Days after the Substantial Completion Date of such Stage, but in any event, no later than Final Acceptance.

2.25.9 3D Model. Contractor shall develop and deliver to Owner a 3D model that complies with the applicable requirements of Appendix U. Contractor shall coordinate and cooperate with Owner to update such 3D model during performance of the Work.

2.25.10 Deliverables. Contractor shall deliver copies of all Deliverables in Fully Functional files, and in the formats and in accordance with timing and other requirements set forth in Appendix U and Attachment U-1.

2.26 Survey Control Points. Contractor shall establish all survey control points and layout the entire Work in accordance with the requirements of this Agreement. If Contractor or any of its Subcontractors or any of the representatives or employees of any of them move or destroy or render inaccurate the survey control point provided by Owner, such control point shall be replaced by Contractor at Contractor’s own expense and Contractor shall be liable to Owner for all other damages, costs, losses and expenses arising out of such relocation or destruction.

2.27 Operation Prior to Substantial Completion.

2.27.1 Use of Operating Personnel. Contractor shall provide all labor, administrative personnel, materials, supplies and other items which may be required in connection with operation of each Stage prior to Substantial Completion except for the Operating Personnel. Training of Operating Personnel for the operation and maintenance of the LNG Facility shall be in accordance with Section 2.16. Until Substantial Completion of the applicable Stage, the Operating Personnel providing support to such Stage, including during Contractor’s pre-commissioning, commissioning, start-up and operation of such Stage and the conduct of Performance Tests and any other tests for such Stage, shall be under the control of and supervised by Contractor; provided, that, notwithstanding the foregoing, such Operating Personnel shall remain employees or agents of Owner and shall not be considered employees of Contractor for any reason; provided, further, that the foregoing shall not be deemed or construed to limit Contractor’s obligation to provide personnel during commissioning and Performance Testing, and Contractor agrees that it shall remain responsible for direct supervision of Operating Personnel that perform such activities.

2.27.2 Plan for Utilization of Operating Personnel. Contractor shall, no later than two hundred seventy (270) Days before the date on which the first tranche of Operating

Personnel are scheduled to complete training in accordance with Appendix P, prepare for Owner's review a proposed plan regarding the utilization of the Operating Personnel and the interface with Contractor's personnel during pre-commissioning, commissioning, start-up and operation of such Stage, and the conduct of Performance Tests and any other tests for such Stage. Each such utilization plan shall, among other things, be prepared (a) so as to minimize, to the extent reasonably possible under the circumstances (considering the obligation to keep any Stage which has achieved Substantial Completion operable), any impact on the operation of any Stage that has achieved Substantial Completion; (b) to take into account Owner's operating and maintenance procedures; (c) based on the number of the Operating Personnel available for participation in pre-commissioning, commissioning, start-up and Performance Testing, and taking into consideration that after commissioning of Stage I is completed, all Operating Personnel assigned to maintenance and all other Operating Personnel that were part of the first tranche of training, shall be assigned to work on Stage I; (d) with consideration of any specific safety issues for such Stage; and (e) taking into account the type of activities to be performed. Such utilization plan shall be mutually agreed-upon by the Parties no later than forty-five (45) Days after Owner's receipt of Contractor's proposed plan.

2.27.3 No Relationship with Operating Personnel. Nothing in this Agreement, including this Section 2.27, shall be interpreted to create a principal-agent relationship between Contractor and any of the Operating Personnel. Notwithstanding anything in this Agreement to the contrary, Contractor will not be entitled to a Change Order or any adjustment to its obligations hereunder as a result of the performance, skill or actions of the Operating Personnel.

2.28 Coordination with Others Performing Work. Contractor acknowledges that Persons (including the Other Contractors), contracting with Owner, other Owner Group members or subcontracting with Other Contractors, may perform certain work on or near the Site. Contractor shall: (a) in accordance with the Interface Management Plan, coordinate the Work with the work of such Persons and cooperate with such Persons to minimize the impact of any interference; (b) attend any meeting reasonably requested by Owner or the Other Contractors (whether or not Owner is an attendee of such meeting) for the purpose of coordinating performance of the Work or to resolve concerns relating to the Work, either Person's employees, or either Person's subcontractors; and (c) use its commercially reasonable efforts, and cause its Subcontractors to use commercially reasonable efforts to, maintain good working relationships with Other Contractors and their employees and such Other Contractors' subcontractors and their employees. If any Other Contractor that is performing any work on the Site fails to reasonably cooperate or coordinate with Contractor and interferes with Contractor in the performance of the Work, Contractor shall promptly notify Owner, reasonably explaining the facts and circumstances surrounding such delay, and Owner shall use reasonable efforts to cause the Other Contractor to avoid interfering with Contractor and to cooperate and coordinate their activities with Contractor.

2.29 Compliance with Lender Requirements.

2.29.1 Financing of Liquefaction Project; Agreements with Lenders. Contractor acknowledges that the Liquefaction Project will be financed with assistance provided by

Lenders. Contractor agrees to deliver, at its expense and as a condition to any such financing or refinancing, such documentation and information as is customary for a financing or refinancing of such type. Without limitation on the preceding sentence, Contractor agrees, when so requested by Owner, to: (a) enter into, and cause Contractor's Guarantor to enter into, direct agreements with any such Lender or Lenders' Agent substantially in the form attached hereto as Appendix OO-1 and Appendix OO-2, respectively (each, a "**Direct Agreement**"), with such modifications thereto as required by such Lender or Lenders' Agent but that do not increase Contractor's liability or obligations to Owner or the Common Facilities Owner, or limit Contractor's rights with respect to Owner under this Agreement; (b) deliver to Lenders or Lenders' Agent certified copies of Contractor's and any Contractor Guarantor's corporate charter and by-laws, resolutions, incumbency certificates, legal opinions (covering, without limitation, such items as the validity and enforceability of this Agreement and any Contractor Guarantee, Letter of Credit or other credit support provided hereunder, the due organization and existence of Contractor and any Contractor Guarantor, that Contractor and any Contractor Guarantor has obtained all necessary governmental consents, and that no material litigation exists), financial information that is customarily provided to Lenders (in a form and format to be reasonably acceptable to Contractor), evidence of insurance, a consent to receive service of process in New York, New York and such other items as Lenders or Lenders' Agent may reasonably request, or that Owner may request in order to meet the reasonable information requests of rating agencies that are rating debt to be issued by Owner for the purposes of financing the Liquefaction Project (subject to customary rating agency confidentiality terms); (c) deliver such other information, documents or data as customarily required by Lenders for purposes of preparing an offering memorandum, prospectus or similar sales document for a financing or capital markets offering, including by providing reasonable access to management for due diligence discussions in connection with any capital markets offering; and (d) fulfill all obligations and comply with all procedures, and require Suppliers, to the extent applicable, to fulfill all obligations and comply with all procedures, that may reasonably result from Owner's financing arrangements, including providing all information and reports reasonably requested by Lenders or Lenders' Agent to facilitate the financing or refinancing of the LNG Facility and the Liquefaction Project, including lien waivers in accordance with Sections 6.3.5 and 6.6. Contractor acknowledges that Owner will from time to time seek the consent of the Lenders, Lenders' Agent or the Independent Engineer in connection with actions that Owner may take under this Agreement as necessary or appropriate under the terms of Owner's agreements with Lenders, and that seeking such consent shall not be deemed or construed to be unreasonable.

2.29.2 Lender Requirements. Contractor agrees, as part of the Work:

- (a) to make available financing expertise within its organization to work with and assist Owner's financial advisors;
- (b) to promptly advise Owner of any significant change in financial position or rating;
- (c) to allow Lenders, their representatives and designees (including any advisors and consultants) access to the Site, any other location where the Work is performed,

and the Work, upon prior request, during normal working hours and in a manner that does not delay or disrupt construction of the LNG Facility in any respect, subject to Contractor and the Lenders having agreed on reasonably satisfactory confidentiality arrangements;

(d) to allow Lenders, their representatives and designees (including any advisors and consultants) to witness any Performance Tests conducted in connection with the Work, subject to Contractor and the Lenders having agreed on reasonably satisfactory confidentiality arrangements;

(e) to cooperate with Owner and its Affiliates in providing such documentation and information as is required by any of the Lenders with respect to the proper and ethical operation of Contractor's businesses, including assurances to the effect that Contractor, and to the extent required by Applicable Law or Lender requirements, Contractor's Affiliates, are in compliance with Section 23.13;

(f) to provide certificates, notices and other information reasonably requested by Lenders as necessary to reasonably demonstrate to the Lenders that Contractor has achieved Mechanical Completion for a Stage, Ready for Start-Up for a Stage, Substantial Completion of a Stage, Final Acceptance of a Stage, and Final Completion; and

(g) to execute promptly any reasonable amendment or modification of this Agreement required by any Lender that does not increase Contractor's liability or obligations to Owner or the Common Facilities Owner, or limit Contractor's rights with respect to Owner under this Agreement.

2.30 Geotechnical Field Testing Program. Prior to the FNTTP Date, Contractor shall conduct field tests of piles, soil mixing and settlement wick drains to confirm Contractor's design of piles, soil mixing and settlement wick drains based on the geotechnical conditions of the Site as determined from the Geotechnical Reports. Contractor shall deliver the results of all such tests to Owner, including Contractor's good faith analysis of the results and any resulting impact on Contractor's pile design, settlement wick drain design or quantities of lime, cement and fill material.

ARTICLE 3

OWNER'S RESPONSIBILITIES

3.1 Payment of the Contract Price.

3.1.1 Owner Obligation. Owner shall timely pay the Contract Price in accordance with the provisions of Article 6.

3.1.2 NO OBLIGATION OF COMMON FACILITIES OWNER. CONTRACTOR ACKNOWLEDGES AND AGREES THAT NOTWITHSTANDING THAT THE COMMON FACILITIES OWNER IS A PARTY HERETO, THE COMMON FACILITIES OWNER SHALL NOT HAVE ANY OBLIGATION OR LIABILITY WHATSOEVER FOR

THE PAYMENT OF ANY AMOUNTS DUE TO CONTRACTOR HEREUNDER, WHETHER ARISING UNDER CONTRACT, TORT (INCLUDING NEGLIGENCE), STRICT LIABILITY, PRODUCTS LIABILITY, INDEMNITY, CONTRIBUTION, OR ANY OTHER CAUSE OF ACTION, AND CONTRACTOR HEREBY WAIVES AND RELEASES THE COMMON FACILITIES OWNER FROM ANY AND ALL CLAIMS FOR COMPENSATION OR PAYMENT OF ANY OTHER AMOUNTS DUE HEREUNDER, AND AGREES TO LOOK SOLELY TO OWNER WITH RESPECT TO PAYMENT OF ANY AMOUNTS OWED TO CONTRACTOR PURSUANT TO OR IN CONNECTION WITH THIS AGREEMENT.

3.1.3 [***].

3.2 Owner Supply of Electricity during Pre-Commissioning, Commissioning, Start-up and Testing. Subject to Contractor's performance of the Work in accordance with Appendix A and Appendix B and otherwise in accordance with this Agreement, that is required to interconnect the LNG Facility with the new facilities to be constructed by Entergy, Owner shall supply electricity to each Stage of the LNG Facility for use during pre-commissioning, commissioning, start-up and testing of such Stage at such dates and in the amount identified in Appendix E-1. During such periods, Contractor shall remain responsible for obtaining electrical power as otherwise required for performance of the Work in accordance with Section 2.13.2. The electricity supplied by Owner pursuant to this Section 3.2 shall be used only for operation of Equipment installed in each Stage during pre-commissioning, commissioning, start-up and testing, and shall not be used by Contractor for any other purpose.

3.3 Owner-Furnished Information.

3.3.1 Owner has provided, and may from time to time provide, Contractor with certain information relative to the LNG Facility, the Work, other aspects of the Liquefaction Project or related matters (such information, the "**Owner-Furnished Information**"). Contractor acknowledges that the Owner-Furnished Information has been provided as background information and as an accommodation to Contractor. In addition, Owner has provided Contractor with certain Non-Verified Information as identified in Appendix N. Owner acknowledges that Contractor is relying upon such information and has not verified and shall not verify the Non-Verified Information.

3.3.2 OWNER MAKES NO WARRANTIES, EXPRESS OR IMPLIED, TO CONTRACTOR OR ANY OTHER PERSON, AS TO THE ACCURACY, SUFFICIENCY OR CONTENT OF THE OWNER-FURNISHED INFORMATION OR THE OPINIONS THEREIN CONTAINED OR EXPRESSED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. ANY ERROR IDENTIFIED IN ANY SUCH OWNER-FURNISHED INFORMATION SHALL NOT BE A BREACH OF ANY COVENANT, CONDITION, REPRESENTATION OR WARRANTY OF OWNER, SHALL NOT FORM A BASIS FOR AN OWNER EVENT OF DEFAULT, SHALL NOT BE AN EVENT OF FORCE MAJEURE, AND SHALL NOT BE AN EXCUSABLE EVENT (EXCEPT WITH RESPECT TO ERRORS OR INACCURACIES IN THE NON-VERIFIED INFORMATION WHICH SHALL BE AN OWNER-CAUSED DELAY).

3.4 Appointment of Authorized Representative. Owner hereby appoints Karim El Kheiasy to be the Owner Representative. The Owner Representative shall have full authority to act on Owner's behalf under this Agreement; provided, however, that the Owner Representative shall not be entitled to amend or terminate this Agreement without further written authorization from Owner; provided, further, that Owner may from time to time by notice to Contractor limit the authority of the Owner Representative to take certain actions on Owner's behalf under this Agreement, which notices will be effective only prospectively from and after the date that the notices are deemed to have been given under Article 22. Owner may from time to time by notice to Contractor remove any person from his appointment as the Owner Representative and appoint another person in his place with effect from a future date to be specified in the notice. Owner shall at all times throughout the term of this Agreement ensure that some person continues to act as the Owner Representative.

3.5 Access to the Site. Subject to Contractor obtaining and maintaining any applicable Permits, Owner shall provide Contractor with such access to the Site as agreed by the Parties pursuant to a Limited Notice to Proceed issued by Owner and signed by Contractor in accordance with this Agreement, and shall provide Contractor with access to the Site following the FNTP Date in accordance with Sections 2.11.1 and 2.11.4 as of the FNTP Date.

3.6 Personnel Provided by Owner.

3.6.1 Personnel for Operations. Owner shall provide, or contract for, between eighty (80) and one hundred (100) Operating Personnel as Owner determines necessary for the operation and maintenance of the LNG Facility. Owner shall notify Contractor by no later than three hundred sixty five (365) Days after the FNTP Date of the number of Operating Personnel and the job disciplines of such Persons that Owner will make available for training. Owner will make Operating Personnel available in accordance with Section 3.6.2 to complete field training and work under the direction of Contractor during pre-commissioning, commissioning, start-up and operation of a Stage until Substantial Completion of such Stage in accordance with the utilization plan agreed to by Owner and Contractor as described in Section 2.27.2. For the avoidance of doubt, Owner shall be responsible for payment of all wages, fringe benefits, taxes and insurance for the Operating Personnel, and the provision of any computers or tablet devices as Owner determines necessary for the Operating Personnel.

3.6.2 Personnel for Training. Owner shall ensure that, subject to Owner's sick leave and other employee policies, the Operating Personnel are available for training at the times required under the training schedule agreed to by Owner and Contractor in accordance with Appendix P.

3.7 Owner Permits. Owner shall confer with Contractor upon receipt of a notice of a proposed modification or amendment or extension of an Owner Permit, and shall sign such applications for the amendment or modification or extension of any Owner Permit as Owner reasonably agrees are desirable and appropriate and in a form reasonably acceptable to Owner. Owner shall have the right to, at Owner's request, submit any proposed modification, amendment or extension of an Owner Permit to the relevant Governmental Authority and participate in any meetings with Governmental Authorities regarding any Owner Permit. Owner

shall provide such information as reasonably requested by Contractor and otherwise provide reasonable assistance to Contractor in obtaining the Contractor Permits. Owner shall obtain and maintain the Owner Permits. In connection with the FERC Order, Owner shall: (a) provide the turning lanes as and when required under Condition No. 81; (b) provide the hazard analysis reports and studies as and when required under Condition No. 88; (c) provide the operational plans and programs for each Stage as and when required under Condition No. 123, other than the O&M Manuals to be provided by Contractor as part of the Work; and (d) provide procedures for management of off-Site contractors following Substantial Completion of Stage II as and when required under Condition No. 124, other than with respect to management of Suppliers performing Warranty Work.

3.8 Feed Gas; Fuel Gas. On or before the dates set forth on the Key Date Schedule, Owner shall procure and make Fuel Gas and Feed Gas available for commissioning, start-up, cool down and testing of the LNG Facility as required for Contractor to achieve Substantial Completion of each Stage (including Natural Gas or LNG utilized in the initial cool down of the LNG Facility). Such Fuel Gas and Feed Gas shall be made available by Owner at the outlet of the applicable meter stations to be constructed by Other Contractors. When made available to Contractor, the Fuel Gas and Feed Gas will meet the Feed Gas Specifications. Fuel Gas and Feed Gas to be provided by Owner in accordance with this Section 3.8 shall be nominated and scheduled in accordance with Section 9.5.3.

3.9 Owner Provision of LNG Tankers; LNG Tanker Loading; Cool-Down Cargos. Subject to Contractor's having provided the notices and information required under Section 9.6.1, on or before the dates set forth on the Key Date Schedule, Owner shall cause LNG Tankers to be available for Loading of LNG, including for purposes of the Ship Loading Rate Performance Test. Subject to Contractor's having provided the notices and information required under Section 9.6.7; Owner shall use commercially reasonable efforts to provide a LNG Tanker carrying at least the volume of LNG and at such time as requested by Contractor under Section 9.6.7 for use in the cool-down of applicable Stage I components.

3.10 Disposition and Title to Products. As between Contractor and Owner, Owner shall be responsible for the disposition of the produced LNG and NGLs, including LNG and NGLs produced during the commissioning, start-up, cool down and testing of the LNG Facility. As between Contractor and Owner, Owner (or its customers) shall have title to, and be entitled to retain, all revenues received from the sale of LNG, NGLs and other products.

3.11 Pre-Existing Hazardous Materials and Archeological Finds. Owner shall, as promptly as practicable following receipt of notice from Contractor in accordance with Section 2.17, and to the extent required by any Applicable Law or any Governmental Authority, remediate, or cause the remediation of, any Pre-Existing Hazardous Materials present at the Site and address Archeological Finds with the appropriate Governmental Authority, as applicable.

3.12 LNG Storage. Following Substantial Completion of Stage I and subject to Contractor providing the notices and information required in accordance with Sections 9.5.1 and 9.6, Owner shall provide sufficient storage volume for Contractor to perform the commissioning activities for Stage II.

3.13 Tipping Fees. Owner shall pay any tipping fees related to disposal of dredge material into area 9A-9B of the Sabine Naches Navigation District disposal site or area 8 of the U.S. Army Corp of Engineers site.

3.14 Rights-of-Way. Owner shall obtain rights-of-way from utility owners to allow Contractor to cross over existing and relocated utilities in the locations as depicted on Attachment L-4 to Appendix L by the dates set forth in the Key Date Schedule, subject to Contractor having provided the design of the cross-overs in accordance with Section 2.11.5 and approval of the proposed design by the applicable utilities.

3.15 No Other Responsibilities. Without limiting its obligations under this Article 3, Owner shall have no responsibilities with respect to the engineering, construction, pre-commissioning, commissioning, start-up or testing of the LNG Facility, any Stage, or operation of any Stage prior to Substantial Completion of such Stage.

3.16 Owner's Failure to Perform. A failure of Owner to perform any obligation or covenant in accordance with this Article 3 (other than Section 3.1) shall not be considered a breach of any covenant, condition, representation or warranty of Owner, and shall not be construed as an Owner Event of Default, it being understood that any such failure may constitute an Owner-Caused Delay, the sole and exclusive remedy for which is set forth in Article 8 and Article 18.

ARTICLE 4

COMMENCEMENT OF WORK; PROJECT SCHEDULE

4.1 Commencement of Work.

4.1.1 Limited Notice to Proceed. At any time on or before [***], Owner, in its sole discretion, may issue the Bridging LNTP, or the Bridging LNTP and Non-Bridging LNTP, authorizing Contractor to commence performance of the Work as specified in such Limited Notice to Proceed; provided, however, that if Owner maintains EDSA/SWSA Funding following [***], Owner may issue the Bridging LNTP or Non-Bridging LNTP after [***]. If Owner has issued Bridging LNTP or maintained EDSA/SWSA Funding, Owner, in its sole discretion, may issue Non-Bridging LNTP at any time; provided, however, if Owner issues the Non-Bridging LNTP, Owner must concurrently issue the Bridging LNTP if not already already issued. If Owner has not either issued the Bridging LNTP on or before [***], or committed to maintaining EDSA/SWSA Funding through [***], Contractor may suspend performance of the Work and such suspension shall be deemed a suspension by Owner pursuant to Section 19.2. If Owner has not issued the Non-Bridging LNTP on or before [***], the Bridging LNTP, if issued, shall be adjusted in accordance with Attachment NN-1 to Appendix NN pursuant to Section 8.3.1(t). If Owner has not issued the Full Notice to Proceed such that the FNTP Date has occurred on or before [***], the Bridging LNTP and the Non-Bridging LNTP, if issued, shall be extended for the period from [***] and up to [***] in accordance with Attachments NN-1 and NN-2 to Appendix NN pursuant to Section 8.3.1(t). If Owner has not issued the Bridging LNTP or the Non-Bridging LNTP on or before [***], or committed to maintaining EDSA/SWSA Funding

through [***], Contractor may suspend performance of the Work and such suspension shall be deemed a suspension by Owner pursuant to Section 19.2. Depending on when the Bridging LNTP, the Non-Bridging LNTP and the Full Notice to Proceed is issued, as applicable, the provisions of Section 4.2.1 shall apply. Owner shall have no obligation to issue a Limited Notice to Proceed. If Owner issues a Limited Notice to Proceed, Contractor shall commence with the performance of the Work as and when described in the Limited Notice to Proceed. Except as expressly stated in the Limited Notice to Proceed, Contractor shall not be entitled to any compensation with respect to the Work performed under the Limited Notice to Proceed, and Owner shall not be obligated to make any payments with respect to the Work performed pursuant to the Limited Notice to Proceed. Any payments made to Contractor pursuant to a LNTP shall be credited against the Contract Price.

4.1.2 Effect of Full Notice to Proceed. The Full Notice to Proceed shall authorize Contractor to commence performance of all of the Work. Until Owner issues the Full Notice to Proceed and it has become effective in accordance with its terms, Contractor shall not have the right or obligation to perform any Work hereunder; provided, however, that if Owner issues a Limited Notice to Proceed, Contractor shall have the obligations to perform the Work as described in such Limited Notices to Proceed, and Contractor shall have the obligations as set forth in Section 18.2.5 beginning upon the Effective Date. Upon the date that the Full Notice to Proceed becomes effective in accordance with its terms, Contractor shall promptly commence the Work in accordance with the Baseline CPM Schedule. **IN THE ABSENCE OF OWNER'S ISSUANCE OF THE FULL NOTICE TO PROCEED AND SUCH FULL NOTICE TO PROCEED HAVING BECOME EFFECTIVE, IF CONTRACTOR PERFORMS OR COMMENCES PERFORMANCE OF A PART OF THE WORK OTHER THAN AS AUTHORIZED UNDER A LIMITED NOTICE TO PROCEED ISSUED BY OWNER, CONTRACTOR SHALL NOT BE ENTITLED TO ANY COMPENSATION HEREUNDER, PERFORMANCE OF THAT PART OF THE WORK SHALL BE AT CONTRACTOR'S SOLE RISK AND EXPENSE AND SHALL BE REVERSED UPON THE WRITTEN ORDER OF OWNER AT CONTRACTOR'S RISK AND EXPENSE, AND CONTRACTOR SHALL NOT BE ENTITLED TO ANY ADJUSTMENT TO THE SCOPE OF WORK, CONTRACT PRICE, MILESTONES, PAYMENT SCHEDULE OR THE KEY DATE SCHEDULE, OR ANY OTHER TERMS OR CONDITIONS OF THIS AGREEMENT, IN CONNECTION WITH THE PERFORMANCE OF THAT PART OF THE WORK OR ANY SUCH REVERSAL.**

4.1.3 Issuance of Full Notice to Proceed. Subject to Section 4.1.4, Owner, in its sole discretion, may issue the Full Notice to Proceed with a FNTP Date that occurs on or before October 15, 2020. Owner shall have no obligation to issue the Full Notice to Proceed and shall issue or shall not issue the Full Notice to Proceed in its sole discretion.

4.1.4 Delay in FNTP Date.

(a) If Owner does not issue the Full Notice to Proceed on or before July 15, 2020, then upon Owner's issuance of the Full Notice to Proceed with a FNTP Date that occurs on or before October 15, 2020, Contractor shall have the right to a Change Order in accordance with Section 8.3.1(k) for an increase in the Contract Price: (i) for the first [***] Days

of delay, an amount equal to [***] (pro-rated for each Day or portion thereof by which the delay is less than [***] Days); (ii) for the next [***] Days of delay, an amount equal to [***] (pro-rated for each Day or portion thereof by which such additional delay is less than [***] Days); and (iii) for the next [***] Days of delay, an amount equal to [***] (pro-rated for each Day or portion thereof by which such additional delay is less than thirty (30) Days), after July 15, 2020 and before the FNTP Date occurs (e.g., if Owner issues the Full Notice to Proceed with a FNTP Date that occurs on October 15, 2020, the amount that shall be due pursuant to this Section 4.1.4(a) shall equal Fifty Seven Million Dollars (\$57,000,000)). Except for the adjustment to the Contract Price as contemplated in this Section 4.1.4(a) and corresponding adjustments to the Milestones and Payment Schedules, and the Change Order to be issued in connection with the determination of the Guaranteed Substantial Completion Dates in accordance with Section 4.2.2, Contractor shall not have any right to a Change Order with respect to any further adjustments to the Contract Price, or any adjustment to the Milestones, the Payment Schedule, the Key Dates, including the Guaranteed Substantial Completion Date, or the Guaranteed Performance Levels, or any other terms or conditions of this Agreement, as a result of such delay, other than pursuant to Section 8.3.1(t), as applicable.

(b) If Owner does not issue the Full Notice Proceed such that the FNTP Date occurs on or before October 15, 2020 (the “Extended Bid Validity Date”), then unless the Parties otherwise agree, the Parties shall meet and discuss whether and how to proceed with this Agreement and the Work, including agreeing on any amendments to this Agreement that may be required. Prior to such meeting, Contractor shall, if requested by Owner, to the extent reasonably possible, provide its revised proposal for the Work, or provide a proposal to develop a revised proposal, including revisions to the Contract Price and the Key Date Schedule, reasonably anticipated to result from such delay in issuance of the Full Notice to Proceed. Adjustments proposed and agreed to by the Parties shall not be subject to the requirements or the limitations or waivers described in Article 8 or Article 18, but shall not include any changes in design, quantities or Equipment (unless such changes have been requested or directed by Owner), or adjustments to correct for errors or omissions in Contractor’s assumptions; provided, however, that no such limitation on changes shall apply if the Parties have not agreed to the proposed adjustments on or before the date that is ninety (90) Days after the Extended Bid Validity Date. If the Parties reach agreement on how to proceed with this Agreement, Contractor and Owner shall prepare a Change Order, and any necessary amendments to this Agreement as the Parties agree, to adjust the Guaranteed Substantial Completion Dates in accordance with Section 4.2.2, and document the adjustments to the Contract Price, if any, and update Appendix C and the Payment Schedule accordingly, as agreed; provided that such Change Order shall not include any adjustments to the Milestones or the Guaranteed Performance Levels. If the Parties are unable to agree on how to proceed with this Agreement on or before February 28, 2022, either Party may terminate this Agreement pursuant to Section 19.8. In no event shall Owner’s rights to issue unilateral Change Orders apply under the circumstances described in this Section 4.1.4(b).

4.1.5 CONTRACT PRICE ADJUSTMENTS AS LIQUIDATED DAMAGES. ANY INCREASE TO THE CONTRACT PRICE PURSUANT TO SECTION 4.1.4(a) WILL BE DEEMED TO BE A LIQUIDATED DAMAGE. CONTRACTOR SHALL NOT HAVE ANY

RIGHT TO A CHANGE ORDER WITH RESPECT TO THE CONTRACT PRICE, THE MILESTONES, THE PAYMENT SCHEDULE, THE KEY DATE SCHEDULE, INCLUDING THE GUARANTEED SUBSTANTIAL COMPLETION DATE, OR THE GUARANTEED PERFORMANCE LEVELS, OR ANY OTHER TERMS AND CONDITIONS OF THIS AGREEMENT, EXCEPT AS SPECIFIED IN SECTION 4.1.4 AND SECTION 4.2.2. THE PARTIES HEREBY ACKNOWLEDGE AND AGREE THAT IT WOULD BE DIFFICULT IF NOT IMPOSSIBLE TO ASCERTAIN AND QUANTIFY THE ACTUAL DAMAGES THAT CONTRACTOR WOULD INCUR UNDER THE CIRCUMSTANCES SET FORTH IN SECTION 4.1.4(a). ACCORDINGLY, IT IS EXPRESSLY AGREED THAT NONE OF THE AMOUNTS PAYABLE UNDER SECTION 4.1.4(a) CONSTITUTE A PENALTY AND THAT THE PARTIES, HAVING NEGOTIATED IN GOOD FAITH FOR SUCH SPECIFIC AMOUNTS AND HAVING AGREED THAT SUCH AMOUNTS ARE REASONABLE IN LIGHT OF THE ANTICIPATED HARM CAUSED BY THE DELAY IN THE FNTF EFFECTIVE DATE, ARE ESTOPPED FROM CONTESTING THE VALIDITY OR ENFORCEABILITY OF THE AMOUNTS AS SET FORTH IN SECTION 4.1.4(a) ON THE BASIS THAT SUCH AMOUNTS CONSTITUTE A PENALTY OR ARE OTHERWISE UNENFORCEABLE OR INVALID. NOTHING IN THIS SECTION 4.1.5 SHALL LIMIT CONTRACTOR'S RIGHTS UNDER SECTION 18.2.5 IN THE EVENT OF A CLAIM SUBMISSION EVENT THAT OCCURS PRIOR TO THE FNTF DATE.

4.2 Project Schedule. Contractor shall perform the Work in accordance with the Project Schedule and this Section 4.2. Attached hereto as Appendix E-1 is the Key Date Schedule which lists the Key Date Items, including the Guaranteed Substantial Completion Dates, and the applicable dates of completion for each such Key Date Item. Attached hereto as Appendix E-2 is the Baseline CPM Schedule, incorporating all of the Key Date Items consistent with the Key Date Schedule. The Baseline CPM Schedule shall not be subject to adjustment during the performance of the Work unless otherwise agreed to by the Parties pursuant to an amendment to this Agreement (and not by Change Order) except to reflect the actual FNTF Date in accordance with Section 4.4. The Key Date Items on the Key Date Schedule, including the Guaranteed Substantial Completion Dates, shall be subject to adjustment only in accordance with Section 4.4 or as agreed to by Owner (or determined in accordance with Article 20) pursuant to a Change Order issued in accordance with the applicable provisions of Article 8, except that certain Key Date Items may be added to the Key Date Schedule or adjusted pursuant to Section 9.6.3.

4.2.1 Guaranteed Completion Dates. Contractor shall cause each Stage to achieve Substantial Completion on or before the dates indicated below.

(a) Provided that (i) Owner has maintained EDSA/SWSA Funding until it issues the Bridging LNTP; (ii) Owner has issued the Bridging LNTP and the Non-Bridging LNTP on or before [***] and funds the Limited Notices to Proceed in accordance with the schedules set forth therein until the Full Notice to Proceed is issued; (iii) the Non-Bridging LNTP is issued at least [***] Days before the Full Notice to Proceed is issued; and (iv) the Full Notice to Proceed is issued on or before October 15, 2020, then Contractor shall cause Substantial Completion of Stage I to be achieved on or before the date that is [***] Days after

the FNTP Date (the “**Guaranteed Stage I Substantial Completion Date**”); provided, further, that if the Full Notice to Proceed is issued after July 15, 2020 but on or before October 15, 2020, the Contract Price will be adjusted in accordance with Section 4.1.4(a).

(i) If (A) Owner has maintained EDSA/SWSA Funding until it issues the Bridging LNTP; (B) Owner issues the Bridging LNTP on or before [***] and funds the Bridging LNTP in accordance with the schedule set forth therein, or maintains EDSA/SWSA Funding in lieu of issuing the Bridging LNTP, until the Full Notice to Proceed is issued; (C) the Non-Bridging LNTP is never issued; and (D) the Full Notice to Proceed is issued no earlier than [***] but on or before October 15, 2020, the Guaranteed Stage I Substantial Completion Date shall be [***] Days after the FNTP Date; provided, that if the Full Notice to Proceed is issued after July 15, 2020 but on or before October 15, 2020, the Contract Price will be adjusted in accordance with Section 4.1.4(a); provided, further, that if Owner issues the Full Notice to Proceed earlier than June 15, 2020, the Guaranteed Stage I Substantial Completion Date shall be adjusted as agreed by the Parties.

(ii) If (A) Owner has maintained EDSA/SWSA Funding until it issues the Bridging LNTP; (B) Owner issues the Bridging LNTP on or before [***] and funds the Bridging LNTP in accordance with the schedule set forth therein, or maintained EDSA/SWSA Funding in lieu of issuing the Bridging LNTP until the Bridging LNTP is issued; (C) Owner issues the Non-Bridging LNTP at least [***] Days before the Full Notice to Proceed is issued and funds the Non-Bridging LNTP in accordance with the schedule set forth therein until the Full Notice to Proceed is issued; and (D) the Full Notice to Proceed is issued on or before October 15, 2020, the Guaranteed Stage I Substantial Completion Date shall be [***] Days after the FNTP Date; provided, that if the Full Notice to Proceed is issued after July 15, 2020 but on or before October 15, 2020, the Contract Price will be adjusted in accordance with Section 4.1.4(a).

(iii) If (A) Owner has maintained EDSA/SWSA Funding until it issues the Bridging LNTP; (B) Owner issues the Bridging LNTP on or before [***] and funds the Bridging LNTP in accordance with the schedule set forth therein, or maintained EDSA/SWSA Funding in lieu of issuing the Bridging LNTP until the Bridging LNTP is issued; (C) Owner issues the Non-Bridging LNTP less than one hundred thirty (130) Days before the Full Notice to Proceed is issued and funds the Non-Bridging LNTP in accordance with the schedule set forth therein until the Full Notice to Proceed is issued; and (D) the Full Notice to Proceed is issued no earlier than [***] but on or before October 15, 2020, the Guaranteed Stage I Substantial Completion Date shall be between [***] Days and [***] Days after the FNTP Date, as the Parties agree; provided, that if the Full Notice to Proceed is issued after July 15, 2020 but on or before October 15, 2020, the Contract Price will be adjusted in accordance with Section 4.1.4(a); provided, further, that if Owner issues the Full Notice to Proceed earlier than [***], the Guaranteed Stage I Substantial Completion Date shall be adjusted as agreed by the Parties.

(b) Provided that (i) Owner has maintained EDSA/SWSA Funding until it issues the Bridging LNTP; (ii) Owner has issued the Bridging LNTP and the Non-

Bridging LNTP on or before [***] and funds the Limited Notices to Proceed in accordance with the schedules set forth therein until the Full Notice to Proceed is issued; (iii) the Non-Bridging LNTP is issued at least [***] Days before the Full Notice to Proceed is issued; and (iv) the Full Notice to Proceed is issued on or before October 15, 2020, then Contractor shall cause Substantial Completion of Stage II to be achieved on or before the date that is [***] Days after the FNTP Date (the “**Guaranteed Stage II Substantial Completion Date**”); provided, further, that if the Full Notice to Proceed is issued after July 15, 2020 but on or before October 15, 2020, the Contract Price will be adjusted in accordance with Section 4.1.4(a).

(i) If (A) Owner has maintained EDSA/SWSA Funding until it issues the Bridging LNTP; (B) Owner issues the Bridging LNTP on or before [***] and funds the Bridging LNTP in accordance with the schedule set forth therein, or maintains EDSA/SWSA Funding in lieu of issuing the Bridging LNTP, until the Full Notice to Proceed is issued; (C) the Non-Bridging LNTP is never issued; and (D) the Full Notice to Proceed is issued no earlier than [***] but on or before October 15, 2020, the Guaranteed Stage II Substantial Completion Date shall be [***] Days after the FNTP Date; provided, that if the Full Notice to Proceed is issued after July 15, 2020 but on or before October 15, 2020, the Contract Price will be adjusted in accordance with Section 4.1.4(a); provided, further, that if Owner issues the Full Notice to Proceed earlier than June 15, 2020, the Guaranteed Stage II Substantial Completion Date shall be adjusted as agreed by the Parties.

(ii) If (A) Owner has maintained EDSA/SWSA Funding until it issues the Bridging LNTP; (B) Owner issues the Bridging LNTP on or before [***] and funds the Bridging LNTP in accordance with the schedule set forth therein, or maintained EDSA/SWSA Funding in lieu of issuing the Bridging LNTP until the Bridging LNTP is issued; (C) Owner issues the Non-Bridging LNTP at least [***] Days before the Full Notice to Proceed is issued and funds the Non-Bridging LNTP in accordance with the schedule set forth therein until the Full Notice to Proceed is issued; and (D) the Full Notice to Proceed is issued on or before October 15, 2020, the Guaranteed Stage II Substantial Completion Date shall be [***] Days after the FNTP Date; provided, that if the Full Notice to Proceed is issued after July 15, 2020 but on or before October 15, 2020, the Contract Price will be adjusted in accordance with Section 4.1.4(a).

(iii) If (A) Owner has maintained EDSA/SWSA Funding until it issues the Bridging LNTP; (B) Owner issues the Bridging LNTP on or before [***] and funds the Bridging LNTP in accordance with the schedule set forth therein, or maintained EDSA/SWSA Funding in lieu of issuing the Bridging LNTP until the Bridging LNTP is issued; (C) Owner issues the Non-Bridging LNTP less than [***] Days before the Full Notice to Proceed is issued and funds the Non-Bridging LNTP in accordance with the schedule set forth therein until the Full Notice to Proceed is issued; and (D) the Full Notice to Proceed is issued no earlier than [***] but on or before October 15, 2020, the Guaranteed Stage II Substantial Completion Date shall be between [***] Days and [***] Days after the FNTP Date, as the Parties agree; provided, that if the Full Notice to Proceed is issued after July 15, 2020 but on or before October 15, 2020, the Contract Price will be adjusted in accordance with Section 4.1.4(a); provided,

further, that if Owner issues the Full Notice to Proceed earlier than [***], the Guaranteed Stage II Substantial Completion Date shall be adjusted as agreed by the Parties.

(c) If the Full Notice to Proceed is not issued on or before the Extended Bid Validity Date, then the Guaranteed Substantial Completion Date for each Stage will be agreed, subject to Section 4.1.4(b), and set forth in a Change Order.

4.2.2 Adjustment to Key Date Schedule. Within thirty (30) Days after the FNTP Date, Contractor and Owner shall prepare a Change Order that documents the Guaranteed Substantial Completion Dates as dates certain as determined in accordance with Section 4.2.1, and updates the Key Date Schedule and the Baseline CPM Schedule to reflect the actual FNTP Date, the Guaranteed Substantial Completion Dates and dates certain for each other Key Date Item as determined pursuant to this Section 4.2.2; provided that, without limiting Section 18.2.5, such Change Order shall not include any adjustments to the Contract Price, the Milestones and the Payment Schedule or the Project Schedule (except with respect to incorporating the Guaranteed Substantial Completion Dates and the other Key Date Items as dates certain), or the Guaranteed Performance Levels.

4.2.3 ENFORCING SCHEDULE. WITHOUT LIMITING CONTRACTOR'S RIGHTS PURSUANT TO ARTICLE 8, CONTRACTOR HEREBY WAIVES, ON ITS OWN BEHALF AND ANYONE CLAIMING THROUGH IT, ANY RIGHT CONTRACTOR MAY HAVE IN LAW OR IN EQUITY TO CHALLENGE THE SCHEDULED DATE FOR ANY OF THE KEY DATE ITEMS, INCLUDING WAIVING ANY RIGHT IT MAY HAVE TO SEEK AN ORDER FROM A COURT OR A FINDING BY AN ARBITRATOR THAT THE SCHEDULED DATE FOR ANY OF THE KEY DATE ITEMS SHOULD NOT BE ENFORCEABLE OR SHOULD BE MODIFIED IN ANY WAY FROM THE THEN-CURRENT KEY DATE SCHEDULE, AS MODIFIED FROM TIME TO TIME IN ACCORDANCE WITH THIS AGREEMENT. CONTRACTOR ACKNOWLEDGES AND AGREES THAT THE WAIVER PROVIDED BY CONTRACTOR UNDER THIS SECTION 4.2.3 WAS A MATERIAL CONSIDERATION FOR OWNER AND COMMON FACILITIES OWNER IN ENTERING INTO THIS AGREEMENT.

4.3 Liquidated Damages.

4.3.1 Delay Liquidated Damages.

(a) Subject to Section 8.4.1(e), if Substantial Completion of Stage I occurs after the Guaranteed Stage I Substantial Completion Date, Contractor shall pay to Owner the following amounts as liquidated damages per Day for each Day, or portion thereof, commencing on the Day immediately following the Guaranteed Stage I Substantial Completion Date and ending on (but including) the date on which Substantial Completion of Stage I occurs (the "Stage I Delay Liquidated Damages"):

[***]

(b) Subject to Section 8.4.1(e), if Substantial Completion of Stage II occurs after the Guaranteed Stage II Substantial Completion Date, Contractor shall pay to Owner the following amounts as liquidated damages per Day for each Day, or portion thereof, commencing on the Day immediately following the Guaranteed Stage II Substantial Completion Date and ending on (but including) the date on which Substantial Completion of Stage II occurs (the “**Stage II Delay Liquidated Damages**”):

[***]

4.3.2 Delay LD Cap; Delay Liquidated Damages Not a Penalty.

(a) Contractor’s maximum liability to Owner for Delay Liquidated Damages for a Stage is the Delay LD Cap for such Stage.

(b) THE PARTIES HEREBY ACKNOWLEDGE AND AGREE THAT IT WOULD BE DIFFICULT IF NOT IMPOSSIBLE TO ASCERTAIN AND QUANTIFY THE ACTUAL DAMAGES THAT OWNER WOULD INCUR IF CONTRACTOR SHOULD FAIL TO MEET ANY OF THE GUARANTEED SUBSTANTIAL COMPLETION DATES. ACCORDINGLY, IT IS EXPRESSLY AGREED THAT LIQUIDATED DAMAGES PAYABLE UNDER THIS AGREEMENT DO NOT CONSTITUTE A PENALTY AND THAT THE PARTIES, HAVING NEGOTIATED IN GOOD FAITH FOR SUCH SPECIFIC DELAY LIQUIDATED DAMAGES AND HAVING AGREED THAT THE AMOUNT OF SUCH DELAY LIQUIDATED DAMAGES IS REASONABLE IN LIGHT OF THE ANTICIPATED HARM CAUSED BY THE BREACH RELATED THERETO, ARE ESTOPPED FROM CONTESTING THE VALIDITY OR ENFORCEABILITY OF THE PER-DAY RATE OF THE DELAY LIQUIDATED DAMAGES ON THE BASIS THAT SUCH PER-DAY RATE CONSTITUTES A PENALTY OR IS OTHERWISE UNENFORCEABLE OR INVALID.

(c) During any period in which Delay Liquidated Damages have accrued or are accruing, Owner may prepare and submit an invoice to Contractor once each Month with respect to Delay Liquidated Damages that have accrued prior to such date. Contractor shall pay such Delay Liquidated Damages within thirty (30) Days after such invoice is submitted to Contractor. Payment of any Delay Liquidated Damages with respect to any Work shall be in addition to, and not in lieu of, Contractor’s other obligations under this Agreement.

(d) PAYMENT OF ANY DELAY LIQUIDATED DAMAGES WITH RESPECT TO ANY WORK SHALL BE IN ADDITION TO, AND NOT IN LIEU OF, CONTRACTOR’S OTHER OBLIGATIONS UNDER THIS AGREEMENT. NOTWITHSTANDING THE FOREGOING, SUBJECT TO OWNER’S RIGHTS AND REMEDIES PURSUANT TO SECTION 4.4.2, SECTION 4.4.4, SECTIONS 19.3.1(d), 19.3.1(l), 19.3.1(m) AND 19.3.1(n), AND SECTION 21.2, DELAY LIQUIDATED DAMAGES SHALL BE THE SOLE AND EXCLUSIVE REMEDY OF OWNER AND COMMON FACILITIES OWNER FOR ANY DELAY IN THE PERFORMANCE OR COMPLETION OF THE WORK IN ACCORDANCE WITH THE BASELINE CPM SCHEDULE OR KEY DATE SCHEDULE; PROVIDED, THAT THE FOREGOING SHALL NOT BE CONSTRUED OR DEEMED TO LIMIT OWNER’S RIGHT TO RECEIVE AND CONTRACTOR’S

OBLIGATION TO PAY PERFORMANCE LIQUIDATED DAMAGES IN ACCORDANCE WITH SECTION 5.2 IF CONTRACTOR FAILS TO CAUSE A STAGE TO ACHIEVE THE APPLICABLE GUARANTEED PERFORMANCE LEVELS.

4.4 Critical Path Method Schedule; Acceleration and Schedule Recovery.

4.4.1 Critical Path Method Schedule. In accordance with Appendix S, Contractor shall prepare, manage, update and deliver to Owner a CPM Schedule (and updates thereto) covering the duration of the performance of the Work and showing the actual schedule of the Work. Each CPM Schedule delivered by Contractor hereunder shall represent Contractor's best judgment as to how it shall complete the Work in compliance with the Guaranteed Substantial Completion Dates and the Key Date Schedule, and shall comply with the requirements of this Section 4.4 and the applicable requirements of Appendix S. In the event that a CPM Schedule delivered to Owner does not meet the requirements of this Agreement, Contractor shall promptly revise and resubmit the CPM Schedule to Owner. Owner shall be entitled to reasonably rely upon the Baseline CPM Schedule attached hereto as Appendix E-2 (as the Key Date Items may be adjusted by Change Order in accordance with this Agreement), and any CPM Schedules provided by Contractor, including reliance that Contractor has developed a comprehensive, reasonable and accurate schedule to plan, organize, direct, coordinate, perform, execute and complete each portion of the Work.

4.4.2 Recovery and Recovery Plan. If, at any time during the prosecution of the Work, the CPM Schedule or the Monthly Status Report shows, or if Contractor fails to provide a current updated CPM Schedule or a Monthly Status Report in compliance with the requirements of this Agreement and Owner reasonably determines that (each, a "**Recovery Plan Triggering Event**"): [***], Owner may, in addition to any other remedies that it may have under this Agreement, require that Contractor prepare a plan and associated schedule to explain and display how it intends to regain compliance with the Key Date Schedule or as close thereto as reasonably possible using the means described in Section 4.4.2(f) (collectively, a "**Recovery Plan**"). Except as set forth in the next sentence, Contractor shall prepare and prosecute a Recovery Plan even if Contractor Disputes Owner's determination of the need for a Recovery Plan. As the only exception to the foregoing sentence, Contractor shall not be required to prepare and prosecute a Recovery Plan if a Recovery Plan Triggering Event occurs if, and only if: (1) Contractor claims (by Notice to Owner after Owner requests Contractor to prepare such Recovery Plan) that the occurrence of a Claim Submission Event is the cause of the Recovery Plan Triggering Event; and (2) Contractor has submitted a Claim for relief (or provided notice of the same under Section 18.2.1 or 18.2.2) under the Key Date Schedule by the Claim Submission Deadline for such Claim Submission Event pursuant to and in accordance with Section 18.2.3; and (3) Owner is still evaluating such Claim pursuant to the provisions of Section 8.5.4 and has yet to advise Contractor on whether or not Owner has accepted or rejected such Claim. In all other circumstances, Contractor shall be required to prepare a Recovery Plan if a Recovery Plan Triggering Event occurs. Contractor shall take the following actions after written notification by Owner of the requirement for a Recovery Plan:

(a) Within ten (10) Business Days after such written notification, Contractor shall prepare the Recovery Plan in accordance with GECP and to a similar level of detail as the CPM Schedule, and submit it to Owner for Owner's review and comment. Owner shall have the right to accept or reject such Recovery Plan, such acceptance not to be unreasonably withheld or delayed. The Recovery Plan shall represent Contractor's best judgment as to how Contractor shall regain compliance with the Key Date Schedule or as close thereto as reasonably possible using the means described in Section 4.4.2(f).

(b) Within ten (10) Business Days after Contractor submits a Recovery Plan, Contractor shall participate in a conference with Owner to review and evaluate the Recovery Plan. Such conference shall include Suppliers that Owner requests participate in the conference, subject to Contractor's consent to such participation, which consent shall not be unreasonably denied if the Supplier is material to the Recovery Plan. Any revisions necessary as a result of this review shall be resubmitted to Owner within three (3) Business Days after the conference, and Owner will have the right to accept or reject such revised Recovery Plan such acceptance not to be unreasonably withheld or delayed. This process shall be repeated until Contractor provides a Recovery Plan that is accepted by Owner, such acceptance not to be unreasonably withheld or delayed. During this process, the Parties and agreed participants (including Suppliers, as set forth above) shall continue to meet daily to discuss and attempt to resolve any differences with respect to the proposed Recovery Plan. If Owner indicates in writing that it accepts the revised Recovery Plan, the revised Recovery Plan shall then be the plan which Contractor shall use in planning, organizing, directing, coordinating, performing, and executing the Work (including all activities of Suppliers).

(c) Contractor shall perform the Work covered by the Recovery Plan in accordance therewith until Contractor achieves the results agreed on in the Recovery Plan.

(d) During the performance of the Recovery Plan, Contractor shall meet with Owner once each Week at the Site to review the effectiveness of the Recovery Plan and to determine whether Contractor has regained compliance with the Key Date Schedule. At the direction of Owner and without limiting Owner's rights under Section 19.3.1(m) or 19.3.1(n), Contractor shall prepare another Recovery Plan in accordance with Section 4.4.2(a) if any of the following circumstances occur:

(i) Contractor does not comply with the Recovery Plan, including if Contractor fails to ramp-up or add additional resources, or to add additional shifts, in accordance with the agreed Recovery Plan; or

(ii) Contractor complies with the Recovery Plan but fails to achieve the agreed results set forth in such Recovery Plan.

(e) If Contractor has regained compliance with the Key Date Schedule or otherwise achieved the results agreed in the Recovery Plan, Contractor shall return to the use of the CPM Schedule.

(f) In preparing and executing the Recovery Plan, Contractor shall take [***] designed to regain compliance with the Key Date Schedule or as close thereto as reasonably possible, including establishing additional shifts, hiring additional manpower, paying or authorizing overtime, providing additional Construction Equipment, and resequencing activities.

(g) The cost of preparing the Recovery Plan, and performing in accordance therewith, shall be for Contractor's account, regardless of its success or failure.

(h) Owner's requirement, review and acceptance of the Recovery Plan, or its decision not to request a Recovery Plan, shall not relieve Contractor of any obligations for the performance of the Work, change the Guaranteed Substantial Completion Dates or other Key Date Items, or be construed to establish the reasonableness of the Recovery Plan.

(i) Nothing herein shall limit Contractor's rights under Article 8 or Section 18.1 for Force Majeure or Excusable Events or other item(s) for which Contractor has a right to a Change Order under Section 8.3.1 that occur during performance of a Recovery Plan.

4.4.3 No Constructive Acceleration. In no event shall Owner's request for a Recovery Plan or its rejection of or comments to any proposed Recovery Plan in accordance with Section 4.4.2, Owner's notice to Contractor of the continued application of the Key Dates or the Guaranteed Dates or any of Contractor's obligations to perform the Work in accordance with the Key Date Schedule, or Owner's rejection or denial of a request from Contractor to issue a Change Order to adjust the Guaranteed Dates under circumstances where Owner reasonably believes that Contractor is responsible for the delay, constitute the acceleration of the Work, and Contractor waives all claims it may have against Owner based on a theory of constructive acceleration or similar claim.

4.4.4 Acceleration and Acceleration Plan. Even if the Work is otherwise in compliance with the Key Date Schedule, Owner may, at any time, direct Contractor by unilateral or mutually agreed Change Order to accelerate the Work by, among other things, establishing additional shifts, paying or authorizing overtime, providing additional Construction Equipment or expediting Equipment orders; provided, however, that if the Work is being performed in compliance with the Key Date Schedule, Contractor shall have agreed pursuant to a mutually agreed Change Order to accelerate the Work; [***]. In no event will a Recovery Plan be deemed to be an Acceleration Plan, and this Section 4.4.4 does not apply to the matters described in Section 4.4.2. If Owner directs Contractor in writing to accelerate the Work, Contractor shall prepare a plan and associated schedule to explain and display how it intends to accelerate the Work and how that acceleration will affect the critical path of the CPM Schedule (an "**Acceleration Plan**"), and upon receipt of a mutually-agreed Change Order or unilateral Change Order, as applicable, promptly commence and diligently perform the acceleration of the Work in accordance with the Acceleration Plan. With respect to an Acceleration Plan:

(a) The Acceleration Plan shall represent Contractor's best judgment as to how it shall satisfy Owner's acceleration directive and shall reflect Contractor's best estimate of the additional costs that will be incurred, with reasonable explanation thereof. The

Acceleration Plan shall be prepared in accordance with GECP and to a similar level of detail as the CPM Schedule.

(b) On the tenth (10th) Business Day after submittal of the Acceleration Plan to Owner (or such longer time as may be mutually agreed in writing by the Parties), Contractor shall participate in a conference with Owner to review and evaluate the Acceleration Plan. Any revisions to the Acceleration Plan necessary as a result of this review shall be resubmitted to Owner no later than the tenth (10th) Business Day after such meeting or such other date as may be agreed in writing by the Parties, and Owner will have the right to accept or reject such revised Acceleration Plan. The agreed Acceleration Plan shall be the schedule which Contractor shall use in planning, organizing, directing, coordinating, performing, and executing that portion of the Work that is affected by such acceleration, with the CPM Schedule governing the performance of all other Work.

(c) Owner's review and acceptance of the Acceleration Plan shall not constitute an independent evaluation or determination by Owner of the workability, feasibility, or reasonableness of that schedule.

ARTICLE 5

PROJECT PERFORMANCE

5.1 Guaranteed Performance Levels. Contractor guarantees that each Stage will meet all of the Guaranteed Performance Levels for such Stage under the Performance Conditions during the applicable Performance Tests or Contractor shall take the actions provided for in Section 9.10.

5.2 Liquidated Damages.

5.2.1 Performance Damage Amounts. If a Stage meets the Minimum Performance Standards but fails to meet the Guaranteed Performance Levels by the last Performance Test conducted by Contractor prior to the Guaranteed Substantial Completion Date, Contractor shall take the actions to cure the applicable deficiencies and pay to Owner the Performance Liquidated Damages in accordance with Section 9.10 and Appendix G, as applicable.

5.2.2 Performance LD Cap; Performance Liquidated Damages Not a Penalty.

(a) Contractor's maximum liability to Owner for Performance Liquidated Damages for a Stage is the Performance LD Cap for such Stage.

(b) THE PARTIES HEREBY ACKNOWLEDGE AND AGREE THAT IT WOULD BE DIFFICULT IF NOT IMPOSSIBLE TO ASCERTAIN AND QUANTIFY THE ACTUAL DAMAGES THAT OWNER WOULD INCUR IF CONTRACTOR SHOULD FAIL TO MEET ANY OF THE GUARANTEED PERFORMANCE LEVELS. ACCORDINGLY, IT IS EXPRESSLY AGREED THAT THE PERFORMANCE LIQUIDATED DAMAGES

PAYABLE UNDER THIS AGREEMENT DO NOT CONSTITUTE A PENALTY AND THAT THE PARTIES, HAVING NEGOTIATED IN GOOD FAITH FOR SUCH SPECIFIC PERFORMANCE DAMAGES AND HAVING AGREED THAT THE AMOUNT OF SUCH PERFORMANCE LIQUIDATED DAMAGES IS REASONABLE IN LIGHT OF THE ANTICIPATED HARM CAUSED BY THE BREACH RELATED THERETO, ARE ESTOPPED FROM CONTESTING THE VALIDITY OR ENFORCEABILITY OF THE RATE OF PERFORMANCE LIQUIDATED DAMAGES ON THE BASIS THAT SUCH RATE CONSTITUTES A PENALTY OR IS OTHERWISE UNENFORCEABLE OR INVALID.

(c) PAYMENT OF ANY PERFORMANCE LIQUIDATED DAMAGES FOR A STAGE WITH RESPECT TO ANY WORK SHALL BE IN ADDITION TO, AND NOT IN LIEU OF, CONTRACTOR'S OTHER OBLIGATIONS UNDER THIS AGREEMENT. NOTWITHSTANDING THE FOREGOING, SUBJECT TO CONTRACTOR HAVING ACHIEVED THE MINIMUM PERFORMANCE STANDARDS AND OWNER'S RIGHTS AND REMEDIES PURSUANT TO SECTION 9.10, AND SECTION 21.2, PERFORMANCE LIQUIDATED DAMAGES SHALL BE THE SOLE AND EXCLUSIVE REMEDY OF OWNER AND COMMON FACILITIES OWNER FOR THE FAILURE OF CONTRACTOR TO ACHIEVE THE GUARANTEED PERFORMANCE LEVELS TO WHICH SUCH MINIMUM PERFORMANCE STANDARDS APPLY; PROVIDED, THAT THE FOREGOING SHALL NOT BE CONSTRUED OR DEEMED TO LIMIT (I) CONTRACTOR'S WARRANTY OBLIGATIONS UNDER ARTICLE 10; OR (II) OWNER'S RIGHT TO RECEIVE AND CONTRACTOR'S OBLIGATION TO PAY DELAY LIQUIDATED DAMAGES IN ACCORDANCE WITH SECTION 4.3.

ARTICLE 6

COMPENSATION AND PAYMENT

6.1 Contract Price.

6.1.1 Contract Price. Owner shall pay to Contractor, and Contractor shall accept, the Contract Price in full consideration for performance of the Work. The Contract is a fixed "separated" price contract as defined in 34 Tex. Administrative Code §3.291(a)(13), subject to adjustment only by Change Orders (as provided in Article 8). The Contract Price, as so adjusted, includes: (a) all Taxes for which Contractor is responsible under Article 7, costs, charges, and expenses of whatever nature applicable to the Work; (b) the amounts paid to Contractor pursuant to the EDSA or the SWSA; and (c) Provisional Sums as described in Section 6.1.2. Payments made to Contractor under the EDSA and the SWSA shall be credited against the Contract Price.

6.1.2 Provisional Sums. Notwithstanding anything to the contrary in Section 6.1.1, the Parties acknowledge and agree that the Contract Price includes provisional sums for certain portions of the Work in the amounts set forth in Appendix C. Accordingly, the Contract Price may be adjusted with respect to such provisional sums in accordance with Section 8.3.1(b).

6.1.3 Reimbursement of Unused Provisional Sums. To the extent that as of the Substantial Completion Date, the actual aggregate amount of the costs incurred by Contractor to perform a portion of the Work for which a provisional sum is set forth on Appendix C, is less than the provisional sum for such Work set forth on Appendix C, Contractor shall reimburse Owner for such excess amounts of such provisional sum.

6.1.4 Option. Notwithstanding anything to the contrary in Section 6.1.1, the Parties acknowledge and agree that Appendix C (a) identifies the Scope Options that Owner may elect to exercise; (b) sets forth the related adjustments to the Contract Price, Key Date Schedule and any other adjustments to the Work or the requirements under this Agreement in connection with such Scope Option if the Scope Option is exercised; and (c) sets forth a date by which Owner must notify Contractor that Owner is exercising the Scope Option. If Owner elects to exercise a Scope Option within the applicable time period set forth in Appendix C, Owner shall notify Contractor in writing and the Parties shall enter into a Change Order to adjust the Contract Price and make the other adjustments as contemplated in Appendix C as applicable with respect to such Scope Option.

6.2 Payments.

6.2.1 Payments Prior to the FNTF Date. Prior to the FNTF Date, Owner shall make payments to Contractor on account of the Contract Price in the amounts and at the times as provided in the Limited Notices to Proceed, if any, issued by Owner to Contractor; provided that in no event shall Owner's liability to make payments to Contractor pursuant to a Limited Notice to Proceed exceed the Maximum LNTP Payment Amount as set forth in such Limited Notice to Proceed. Except as expressly modified in a Limited Notice to Proceed, the provisions of this Article 6 shall apply to all Invoices and payments made pursuant to a Limited Notice to Proceed.

6.2.2 Milestone Payments After the FNTF Date. Subject to the other provisions of this Article 6, from and after the FNTF Date, Owner shall make payments to Contractor on account of the Contract Price equal in amount to the applicable Milestone Payment following Contractor's completion of each Milestone, as further described herein and in Attachment D-1 to Appendix D. Each Milestone Payment shall be due and payable only to the extent it is supported by the completion of the Milestone, it being acknowledged and understood that no Milestone Payment shall be made for any partially completed Milestones (including in the case of Defects). The Parties acknowledge that each Milestone does not represent the cost of the Work included in such Milestone; accordingly, the Milestone Payments may not represent an actual measure of the progress of the Work.

(a) Contractor acknowledges that Attachment D-1 to Appendix D includes a Milestone titled "**Administrative Milestone**" for each Month of the Baseline CPM Schedule with respect to Contractor's delivery of reports, statements and the performance of other administrative obligations of Contractor hereunder, as described in Appendix D. If Contractor fails to complete the Administrative Milestone for a Month for [***], Owner may withhold from each Invoice an amount equal to the sum of: (i) the amount of the payment to be made upon achievement of the Administrative Milestone; multiplied by (ii) for such Invoice, the number of Months in the aggregate Contractor has failed to achieve the Administrative Milestone

and has not cured such Administrative Milestone in accordance with the following sentence. Owner may withhold such amounts until Contractor has achieved all of the Administrative Milestones that are required to be achieved (including delivery of all reports, statements and completion of other administrative obligations of Contractor, as described in Appendix D for all previous Administrative Milestones that were not achieved).

(b) Contractor acknowledges that Attachment D-1 to Appendix D includes Milestones titled “**Local Content Milestone**” with respect to Contractor’s compliance with its reporting obligations under the Local Content Program. If Contractor fails to comply with the completion criteria as described in Attachment D-1 to Appendix D with respect to a Local Content Milestone, Contractor shall not be entitled to payment of such Local Content Milestone, and Owner may withhold the amount of such Local Content Milestone, until Contractor has cured such failure to comply (delivery of all reports as described in Attachment D-1 to Appendix D for all previous Local Content Milestones that were not achieved).

(c) In connection with any adjustment to the Contract Price hereunder, the Parties shall update Attachment D-1 to Appendix D with respect to any additional Milestones (including incorporating completion criteria for such additional Milestones) and adjust the Payment Schedule. Any adjustments to the Project Schedule that increase the amount of time required for Contractor to complete the Work and include an adjustment to the Contract Price, shall be accompanied by an adjustment to the Payment Schedule to incorporate an Administrative Milestone for each additional Month (or part thereof) added to the Project Schedule; provided that the additional Administrative Milestones shall not result in an increase of the Contract Price except to the extent that the Contract Price has otherwise been adjusted in accordance with this Agreement.

6.2.3 Progress Payments. Subject to the other provisions of this Article 6, from and after the FNTP Date, Owner shall make payments to Contractor on account of the Contract Price equal in amount to the applicable Progress Payments based on the progress of the Work, as further described herein and in Attachment D-2 to Appendix D. Progress Payments shall be due and payable to the extent progress of the Work is verified in accordance with Section 6.3.3. If the Parties determine any updates or modifications to the Payment Schedule should be made, the allocation of Progress Payments in such updated Payment Schedule shall be determined utilizing the same methodology as that used in the Payment Schedule set forth in Attachment D-2 to Appendix D as of the Effective Date.

6.2.4 Time and Materials Payments. Subject to the other provisions of this Article 6, with respect to Work performed on a time and materials basis under a Change Order, payments that are not Disputed shall be made monthly based upon the time and materials used for the Work authorized pursuant to such Change Order, as detailed in the applicable Invoice.

6.2.5 Form of Payment. All payments to Contractor shall be made in Dollars by wire transfer of immediately available funds to the bank and account specified in Appendix RR or such other bank and account located in the U.S. that Contractor specifies in a notice to Owner no later than five (5) Business Days before the applicable payment is due under this Agreement.

6.2.6 FNTP Date Payment. Within one (1) Business Day after Owner issues the Full Notice to Proceed, Contractor shall submit an invoice to Owner for payment of the Milestone Payment due upon issuance of the Full Notice to Proceed as set forth in Attachment D-1 to Appendix D. On the date that is identified as the FNTP Date in the Full Notice to Proceed when issued by Owner, Owner and Contractor shall meet at the time and location in Houston as agreed by the Parties, and:

(a) Owner shall deliver to Contractor:

- (i) the payment due pursuant to the Invoice issued by Contractor pursuant to this Section 6.2.6;
- (ii) [***];
- (iii) [***]; and

(b) Contractor shall deliver to Owner:

- (i) a Letter of Credit in accordance with Section 17.2.1; and
- (ii) certificates of insurance for the insurance required pursuant to Article 16 and Appendix MM

as of the FNTP Date.

Owner acknowledges and agrees that if any Person other than Owner and Common Facilities Owner directly owns an interest in the LNG Facility as of the date on which Owner issues the Full Notice to Proceed, it shall be a condition to Contractor's obligation to proceed with the Work as of the FNTP Date that Owner shall have delivered the acknowledgements as described in Section 6.2.6(a)(ii) from such Person(s).

6.2.7 Reconciliation of Payment Schedule. Within thirty (30) Days after the FNTP Date, Contractor shall submit to Owner a revised Payment Schedule that adjusts both the Milestones and the progress payments, including the progress payment curve, as necessary to reflect the amounts paid to Contractor under the EDSA and the SWSA and the Limited Notices to Proceed, if any, pursuant to Section 4.1.4(a), as applicable, and the exercise of any Scope Options by Owner.

6.3 Invoices and Supporting Documentation.

6.3.1 Invoices. Within ten (10) Business Days after the end of each Month (which for purposes of the Invoices shall end as of the second to last Friday of each Month), Contractor shall submit to Owner a Monthly Invoice. Each Monthly Invoice shall include all Milestones completed during the prior Month, if any, any amounts owing for Work for which a Progress Payment is to be made that was performed during the prior Month, any amounts due with respect to a Provisional Sum, and any amounts owing for Work performed on a time and materials basis for additional Work performed pursuant to a mutually executed Change Order or a unilateral Change Order under this Agreement during the prior Month, and shall deduct any amounts previously paid with respect to Defective Work discovered after a previous Invoice

covering such Work was submitted to Owner. Without limiting the foregoing, Contractor shall not include a request for payment for any known Defective Work on any Invoice. Such Monthly Invoice shall also note: (a) Milestones projected to be completed during the Month in which the Invoice is submitted and the next succeeding Month, if any; (b) amounts projected to be due for Work for which a Progress Payment is to be made during the Month in which the Invoice is being submitted and the next succeeding Month; (c) Customs Duties for which Contractor is entitled to reimbursement pursuant to Section 7.3.2; and (d) if a Change Order requires payment of amounts due under such Change Order on a basis other than pursuant to the completion of Milestones or Progress Payments, amounts projected to be due and owing for Work performed pursuant to such Change Order during the Month in which the Invoice is submitted and the next succeeding Month, if any, separated by amounts due for materials, or labor or services provided. All Invoices, other than the Invoice for final payment for each Stage under this Agreement, shall be in the form of Appendix V-1, shall comply with the requirements of Appendix S, and shall include all documentation supporting Contractor's request for payment as required under this Agreement. Contractor shall segregate the Monthly Invoice so as to clearly segregate the billing and back-up information related to completed Milestones, Progress Payments and requests for payments under mutually executed Change Orders.

6.3.2 Milestone Completion Notices. During the performance of any Work under a Limited Notice to Proceed, Contractor shall provide written notices to Owner as the milestones under such Limited to Proceed are completed. From and after the FNTP Date, Contractor shall provide written notices to Owner at least once each Week of the Milestones that were completed in the previous Week (which notices may be included as part of the Weekly Status Report provided to Owner). Owner may inspect the Work to determine whether such Milestones have been completed, but is under no obligation to Contractor to do so. If Owner inspects the Work and disagrees that a Milestone has been completed, Owner shall promptly notify Contractor in writing of the reasons why Owner believes the Milestone has not been completed. Contractor shall notify Owner once Contractor has completed any further Work required to complete such Milestone, and if Owner inspects the Work and still disagrees that the Milestone has been completed, Owner shall promptly notify Contractor in writing. The Parties shall repeat this process on an iterative basis as necessary. If an Invoice includes a request for payment of any Milestone that Owner disagrees has been completed, Owner's notice to Contractor of Owner's disagreement that the Milestone has been completed pursuant to this Section 6.3.2, shall constitute Owner's notice of a Dispute pursuant to Section 6.3.6 and Section 6.4.1. If Contractor disagrees with Owner's assessment that a Milestone has not been completed, such Dispute shall be resolved pursuant to Article 20.

6.3.3 Progress Payment Verification. From and after the FNTP Date, Contractor shall provide written notices to Owner once each Week verifying the progress of the Work in the previous Week (other than engineering progress which will only be reported on a Monthly basis), which notices may be included as part of the Weekly Status Report provided to Owner. Contractor shall provide Owner with a Fully Functional copies of the detailed reports of Contractor's progress measurement details and summaries as described in Appendix S-3, as well as back up documentation for progress achieved on a Monthly basis, for the purpose of verification of achieved progress. Summaries of progress achieved shall be submitted together

with Contractor's Invoice when submitted hereunder. Owner may inspect the Work to determine whether such progress has been achieved, but is under no obligation to do so. If Owner inspects the Work and disagrees with the amount of progress of the Work that Contractor reports has been achieved, Owner shall promptly notify Contractor in writing of the reasons why Owner believes the progress of the Work differs from that reported by Contractor. Contractor shall notify Owner once Contractor has completed any further Work required to achieve the progress of the Work reported by Contractor, and if Owner inspects the Work and still disagrees that the Work has progressed to the level reported by Contractor, Owner shall promptly notify Contractor in writing. The Parties shall repeat this process on an iterative basis. If an Invoice includes a request for a Progress Payment based on progress that Owner disagrees has been achieved, Owner's notice to Contractor of Owner's disagreement with the reported progress of the Work pursuant to this Section 6.3.3 shall constitute Owner's notice of a Dispute pursuant to Section 6.3.6 and Section 6.4.1. If Contractor disagrees with Owner's assessment of the progress of the Work, such Dispute shall be resolved in accordance with Article 20.

6.3.4 Time and Materials Documentation. During any period in which Contractor is performing any of the Work on a time and materials basis, Contractor shall cause its and the Suppliers' personnel performing Work on a time and materials basis to submit to Owner for countersignature bi-weekly hour reports showing hours worked by such personnel. No hourly charges with respect to such personnel may be included in any Invoice unless supported by such a countersigned bi-weekly hour reports. In addition, Contractor shall provide Owner with additional supporting documentation for any expensed amounts included on Invoices submitted with respect to Work performed on a time and materials basis, including invoices and receipts for amounts incurred by Contractor with respect to such Work.

6.3.5 Interim Lien and Claim Waivers. Each Invoice received by Owner prior to Final Completion shall be accompanied by: (a) a fully executed Interim Lien and Claim Waiver from Contractor in the form of Appendix EE-1 for all Work for which payment is requested; and (b) fully executed Interim Lien and Claim Waivers from each Major Supplier in the form set forth in Appendix EE-2 for all Work for which payment is requested. Interim Lien and Claim Waivers shall not be required from Major Suppliers until they have performed Work, and Major Suppliers shall be required to submit additional Interim Lien and Claim Waivers only if they have performed Work not covered by a previous Interim Lien and Claim Waiver. Submission of all Interim Lien and Claim Waivers covering the period through the end of the applicable Month is a condition precedent to payment of any Invoice. In addition, beginning with the second Invoice submitted by Contractor hereunder, Contractor shall submit (i) a fully executed Interim Unconditional Lien and Claim Waiver from Contractor in the form of Appendix FF-1 for all Work for which payment was received and for which Contractor has not previously provided an Interim Unconditional Lien and Claim Waiver; (ii) fully executed Interim Unconditional Lien and Claim Waivers from each Major Supplier in the form set forth in Appendix FF-2 for all Work for which payment has been received and for which the Major Supplier has not previously provided an Interim Unconditional Lien and Claim Waiver; (iii) fully executed Final Lien and Claim Waivers in the form set forth in Appendix GG-2 from each Major Supplier that performed any part of the Work in the prior Month and that has completed all of the Work to be performed by that Major Supplier for which the Major Supplier has not previously provided a Final

Unconditional Lien and Claim Waiver; and (iv) fully executed Final Unconditional Lien and Claim Waivers in the form set forth in Appendix HH-2 from each Major Supplier that has completed all of the Work to be performed by that Major Supplier and has not previously executed and delivered a Final Unconditional Lien and Claim Waiver.

6.3.6 Invoice Review and Payment. Contractor shall furnish such supporting documentation and notices as specified in this Section 6.2.7 in connection with Owner's review of an Invoice. Without limiting Owner's rights of review under this Agreement, within ten (10) Business Days after Owner receives an Invoice and all accompanying documentation required under this Section 6.2.7, Owner shall (in consultation with the Lenders Agent and the Independent Engineer, to the extent Owner chooses to consult with such Persons): (a) determine whether the Work covered thereby has been completed as described by Contractor; (b) determine whether the Work performed conforms with the requirements of this Agreement; and (c) determine and notify Contractor concerning any invoiced amount that is in Dispute and the basis for such Dispute. Unless Disputed by Owner in accordance with Section 6.4.1, each Invoice (less any withholdings allowed under this Agreement) shall be due and payable [***] Days after the Invoice is received by Owner.

6.4 Disputed Payments and No Waiver.

6.4.1 Disputed Payments. If Owner Disputes one (1) or more items in an Invoice, Owner shall pay the portion of the Invoice that is not Disputed by the due date for payment in accordance with Section 6.3.6 and shall notify Contractor in writing of the item or items under Dispute and the reasons therefor and the Dispute shall be resolved pursuant to Article 20. Payment of such Disputed items may be withheld by Owner, without payment of interest, until settlement of the Dispute. Payment on Disputed amounts shall be made as soon as such Dispute is resolved. Failure by Owner to pay any amount in Dispute and identified pursuant to this Section 6.4.1 until resolution of such Dispute in accordance with this Agreement shall neither in any respect alleviate, diminish, modify nor excuse the performance of, Contractor's obligations to perform hereunder, including Contractor's obligation to meet the Guaranteed Substantial Completion Dates. Contractor and Owner shall use their commercially reasonable efforts to resolve all disputed amounts reasonably expeditiously and in accordance with the provisions of Article 20.

6.4.2 No Waiver. No payment made under this Agreement shall be construed to be acceptance or approval of that part of the Work to which such payment relates or shall constitute a waiver by Owner of the performance by Contractor of any of its obligations hereunder, and in no event shall any such payment affect the warranty obligations of Contractor as set forth in Section 10.1. Any payment withheld under this Agreement shall be without prejudice to any other rights or remedies available herein to Owner. Contractor's acceptance of any payment shall not be deemed to constitute a waiver of amounts that are then in Dispute.

6.5 Owner Right to Withhold and Set Off Payment.

6.5.1 Withholding. To the extent permitted by Applicable Law, Owner may withhold payment to Contractor, without payment of interest, of amounts otherwise due

Contractor, and deduct or set-off monies due or owing by Contractor to Owner under this Agreement, for any of the following reasons:

- (a) a Dispute over any amount in an Invoice (including as to the completion of Milestones or achievement of progress), to the extent of the Disputed amount;
- (b) the filing of third-party claims against Owner asserting amounts due to such third parties by Contractor or any Supplier, or the filing of Liens against Owner or the Common Facilities Owner or any of their respective property with respect to the Work; provided that Contractor has refused or failed to defend, indemnify and hold harmless Owner and the Common Facilities Owner against such claims or obtain the release or discharge of such Liens to the extent Contractor is obligated hereunder to do so;
- (c) in accordance with Tex. Property Code §53.081 following receipt of a notice from a Supplier as described therein;
- (d) the assessment of any fines, penalties or similar assessments against Owner as a result of Contractor's failure to comply with Applicable Laws, to the extent of such fines, penalties or similar assessments;
- (e) a failure by Contractor to pay amounts properly due for Equipment, materials and personnel used by Contractor in connection with the Work; provided, that Owner has paid Contractor all undisputed amounts hereunder;
- (f) a failure by Contractor to pay any amount owing to Owner under this Agreement on or before the date due in the amount of such payment owed, or other breach by Contractor of any material provision of this Agreement as reasonably necessary for Owner to protect itself from resulting Losses;
- (g) amounts previously overpaid by Owner to Contractor, including under the EDSA or the SWSA;
- (h) if Contractor fails to deliver the reports, statements or otherwise perform the administrative obligations of Contractor due in connection with an Administrative Milestone in any given Month for which an Administrative Milestone is not included in the Payment Schedule, an amount equal to the most recent Administrative Milestone Payment included in the Payment Schedule, without duplicating amounts withheld under Section 6.2.2(a);
- (i) if any Invoice does not include the required supporting documentation, to the extent of the amounts on such Invoice for which the supporting documentation is lacking;
- (j) in accordance with Sections 6.2.2(a) and 6.2.2(b); or
- (k) to the extent necessary to protect Owner from loss or potential loss against which Owner reasonably deems itself inadequately protected arising out of:

(i) failure by Contractor to provide a release or bond or otherwise discharge any Lien in breach of Section 2.9.3; provided that Contractor has refused or failed to obtain the release or discharge of such Liens to the extent Contractor is obligated to do so in accordance with Section 2.9; or

(ii) Contractor's failure to submit a Recovery Plan (without regard as to whether or not Owner has approved the proposed Recovery Plan, but without limiting Owner's right to challenge the reasonableness of such plan), or implement or materially comply with an accepted Recovery Plan.

If Owner elects to withhold payment from Contractor on account of any of the foregoing causes, Owner shall notify Contractor of such withholding at least ten (10) Days in advance of the due date for payment and state the reasons therefor. If such notice is provided with less than ten (10) Days remaining before the due date for payment, Owner shall pay the amount to be withheld but may withhold such amount from amounts due under a subsequent Invoice unless the reason for such withholding is corrected before payment is due with respect to such subsequent Invoice. Contractor shall continue to perform the Work, subject to Owner's right to terminate or suspend Contractor's performance under Section 19.3.2, notwithstanding the withholding by Owner of any such amount.

6.5.2 Payment of Withheld Amounts. Subject to Section 6.4.1, if and when the cause or causes for withholding any payment shall be remedied or removed by Contractor and reasonably satisfactory evidence of such remedy or removal has been presented to Owner, the amount withheld (other than with respect to monies due or owing by Contractor to Owner) shall be paid to Contractor at the due date for payment of the next Invoice to become due. If Contractor fails or refuses to remedy or remove any cause for withholding such payment for [***] Days after Owner notified Contractor that it intended to withhold such payment, Owner may remedy or remove the same, or cause the same to be remedied or removed, and may recover from Contractor the costs incurred by Owner to remedy or remove the same, or may deduct the cost thereof from any amounts due or owing to, or that may become due or owing to, Contractor; provided, however, that if Owner withholds amounts due to a Contractor Event of Default, Contractor shall have the same amount of time to attempt to remedy or cure such Contractor Event of Default as Contractor would have with respect to such default pursuant to Section 19.3.1.

6.5.3 Insufficient Amounts. If insufficient amounts are available for full offset by Owner, then Contractor, upon receipt of Owner's written notice of Contractor's outstanding obligations hereunder, shall promptly remit to Owner all amounts properly due and owing pursuant to the terms of this Agreement. Should Contractor fail to pay any such amount within [***] Days after Owner's notice (reserving its right to draw on the Letter of Credit), Owner may at its sole and absolute discretion draw on the Letter of Credit for such amounts, in addition to any other remedies that may be available to it under this Agreement.

6.5.4 No Suspension or Termination. Subject to Applicable Laws, and notwithstanding the provisions of Sections 19.4.2 and 20.5, Contractor shall not have any rights

of termination or suspension under Section 19.4.2 as a result of Owner's exercise or attempted exercise of its rights under this Section 6.5.

6.6 Final Payments. Upon Final Completion, Contractor shall, in addition to any other requirements in this Agreement for achieving Final Completion, including those requirements set forth in Section 1.2 for the definition of Final Completion, submit a fully executed final Invoice (the "**Final Invoice**") in the form attached hereto as Appendix V-2, along with: (a) a statement summarizing and reconciling all previous Invoices, payments and Change Orders; (b) an affidavit that all payrolls, Taxes, liens, charges, claims, demands, judgments, security interests, bills for Equipment, and any other indebtedness connected with the Work have been paid; (c) fully executed Final Lien and Claim Waiver from Contractor in the form of Appendix GG-1; and (d) fully executed Final Lien and Claim Waivers in the form set forth in Appendix GG-2 from each Major Supplier that performed any part of the Work in the prior Month. No later than [***] Days after receipt by Owner of the Final Invoice and all requested documentation and achieving Final Completion, Owner shall, subject to its rights to withhold payment under this Agreement, including Owner's right to withhold payment for any unpaid liquidated damages which Contractor owes under the terms of this Agreement, and subject to Contractor concurrently delivering to Owner a Final Unconditional Lien and Claim Waiver in the form of Appendix HH-1 and delivering fully executed Final Unconditional Lien and Claim Waivers in the form set forth in Appendix HH-2 from each Major Supplier from which a Final Unconditional Lien and Claim Waiver has not yet been delivered, pay Contractor the balance of the Contract Price. Acceptance of final payment by Contractor shall constitute a waiver of claims for payment by Contractor except those previously made in writing and identified by Contractor in the Final Invoice which are unsettled at the time of Contractor's application for final payment. Any Invoice or other request for payment delivered by Contractor with respect to a Stage more than [***] Days after the Final Completion Date, other than for amounts determined by virtue of an audit conducted under Section 2.23.2, amounts owing by Owner pursuant to Article 15, or amounts determined to be owed by Owner in accordance with Article 20 with respect to Disputes arising prior to the Final Invoice, as described therein, shall be invalid, and Owner shall have no obligation or liability to pay such Invoice or request.

6.7 Late Payments. Any late payments due to Owner or Contractor under this Agreement, excluding any payments that are properly withheld pursuant the terms of this Agreement, shall bear interest from the date payment is due at the Late Payment Rate per annum.

6.8 Overpayments. If an error is made in connection with a payment, and such payment is an overpayment, the overpayment shall be reconciled with the next monthly Invoice, or in the case of an overpayment by Owner offset under Section 6.5, or if no further invoices are planned or the amount of such Invoices are not estimated to be of an amount sufficient to properly reconcile the error, then the Party receiving such payment in error shall promptly refund the mistaken amount to the paying Party.

6.9 Currency Conversions. Within ten (10) Days after (a) the Non-Bridging LNTP Date, if any; and (b) the FNTF Date with respect to any portions of the Contract Price that are stated in currencies other than Dollars on Appendix C that have not been converted in connection with the issuance of the Limited Notice To Proceed, Contractor shall prepare and submit a proposed Change Order to Owner in accordance with Section 8.3.1(m) to: (i) convert those portions of the Contract Price that are stated in currencies other than Dollars on Appendix C (the “**Foreign Currency Amount**”), into Dollars, in accordance with Attachment C-2 to Appendix C that are being converted as of such date; and (ii) reimburse Contractor for the associated hedging costs incurred by Contractor (without any mark-up), as demonstrated by the hedging agreements that Contractor has entered into with respect to conversion of such currencies and that are provided to Owner in connection with such Change Order. Except for such adjustments to the Contract Price as described in Attachment C-2 to Appendix C, Contractor will not have a right to any further adjustment to the Contract Price, or to any adjustment of the Milestone Payments, Progress Payments, the Payment Schedule, the Key Date Schedule, including the Guaranteed Substantial Completion Dates, the Guaranteed Performance Levels, or any other terms or conditions of this Agreement, as a result of the conversions of the Foreign Currency Amount pursuant to this Section 6.9 and Attachment C-2 to Appendix C.

6.10 Effect of Payment. No payment, final or otherwise, shall constitute a waiver of any claims by Owner or be considered or deemed to represent that Owner has inspected the Work, nor shall it constitute or be deemed an acceptance, in whole or in part, of any portion of the Work not in accordance with this Agreement.

6.11 Certain Conditions Precedent to Payment. It shall be a condition precedent to Owner’s obligation to make any payment hereunder (a) whether under a Limited Notice to Proceed or after the FNTF Date, that Contractor has provided to Owner, and is maintaining (i) the Contractor Guarantee in accordance with Sections 17.1; and (ii) has procured and is maintaining the insurance policies in accordance with Article 16 and Appendix MM (as evidenced by certificates of insurance provided in accordance with Section 16.9); and (b) after the FNTF Date, that Contractor has provided to Owner, and is maintaining the Letters of Credit in accordance with Sections 17.2 and 9.10, as and when applicable.

6.12 Fixed Price Nature of Contract. Without limiting either Contractor’s or Owner’s rights pursuant to Article 8, Contractor and Owner acknowledge and agree there are cost risks inherent in the execution of a fixed price contract for construction. Contractor acknowledges that this Agreement constitutes a fixed price, date certain obligation to engineer, design, procure, construct, test and start-up a turnkey project (including the training of the Operating Personnel as described herein). References to the obligations of Contractor under this Agreement as being “turnkey” and performing the Work on a “turnkey basis” means that Contractor is obligated to supply all of the Equipment, labor and design services and to supply and perform all of the Work, in each case as may reasonably be required, necessary, incidental, or appropriate to complete the Work such that the LNG Facility meets the Guaranteed Performance Levels, or the Minimum Performance Standards, where applicable, and the LNG Facility otherwise complies with the applicable terms, conditions and other requirements set forth in this Agreement, all for the Contract Price. Contractor acknowledges that “turnkey” or “turnkey basis” does not limit

Owner's right to review, inspect or comment on any aspect of the Work or Contractor's performance thereof as permitted under this Agreement. Contractor further acknowledges that it may have miscalculated its and its Suppliers' costs to perform the Work, and that the performance of the Work in accordance with this Agreement may result in Contractor (or its Suppliers) expending more resources than it or they estimated or budgeted or otherwise intend to expend. Similarly, Owner acknowledges that Contractor may have been conservative in its assumptions regarding the overall cost of the Work, and that the actual cost to Contractor to perform the Work may in fact be significantly less than the Contract Price. The fact that either Party may have so miscalculated the costs to perform the Work hereunder, or that either Party expended extra resources that it did not intend to spend as a result of such miscalculation, shall not form the basis for any claim of relief hereunder, whether such claim arises in contract or tort.

ARTICLE 7

TAXES

7.1 Responsibility for Taxes. The Contract Price includes all Taxes imposed on or payable by Contractor and Subcontractors in connection with the Work, other than: (a) those Taxes for which Owner is responsible as described in Section 7.3; and (b) those Texas Sales and Use Taxes for which Owner will be responsible as described in Section 7.5. Contractor shall: (i) pay and cause the payment when due of all Taxes imposed on or payable by Contractor and its Subcontractors in connection with the Work for which Contractor is responsible pursuant to this Section 7.1; and (ii) make, and shall cause its Subcontractors to make, any and all payroll deductions required by Applicable Laws. Without limiting the foregoing, the Contract Price includes, and Owner shall have no responsibility to pay, any Texas Sales and Use Taxes or property taxes or any other taxes assessed, incurred or levied on any Construction Equipment. The Contract Price shall not be increased with respect to any of the foregoing or with respect to any withholdings that Owner may be required to make in respect of any of the foregoing items. Contractor shall also bear responsibility for any employment Taxes with respect to all individuals performing services under this Agreement on the behalf of Contractor who are not employed by Contractor as employees of Contractor, and cause all Subcontractors to bear responsibility for any employment Taxes with respect to all individuals performing Work for such Subcontractors who are not employed by such Subcontractors as employees of such entities. Notwithstanding the foregoing, Contractor shall not be liable for, and the Contract Price shall not include property Taxes levied on: (i) the real property of Owner; and (ii) Equipment and materials to be incorporated into, affixed to, or installed into the LNG Facility; provided, however, that notwithstanding anything to the contrary in the foregoing, Contractor shall be responsible to pay, and the Contract Price includes, property Taxes on Equipment and materials to be incorporated into, affixed to, or installed into the LNG Facility that are assessed by any jurisdiction outside of Jefferson County, Texas due to Contractor's delivery, handling, transport or storage of the Equipment (including Capital Spare Parts) that would not have been incurred or levied if Contractor had delivered the Equipment to the Site or the laydown yard in Jefferson County, Texas, as applicable, and stored it therein or thereon, until installation in the Liquefaction Facility; provided, further, that the foregoing shall not limit Contractor's right to relief in connection with the occurrence of a Force Majeure event. Contractor shall, and shall cause its

Subcontractors to, file all returns required with respect to Taxes for which Contractor or such Subcontractors are responsible hereunder by the date required under Applicable Laws.

7.2 Withholding of Taxes. If Owner is required by Applicable Laws to withhold compensation due to Contractor to satisfy any obligation of Contractor for Taxes, Owner shall use commercially reasonable efforts to provide Contractor with at least ten (10) Business Days prior notice and may withhold such amounts from any payment due to Contractor hereunder. Owner shall pay any amounts so withheld to the applicable taxing authority and provide Contractor with any tax receipts or other evidence of payment that Owner obtains from such taxing authorities. Owner shall not withhold such Taxes from Contractor's compensation if Contractor produces evidence, reasonably satisfactory to Owner, that Contractor is exempt from withholding of such Taxes at least ten (10) Business Days prior to the next payment date.

7.3 Foreign-Trade Zone.

7.3.1 Cooperation. Owner shall designate the Site as a Foreign-Trade Zone, and shall similarly designate the off-Site laydown area located in Jefferson County, Texas, if any, identified by Contractor as of the Bridging LNTP Date, as part of the Foreign-Trade Zone. Owner shall act as the "FTZ Operator" for the approved FTZ and Contractor will utilize the Owner's FTZ as a "Zone User". Contractor shall, to the maximum extent possible under Applicable Laws, and shall cause its Suppliers to, use the locations designated as part of the FTZ for admissions of imported Contractor-Furnished Items. Contractor shall, and shall cause its Suppliers to, cooperate in good faith with Owner and its tax/customs consultants to achieve applicable Customs Duties and fee savings as it relates to the FTZ designation. Such cooperation may include, among other things, timely providing relevant shipment information to Owner, filing required FTZ documentation with U.S. Customs and Border Protection for in-bound transportation from the port of arrival to the designated FTZ location and admission into the FTZ in lieu of a normal entry for consumption, and providing relevant information to Owner regarding inventory admitted within the FTZ (including movement within and out of the FTZ); provided, however, if Owner's Tax/customs consultant requests information relating to the actual cost of any item of Equipment, Contractor shall provide such information to Owner's Tax/customs consultant, subject to such consultant having signed a reasonable and customary non-disclosure agreement with Contractor and on the understanding that such consultant shall not disclose to Owner the actual cost incurred by Contractor or its Subcontractors for any item of Equipment included in the Contract Price. Owner will rely on cooperation from Contractor and its Suppliers to ensure regulatory compliance. Costs associated with integrating the FTZ's inventory control and recordkeeping system ("**ICRS**") software with Contractor's Enterprise Resource Planning system shall be borne by Contractor. The costs for Contractor and the Suppliers to comply with the FTZ requirements and to support Owner in the administration of the FTZ are included in the Contract Price.

7.3.2 Importer of Record; Payment of Customs Duties. Contractor shall be the importer of record and Owner shall reimburse Contractor for any Customs Duties paid by Contractor, except to the extent Contractor fails to comply with its obligations with respect to importing Equipment through the FTZ (once the FTZ is activated and subject to

Sections 2.12.2(c) and 2.12.4) and transporting Equipment such that Owner does not lose the FTZ benefits. Contractor shall utilize the FTZ for eligible Equipment, and shall use commercially reasonable efforts to minimize Customs Duties and restrictions or other punitive or retaliatory duties imposed by the U.S. in its sourcing decisions, irrespective of the FTZ. Contractor shall, and shall cause its Suppliers to pursue and utilize any available Free Trade Agreement or duty preference program as it relates to Contractor-Furnished Items imported into the U.S. (such as the North American Free Trade Agreement (NAFTA) and its successor the United States-Mexico-Canada Agreement, the U.S.-Korean Free Trade Agreement (KORUS), the U.S. Goods Returned program, and the Generalized System of Preferences (GSP)), assuming the imported Contractor-Furnished Item qualifies as originating under the rules of the relevant agreement or duty preference program. Any Taxes for which Contractor is responsible under this Section 7.3.2 are included in the Contract Price.

7.4 Exemptions. Contractor and Owner shall use commercially reasonable efforts to cooperate with each other to minimize the liabilities for Taxes of both Parties to the extent legally permissible and to secure Tax credits and incentives and exemptions that are available or that Owner obtains for the Liquefaction Project, supplying resale and exemption certificates, if applicable, and any other information as reasonably requested or required by Governmental Authorities or Owner. Contractor certifies that the Contract Price does not include any Taxes for which Owner is responsible under Section 7.3 or any Customs Duties or Texas Sales and Use Taxes that are reimbursable pursuant to Section 7.3.2 or Section 7.5, respectively. If Contractor or any Supplier stores any Equipment off the Site in a manner that causes the imposition of any Taxes that would not otherwise be imposed if the Equipment were delivered to and stored at the Site, or, once the FTZ is activated and subject to Sections 2.12.2(c) and 2.12.4, within the FTZ, or does not utilize the FTZ for importation of Contractor-Furnished Items or otherwise through its acts or omissions causes the imposition of any Taxes on the Equipment that would not otherwise be imposed if Contractor or such Supplier had complied with the requirements of this Agreement, Owner shall not have any liability or responsibility to pay for or reimburse Contractor for such Taxes.

7.5 Texas Sales and Use Tax Matters.

7.5.1 Texas Sales and Use Taxes – Generally. For Texas Sales and Use Tax purposes, this Agreement is intended to be a “separated contract” as such term is defined in 34 Tex. Administrative Code §3.291(a)(13). The Parties acknowledge and agree that any Supply Contract in connection with the Project will be structured as a “separated contract” to the extent reasonably practicable.

7.5.2 Exemption Certificates. Owner shall provide Contractor with a Texas direct pay exemption certificate on or before the FNTP Date, and shall pay applicable Texas Sales and Use Taxes directly to the State of Texas. Contractor shall issue, and shall cause the applicable Suppliers to issue, properly completed resale certificates or other documentation or exemption certificates to all applicable Suppliers, in order to claim, obtain or evidence that the sale of such taxable items is exempt or otherwise not taxable for Texas Sales and Use Tax purposes. As used in this Section 7.5, the term “taxable item” has the meaning assigned to that

term in Section 151.010 of the Texas Tax Code. Pursuant to direct pay permit status, Owner shall pay applicable Texas Sales and Use Tax on Equipment directly to the State of Texas. In no event shall Owner have any obligation to reimburse Contractor for Texas Sales and Use Taxes paid, directly or indirectly, by Contractor or any Supplier with respect to any taxable items for which Owner has provided a Texas direct pay exemption certificate, nor shall Owner have any responsibility to pay any Texas Sales and Use Taxes assessed, incurred or levied on any Construction Equipment.

7.5.3 Sales and Use Tax List. Set forth on Appendix C is an allocation of the Contract Price by item or category of items included in the Work that complies with the requirement of 34 Tex. Administrative Code § 3.291(a)(13) to provide separately stated amounts for incorporated materials, and separately stated amounts for all skill and labor that includes fabrication, installation and other labor that is furnished by Contractor. Each Change Order issued hereunder shall include a similar detailed breakdown with respect to the adjustment to the Contract Price reflected in such Change Order. Set forth on Attachment C-1 to Appendix C is the incorporated materials price for the incorporated Equipment listed on Attachment C-1 to Appendix C for Owner's Texas Sales and Use Tax purposes. To the extent any Change Order includes any new incorporated Equipment, Contractor shall update Attachment C-1 to Appendix C to account for such new incorporated Equipment. Notwithstanding anything to the contrary in this Section 7.5.3, Contractor shall provide Owner with a final statement of information within thirty (30) Days after Final Acceptance of Stage II that otherwise complies with the requirements of this Section 7.5.3 regarding the matters set forth on Attachment C-1 to Appendix C. Contractor shall also provide Owner with any additional information regarding the allocations in Appendix C and Attachment C-1 to Appendix C, and such Change Orders, and Texas Sales and Use Tax matters related thereto, reasonably requested by Owner.

7.5.4 Owner's Audit Right. Pursuant to Section 2.23, Owner shall have the right to have its tax consultant, after the consultant has signed a reasonable and customary non-disclosure agreement with Contractor, audit the relevant Books and Records of Contractor and Subcontractors to confirm: (a) that all Taxes paid by Contractor and its Subcontractors in connection with the Work are properly owed under Applicable Laws; (b) the quantities and descriptions of any Equipment installed in or ordered for the LNG Facility for purposes of Texas Sales and Use Tax or property Tax; and (c) such other information as Owner or Owner's tax consultant may deem reasonably necessary in connection with the preparation of Owner's tax returns or other tax documentation in connection with the Liquefaction Project. If Owner's tax consultant requests information relating to the actual cost of any item of Work, Contractor shall provide such information to Owner's tax consultant, after the consultant has signed a reasonable and customary non-disclosure agreement with Contractor, on the understanding that such tax consultant shall not disclose to Owner the actual cost incurred by Contractor or its Subcontractors for any item of Equipment included in the Contract Price, or unless the amount of Tax properly payable for an item of Work is subject to audit, litigation, arbitration, subpoena, or summons issued by a Governmental Authority; provided, however, that such tax consultant may report to Owner the amount of Taxes properly payable under Applicable Laws.

7.6 **Fixed Asset Price Allocation Schedule.** Contractor shall complete a fixed asset price allocation schedule in the form attached hereto as Appendix PP (the “**Fixed Asset Schedule**”) for each Stage of the Work and shall provide Owner such other information reasonably necessary for Owner to maintain segregated accounts for its Tax records and fixed asset records. The Fixed Asset Schedule, among other information, will provide a breakdown of the Contract Price by individual category (i.e. “soft costs” (i.e. engineering, permitting, etc.) and “hard costs” (materials, labor, equipment, etc.)). The Fixed Asset Schedule shall also include information necessary to assist Owner with any reporting requirements or filings under any Tax Abatements under Section 2.7.10 or other filings with any Governmental Authority. Contractor shall deliver a draft Fixed Asset Schedule for each Stage within thirty (30) Days after the Mechanical Completion Date for such Stage occurs, and shall update such Fixed Asset Schedule periodically thereafter if any material change occurs, until Contractor delivers the final Fixed Asset Schedule for such Stage (which shall be on or before the Substantial Completion Date).

ARTICLE 8

CHANGE ORDERS

8.1 **Changes to the Work.** Except for changes to the Work and adjustments to the extent applicable to the Contract Price, the Milestones, the Payment Schedule, the Key Date Schedule, including the Guaranteed Substantial Completion Dates, or the Guaranteed Performance Levels, pursuant to a Change Order signed by Owner, or Owner and Contractor, as applicable, in accordance with this Article 8, none of the rights or obligations of the Parties under this Agreement shall be changed, modified, altered or adjusted by a Change Order or in any other manner except by a written amendment to this Agreement signed by the Parties. Contractor expressly waives any other compensation as a result of a change in the Work except as set forth in a Change Order in accordance with this Article 8.

8.2 Change Orders Requested by Owner.

8.2.1 Owner shall have the right in its sole and absolute discretion to make changes in the Work (including changes which reduce the scope of Contractor’s Work hereunder). All such changes shall be made and documented in accordance with this Section 8.2 and shall be considered, for all purposes of this Agreement, as part of the Work. The adjustments to the Work, the Contract Price, the Milestones, the Payment Schedule, the Key Date Schedule, including the Guaranteed Substantial Completion Dates, or the Guaranteed Performance Levels, as described in this Section 8.2, shall be the sole adjustments to any of the terms and conditions of this Agreement as a result of the applicable Owner-initiated Change Order.

8.2.2 Owner-Initiated Change Order Procedure.

(a) If Owner desires to initiate a Change Order, Owner shall submit to Contractor a notice with a narrative with respect to any change in the Work that Owner desires to make. Contractor shall respond to Owner within fifteen (15) Days with a preliminary estimate (a “**Preliminary Change Order Estimate**”), setting forth the estimated impact, if any, which Owner’s proposed change to the Work would have on the Contract Price, the Milestones, the

Payment Schedule, the Key Date Schedule, including the Guaranteed Substantial Completion Dates, or the Guaranteed Performance Levels, together with a sufficiently detailed narrative to justify the estimated impact Contractor proposes such change would have on such terms, including signed quotations from Suppliers (including CIMTAS but excluding other Affiliates of Contractor), as applicable, including a description of when the Parties would need to execute a final Change Order so as to minimize as much as possible the effect any such Change Order would have on the Key Date Schedule. Such response from Contractor shall also include Contractor's notice of its estimated costs to prepare a proposed final Change Order if such costs are estimated to exceed the CO Cost Threshold. After receipt of the Preliminary Change Order Estimate, if Owner desires to proceed to a full and final Change Order, Owner shall notify Contractor. If Contractor is instructed to prepare a full and final Change Order, Contractor shall do so (which shall contain all the information required under this Section 8.2.2) within fifteen Days after Owner's notice; provided, however, that if it is not possible for Contractor to provide all of the information under this Section 8.2.2 within the fifteen (15) Day period described in this Section 8.2.2, Contractor shall provide Owner with as much information as possible, together with a written explanation of the reason that additional time is required. With respect to any information not provided within such fifteen (15) Day period, Contractor shall exercise reasonable diligence to provide such information as soon as possible, but in no event later than thirty (30) Days (unless the Parties otherwise agree in writing) following Contractor's receipt of Owner's notice that Contractor shall prepare a full and final Change Order from a Preliminary Change Order Estimate.

(b) Contractor's Preliminary Change Order Estimate and any final proposed Change Order (i) shall only include adjustments to the Project Schedule, including the Guaranteed Substantial Completion Dates in accordance with Section 8.4.1(a); and (ii) shall only include adjustments to the Contract Price, the Milestones and the Payment Schedule in accordance with Section 8.4.1(b); provided that Contractor shall build-up its costs using the rates set forth in Appendix KK. Contractor shall only propose changes to the Guaranteed Performance Levels in accordance with Section 8.4.1(c); provided, however, that if an alternate change to the Work can be made which would not necessitate any adjustment to the Guaranteed Performance Levels, Contractor shall include in any such proposed change in the Work an option (which option shall identify the incremental cost and schedule impact in order to maintain such Guaranteed Performance Levels) to permit Owner to accept a change in the Work which would not require an adjustment to the Guaranteed Performance Levels.

(c) Owner shall respond to Contractor's revised Change Order within fifteen (15) Business Days after receipt of all information to be furnished by Contractor, indicating Owner's agreement or disagreement with Contractor's proposed revisions to the Contract Price, the Milestones, the Payment Schedule, the Key Date Schedule, including the Guaranteed Substantial Completion Dates, or the Guaranteed Performance Levels, in such Change Order.

(d) If Contractor's actual costs to prepare a Change Order in response to a request from Owner pursuant to this Section 8.2.2 exceed the CO Cost Threshold and Contractor notified Owner in accordance with Section 8.2.2(a) that its estimated costs would

exceed such amount, Owner shall reimburse Contractor for such costs (without mark-up, overhead, fees or profit on such costs), subject to Owner's receipt of reasonable supporting documentation of such costs from Contractor.

8.2.3 Agreed Owner-Initiated Change Orders. If the Parties reach agreement on the proposed Change Order, the Parties shall execute such Change Order, and such Change Order shall become binding on the Parties, as part of this Agreement. Each agreed change in the Work, the Contract Price, the Milestones, the Payment Schedule, the Key Date Schedule, including the Guaranteed Substantial Completion Dates, and the Guaranteed Performance Levels, shall be reflected in such Change Order as executed by the Parties.

8.2.4 Scope Option. Without limiting the generality of this Section 8.2, if Owner desires to elect to exercise a Scope Option, Owner shall, on or before the date by which Owner must exercise the Scope Option as described in Appendix C with respect to such Scope Option, submit to Contractor a Change Order in the form of Appendix F-1 with respect to such Scope Option, setting forth, as applicable, the adjustments to the Contract Price, the Milestones and the Payment Schedule, and the Baseline CPM Schedule and Key Date Schedule, as described in Appendix C. Such Change Order, which shall be signed by Owner when submitted to Contractor, shall be signed by Contractor upon receipt.

8.3 Change Orders Requested by Contractor.

8.3.1 Permitted Change Order Requests. Contractor shall only have the right to a Change Order in connection with the occurrence of the following events, but only to the extent described in Section 8.4, and in all cases subject to the requirements of Section 8.5, and, in the case of Sections 8.3.1(e) through (and including) 8.3.1(j), 8.3.1(n), 8.3.1(o), 8.3.1(p), 8.3.1(q), 8.3.1(r), 8.3.1(s) and 8.3.1(t) (the "**Claim Submission Events**"), subject to the provisions of Sections 18.2 and 18.1.3:

(a) the purchase of operating spare parts for a Stage in accordance with Section 2.14.2, as requested by Owner;

(b) (i) the purchase of Capital Spare Parts in accordance with Section 2.14.3 to the extent the aggregate purchase price and delivery costs, taken as a whole for all of the Capital Spare Parts, differs from the provisional sum included in the Contract Price for the Capital Spare Parts as set forth in Appendix C; (ii) to the extent that the aggregate costs incurred by Contractor to close-out action items that were identified during Contractor's HAZOP review that require input from Vendors not received as of the Effective Date, differs from the provisional sum included in the Contract Price for such Work as set forth in Appendix C; (iii) the aggregate fees incurred by Contractor to dispose of materials stripped from the Site (such as during clearing and grubbing) at Contractor's selected landfill in Port Arthur, Texas prior to establishment of the on-Site disposal area and, thereafter, once the on-Site disposal area has reached full capacity, to the extent the aggregate amount of such disposal fees differs from the provisional sum included in the Contract Price for such Work as set forth in Appendix C; provided, that the foregoing shall include only the fees paid to the selected landfill and not any other costs such as costs of stripping or transport of such material; or (iv) to the extent the

aggregate costs incurred by Contractor to construct the Beneficial Use Dredge Material disposal area, differs from the provisional sum included in the Contract Price for such Work as set forth in Appendix C;

- (c) a reduction in the scope of the Work in the case where Owner agrees to perform any of the Work or any of the Work is removed from Contractor's scope in accordance with Section 2.21.2;
- (d) acceleration of the Work in accordance with Section 4.4.4;
- (e) Excusable Events, subject to the terms of Article 18;
- (f) Force Majeure, subject to the terms of Article 18;
- (g) physical loss or damage to or destruction of the Work;
- (h) in accordance with Section 18.4;
- (i) in connection with Contractor's suspension of the Work pursuant to Section 19.4.2(a); or
- (j) in connection with an evacuation of the Site in accordance with Section 18.3;
- (k) a delay in issuing FNTP in accordance with Section 4.1.4(a) or if after the Extended Bid Validity Date, in accordance with Section 4.1.4(b), as applicable;
- (l) Owner's exercise of a Scope Option pursuant to Section 6.1.4;
- (m) in accordance with Section 6.9 in connection with the conversion of the Foreign Currency Amount;
- (n) Contractor's suspension of the repairs or restoration of Work in accordance with Section 16.5.2 due to Owner's failure to release the insurance proceeds that have been paid to Owner for the completion of repairs, replacement or other necessary Work by Contractor;
- (o) Owner's modification of the Owner HSSE Program prior to Substantial Completion of a Stage;
- (p) delays to the Work due to compliance with the FEIS with respect to [***] (including delays in the Work in the affected areas), and the imposition by FERC or other relevant Government Authority of additional mitigation measures beyond those mitigation measures required for Contractor to comply with the environmental conditions set forth in the FEIS, as a result of the occurrence of an event, which the mitigation measures required under the FEIS are intended to prevent or avoid; provided, in each case, that Contractor has complied with

the requirements of the FEIS and that the imposition of such additional mitigation measures are not the result of an act or omission of any member of the Contractor Group;

(q) delays or changes in the Work caused by a modification to Contractor's means and methods of performing the Work, which modification is due to Owner's failure to obtain [***]; or

(r) if the survey of the Site boundaries completed by Contractor in accordance with Section 2.11.7 and agreed by Owner modifies the boundaries of the areas of the Site from those contemplated in Attachment L-1 in such a way that it reduces the area of the Site such that Contractor can no longer reasonably perform the Work without apparent and obvious modifications to Contractor's plan for performance of the Work as of the Effective Date;

(s) if the results of the field tests of piles, soil mixing and settlement wick drains that Contractor will perform on the Site prior to FNTP pursuant to Section 2.30, demonstrate that the soil conditions of the Site differ from the Geotechnical Reports such that Contractor must utilize a different pile design, settlement wick drain design or utilize different quantities of lime, cement and fill material than that assumed by Contractor as of the Effective Date; or

(t) Owner's failure to issue the Non-Bridging LNTP on or before [***], or Owner's failure to issue the Full Notice to Proceed on or before [***].

8.4 Change Order Remedies.

8.4.1 General Requirements. The general requirements as stated in this Section 8.4.1 shall apply in determining all adjustments to the Contract Price, the Milestones, the Payment Schedule, the Key Date Schedule, including the Guaranteed Substantial Completion Dates, or the Guaranteed Performance Levels, to be made in connection with any Change Order. To the extent the specific adjustments referenced in the description of the remedies available under Section 8.4.2 conflict with any of the provisions of this Section 8.4, the more limited adjustments shall apply.

(a) Adjustments to the Key Date Schedule, including the applicable Guaranteed Substantial Completion Dates, shall, subject to Section 18.1.3, be made only if and to the extent Contractor demonstrates that Contractor will be delayed in the performance of Critical Path Items due to the applicable event such that, based on the CPM Schedule and using critical path analysis, Contractor will fail to achieve Substantial Completion of a Stage by the then applicable Target Substantial Completion Date of such Stage, and the Guaranteed Substantial Completion Date shall then only be adjusted on a day-for-day basis as such demonstrated delay to the Target Substantial Completion Date. When the planned progress curves are impacted by a Change Order, Contractor shall include updated progress curves with the CPM Schedule submitted with such Change Order.

(b) All adjustments to the Contract Price through a Change Order shall (i) be prepared on a "separated contract" fixed price basis, separating the proposed adjustments

into amounts for materials, and amounts for labor and services; (ii) reflect the estimated effect (increase or decrease) of the change to Contractor's costs (including those of its Affiliates other than CIMTAS) caused by such Change Order event, (iii) reflect the estimated effect of the change to Contractor's costs in the case of Supply Contracts (including CIMTAS but excluding other Affiliates) which shall be equal to the actual costs charged or to be charged by the Supplier (including CIMTAS but excluding other Affiliates), plus in the case of each subclause (ii) and (iii), an amount equal to seven and [***] of such estimated increase or decrease of such costs, which amount shall represent Contractor's associated overhead (including general and administrative costs), and profit, margin and fees; (iv) include a reasonable amount of contingency appropriate for the scope and risk of the Change Order, where applicable, in any event not including any Change Orders with respect to [***] other than with respect to the estimated costs identified in the Change Order that have not yet been incurred; and (v) comply with the requirements of Section 6.2.2(c). For purposes of clarity, the rates set forth in Appendix KK shall only be used in the build-up of Contractor's costs for adjustments to the Contract Price with respect to Change Orders issued pursuant to [***]. [***]. The calculation of any adjustment to the Contract Price shall include and identify all elements of cost using the following guidelines: labor to include category, unit rate, total rate and hours, travel and other related expenses; and materials to include category, unit rate, total rate and quantity. Contractor shall not be entitled to payment for preparation of Change Orders pursuant to Section 8.3. In connection with any Contract Price adjustment, the Change Order will incorporate changes to the Payment Schedule, including both Milestones and the payment curve, as applicable.

(c) Changes to the Guaranteed Performance Levels shall be made if and only to the extent that Contractor is able to reasonably demonstrate, using the original methodology and calculations, including design margin percentages, that were used by Contractor to determine the Guaranteed Performance Levels, that the change in the Work to which a proposed Change Order relates would impact the expected performance of a Stage such that the Guaranteed Performance Levels cannot be achieved. For the avoidance of doubt, no change, modification or amendment shall be made to the Guaranteed Performance Levels, or any of the provisions of Appendix G, in connection with any Change Order requested by Contractor other than in connection with a Change in Law.

(d) No Claim or demand or request for a Change Order shall be made, or deemed to be made, hereunder unless and until Contractor prepares a fully complete proposed draft of the Change Order, including all amounts that Contractor intends to include in such Claim. Notwithstanding anything to the contrary in this Agreement, Owner shall have no obligation or responsibility to respond to or take any further action with respect to "indicative" or "preliminary" or similar incomplete requests for a Change Order made by Contractor hereunder.

(e) [***].

(f) Nothing in this Agreement shall be deemed to permit Contractor to receive a duplication of relief (whether by increase to the Contract Price or extensions of any of the Key Date Items, or both) by reason of the occurrence of an event, failure or circumstance qualifying under more than one of the clauses set forth in Section 8.3.1.

8.4.2 Specified Remedies. In connection with the Change Order events described in this Section 8.4.2, the remedies set forth in Section 8.4.1 shall be limited as described below:

(a) In the case of the occurrence of an Excusable Event, and subject to the provisions of Section 18.1 and Section 18.2, Contractor shall only have a right to a Change Order under Section 8.3.1(e) for an adjustment to the Key Date Schedule, the Contract Price (with corresponding adjustments to the Milestones and the Payment Schedule), and to the Guaranteed Performance Levels with respect to impacts caused by Change in Law if and only to the extent permitted under Section 18.1.2.

(b) In the case of the occurrence of an event of Force Majeure, and subject to the provisions of Section 18.1 and Section 18.2, Contractor shall only have a right to a Change Order under Section 8.3.1(f) for adjustments to the Key Date Schedule and the Contract Price (with corresponding adjustments to the Milestones and the Payment Schedules) if and only to the extent permitted under Section 18.1.2.

(c) In the case of Section 8.3.1(a), Contractor shall only have a right to a Change Order to adjust the Contract Price (with corresponding adjustments to the Milestones and the Payment Schedules) for the actual purchase price and delivery costs of the operating spare parts in accordance with Section 2.14.2.

(d) In the case of a Change Order due to an acceleration of the Work pursuant to Section 8.3.1(d), the adjustment to the Contract Price (with corresponding adjustments to the Milestones and the Payment Schedules) with respect to any acceleration of the Work as contemplated in Section 4.4.4 will be an amount limited to the actual costs attributable to such acceleration that Contractor reasonably demonstrates will be incurred over and above Contractor's costs that would be incurred without such acceleration (in the case of any personnel costs, such costs shall be limited to any incremental shift differential, costs to expedite, or overtime payments to laborers, craft labor or field supervisors and other employees of Contractor dedicated to the Work (including additional indirect staff) on a full-time basis).

(e) In the case of a Change Order pursuant to Section 8.3.1(g) due to physical loss or damage to or destruction of the Work: (i) an adjustment to the Contract Price (with corresponding adjustments to the Milestones and the Payment Schedules) shall only be made with respect to the costs which Contractor is entitled to recover under Section 11.3.1(c); and (ii) extensions to the Key Date Schedule, including the Guaranteed Substantial Completion Dates, shall be limited to the extent to which the physical loss, damage or destruction and any resulting delay in the performance of the Work was not due to acts or omissions of Contractor or any other member of the Contractor Group, and then in accordance with Section 8.4.1(a).

(f) In the case of a Change Order requested pursuant to Section 8.3.1(h), any adjustment to the Contract Price shall only be made in accordance with Section 18.4, and adjustments to the Key Date Schedule shall, subject to Contractor having satisfied the requirements of Section 18.4, otherwise be made in accordance with Section 8.4.1(a).

(g) In the case of Owner's suspension of the Work pursuant to Section 19.2 or Contractor's suspension of the Work pursuant to Section 19.4.2(a), the adjustment to the Contract Price will be equal to the reasonable costs of such suspension, including demobilization and remobilization costs, if necessary, plus an amount equal to [***] of such costs, which amount shall represent Contractor's associated overhead (including general and administrative costs), and profit, margin and fees, but in no event shall Contractor be entitled to receive any amount for contingency, risk or anticipatory profit.

(h) In the case of a Change Order requested pursuant to Section 8.3.1(j), adjustments to the Contract Price and Key Date Schedule shall be made in accordance with Section 18.3.

(i) In the case of a Change Order pursuant to Section 8.3.1(k) that is subject to Section 4.1.4(a), adjustments to the Contract Price and Key Date Schedule shall be made in accordance with Section 4.1.4(a).

(j) In the case of a Change Order pursuant to Section 8.3.1(t): (i) with respect to Owner's failure to issue the Non-Bridging LNTP, the Change Order shall define the scope of Work to be performed under the extended Bridging LNTP, the Maximum LNTP Payment Amount and the payments to be made under the extended Bridging LNTP in accordance with Attachment NN-1 to Appendix NN, and no adjustments to the Baseline CPM Schedule, the Key Date Items or the Contract Price (without prejudice to Section 4.1.4(a)) shall be made; and (ii) with respect to Owner's failure to issue the Full Notice to Proceed such that the FNTP Date has occurred on or before [***], the Change Order shall define the scope of Work to be performed under each of the extended Bridging LNTP and the Non-Bridging LNTP, as applicable, and the Maximum LNTP Payment Amount and the payments to be made under each of the extended Bridging LNTP and the Non-Bridging LNTP, as applicable, in accordance with Attachments NN-1 and NN-2 to Appendix NN, and no adjustments to the Baseline CPM Schedule, the Key Date Items or the Contract Price (without prejudice to Section 4.1.4(a)) shall be made.

8.5 Change Request Logs; Contractor-Requested Change Order Procedures.

8.5.1 Change Request Log. Subject to Section 8.8, Contractor shall maintain a log of purported Owner instructions or comments that Contractor reasonably considers represent a change to the scope of Work made by Owner, which, in Contractor's view, should result in the issuance of a Change Order by Owner pursuant to Section 8.2. Such log shall contain sufficient detail, including the date on which such instruction was given, for the Parties to identify the instruction or comment at issue. The Parties shall review such log during the Monthly progress review meetings as described in Appendix S. Neither the addition of items by Contractor to this log, including Change Orders requested by Contractor that may be listed in the log, nor the review of such log with Owner during the Monthly progress review meetings, shall constitute a Change Order or a formal request to Owner for a Change Order, and Owner's failure to comment or dispute items on such log shall not be deemed an admission by Owner that such log is accurate or otherwise agreed upon by the Parties. Requests for Change Orders to be issued by Owner must be made in accordance with Section 8.2. If after review of the log by the Parties,

Contractor believes that Owner's instructions or comments nonetheless constitute a change in the Work, Contractor shall notify Owner in writing, and if Owner disagrees and does not issue a Change Order request under Section 8.2 or a unilateral Change Order under Section 8.6 with respect to such Work, either Party may submit such disagreement to dispute resolution proceedings in accordance with Section 20.1.

8.5.2 Change Order Proposal. Upon the occurrence of an event as described in Section 8.3, Contractor shall notify Owner in writing and issue to Owner, at Contractor's expense, a proposed Change Order in the form attached hereto as Appendix F-1, setting forth the effect, if any, which the change has had or would have on the Contract Price, the Milestones, the Payment Schedule, the Key Date Schedule, including the Guaranteed Substantial Completion Dates, or the Guaranteed Performance Levels, as applicable, and accompanied by a detailed written explanation of the proposed change and Contractor's reasons for proposing the change, all documentation necessary to demonstrate the effects of the change on such terms, and all other information reasonably required by Owner to verify such proposed Change Order. In all cases, Contractor shall submit all Claims for relief hereunder for Claim Submission Events by the Claim Submission Deadline.

8.5.3 Agreed Change Orders. If the Parties reach agreement on Contractor's proposed Change Order, Owner shall issue such Change Order, which shall be in the form of Appendix F-1, and such Change Order shall become binding on the Parties as part of this Agreement upon execution thereof by the Parties.

8.5.4 Owner's Review of Change Orders; Disputed Change Orders. Without limiting Owner's rights under Section 2.23 or Section 18.2.3, Owner shall not be obligated under this Agreement to review, comment on, seek additional information with respect to, accept, or deny a proposed Change Order request made by Contractor under Section 8.3 unless and until Contractor submits a proposed final Change Order request for Owner's review which fully and finally sets forth (as contemplated by Section 8.9) all Claims based on or arising out of the subject matter of such Change Order. Owner shall not be obligated to review, comment on, approve or reject any Change Order request made by Contractor which either reserves Contractor's rights to supplement its Change Order request, or otherwise purports to be "preliminary" (or words of similar import), and any such Change Order request shall have no force or effect under this Agreement except with respect to Contractor's obligation to submit updates to Owner with respect to potential Claims pursuant to Sections 18.2.3 and 18.2.5. Once Contractor submits to Owner a proposed final Change Order request for Owner's review which fully and finally sets forth (as contemplated by Section 8.9) all Claims for relief hereunder of Contractor and all Suppliers (as set forth above), Owner shall be allowed (the "**Owner Change Order Review Period**"): (a) for all [***], [***] Business Days after Owner's receipt of Contractor's proposed full and final Change Order; (b) with respect to all Change Order requests seeking relief for a Claim Submission Event (other than those set forth in subclause (a)), a number of Days to review, comment on, seek additional information with respect to, accept, or deny such proposed Change Order request equal to the number Days between the date that Contractor provided the initial notice under Section 18.2.1 of such Excusable Event or event of Force Majeure for which Contractor is seeking relief and the date that Contractor submitted such

proposed final Change Order for Owner review (inclusive); and (c) with respect to all other Change Order requests prepared by Contractor pursuant to Section 8.3 not identified in subclause (a) or (b) above, [***] Business Days after Owner's receipt of Contractor's proposed full and final Change Order. Owner shall not be deemed to have rejected or otherwise improperly delayed acceptance or rejection of any Change Order request to which Contractor is otherwise entitled under this Section 8.3 by reason of Owner's utilizing the entire Owner Change Order Review Period to review, comment on, seek additional information with respect to, accept or deny such proposed Change Order, and Contractor acknowledges that Owner shall be under no obligation to review or respond to any preliminary Claims if the Claim Submission Deadline is extended to more than [***] Days to allow Contractor additional time to prepare a Claim. Contractor hereby waives any remedies at law or at equity (including under such remedies as "constructive acceleration") by reason of Owner's exercise of its rights under this Section 8.5.4, including Owner's enforcement during the Owner Change Order Review Period of Contractor's obligations hereunder to comply with the Key Date Schedule. If the Parties do not reach agreement on all aspects of a Contractor-requested Change Order within fifteen (15) Business Days after the applicable Owner Change Order Review Period, then, without limiting Owner's rights under Section 8.6, either Party may refer the Dispute for resolution under Article 20. Any disagreement with respect to a Contractor-requested Change Order must be submitted for resolution in accordance with Section 20.1 to be raised for discussion by the Parties pursuant to Section 20.2 within [***] Days of the end of the applicable Owner Change Order Review Period. Contractor's failure to submit such Dispute Notice in accordance with Section 20.1 within such [***] Day period shall be a waiver of Contractor's right to make a claim for relief (whether the claim for such relief is related to adjustments to the Contract Price, the Key Date Schedule or otherwise) under this Agreement based on the event, circumstance or occurrence underlying the Contractor-requested Change Order. Contractor shall continue to diligently perform the Work (as required absent the proposed Change Order or, if applicable, as required in a unilateral Change Order issued by Owner pursuant to Section 8.6) pending resolution of the Dispute.

8.6 Unilateral Change Orders. If Contractor and Owner are unable to agree on the matters described in a proposed Change Order, or if they are unable to agree on whether Contractor is entitled to a Change Order, regardless of whether such Change Order is requested by Contractor or by Owner, or if Owner desires that a proposed change in the Work commence without having reached agreement on a proposed Change Order, Owner may, by issuance of a unilateral Change Order in the form attached hereto as Appendix F-2 as submitted by Owner, require Contractor to commence and perform the Work as specified in the unilateral Change Order on a time and materials basis at the rates set forth on Appendix KK, plus an amount equal to [***] of Contractor's costs, which amount shall represent Contractor's associated overhead (including general and administrative costs), contingency and profit; provided, that Contractor will only be entitled to payment under this Section 8.6 to the extent that Contractor reasonably demonstrates (subject to Section 8.11 and otherwise with reasonably adequate supporting documentation), that Contractor's costs to perform the Work are materially increased by such unilateral Change Order; provided, further, that such unilateral Change Order does not constitute a cardinal change in the Work. Owner shall assign a "Pending Item Claim Number" to the Work in question and shall issue Contractor a separate notice to proceed with respect to such unilateral Change Order. Contractor shall proceed to perform the Work identified therein. If Owner and

Contractor ultimately agree either on the effect of such disputed change in the Work, or agree as to whether Contractor was entitled to such Change Order (in the case of a dispute over whether Contractor is entitled to a Change Order hereunder), such agreement shall be recorded by execution by the Parties of a Change Order in the form attached hereto as Appendix F-1, which shall supersede the unilateral Change Order previously issued and relating to such changed Work. If the Parties do not agree on the effect of a unilateral Change Order within [***] Business Days after Owner's issuance of the unilateral Change Order, then either Party may refer the Dispute for resolution under Article 20. Pending resolution of the Dispute, Contractor shall perform the Work as specified in such unilateral Change Order as issued by Owner and Owner shall continue to pay Contractor in accordance with the terms of this Agreement, the unilateral Change Order and any previously agreed Change Orders. Contractor shall commence the performance of the changed Work as set forth in such unilateral Change Order upon issuance thereof by Owner (or within such other time specified in such unilateral Change Order) and shall diligently perform the changed Work required in such unilateral Change Order. Notwithstanding anything to the contrary in the foregoing: (a) Contractor may, in Contractor's sole and absolute discretion, reject an unilateral change to the extent such change directs Contractor to classify, handle, remediate, transport, store, or dispose of any Pre-Existing Hazardous Materials or any Hazardous Materials other than Hazardous Materials for which Contractor is responsible under this Agreement; and [***].

8.7 Subsequent Invoices. Without prejudice to Sections 8.2 or 8.3, after signature or other determination of a Change Order by the Parties, or pursuant to Article 20, subsequent Invoices shall reflect any increase or decrease in the Contract Price pursuant to such Change Order.

8.8 NO OBLIGATION OR PAYMENT WITHOUT EXECUTED CHANGE ORDER. NOTWITHSTANDING ANY ORAL INSTRUCTION, OR ANY WRITTEN INSTRUCTION THAT IS NOT IN ACCORDANCE WITH THIS ARTICLE 8, IN NO EVENT SHALL CONTRACTOR BE ENTITLED TO UNDERTAKE OR BE OBLIGATED TO UNDERTAKE ANY CHANGE TO THE WORK, UNTIL CONTRACTOR HAS RECEIVED A CHANGE ORDER EXECUTED BY OWNER PURSUANT TO SECTION 8.6, OR EXECUTED BY OWNER AND CONTRACTOR PURSUANT TO SECTIONS 8.2.3 OR 8.5.3, AS APPLICABLE, OR AS MAY BE ORDERED PURSUANT TO ARTICLE 20. IN THE ABSENCE OF SUCH A CHANGE ORDER, IF CONTRACTOR UNDERTAKES ANY CHANGES IN THE WORK, THEN SUCH CHANGES SHALL BE AT CONTRACTOR'S SOLE RISK AND EXPENSE AND SHALL BE REVERSED UPON THE WRITTEN ORDER OF OWNER AT CONTRACTOR'S RISK AND EXPENSE, AND CONTRACTOR SHALL NOT BE ENTITLED TO ANY COMPENSATION HEREUNDER OR ADJUSTMENT TO THE SCOPE OF WORK, CONTRACT PRICE, MILESTONES, PAYMENT SCHEDULE OR KEY DATE SCHEDULE, INCLUDING THE GUARANTEED SUBSTANTIAL COMPLETION DATES, OR ANY OTHER TERMS OR CONDITIONS OF THIS AGREEMENT, FOR UNDERTAKING SUCH CHANGES OR REVERSAL.

8.9 Executed Change Order Form Final. Each executed Change Order shall constitute a final settlement of, and waiver by, Contractor of the right to assert: (a) [***]; or

(b) any further Claim in any way addressed by the items set forth in such Change Order, including any increase in compensation based upon any theory such as loss of productivity, lost efficiency, constructive acceleration, cardinal change, [***].

8.10 No Suspension. Contractor shall not suspend the Work pending resolution of any proposed Change Order unless directed by Owner in writing in accordance with Section 19.2.

8.11 Supplier Rates. With respect to all Change Orders (either issued by Owner or claimed by Contractor), Contractor shall supply signed quotations from the relevant Suppliers (including CIMTAS but excluding other Affiliates of Contractor) with respect to any costs on a proposed Change Order that are related to such Supplier, together with reasonable supporting documentation to justify the amount claimed with respect to such Supplier. In calculating the value of any Change Order for which the rates of Appendix KK are to be applied, with respect to such Supplier, to the extent Appendix KK does not contain the various rates and pricing information from the applicable Supplier, in calculating the value of any Change Order with respect to such Supplier, Contractor shall use such Supplier's actual class rate or pricing for such employee or item of Equipment.

8.12 SOLE AND EXCLUSIVE REMEDY. CONTRACTOR EXPRESSLY WAIVES ANY ADDITIONAL COMPENSATION FOR ANY AND ALL CHANGE ORDERS EXECUTED HEREUNDER, INCLUDING ANY OTHER CHANGE IN THE CONTRACT PRICE, THE MILESTONES, THE PAYMENT SCHEDULE, THE KEY DATE SCHEDULE, INCLUDING THE GUARANTEED SUBSTANTIAL COMPLETION DATES, OR THE GUARANTEED PERFORMANCE LEVELS. THE TOTAL CHANGE TO THE CONTRACT PRICE OF ANY CHANGE ORDER SHALL BE THAT INDICATED IN THE EXECUTED CHANGE ORDER AND CONTRACTOR WAIVES ANY CLAIM FOR ANY ADDITIONAL INCREASE TO THE CONTRACT PRICE ARISING OUT OF ANY AND ALL EXECUTED CHANGE ORDERS BASED ON ANY THEORY SUCH AS LOSS OF PRODUCTIVITY, CONSTRUCTIVE ACCELERATION, EFFICIENCY, [***].

ARTICLE 9

TESTING AND COMPLETION

9.1 Pre-Commissioning Plan; Completion Database.

9.1.1 Pre-Commissioning Plan. No later than six (6) Months prior to the date on which Contractor is scheduled to commence pre-commissioning of a Stage, Contractor shall provide to Owner for its review and comment a pre-commissioning plan for such Stage, with priorities assigned for pre-commissioning activities to be conducted on each System, and sequential details of pre-commissioning activities to be conducted. The pre-commissioning plan shall include pre-commissioning procedures for each System, and checklists of pre-commissioning requirements, and otherwise comply with the requirements of Appendix A. If Owner provides any comments to the pre-commissioning plan, Contractor shall consider such comments in good faith and resolve the comments with Owner before finalizing the pre-commissioning plan. Contractor shall comply with the requirements for pre-commissioning

activities set forth in the plan, and shall comply with the pre-commissioning procedures and otherwise follow the pre-commissioning plan as finalized pursuant to this Section 9.1.

9.1.2 Systems Designation. Contractor shall designate Systems on mark-ups of the P&IDs (the “**Scoped P&IDs**”) for use during pre-commissioning and commissioning activities. The initial Scoped P&IDs were issued to Owner prior to the Effective Date. Any updates to the Scoped P&IDs that occur during performance of the Work shall be issued to Owner via transmittal.

9.1.3 Completions Database. Contractor shall maintain a contemporaneous completions database for the duration of the Work that tracks completion of the Work by System, and as otherwise agreed by Contractor and Owner (the “**Completions Database**”). The Completions Database shall track the status of the Work, including Systems and Punch List Items. Designated representatives of Owner’s completion team shall have read-only electronic access to the Completions Database at all times once, and where, the database is in use by Contractor (with no dataroom restrictions), which shall include the capability to access those portions related to preservation activities and maintenance, commissioning activities, turnover completion package tracking, and Punch List tracking and reporting, and the ability to generate and print reports from the database. Contractor shall also provide Owner with a Weekly completions report broken out by System, sub-System and discipline, cross-referenced with the associated WBS areas where applicable. Such report shall clearly illustrate certified versus planned progress of construction and commissioning activities.

9.2 Mechanical Completion.

9.2.1 Mechanical Completion of Systems. Contractor shall provide Owner with a weekly completion report by System, and walkdown each System to determine if Mechanical Completion of such System has occurred in accordance with its completion schedule. Contractor shall notify Owner of walkdowns of Systems and Owner may participate in such walkdowns. If during a walkdown or review of the completion reports with respect to such System, any issues that would cause such System not to be Mechanically Complete are identified by Contractor (or if Owner identifies any such issue, Owner shall notify Contractor), and Contractor shall take such corrective action or perform additional Work, or list any such issue as a Punch List Item as appropriate, so as to cause such System to be Mechanically Complete. Once Mechanical Completion of a System has been achieved, Contractor shall notify Owner and make the construction turnover packages for such System, including the Punch List Items for such System, available to Owner. The foregoing shall not limit or restrain Owner from reviewing and commenting on such System in connection with any Mechanical Completion Certificate for a Stage, Ready for Start-Up Certificate or Substantial Completion Certificate.

9.2.2 Mechanical Completion Certificate.

(a) When Contractor believes the last System of a Stage is Mechanically Complete, including that the requirements of Section 9.9.2(a) have been satisfied with respect to each such System, and that the Mechanical Completion Date has occurred, Contractor shall execute and deliver to Owner a Mechanical Completion Certificate for such

Stage, and make the construction turnover packages with respect to the Systems, including the Punch List Items for such Systems, available to Owner for review.

(b) As soon as practicable following its receipt of a Mechanical Completion Certificate, Owner shall notify Contractor of any Defect of which it is aware that, if not remedied, would prevent Owner from countersigning the Mechanical Completion Certificate for the relevant Stage. As soon as practicable, and in any event within three (3) Days following its receipt of a Mechanical Completion Certificate for a Stage, Owner shall either:

(i) countersign and deliver to Contractor the Mechanical Completion Certificate for the relevant Stage; or

(ii) notify Contractor in writing that Mechanical Completion of such Systems has not been achieved, stating in detail the reasons therefor.

(c) If Mechanical Completion of such Systems of the relevant Stage has not been achieved, Contractor shall promptly take such corrective action or perform such additional Work as to achieve Mechanical Completion of such Systems of the relevant Stage, and shall issue to Owner another Mechanical Completion Certificate for the relevant Stage, as applicable, pursuant to Section 9.9.2(a). Neither Owner's execution of the Mechanical Completion Certificate for the relevant Stage, nor any matter reported by Owner pursuant to Section 9.9.2(b), nor any action taken by Contractor pursuant to this Section 9.9.2(c) shall diminish Contractor's obligations pursuant to Article 10.

9.3 Commissioning Activities.

9.3.1 Commissioning Manager. The individual who will act as Contractor's commissioning manager shall be specifically named and identified on Contractor's organization chart. Such individual shall be dedicated full time to the performance of the Work by no later than the date that Contractor is scheduled to commence reviews of the "Issued for Construction" P&ID Drawings in accordance with the CPM Schedule.

9.3.2 Conditions to Commencement of Commissioning. Contractor shall not commence commissioning of a System unless: (a) all Punch List A Items with respect to such System have been completed in accordance with Section 9.9.2(a) or re-classified as a Punch List B Item or otherwise as the Parties agree to allow commissioning of such System to commence; (b) commissioning procedures for such System have been finalized in accordance with Section 9.3.4; and (c) all Permits required prior to commencing commissioning of such System have been obtained in accordance with Applicable Laws.

9.3.3 Commencement of Commissioning. Contractor shall commence commissioning activities of each System promptly after Mechanical Completion of such System, subject to satisfying the requirements of Section 9.3.2.

9.3.4 Commissioning and Start-Up Plan; Operating and Maintenance Procedures.

(a) No later than six (6) Months prior to the date on which Contractor is scheduled to commence commissioning and start-up of any System within a Stage, Contractor shall provide to Owner for its review and comment a detailed commissioning and start-up plan with priorities assigned for commissioning activities to be conducted on each System, and sequential details of commissioning and start-up activities to be conducted, including the LNG Tanks. The commissioning and start-up plan shall include commissioning and start-up procedures for each System or groups of Systems within such Stage, identify pre-start-up safety reviews by System or groups of Systems, checklists of commissioning and start-up requirements, and shall otherwise comply with the requirements of Appendix A. If Owner provides any comments to the commissioning and start-up plan, Contractor shall respond to such comments in good faith and resolve the comments with Owner before finalizing the commissioning and start-up plan. Contractor shall comply with the requirements for commissioning and start-up activities set forth in the plan, and shall comply with the commissioning and start-up procedures and otherwise follow the commissioning and start-up plan as finalized pursuant to this Section 9.3.4(a).

(b) Contractor shall also prepare and deliver, together with the commissioning and start-up plan, operating and maintenance procedures for the Equipment and facilities within each Stage, for review and comment by Owner. If Owner provides any comments to the operating and maintenance procedures, Contractor shall respond to such comments in good faith and resolve such comments with Owner before finalizing the operating and maintenance procedures. Once the operating and maintenance procedures are finalized, Contractor shall comply with such procedures in connection with the operation and maintenance of each Stage until such Stage achieves Substantial Completion and care, custody and control of such Stage is turned over to Owner.

9.4 Ready for Start-Up.

9.4.1 Start-Up of Systems or Groups of Systems. Upon determining that the requirements of Section 9.9.2(b) have been satisfied for a System, or a group of Systems, and that the System or group of Systems is otherwise ready for start-up, including that any Punch List A Items for such System or group of Systems to which Owner agreed to a work-around for purposes of achieving Mechanical Completion have been completed, Contractor shall notify Owner, make any supporting documentation with respect to such System or group of Systems, including the Punch List Items for such System or group of Systems, available to Owner for review, and walkdown the System or group of Systems with Owner. The Parties shall use commercially reasonable efforts to complete such walkdowns within three (3) Business Days of Contractor's notice to Owner. If either Party identifies any issues in the walkdown of such System or group of Systems that would cause such System or group of Systems to not be ready for start-up, Contractor shall promptly take such corrective action or perform such additional Work as will cause such System or group of Systems to be ready for start-up, and shall notify Owner when such Work is completed. The foregoing shall not limit or restrain Owner from

reviewing and commenting on such System or Systems in connection with any Ready for Start-Up Certificate for a Stage or Substantial Completion Certificate. Owner acknowledges and agrees that, subject to Section 2.13.4, Contractor may start-up Systems, including the wet flare, dry flare, the introduction of Fuel Gas to certain Systems, Feed Gas to warm end, and cool down of the loading System and the LNG Tank, prior to Mechanical Completion of a Stage; provided, that any required FERC approvals or authorizations shall have been received and Contractor's pre-start-up safety review shall have been submitted to and signed by Owner before such start-up activities commence.

9.4.2 Ready for Start-Up of a Stage. When Contractor believes that Ready for Start-Up of a Stage has been achieved, and that all of the requirements of Sections 9.9.2(b) and 9.9.2(c) have been satisfied with respect to the Systems of such Stage, Contractor shall execute and deliver to Owner a Ready for Start-Up Certificate for such Stage, together with required documentation with sufficient detail to enable Owner to determine whether the requirements for Ready for Start-Up for such Stage have been met.

(a) As soon as practicable following its receipt of a Ready for Start-Up Certificate delivered pursuant to Section 9.4.2, Owner and Contractor shall walkdown the applicable Stage and all of the applicable Work, and Owner promptly notify Contractor of any Defect of which it is aware that, if not remedied, would prevent Owner from countersigning the Ready for Start-Up Certificate. As soon as practicable, and in any event within three (3) Business Days following its receipt of a Ready for Start-Up Certificate, Owner shall consider the report submitted by Contractor and either:

- (i) countersign and deliver to Contractor the Ready for Start-Up Certificate; or
- (ii) notify Contractor in writing that Ready for Start-Up of the relevant Stage has not been achieved, stating in detail the reasons therefor.

(b) If Ready for Start-Up of the Stage has not been achieved, Contractor shall promptly take such corrective action or perform such additional Work as to achieve Ready for Start-Up for the Stage, and shall issue to Owner another Ready for Start-Up Certificate for such Stage, in which case the Parties shall walkdown the applicable part of the Stage and the Work that has been corrected in accordance with this Section 9.4.2. Neither Owner's execution of the Ready for Start-Up Certificate, nor any matter reported by Owner pursuant to Section 9.4.2, nor any action taken by Contractor pursuant to this Section 9.4.2(b), shall diminish Contractor's obligations pursuant to Article 10.

9.4.3 Start-Up; Notice of Initial Production Date. Following Owner's acceptance of the Ready for Start-Up Certificate for the applicable Stage, Contractor shall thereafter follow the start-up procedures and conduct the start-up and cool-down activities with respect to such Stage in accordance with the commissioning and start-up plan accepted by Owner pursuant to Section 9.3.4, and shall commence production of LNG. Within five (5) Business Days after the occurrence of the Initial Production Date for the LNG Train that is a part of the

applicable Stage, Contractor shall provide to Owner a notice stating that the Initial Production Date for that LNG Train has occurred and identifying the Initial Production Date.

9.5 Notices of Initial Production Dates and Feed Gas Requirements.

9.5.1 Notices of Initial Production Date for Stage I.

(a) Subject to the issuance of the Full Notice to Proceed, Contractor expects the Initial Production Date for Stage I to occur during a [***] Day period beginning on the date that is [***] Months after the FNTP Date (the “**Train 1 First Production Window**”).

(b) No later than [***] Days in advance of the first Day of the Train 1 First Production Window, Contractor shall give Owner a written notice specifying a [***] Day period falling within the Train 1 First Production Window in which it expects the Initial Production Date for Stage I to occur (the “**Train 1 Second Production Window**”); provided, that if Contractor fails to give such notice within such [***] Day period, the Train 1 Second Production Window shall be the last [***] Day period within the Train 1 First Production Window.

(c) No later than [***] Days in advance of the first Day of the Train 1 Second Production Window, Contractor shall give Owner a written notice specifying a [***] Day period falling within the Train 1 Second Production Window in which it expects the Initial Production Date for Stage I to occur (the “**Train 1 Third Production Window**”); provided, that if Contractor fails to give notice within such [***] Day period, the Train 1 Third Production Window shall be the last [***] Day period within the Train 1 Second Production Window.

(d) No later than [***] Days in advance of the first Day of the Train 1 Third Production Window, Contractor shall notify Owner of a window of one (1) week during which the Initial Production for Stage I is expected to occur, which shall fall within the Train 1 Third Production Window; provided, that if Contractor fails to give notice by such date, the Initial Production Date for Stage I shall be the last Day in the Train 1 Third Production Window.

(e) Contractor shall promptly notify Owner if for any reason the proposed Initial Production Date for Stage I is expected to occur after the last Day of the current window, with such notice to include a reasonably detailed explanation of the reason for such delay and the date on which Contractor expects the Initial Production Date to occur.

9.5.2 Notice of Initial Production Date for Stage II. On the Day immediately following the Day on which the Initial Production Date of Stage I occurs, Contractor shall notify Owner of the date on which the Initial Production Date for Stage II is expected to occur, which date shall be no earlier than [***] Days and no later than [***] Days after the Initial Production Date of Stage I. Contractor shall promptly notify Owner if for any reason the proposed Initial Production Date for Stage II is expected to occur after such date.

9.5.3 Notice of Requirements for Fuel Gas and Feed Gas for each Stage.

(a) Within [***] Months after the FNTP Date, Contractor shall provide Owner with a good faith estimate of (i) Fuel Gas required for each Month during the commissioning and start-up of the Project; and (ii) Feed Gas required for each Month during the start-up and testing of the Project.

(b) Not later than the first (1st) Business Day of the Month occurring three (3) Months prior to the Month in which Contractor first needs Fuel Gas for commissioning the Project, Contractor shall give written notice to Owner of the estimated quantity of commissioning Fuel Gas required for that first Month in which Fuel Gas is needed and for each following Month for commissioning and system start-up prior to commencement of delivery of Feed Gas. Not later than the first (1st) Business Day of the Month occurring three (3) Months prior to the Month in which Contractor first needs Feed Gas for start-up of the Project, Contractor shall give written notice to Owner of the estimated quantity of Feed Gas required for that first Month in which Feed Gas is needed and for each following Month prior to Substantial Completion.

(c) In the event that Contractor at any time becomes aware or has reason to believe that Contractor's need for Fuel Gas or Feed Gas will be delayed beyond the periods specified by Contractor pursuant to Section 9.5.3(a) or Section 9.5.3(b), or that the quantities required by Contractor have changed from that identified in Contractor's prior notices, Contractor shall as promptly as practicable give Owner written notice of that delay or change in quantities and of the date on which Contractor then expects to require Fuel Gas or Feed Gas, as applicable, and the estimated quantities.

(d) Not later than the first (1st) Business Day of the Month occurring two (2) Months prior to the Month in which Contractor first needs Feed Gas for commissioning and start-up of the Stage, Contractor shall give written notice to Owner of the total quantity of Feed Gas required for commissioning, start-up, operation and testing, as applicable, for each twenty-four (24) hour period between the hours of 9:00 am (Central Time) of one (1) Day to 9:00 am (Central Time) of the next Day (the "**Daily Quantity**") for that first Month in which Feed Gas is needed and shall provide revised figures for the total quantity of Feed Gas required for commissioning, start-up, operation and testing of the Stage, as applicable, each following Month prior to Substantial Completion of the Stage.

(e) Not later than ten (10) Business Days prior to the first (1st) Day of the Month in which Contractor first needs Feed Gas for commissioning and start-up of a Stage, and not later than ten (10) Business Days prior to the first (1st) Day of each following Month during the period prior to Substantial Completion of the Stage, Contractor shall give written notice to Owner of the anticipated Daily Quantities of Feed Gas for the next three (3) Months.

(f) During each Month prior to Substantial Completion of a Stage in which Contractor requires delivery of Feed Gas for commissioning, start-up, operation or Performance Tests of a Stage, Contractor shall give daily written notices to Owner by 8:00 am (Central Time) of the Daily Quantity of Feed Gas required by Contractor, which notices shall be

given on the form of notice provided by Owner, which form shall be provided to Contractor on or before the scheduled date of Mechanical Completion for such Stage as set forth in the Key Date Schedule. If, following the first (1st) Business Day of each Month after the Month in which Contractor first needs Feed Gas for commissioning and start-up of a Stage, Contractor notifies Owner in writing that Contractor's need for Daily Quantities of Feed Gas has changed materially from the previously noticed Daily Quantities, then Owner shall use commercially reasonable efforts to reschedule the delivery of such Feed Gas so as to accommodate the revised Daily Quantities notified by Contractor.

(g) In the event that Contractor at any time becomes aware or has reason to believe that Contractor will require materially less or more Feed Gas for a Day than the previously noticed Daily Quantity of Feed Gas, Contractor shall as promptly as possible give Owner written notice of such fact and of the revised Daily Quantity for Feed Gas. Contractor shall make commercially reasonable efforts to change its nomination of Feed Gas by notice to Owner upon at least thirty-six (36) hours' notice prior to the Day for which the nomination will be changed; provided, that Contractor shall provide as much notice of changes in its nomination of Daily Quantities as reasonably possible.

(h) In the event that Contractor requests delivery of Feed Gas for a Stage pursuant to Section 9.5.3(f) that Owner reasonably determines is excessive due to the Stage not being able to start-up or operate in a safe manner or utilize the quantity requested on the requested delivery date, Owner may notify Contractor that Owner will not deliver the requested Daily Quantity of Feed Gas until Contractor reasonably demonstrates to Owner that the Stage is capable of safe operation and would reasonably be expected to use the Daily Quantity requested. Owner shall promptly notify Contractor following Owner's receipt of Contractor's request for delivery of a Daily Quantity of Feed Gas if Owner will not deliver all or any part of the requested Daily Quantity pursuant to this Section 9.5.3(h). Owner's failure to deliver all or part of the Daily Quantity of Feed Gas pursuant to this Section 9.5.3(h) shall not be deemed or construed to be an Owner-Caused Delay or Excusable Event, nor shall it otherwise serve as the basis of a proposed Change Order; unless and until Contractor reasonably demonstrates that the Stage is capable of safe operation and Contractor is reasonably expected to use the Daily Quantity requested.

9.6 LNG Production From and After Start-Up.

9.6.1 LNG Production Schedule. Not later than [***] Days prior to the start of the Train 1 Second Production Window and not later than [***] Days prior to the scheduled Initial Production Date for Stage II, Contractor shall deliver to Owner notice (the "**LNG Production Schedule**") of the amounts of LNG it reasonably projects will be produced between the Initial Production Date and projected Substantial Completion of such Stage, assuming maximum useable rate deliveries of Natural Gas could be delivered to the LNG Train, and including: (a) an estimated forty-eight (48) hour Loading window for each proposed Cargo, which window shall begin at 6:00 a.m. Central Time on the first Day of the proposed window and end forty-eight (48) hours later (each, a "**Loading Window**"); and (b) the quantities of LNG that is estimated to be available for each Cargo. Contractor shall use commercially reasonable

efforts to cause each Cargo prior to the Substantial Completion Date of the Stage to be equal to the maximum quantity of LNG that may safely be Loaded onto and transported by an LNG Tanker that has a maximum gross cargo containment capacity of no less than [***] and no larger than [***] (a “**Full Cargo**”). Contractor shall keep Owner informed of the expected LNG Production Schedule for each Stage, including providing Owner with the production profile during execution of the Work beginning on the Initial Production Date for such Stage and continuing until the Substantial Completion Date for such Stage.

9.6.2 LNG Tanker Coordination. Contractor and Owner shall each provide the other Party on an on-going basis with any information available to Contractor or Owner, respectively, regarding the expected and actual production of LNG for each Stage prior to the Substantial Completion Date of such Stage, the proposed Cargos, the proposed Loading Windows, the proposed LNG Tankers that will be made available for Loading, and any other relevant information that could reasonably be expected to affect the LNG Production Schedule. From time to time after the delivery of the initial LNG Production Schedule for Stage pursuant to Section 9.6.1, Contractor shall deliver to Owner an update to the LNG Production Schedule, incorporating among other things any additional information provided by Owner regarding Feed Gas deliveries and the cargo capacity of the LNG Tankers that will be provided for Loading of each Proposed Cargo. Without limiting the generality of the foregoing, Owner shall notify Contractor of the gross cargo containment capacity of each LNG Tanker (and quantities required for cool down (if any)) that Owner expects will be available to load the proposed Cargo specified in the initial LNG Production Schedule for a Stage provided by Contractor pursuant to Section 9.6.1 as promptly as practicable once such information is available to Owner, and shall thereafter notify Contractor of any changes to the gross cargo containment capacity of the LNG Tankers that will be provided to Load any proposed Cargo as promptly as practicable once Owner receives any notice of a change in the LNG Tankers that will be provided. Owner shall use commercially reasonable efforts to obtain the necessary cargo capacity so that Contractor can continue to perform commissioning and start up and produce LNG. Contractor shall as necessary from time to time based on the cargo capacity of the LNG Tankers that Owner expects will be available to Load during the proposed Loading Window, modify the LNG Production Schedule and the proposed Cargo sizes reflected in the LNG Production Schedule such that Contractor’s proposed schedule is based on the cargo capacity of such LNG Tankers.

9.6.3 Confirmation of Loading Windows. No less than [***] Days prior to the proposed Loading Window for each proposed Cargo included in the most recent LNG Production Schedule for a Stage that has been provided by Contractor, Contractor shall confirm and, if necessary, update such scheduled Loading Window for such Cargo. No less than ten (10) Days prior to the proposed Loading Window for each proposed Cargo included in the most recent LNG Production Schedule for a Stage that has been provided by Contractor, Contractor shall confirm the quantity of LNG in the Cargo and the final Loading Window (the “**Final Loading Window**”) for such Cargo. The Final Loading Window for (a) the Cargo to be loaded into the Initial Tanker; and (b) the Cargo or Cargoes to be loaded in connection with a Ship Loading Rate Performance Test, will each be incorporated into the Key Date Schedule and will define the Key Date Items with respect to Owner’s obligations to deliver an LNG Tanker under Section 3.9, and such dates shall thereafter be deemed to be part of the Key Date Schedule for such purposes and

shall be adjusted only as permitted pursuant to this Agreement. Owner shall use commercially reasonable efforts to schedule LNG Tankers to meet the Final Loading Windows for Cargos other than as described in the foregoing sentence, but the failure of an LNG Tanker to arrive in time to load Cargos during such other Final Loading Windows shall not serve as the basis for a Change Order to adjust either the Contract Price or the Key Date Schedule.

9.6.4 Adjustments to LNG Production Schedule. The Parties shall cooperate and work together to accommodate adjustments to LNG Production Schedule that may occur from time to time. Contractor shall use commercially reasonable efforts to ensure that Cargoes are available for delivery during the proposed and the Final Loading Windows, and if Owner requests an alteration of any Loading Window, Contractor shall use commercially reasonable efforts to accommodate such requested adjustment. If Contractor desires to move the applicable Loading Window with respect to a Cargo to an earlier date and notifies Owner of such revised Loading Window in writing, Owner shall promptly consult with its customers and shall notify Contractor if Owner will be able to provide an LNG Tanker for Loading at an earlier date than the scheduled Loading Window (but in no event will the scheduled Loading Window be moved forward to an earlier date without Owner's prior written consent). If Contractor at any time is aware or has reason to believe that its ability to Load a Cargo during a scheduled Loading Window will be delayed beyond the end of such Loading Window period, Contractor shall give Owner written notice of the delay as promptly as practicable and of the date on which Contractor then expects Contractor will be ready to Load. In the event of a delay in the applicable Loading Window, Owner's obligations to deliver an LNG Tanker will be extended to the later scheduled Loading Window (but in no event will a scheduled Loading Window be moved forward to an earlier date without Owner's prior written consent) as notified by Contractor. Notwithstanding anything to the contrary in the foregoing, in no event may Contractor accelerate or delay a Final Loading Window without Owner's prior written consent.

9.6.5 Failure to Load an LNG Tanker. If during the period prior to Substantial Completion of a Stage, Owner is unable to Load the first LNG Tanker scheduled for loading (the "**Initial Tanker**") during the Final Loading Window as scheduled pursuant to Section 9.6.3 for reasons arising out of or related to the acts or omissions of Contractor or a Supplier and such reasons are not the basis for a Change Order under Article 8, and Owner has an LNG Tanker scheduled to receive the Loading of LNG and pays any demurrage, cancellation or other charges to the LNG Tanker owner or charterer or customer of the LNG Facility, then to the extent such demurrage, cancellation or other charges are due to such acts or omissions of Contractor or a Supplier, Contractor shall be responsible for the lesser of: (a) [***] for each Day or part of a Day of delay in Loading such LNG after the expiration of such Final Loading Window; or (b) an amount equal to the sum of any demurrage, cancellation and other charges with respect to the LNG Tanker scheduled for such Loading Window that are incurred by Owner in connection with such delay in or failure to Load; provided that Contractor's liability for the failure to load such LNG Tanker as scheduled shall not exceed a maximum of [***] in the aggregate.

9.6.6 Contractor Obligation to Produce LNG. From and after the Initial Production Date for a Stage until Owner takes care, custody and control of such Stage in accordance with Section 11.2.2 or Section 11.2.3, so long as Owner provides Feed Gas for the

applicable Stage, Contractor shall, unless directed otherwise by Owner, use commercially reasonable efforts to operate such Stage so as to continually produce LNG in accordance with GECP to until the LNG Tanks are full, except to the extent that such production would impact Contractor's ability to perform the Work in accordance with this Agreement.

9.6.7 Natural Gas and LNG for Cooling and Gasification.

(a) In addition to its obligation to produce LNG and supply LNG for Loading as provided in this Section 9.6, Contractor shall utilize LNG produced from the LNG Facility for purposes of gasification and cool down of LNG Tankers.

(b) Owner shall bring in a LNG Tanker to deliver LNG for use in cooling down Stage I, subject to Contractor having notified Owner at least thirty (30) Days in advance as to when it will require LNG for cooling down Stage I and the volume of LNG Contractor anticipates will be required. Owner shall use commercially reasonable efforts to obtain such LNG at the time as requested by Contractor. Contractor shall be responsible for unloading any LNG Tanker that delivers LNG for cool down.

9.7 Performance Testing.

9.7.1 Performance Test Procedures. No later than two hundred forty (240) Days prior to the Guaranteed Substantial Completion Date of Stage I, Contractor shall propose to Owner for its review and acceptance detailed final test procedures for the conduct of Performance Tests, and the functional tests as described in Appendix G, with respect to each Stage, including for Stage I, detailed final test procedures with respect to the LNG Tanks and the other Common Facilities; provided that Contractor shall endeavor to provide such test procedures no later than two hundred forty (240) Days prior to the Target Substantial Completion Date if earlier than the Guaranteed Substantial Completion Date. Contractor's proposed test procedures shall incorporate all of the requirements and comply with the conditions of testing described in Appendix G. Once Owner has accepted final test procedures for the conduct of the Performance Tests and the functional tests described in Appendix G for such Stage (the "**Performance Test Procedures**"), the Performance Test Procedures shall form a part of the requirement for the conduct of the Performance Tests. Thereafter, either Party may propose changes to a Performance Test Procedure at any time up to sixty (60) Days prior to commencement of the initial functional test as described in Appendix G or the initial Performance Test, as applicable, and each Party agrees to cooperate in good faith in evaluating such change. No change shall be effective, however, without written acceptance of Owner and Contractor.

9.7.2 Notice of Readiness for Performance Testing. Without limitation of the foregoing or any other scheduling requirements contained in this Agreement, Contractor shall give Owner ninety (90) Days' prior written notice of a thirty (30) Day period in which it expects to conduct the Performance Tests with respect to a Stage (and the LNG Tank with respect to such Stage) and shall provide notice to Owner of the scheduled date for any such Performance Test, which date shall fall within the thirty (30) Day period previously notified, at least thirty (30)

Days prior to such date. Any Ship Loading Rate Performance Test shall be performed using an LNG Tanker scheduled in accordance with Section 9.6.

9.7.3 Owner Access; Performance Test Reports.

(a) Owner, Lenders' Agent, the Independent Engineer and equity participants in the LNG Facility may attend each of the Performance Tests. Other Invitees of Owner (including, where invited by Owner, customers) may attend each of the Performance Tests, subject to Contractor's consent, which consent shall not be unreasonably withheld or delayed.

(b) Contractor shall analyze the data obtained during all Performance Tests, and ensure that such data reflects the performance standards required hereunder. A complete copy of all raw performance data and a list of all testing instrumentation utilized shall be provided to Owner at the completion of testing. Following completion of each Performance Test, Contractor shall provide to Owner a Performance Test report and analysis for the Performance Tests conducted for such Stage. At a minimum, each Performance Test report shall include: (i) the raw data; (ii) the instrumentation utilized for the applicable Performance Tests; (iii) a description of the Performance Test Procedures and Contractor's compliance with same; (iv) calculations and information, and a full explanation concerning same, for adjustments to the Performance Conditions; and (v) any other supporting information used to demonstrate that the Work has met the Minimum Performance Standards, Guaranteed Performance Levels, and other requirements of this Agreement for the applicable Stage, including the LNG Tank and other Common Facilities with respect to Stage I.

9.7.4 Contractor Right and Obligation to Repeat Performance Tests Prior to Guaranteed Substantial Completion Date.

(a) Until Substantial Completion of a Stage has occurred, Contractor may discontinue, or repeat the Performance Tests for such Stage as Contractor deems appropriate, subject to Contractor's compliance with its obligations under this Agreement.

(b) If, prior to Substantial Completion of a Stage: (i) a Performance Test with respect to that Stage has been completed; (ii) Contractor or any Supplier makes any modification to that Stage; and (iii) such modification could reasonably be expected to have a material effect on the outcome of that Performance Test if it had been made before the completion of that Performance Test, then such Performance Test shall be re-run, as a condition to achieving Substantial Completion of the applicable Stage.

(c) Contractor shall bear the costs of performing the Performance Tests other than with respect to Owner's provision of Feed Gas and LNG Tankers as required. Contractor shall give Owner three (3) Days advance notice of each Performance Test following the initial Performance Test. Contractor's ability to repeat a Performance Test requiring LNG Tankers will be subject to the availability of LNG Tankers in accordance with Section 9.6.

9.8 Substantial Completion.

9.8.1 Substantial Completion Certificate. When Contractor believes that a Stage has achieved Substantial Completion, Contractor shall execute and deliver to Owner a Substantial Completion Certificate for such Stage, together with a report of the Work completed with sufficient detail to enable Owner to determine whether the Substantial Completion for such Stage has been achieved. The Substantial Completion Certificate for each Stage shall be accompanied by all other supporting documentation to establish that the requirements for Substantial Completion of such Stage have been met.

9.8.2 Owner Acceptance or Rejection. As soon as practicable following its receipt of a Substantial Completion Certificate for a Stage delivered pursuant to Section 9.8.1 or 9.8.3, Owner and Contractor shall walkdown the applicable Stage and all of the applicable Work and Owner shall promptly notify Contractor of any Defect of which it is aware that, if not remedied, would prevent Owner from countersigning the Substantial Completion Certificate for such Stage. As soon as practicable, and in any event within ten (10) Business Days following its receipt of a Substantial Completion Certificate for such Stage, Owner shall consider the report submitted by Contractor and either:

(a) countersign and deliver to Contractor the Substantial Completion Certificate for such Stage; provided, that Contractor shall have paid Owner any Delay Liquidated Damages that have accrued with respect to such Stage, including any Delay Liquidated Damages that have accrued since the date of Owner's last invoice for Delay Liquidated Damages, if any, submitted to Contractor pursuant to Section 4.3.2(c), and until such payment is made, Owner shall have no obligation hereunder to countersign the Substantial Completion Certificate; or

(b) notify Contractor in writing that Substantial Completion for such Stage has not been achieved, stating in detail the reasons therefor.

No Delay Liquidated Damages shall accrue with respect to a Stage during the period in which Owner reviews the Substantial Completion Certificate for such Stage; provided that if Substantial Completion for such Stage has not occurred, Delay Liquidated Damages shall continue to accrue during such period. Notwithstanding anything to the contrary in the foregoing, if Owner fails to respond to Contractor's submission of a Substantial Completion Certificate for a Stage within ten (10) Business Days, Delay Liquidated Damages shall not accrue if Owner agrees that Substantial Completion has occurred, and if Owner rejects the Substantial Completion Certificate in accordance with Section 9.8.2(b), Delay Liquidated Damages shall not accrue during the period beginning on the last Day of such ten (10) Business Day period and ending on the Day on which Owner responds to Contractor's submission in accordance with Section 9.8.2(a) or 9.8.2(b). Notwithstanding the date on which Owner countersigns the Substantial Completion Certificate, once Owner countersigns the Substantial Completion Certificate, Substantial Completion shall be deemed to have occurred on the date set forth in the Substantial Completion Certificate that is countersigned by Owner.

9.8.3 Corrective Action. If Substantial Completion for a Stage has not been achieved, Contractor shall promptly take such corrective action or perform such additional Work

as will achieve Substantial Completion for such Stage, including all Work required to achieve the applicable Guaranteed Performance Levels (or the Minimum Performance Standards if Contractor achieves Substantial Completion for such Stage by achieving the Minimum Performance Standards), and shall issue to Owner another Substantial Completion Certificate for such Stage pursuant to Section 9.8.1. Neither Owner's execution of the Substantial Completion Certificate for such Stage nor any matter reported by Owner pursuant to Section 9.8.2 and action taken by Contractor pursuant to this Section 9.8.3 shall diminish Contractor's obligations pursuant to Article 10.

9.8.4 Failure to Agree upon Achievement of Substantial Completion. In the event that Owner and Contractor do not agree upon whether Substantial Completion of a Stage has been achieved, the Dispute shall be resolved in accordance with Article 20.

9.8.5 Common Facilities. Owner acceptance of Substantial Completion of the Common Facilities included as part of Stage I Substantial Completion shall not relieve Contractor of its obligation as part of the Work for the Common Facilities to support the design and performance requirements of Stage II in order for Stage II Substantial Completion to be achieved.

9.9 Punch List.

9.9.1 Development of Punch Lists; Punch List Item Categories. Prior to issuance of a notice to Owner of Mechanical Completion for a System, Contractor shall generate a Punch List updated with the Punch List Items remaining to be completed for such System. Each Punch List Item will be categorized as either "Punch List A Items", "Punch List B Items", "Punch List C Items" or "Punch List D Item" as described below, and Contractor and Owner shall contemporaneously review and concur on such Punch List; provided, however, any disagreement with respect to "Punch List A Items", "Punch List B Items" or "Punch List C Items" shall be resolved by Contractor's commissioning and start-up manager, without prejudice to Owner's right to stop Work in accordance with Section 2.18.4 or to Dispute such determination. Any additional items of Work remaining to be completed that are noted during the System walkdowns by Owner or Contractor shall be included in the Punch List. Contractor shall update the Punch List during performance of the Work to reflect Punch List Items that have been completed, added or re-classified (with Owner's concurrence). No less than ten (10) Business Days prior to Substantial Completion of a Stage, Contractor shall issue an updated Punch List to Owner for Owner's review and acceptance, together with an estimate of the cost and time necessary to complete or correct each Punch List D Item. Only Defects or deficiencies or other incomplete Work which satisfy the criteria of a Punch List D Item shall be eligible for inclusion on the Punch List as of the Substantial Completion Date. The failure to include any items on any iteration of the Punch List shall not alter the responsibility of Contractor to complete all of the Work in accordance with the terms and provisions of this Agreement.

(a) "**Punch List A Items**" are items of Work that impact the energization of a System, hamper subsequent commissioning and start-up activities of such System or other Systems of such Stage, or jeopardize the safe operation of such System, the Stage or the LNG Facility.

(b) “**Punch List B Items**” are items of Work that are incomplete or Defective and do not meet any of the criteria of Punch List A Items, but that must be completed prior to start-up of the System or the introduction of hydrocarbons into such System or a Stage, under Applicable Laws or in accordance with GECP.

(c) “**Punch List C Items**” are items of Work that are incomplete or Defective and do not meet the criteria to be classified as a Punch List D Item.

(d) “**Punch List D Items**” are items of Work that are incomplete or otherwise Defective but meet each of the following:

(i) it does not impede the safe operation of the LNG Facility in accordance with GECP, or impede marine operations;

(ii) it does not affect the operability, safety or mechanical, electrical or structural integrity of the LNG Facility;

(iii) it can be corrected safely with the LNG Facility operating at design capacity;

(iv) it does not materially increase the cost of operating the LNG Facility; and

(v) it does not materially and adversely affect the economic benefits to Owner that arise from the operation of the LNG Facility.

9.9.2 Conditions to Commissioning, Start-Up, Testing and Completion.

(a) In no event shall Contractor commence commissioning a System, nor shall a System achieve Mechanical Completion, until all of the Punch List A Items with respect to that System have been completed, or the Parties have agreed to a work-around for such Punch List A Item that allows Contractor to safely commence commissioning of such System.

(b) In no event shall Contractor start-up a System, nor shall a System achieve Ready for Start-Up, until (i) such System has achieved Mechanical Completion; (ii) any Punch List A Items for which Owner agreed to a work-around for purposes of achieving Mechanical Completion have been completed and no Punch List A Items are included in the Punch List with respect to such System; and (iii) all of the Punch List B Items with respect to that System included on the Punch List have been completed or the Parties have agreed to re-classify such Punch List Item with an agreed-to completion date, and no Punch List B Items are included in the Punch List with respect to such System. In no event shall Contractor achieve Ready for Start-Up of a Stage until all of the Punch List B Items with respect to the Systems within the LNG Train within such Stage and the related process and utility Systems of the Stage containing such LNG Train, have been completed and no Punch List B Items are included in the Punch List with respect to any such Systems.

(c) In no event shall Contractor introduce Feed Gas into a System or a Stage for processing into LNG until Ready for Start-Up of such Stage has been achieved.

(d) In no event shall Contractor commence Performance Tests other than functional tests with respect to a Stage until all of the Systems within such Stage have achieved Mechanical Completion and Ready for Start-Up.

(e) In no event shall Contractor achieve Substantial Completion of a Stage until all of the Systems within such Stage have achieved Mechanical Completion and Ready for Start-Up, and all of the Punch List C Items with respect to such Stage have been completed.

9.9.3 Access; Completion of Punch List D Items. Owner shall provide Contractor with access to each Stage after Substantial Completion that is reasonably sufficient to enable Contractor to complete all Punch List D Items, so long as such access does not unreasonably interfere with operation of such Stage or any other Stage that has achieved Substantial Completion and subject to Contractor complying with Owner's HSSE Program. All Punch List D Items shall be completed as a condition to Final Acceptance of such Stage. Contractor shall promptly initiate measures to complete or correct, as appropriate, the Punch List D Items on the Punch List within the estimated time necessary to complete or correct that Punch List Item provided by Contractor. On a bi-Weekly basis after Substantial Completion of a Stage, Contractor shall revise and update the Punch List to include the dates that items listed on such Punch List are completed by Contractor and accepted by Owner. Notwithstanding any of the foregoing, a Punch List D Item shall not be considered complete until Owner has inspected the Punch List D Item and acknowledged, by notation on the updated Punch List, that the Work related to that Punch List D Item is complete.

9.9.4 Owner Completion. At any time after the scheduled date for Final Acceptance of such Stage, Owner may elect by written notice to complete the remaining Punch List Items that have not been completed as of the date of Owner's notice. Upon such election, Owner may withhold and use amounts otherwise due to Contractor hereunder to pay for Owner's reasonably documented costs incurred to complete such remaining Punch List Items, or if such costs exceed amounts remaining to be paid to Contractor hereunder, Contractor shall pay Owner its reasonably documented costs within thirty (30) Days after receipt of an invoice from Owner reasonably documenting the costs incurred by Owner to complete such Punch List Items.

9.10 Achievement of Guaranteed Performance Levels.

9.10.1 Achievement of Substantial Completion. If at any time prior to Substantial Completion of a Stage, a Stage: (a) meets the Emission Guarantees; (b) either meets the Noise Guarantee or Contractor is able to demonstrate through modeling, using the Noise Model, that such Stage satisfies the Noise Guarantee; (c) meets the Guaranteed Performance Levels to which a Minimum Performance Standard does not apply; and (d) for any Guaranteed Performance Levels which are not satisfied, the Minimum Performance Standards for a Stage are met during the Performance Tests for such Stage, then Contractor shall have the option to: (i) perform remedial Work to correct the deficiencies in performance and re-perform the failed

Performance Test; or (ii) if all other conditions to Substantial Completion for such Stage have been met or waived by Owner, achieve Substantial Completion for such Stage by increasing the Letter of Credit provided by Contractor pursuant to Section 17.2, or providing Owner with a separate Letter of Credit that meets the requirements of Section 17.2.1, in an amount equal to all Performance Liquidated Damages due with respect to the Guaranteed Performance Levels that have not been met; provided, that if the Guaranteed Substantial Completion Date has occurred, then: (A) Delay Liquidated Damages will accrue until Substantial Completion is achieved; and (B) if all other conditions to Substantial Completion for such Stage have been met or waived by Owner, Owner may at any time require Contractor to post such Letter of Credit under clause (ii) and achieve Substantial Completion for such Stage, in which case Contractor shall provide a Substantial Completion Certificate for such Stage to Owner.

9.10.2 Contractor Obligation to Attempt to Achieve Guaranteed Performance Levels. If a Stage: (a) meets the Emission Guarantees; (b) either (i) meets the Noise Guarantee; or (ii) fails to meet the Noise Guarantee but Contractor's Noise Model demonstrates that such Stage satisfies the Noise Guarantee; (c) meets the Guaranteed Performance Levels, or meets the Minimum Performance Standards for those Guaranteed Performance Levels that have not been achieved, during the Performance Tests; and (d) such Stage has satisfied the other requirements to achieve Substantial Completion, then, at Contractor's or Owner's option, which may be exercised by either such Party by providing notice to the other Party any time until ten (10) Days after the date on which Owner countersigns a Substantial Completion Certificate for such Stage, Contractor shall attempt for a period of up to [***] Days commencing on the date that the applicable Party exercises its option under this Section 9.10.2 (the "**Guaranteed Performance Levels Correction Period**"), to correct the Work so that the LNG Facility achieves all of the Guaranteed Performance Levels for the applicable Stage and otherwise achieves any conditions to Substantial Completion that were waived by Owner for such Stage; provided, however, if such Stage fails to meet any of the Guaranteed Performance Levels by only [***], then Contractor shall have the option in its sole discretion to pay the Performance Liquidated Damages due with respect to the Guaranteed Performance Levels for which Contractor achieved all but [***] of the Guaranteed Performance Levels in lieu of undertaking any efforts to correct the Work (but must undertake corrective efforts with respect to the Guaranteed Performance Levels which have failed to meet the respective Guaranteed Performance Level by more than [***]). Within ten (10) Days after either receipt of a notice from Owner or Contractor's notice electing to undertake to cure the performance deficiencies, and prior to commencing any curative Work during the Guaranteed Performance Levels Correction Period, Contractor shall submit a plan describing the Work that Contractor will undertake to correct, repair or remedy any of the Work necessary to achieve the relevant Guaranteed Performance Levels, the access required and when such Work will be performed (a "**GPL Correction Plan**"), for review and acceptance by Owner with respect to timing when such Work will be performed and the access required to perform such Work, not to be unreasonably withheld, conditioned or delayed by Owner. The GPL Correction Plan shall be amended in accordance with Section 9.10.3 as may be necessary with respect to Work necessary to satisfy the Noise Guarantee. Any such GPL Correction Plan shall minimize any interference that performance of the curative Work shall or may have on the relevant Stage or any other Stage that has achieved Substantial Completion. Contractor shall thereafter complete all such Work in accordance with the GPL Correction Plan that has been accepted by

Owner. Contractor shall bear all costs to correct the Work pursuant to this Section 9.10.2; provided, however, that if Owner elects to require Contractor to correct the Work, Contractor shall not be required to incur costs to perform curative Work that exceed the amount of [***].

9.10.3 Contractor's Demonstration of Satisfaction of the Noise Guarantee. With respect to the Noise Guarantee for each Stage, if the Performance Test conducted prior to Substantial Completion does not demonstrate that the Noise Guarantee has been satisfied, but the Noise Model demonstrates that such Stage satisfies the Noise Guarantee, then during the Guaranteed Performance Levels Corrections Period, Contractor shall promptly prepare and deliver to Owner for submission to FERC the necessary information, including the Noise Model, to demonstrate to FERC that the applicable Stage satisfies the Noise Guarantee. If FERC does not agree that such Stage satisfies the Noise Guarantee, Contractor shall amend its GPL Correction Plan, using the same procedures as described in Section 9.10.2, to include the Work that Contractor will undertake to correct, repair or remedy any of the Work necessary to cause the Stage to satisfy the Noise Guarantee. Without limiting Contractor's rights hereunder in the event of a Change in Law, Contractor's costs to perform curative Work to satisfy the Noise Guarantee shall not be subject to the limitation on Contractor's costs as described in Section 9.10.2.

9.10.4 Contractor Access. During any Guaranteed Performance Levels Correction Period, Owner shall provide Contractor with access to the LNG Facility sufficient to perform its curative Work under this Agreement in accordance with the plan as accepted by Owner pursuant to Section 9.10.1 or 9.10.2, so long as such access does not unreasonably interfere with operation of the relevant Stage or any other Stage that has achieved Substantial Completion, and in connection therewith Owner may place reasonable limitations on Contractor's access to the Work such that performance of the Work will minimize disruption to Owner's operations and loss of revenue resulting from performance of such Work. In any event, Owner shall notify Contractor of the periods in which Owner is scheduled to operate a Stage to produce LNG as necessary for imminent Loading of a LNG Tanker and during Cargo Loading, and Contractor acknowledges that Contractor shall not have access to the Work during such periods. If during performance of the curative Work Contractor determines that any activities that were not contemplated in the plan as accepted by Owner pursuant to Section 9.10.2 have become necessary, Contractor shall provide the prior written notice required under Section 2.11.2 to Owner if performance of the curative Work will interfere with operation of that Stage or prior Stages, in which case Owner may place reasonable limitations on Contractor's access to the Work such that performance of the Work will minimize disruption to Owner's operations and loss of revenue resulting from performance of such Work. If Contractor is not granted access to the LNG Facility in order to perform the curative Work in accordance with the plan as accepted by Owner pursuant to Section 9.10.1 or 9.10.2, the Guaranteed Performance Levels Correction Period shall be extended as necessary to provide Contractor with the required access in accordance with such plan.

9.10.5 Conduct of Performance Tests. During any Guaranteed Performance Levels Correction Period, Contractor shall provide notice to Owner when Contractor believes the relevant Stage is prepared for Performance Tests to be conducted to demonstrate such Stage

meets the applicable Guaranteed Performance Levels, and Owner shall conduct such Performance Tests in accordance with the Performance Test Procedures; provided, that Contractor shall supply all test technicians and instrumentation and any other personnel, other than the Operating Personnel, necessary to perform the Performance Tests. If a Performance Test with respect to a Stage is commenced but is not completed, the Performance Test must be Successfully Run after such attempt and before Contractor shall have met its obligations under the applicable GPL Correction Plan. If based on such Performance Test, a Stage fails to meet any of the Minimum Performance Standards, or the Performance Test is not otherwise Successfully Run, Contractor shall within forty eight (48) hours submit a GPL Correction Plan for Owner's review and acceptance in accordance with Section 9.10.2, for the correction or repair or remedy of any of the Work as necessary to correct such performance deficiencies as soon as possible. Contractor shall continue to perform curative work in accordance with this Section 9.10.5 until the Stage achieves the applicable Minimum Performance Standards and the applicable Performance Test is otherwise Successfully Run, notwithstanding the expiration of the Guaranteed Performance Levels Correction Period.

9.10.6 Calculation of Performance Liquidated Damages. If Contractor corrects the performance of the Stage and based on subsequent Performance Tests meets the relevant Guaranteed Performance Levels or improves the performance of the Stage with respect to the Guaranteed Performance Levels to which the Minimum Performance Standards apply, the Performance Liquidated Damages payable pursuant to this Agreement shall be recalculated by Contractor and submitted to Owner. If Owner disagrees with Contractor's calculation of the Performance Liquidated Damages that are due, Owner shall notify Contractor, and Contractor and Owner shall attempt to resolve any such disagreements. Contractor shall pay Owner the undisputed Performance Liquidated Damages within thirty (30) Days after Contractor first submits its calculations to Owner, and shall pay Owner any disputed Performance Liquidated Damages that are determined to be due and owing to Owner upon resolution of the related Dispute in accordance with Article 20. If and to the extent the amount by which the Stage fails to meet any of the Guaranteed Performance Levels to which the Minimum Performance Standards apply has increased and additional Performance Liquidated Damages are due with respect to such Guaranteed Performance Levels, Contractor shall pay such additional Performance Liquidated Damages to Owner. If the performance of the Stage decreases such that the Stage fails to meet the Minimum Performance Standards or fails to meet any of the Guaranteed Performance Levels to which the Minimum Performance Standards do not apply following the performance of Contractor's curative Work, then Contractor shall continue to perform curative work to cause the Stage to achieve at least the Minimum Performance Standards where applicable and achieve any Guaranteed Performance Levels to which the Minimum Performance Standards do not apply, notwithstanding the expiration of the Guaranteed Performance Levels Correction Period. Once Contractor demonstrates the Stage meets the Guaranteed Performance Levels, or the Minimum Performance Standards, as applicable, the Parties shall re-calculate, approve and pay the Performance Liquidated Damages as contemplated in this Section 9.10.6, notwithstanding the expiration of the Guaranteed Performance Levels Correction Period. Owner shall release the Letter of Credit provided by Contractor with respect to Performance Liquidated Damages for such Stage pursuant to Section 9.10.1 (or Contractor may reduce the Letter of Credit provided by Contractor pursuant to Section 17.2 if Contractor

elected to increase such Letter of Credit in accordance with Section 9.10.1), upon receipt of payment in full of all Performance Liquidated Damages that are due hereunder with respect to such Stage.

9.11 Final Acceptance.

9.11.1 Final Acceptance Certificate. When Contractor believes that a Stage has achieved Final Acceptance, Contractor shall execute and deliver to Owner a Final Acceptance Certificate for such Stage, together with a report of the Work completed with sufficient detail to enable Owner to determine whether Final Acceptance of such Stage has been achieved. The Final Acceptance Certificate for each Stage shall be accompanied by all other supporting documentation as may be required to establish that the requirements for Final Acceptance of such Stage have been met.

9.11.2 Owner Acceptance or Rejection. As soon as practicable following its receipt of a Final Acceptance Certificate delivered pursuant to Section 9.11.1 or 9.11.3, Owner shall inspect the applicable Stage and all of the applicable Work and promptly notify Contractor of any matter of which it is aware that, if not remedied, would prevent Owner from countersigning the Final Acceptance Certificate for such Stage. As soon as practicable, and in any event within ten (10) Business Days following its receipt of a Final Acceptance Certificate for such Stage, Owner shall consider the report submitted by Contractor and either:

(a) countersign and deliver to Contractor the Final Acceptance Certificate for such Stage; or

(b) notify Contractor in writing that Final Acceptance for such Stage has not been achieved, stating in detail the reasons therefor.

9.11.3 Corrective Action. If Final Acceptance for a Stage has not been achieved, Contractor shall promptly take such corrective action or perform such additional Work as will achieve Final Acceptance for such Stage and shall issue to Owner another Final Acceptance Certificate for such Stage pursuant to Section 9.11.1. Neither Owner's execution of the Final Acceptance Certificate nor any matter reported by Owner pursuant to Section 9.11.2 and action taken by Contractor pursuant to this Section 9.11.3 shall diminish Contractor's obligations pursuant to Article 10.

9.11.4 Achievement of Final Acceptance. Contractor shall achieve Final Acceptance of each Stage within [***] Days after the Substantial Completion Date for such Stage; provided, however, that such [***] Day period shall be reasonably extended to the extent that Contractor is not provided access to such Stage in accordance with Appendix M during such period to the extent necessary to perform the Work required to satisfy the conditions to Final Acceptance.

9.11.5 Failure to Agree upon Achievement of Final Acceptance. In the event that Owner and Contractor do not agree upon whether Final Acceptance for a Stage has been achieved, the Dispute shall be resolved in accordance with Article 20.

9.12 Final Completion.

9.12.1 Final Completion Certificate. When Contractor believes that it has met all of the requirements for Final Completion, Contractor shall execute and deliver to Owner a Final Completion Certificate, together with a report of the Work completed with sufficient detail to enable Owner to determine whether Final Completion has been achieved. The Final Completion Certificate shall be accompanied by all other supporting documentation as may be required to establish that the requirements for Final Completion have been met.

9.12.2 Owner Acceptance or Rejection. As soon as practicable following its receipt of a Final Completion Certificate delivered pursuant to Section 9.12.1 or 9.12.3, Owner shall promptly notify Contractor of any matter of which it is aware that, if not remedied, would prevent Owner from countersigning the Final Completion Certificate. As soon as practicable, and in any event within ten (10) Business Days following its receipt of a Final Completion Certificate, Owner shall consider the report submitted by Contractor and either:

- (a) countersign and deliver to Contractor the Final Completion Certificate; or
- (b) notify Contractor in writing that Final Completion has not been achieved, stating in detail the reasons therefor.

9.12.3 Corrective Action. If Final Completion has not been achieved, Contractor shall promptly take such corrective action or perform such additional Work as will achieve Final Completion and shall issue to Owner another Final Completion Certificate pursuant to Section 9.12.1. Neither Owner's execution of the Final Completion Certificate nor any matter reported by Owner pursuant to Section 9.12.2 and action taken by Contractor pursuant to this Section 9.12.3 shall diminish Contractor's obligations pursuant to Article 10.

9.12.4 Failure to Agree upon Achievement of Final Completion. In the event that Owner and Contractor do not agree upon whether Final Completion has been achieved, the Dispute shall be resolved in accordance with Article 20.

ARTICLE 10

WARRANTIES AND CORRECTION OF WORK

10.1 Contractor's Warranties.

10.1.1 Warranty Coverage. Contractor warrants to Owner as follows:

(a) Contractor shall perform the Work using its skills and attention, in accordance with GECP associated with constructing Comparable Facilities, as such standards are applicable to the circumstances of the LNG Facility and the Liquefaction Project.

(b) All Equipment procured or furnished by Contractor hereunder shall be new, of good quality, suitable for use in a liquefaction facility in accordance with GECP and shall comply with the Specifications.

(c) The Work, including all Equipment, and each component thereof, shall comply with the requirements of this Agreement, the Scope of Work, Basis of Design, the Deliverables and Applicable Laws.

(d) Subject to Owner having paid undisputed amounts due hereunder, Owner and the Common Facilities Owner, as applicable, shall receive good and marketable title to and ownership of the Work, and each component of the Work shall be free and clear of any and all Liens when title thereto passes to Owner, except those of the Lender, but in no event including any Liens of Contractor or any Supplier.

(e) All Equipment and any component thereof shall be composed and made of only proven technology, of a type in commercial operation as of the Effective Date, with conditions substantially similar to those contained herein.

If requested by Owner, Contractor shall provide Owner with reasonably satisfactory evidence that any items of Equipment meet the warranties set forth in this Section 10.1.1.

The warranties set forth in this Article 10 are in addition to and constitute separate obligations from Contractor's obligation to achieve the Guaranteed Performance Levels set forth in this Agreement. Provided that Contractor has achieved the Minimum Performance Standards pursuant to Successful Runs of the Performance Tests for each Stage, the failure by Contractor to achieve the Guaranteed Performance Levels (other than those to which Minimum Performance Standards do not apply) shall not be deemed to be a Defect.

10.1.2 Warranty Exclusions. The Warranty excludes remedies, and Contractor shall have no liability to Owner, for damages or defects to the extent caused by: (a) Owner's failure to maintain or repair any Equipment in accordance with the recommendations set forth in the O&M Manuals, including the use of spare parts in the repair or maintenance of Equipment that are not in accordance with the specifications set forth in the O&M Manuals, but only after Substantial Completion of the applicable Stage containing such Equipment; (b) operation of any Equipment or any component thereof by Owner outside of the operating parameters or other material requirement of the O&M Manuals, but only after Substantial Completion of the applicable Stage containing such Equipment; (c) normal wear and tear; provided, that actions by Operating Personnel furnished by Owner under Section 3.6 but acting under the direction of Contractor shall be considered actions of Contractor, not Owner; or (d) repairs or alterations of Defective Work during or after the Warranty Period not performed by Contractor (except for work performed by Owner pursuant to Section 10.3.5); or (e) damage caused by a Force Majeure event that occurs after Substantial Completion of the applicable Stage.

10.1.3 Warranty Period. The warranty period with respect to each Stage will commence on the Substantial Completion Date and continue for a period of [***] months from

the Substantial Completion Date of such Stage (each such period referred to herein individually as a “**Warranty Period**”). Notwithstanding anything to the contrary in this Section 10.1.3, the Warranty Period with respect to items of the Common Facilities shall commence on the date of Substantial Completion of Stage II unless such item of Common Facilities installed as part of Stage I can be both fully utilized and fully tested at Substantial Completion of Stage I, and the Warranty Period for any part or component of the Work which is corrected, repaired or replaced pursuant to this Section 10.3.1 shall be renewed for a period of [***] months from the date of completion of such correction, repair or replacement; provided, further, that the Warranty Period for any part or component of the Work that is out of service because of a Defect affecting another part or component shall be extended by a period equal to the period during which such Work cannot be used by reason of the Defect. Notwithstanding the preceding, but subject to Section 10.4, the Warranty Period for any part or component of the Work (including warranty Work) shall in no event extend beyond [***] months from the date of commencement of the Warranty Period upon the Substantial Completion of the applicable Stage, except with respect to the Extended Warranty Items.

10.1.4 Assignment of Warranties. The warranties made in this Agreement shall be for the benefit of Owner and its successors and assigns and the respective successors and assigns of any of them, and any warranties obtained by Contractor from its Suppliers (including CIMTAS but excluding other Affiliates of Contractor) that remain after the expiry of the Warranty Period, as extended pursuant to Section 10.1.3, shall be assigned to Owner (or its successors or assigns).

10.2 Supplier Warranties.

10.2.1 Generally. Contractor shall be fully responsible and liable to Owner for its warranty and Corrective Work obligations and liability under this Agreement for all Work, regardless of whether any Supplier warranties meet the requirements of this Agreement. Contractor shall use commercially reasonable efforts to obtain similar Warranties to those provided by Contractor hereunder from its Suppliers (including CIMTAS but excluding other Affiliates of Contractor) as appropriate for the Work provided by such Supplier, but except with respect to the Extended Warranty Items (subject to Section 10.2.2) and the Licensors, for which Contractor shall obtain the warranties as described herein, Contractor shall not be required to obtain any specific warranties from Suppliers. Contractor shall promptly assign any Supplier warranties remaining in effect at the end of the Warranty Period under Section 10.1.3 to Owner by duly executed instruments, including from CIMTAS but excluding warranties from other Affiliates of Contractor. All warranties provided by any Supplier (including CIMTAS but excluding other Affiliates of Contractor) shall be in such form as to permit direct assignment of any remaining warranty without the consent of Supplier.

10.2.2 Extended Supplier Warranties. Notwithstanding anything to the contrary in Section 10.2.1, Contractor shall obtain warranties from the relevant Vendors with respect to the Extended Warranty Items that extend for a period of no less than [***] months from the Substantial Completion Date of the Stage in which such Equipment is installed. The Extended Warranty Items are the following: fill/adsorbent for the dryer bed, the mercury components of the

dehydration unit, and the mercury removal unit, respectively, each as described in Appendix B. Such warranties shall be assigned by Contractor to Owner at the end of the Warranty Period (and Owner shall accept such assignment), and if Contractor does not assign such warranties to Owner, Contractor shall owe such Warranty obligations to Owner. If Contractor is not able to obtain the extended Warranty Period for the Extended Warranty Items as contemplated herein, Contractor shall notify Owner, and Contractor and Owner shall, acting reasonably and in good faith, determine the acceptable Warranty Period for such Extended Warranty Item that Contractor shall procure.

10.3 Warranty Repair Procedures.

10.3.1 Corrections during Warranty Period. If, during the Warranty Period for any Stage, any Work for such Stage is found to be Defective, Contractor shall, at its sole cost and expense, promptly and on an expedited basis correct such Defective Work, whether by repair, replacement or otherwise, including any and all obligations in connection with such repair, replacement or otherwise, such as in and out costs, storage, labor, Taxes, transportation and expediting costs and any other costs necessary to fully correct the Defective Work (collectively, the “**Corrective Work**”). The cost of disassembling, dismantling or making safe and reassembling finished Work for the purpose of Corrective Work shall be borne by Contractor. Contractor shall use reasonable efforts to avoid or mitigate the loss of refrigerants and other consumables during the performance of the Corrective Work. Nothing herein shall be deemed to expand Contractor’s obligations under Section 11.3.2 for physical loss, damage to or destruction of the Work as a result of such Defective Work. Within forty-eight (48) hours, for matters affecting the operation of a Stage, or ten (10) Business Days, for all other matters, after receipt by Contractor of a Notice from Owner identifying and describing with reasonable specificity that portion of Work that fails to meet an applicable warranty and requesting Contractor to correct the failure, Contractor shall submit a plan to Owner specifying how Contractor proposes to remedy such failure and Contractor and Owner shall mutually agree when Contractor shall remedy such failure. No such remediation or repair shall be considered complete until Owner has reviewed and agreed that such remedial work has been completed and the Defect has been corrected.

10.3.2 Access to the LNG Facility; Spare Parts. Owner shall provide Contractor with access to the LNG Facility portions of the LNG Facility, and will de-energize and de-pressurize the applicable Equipment and otherwise take such other action with respect to such Equipment and the relevant portions of the LNG Facility, as necessary for Contractor to safely access such Equipment and perform its Corrective Work, subject to the security or safety requirements of Owner; provided that Contractor’s activities do not unreasonably interfere with the construction or operation of the LNG Facility. If Owner does not provide Contractor with access to perform the Corrective Work in accordance with the schedule agreed to by the Parties in accordance with Section 10.3.1, the period allowed for Contractor to perform such Corrective Work shall be extended for the length of the delay. Contractor shall not utilize spare parts owned by Owner in the course of performing the Corrective Work without Owner’s prior written consent. In the event Contractor utilizes spare parts owned by Owner in the course of performing the Corrective Work, Contractor shall supply Owner free of charge with spare parts equivalent in quality and quantity to all such spare parts used by Contractor (which shall be new

except as otherwise agreed by Owner), from the original manufacturer of the spare parts used, or otherwise as soon as possible following the utilization of such spare parts, or shall reimburse Owner for the complete replacement costs incurred by Owner to replace such spare parts.

10.3.3 Warranty Manager. Contractor shall furnish and retain at least one (1) Warranty Manager at the LNG Facility on a full-time (forty (40) hours per Week) basis for the duration of the Warranty Period to assist in coordinating resolution of any Warranty claims. Contractor shall provide a replacement Warranty Manager during any periods of vacation or extended illness of the appointed Warranty Manager. Any Person designated by Contractor to serve as the Warranty Manager shall be subject to Owner's review and shall be reasonably acceptable to Owner.

10.3.4 Standards for Corrective Work. All Corrective Work shall be performed to the same standards as the original Work is required to be met under Section 10.1.1. Any change to parts or Equipment that would be inconsistent with the requirements of this Agreement may be made only with the express written consent of Owner. Upon completion of the applicable Corrective Work, Contractor shall perform applicable functional tests on the corrected Work to demonstrate such Work is performing in accordance with the requirements of Section 10.1.1.

10.3.5 Owner's Right to Perform Warranty Work. If Contractor fails to submit a plan for completion of the Corrective Work or fails to commence the Corrective Work as agreed with Owner in accordance with Section 10.3.1, or does not complete such Corrective Work in accordance with the plan for completion (or revised and agreed upon plan (as to when Contractor shall remedy such failure) for completion as necessitated by the circumstances), then Owner, by written notice to Contractor, may (in addition to any other remedies that it has under this Agreement) perform such Corrective Work or cause such Corrective Work to be performed, and Contractor shall be liable to Owner for all reasonable costs and expenses arising out of or relating to such Corrective Work and shall pay Owner within thirty (30) Days after receipt of Owner's invoice an amount equal to such costs and expenses; provided, however, that if the Defective Work presents an imminent threat to safety, health or the environment, or the structural integrity of an item or component of a Stage or the LNG Facility, Owner may proceed to perform or cause such Corrective Work to be performed, and in connection therewith Owner may contact the applicable Supplier that furnished the Defective Work with contemporaneous written notice to Contractor, and Contractor shall nonetheless be liable to Owner for all reasonable costs and expenses arising out of or relating to such Corrective Work. Notwithstanding anything to the contrary in this Section 10.3.5, if an Other Contractor of Owner performs Corrective Work pursuant to this Section 10.3.5 prior to the expiration of the applicable Warranty Period: (a) such Other Contractor shall perform such Corrective Work in accordance with the Specifications applicable to such Corrective Work (unless such Specifications are Defective); and (b) if the Other Contractor provides a warranty for such Corrective Work, Owner shall assign such warranty to Contractor for the duration of the applicable Warranty Period (on the understanding that Contractor shall assign any remaining warranty provided by such Other Contractor back to Owner in accordance with Section 10.2 upon the expiration of the applicable Warranty Period), and Contractor shall not be liable to Owner for the cost of the Other Contractor's warranty

applicable to such Corrective Work to the extent such warranty exceeds Contractor's warranty obligations under this Article 10.

10.3.6 Other Warranty Work Performed by Owner. Without limiting the Parties' rights and obligations under Section 10.3.5, if the Parties agree that Owner will perform certain Corrective Work, then (a) Owner will perform such Corrective Work in accordance with the instructions and procedures with which Contractor would comply if Contractor had performed such Corrective Work (provided that Contractor has, promptly after such agreement by the Parties, provided such instructions and procedures to Owner); (b) Owner will provide to Contractor an estimate of Owner's costs (including actual out of pocket costs and internal costs) to perform such Corrective Work; and (c) Contractor shall reimburse Owner for all reasonable costs and expenses arising out of or relating to such Corrective Work and shall pay Owner within thirty (30) Days after receipt of Owner's invoice an amount equal to such costs and expenses.

10.4 Structural Works Defects. Notwithstanding the terms of Section 10.1.3, to the maximum extent permitted by Applicable Laws, the Warranty Period under this Article 10 with respect to Structural Works Defects in the Work for a Stage will continue for a period of [***] Months from the Substantial Completion Date of Stage II.

10.5 Root Cause. If during the Warranty Period any part or component of the Equipment is changed, repaired or replaced once due to failure to comply with or meet the warranties set forth in Section 10.1, and such Equipment, or similar parts or components or the same or similar Equipment furnished by Contractor hereunder, is Defective again during the applicable Warranty Period (as extended), Contractor shall as promptly as practicable after such Defect or Defective Equipment is identified, undertake a technical root cause analysis of such failures and provide Owner with a copy of such analysis. If there is a root cause that is correctable, and it is reasonably determined that the similar parts or components or the same or similar Equipment furnished by Contractor hereunder contain the same Defect as the Equipment giving rise to the root cause analysis, Contractor shall determine what changes, repairs or replacements are necessary to avoid further failures of such Equipment, or similar parts or components or the same or similar Equipment furnished by Contractor hereunder, Contractor shall make such necessary changes, repairs or replacements to address the root cause with respect to all such Equipment, and similar parts or components or the same or similar Equipment furnished by Contractor hereunder, as part of its warranty obligations hereunder. If there is no root cause or the root cause cannot be identified, Owner and Contractor shall agree on a resolution and Contractor shall repair or replace the Equipment or take such other action as Owner and Contractor have agreed. Without limiting the foregoing, in each case, during the Warranty Period, Contractor shall repeat such process on an iterative basis until such Defects and the underlying cause thereof are corrected, and until such Equipment has not failed again during the immediately succeeding [***] Day period (or such shorter period remaining before expiration of the Warranty Period). Contractor shall complete any root cause analysis commenced during a Warranty Period and shall provide such root cause analysis to Owner whether or not such analysis was completed before the end of the applicable Warranty Period.

10.6 **EXCLUSIVE WARRANTY; EXCLUSIVE REMEDY.** THE WARRANTIES IN THIS AGREEMENT, AND OTHER OBLIGATIONS AND RESPONSIBILITIES OF CONTRACTOR AS SET FORTH IN THIS ARTICLE 10 ARE CONTRACTOR'S SOLE WARRANTY OBLIGATIONS. CONTRACTOR MAKES NO OTHER WARRANTIES OR GUARANTEES, EXPRESS OR IMPLIED, WITH RESPECT TO THE WORK, INCLUDING IMPLIED WARRANTIES, OR WARRANTIES OF MERCHANTABILITY, ORDINARY USE, FITNESS OR SUITABILITY FOR A PARTICULAR PURPOSE, ALL OF WHICH ARE EXPRESSLY DISCLAIMED AND WAIVED. FROM AND AFTER SUBSTANTIAL COMPLETION OF A STAGE, WITHOUT LIMITING CONTRACTOR'S OBLIGATIONS UNDER THIS AGREEMENT WITH RESPECT TO ACHIEVING THE NOISE AND EMISSIONS GUARANTEES AS DESCRIBED IN APPENDIX G AND THE GUARANTEED PERFORMANCE LEVELS, CONTRACTOR'S PERFORMANCE OF ITS OBLIGATIONS UNDER THIS ARTICLE 10, INCLUDING IN THE CASE OF OWNER'S PERFORMANCE OF ANY WARRANTY WORK HEREUNDER, SHALL BE OWNER'S SOLE REMEDY WITH RESPECT TO DEFECTIVE WORK, EXCEPT AND TO THE EXTENT THAT CONTRACTOR FAILS TO PERFORM ITS OBLIGATIONS AND SUCH FAILURE IS A CONTRACTOR EVENT OF DEFAULT PURSUANT TO SECTION 19.3.1.

ARTICLE 11

TITLE TRANSFER; CUSTODY; RISK OF LOSS

11.1 Transfer of Title.

11.1.1 Title to Equipment and Work Product. Title to: (a) all or any component or portion of the Equipment that forms a part of or is included in the Common Facilities shall pass to the Common Facilities Owner; and (b) all or any component or portion of any other Equipment shall pass to Owner; in each case upon the earlier of: (i) delivery of such Equipment to the Site; (ii) incorporation of such Equipment into the LNG Facility; (iii) the Substantial Completion Date of the Stage in which such Equipment is included; (iv) the effective date of termination or cancellation of this Agreement; or (v) after payment for such Equipment has been made, upon Owner's written request. Title to Work Product with respect to all parts of the LNG Facility other than the Common Facilities shall transfer to Owner, and with respect to the Common Facilities shall transfer to the Common Facilities Owner, as described in Section 12.1. Transfer of title to any of the Work shall be without prejudice to Owner's right to reject Defective Work, or any other right of Owner or the Common Facilities Owner under this Agreement. This transfer of title does not relieve Contractor in any way of its obligations or liabilities under this Agreement.

11.1.2 Protection. Contractor shall take or cause to be taken all steps necessary under Applicable Laws to protect Owner's and the Common Facilities Owner's title and to protect Owner and the Common Facilities Owner against claims by third parties, including Suppliers, with respect to Owner's and the Common Facilities Owner's interest in the LNG Facility and all Equipment until title passes to Owner or the Common Facilities Owner, as applicable, pursuant to Section 11.1.1. If Contractor stores any Equipment off the Site, Contractor shall notify Owner where such Equipment is located if in storage for more than five

(5) Days, including in such notice a detailed description of such Equipment, including any serial or identification numbers and such other information as may be necessary for Owner to make such security filings as Owner determines is necessary or desirable to protect Owner's interest or to protect Owner against claims by third parties; provided, however, that Owner shall make any such filings as Owner determines in its sole and absolute discretion and that Owner's filing or failing to make such filing shall not relieve Contractor of its responsibilities under this Section 11.1.2.

11.2 Care, Custody and Control.

11.2.1 Contractor. Notwithstanding the passage to title of Equipment or other parts of the Work to Owner or the Common Facilities Owner, as applicable, Contractor shall have care, custody, and control of the Equipment and the other Work related to each Stage from the date on which any part of the Work is commenced, until the date that care, custody and control of such Stage transfers to Owner in accordance with Section 11.2.2 or Section 11.2.3, as applicable.

11.2.2 Owner Occupancy; Transfer to Owner. Owner may occupy buildings such as the administration and warehouse buildings as certificates of occupancy and such other Permits that are required for such buildings to be occupied in accordance with Applicable Laws are obtained. During such occupancy prior to Substantial Completion of the Stage in which such buildings are included, Owner shall coordinate with Contractor and shall not unreasonably interfere with any on-going Work that Contractor must perform with respect to such buildings prior to Substantial Completion. Notwithstanding Owner's occupancy of any such buildings, care, custody and control of each Stage, including all Equipment, buildings and facilities that form a part of that Stage and the area of the LNG Facility related to such Stage, shall pass from Contractor to Owner on the earlier of termination of this Agreement or the Day immediately following the Day on which Owner countersigns the Substantial Completion Certificate with respect to such Stage.

11.2.3 [***].

11.2.4 Termination. If this Agreement is terminated for any reason, Contractor shall transition care, custody and control of the Site to Owner in an orderly manner, consistent with the requirements of Article 19.

11.3 Risk of Loss.

11.3.1 Prior to Substantial Completion.

(a) Notwithstanding passage of title as provided in Section 11.1 of this Agreement, Contractor shall, to the fullest extent allowed under Applicable Laws, bear the risk of physical loss, damage to or destruction of the Work and each component thereof (including physical loss, damage to or destruction of Equipment whether occurring at a Supplier's premises prior to transit of such item of Equipment to the Site, while in storage whether at the Site or in another location, while such Equipment is in transit and not yet delivered to the Site, or has been

incorporated into the LNG Facility) as follows: (i) with respect to the Work performed for Stage I, Contractor shall bear the risk of physical loss, damage or destruction until the earlier of Stage I Substantial Completion is achieved or termination of this Agreement; and (ii) with respect to the Work performed for Stage II, Contractor shall bear the risk of physical loss, damage or destruction until Stage II Substantial Completion is achieved, or termination of this Agreement if earlier; provided, that Owner shall bear the risk of such loss, damage or destruction to the extent such loss or damage or destruction is due to an Excepted Risk.

(b) Contractor shall promptly repair, reconstruct or replace the damaged Work for which it has the risk of loss pursuant to Section 11.3.1(a), including the removal of any debris, and shall accelerate or expedite such repair, reconstruction or replacement as necessary to minimize any impact on the Guaranteed Substantial Completion Dates to the greatest extent reasonably possible.

(c) If and to the extent Contractor bears the risk of physical loss, damage or destruction pursuant to Section 11.3.1(a), then unless Owner has instructed Contractor to not repair such physical loss, damage or destruction, Contractor shall repair such Work as required under Section 11.3.1(b), and Owner as Contractor's sole compensation for its costs to repair such physical loss or damage, shall in accordance with Section 16.5, reimburse Contractor for the costs to perform such repairs, up to a maximum amount equal to the amount of proceeds that Owner receives under the insurance policies covering such physical loss, damage or destruction, less any such proceeds that are provided directly to Contractor from the applicable insurers. If and to the extent that Owner bears the risk of physical loss, damage or destruction pursuant to Section 11.3.1(a) and Owner has instructed Contractor to repair such physical loss, damage or destruction that occurs prior to Substantial Completion of the applicable Stage, then Owner shall reimburse Contractor for the costs to perform such repairs; **PROVIDED, HOWEVER, WHERE THE PHYSICAL LOSS, DAMAGE OR DESTRUCTION IS CAUSED BY AN EXCEPTED RISK FOR WHICH THERE IS A SUBLIMIT IN THE CONSTRUCTION ALL-RISK PROPERTY OR THE MARINE CARGO INSURANCE COVERAGE FOR THE WORK AND THE LNG FACILITY AS OBTAINED BY CONTRACTOR PURSUANT TO APPENDIX MM, AS APPLICABLE, OWNER SHALL ONLY BE OBLIGATED TO REIMBURSE CONTRACTOR FOR COSTS TO PERFORM SUCH REPAIRS TO THE EXTENT SUCH COSTS EXCEED SUCH SUBLIMITS; PROVIDED, FURTHER, THAT THE FOREGOING SHALL NOT LIMIT THE APPLICATION OF SECTION 18.1.2 WITHOUT DUPLICATION.**

(d) This Section 11.3.1 shall not be interpreted to relieve Contractor of any of its other obligations or liabilities under this Agreement, including its obligations with respect to Defective Work and Corrective Work, and nothing in this Section 11.3.1 shall be deemed or construed to give Contractor a right to recover costs related to Delay Liquidated Damages that Contractor may incur hereunder due to any such loss or damage as contemplated in this Section 11.3.1. An extension to the Key Date Schedule and the Guaranteed Substantial Completion Date as a result of damage or destruction to the Work shall be granted only to the extent provided in Section 8.3. Contractor expressly waives any compensation as a result of any

damage or destruction to the Work other than as described in this Section 11.3.1 to the exclusion of other theories of recovery such as cumulative impact or loss of productivity.

11.3.2 After Substantial Completion. Owner shall bear the risk of physical loss, damage to or destruction of a Stage or a component thereof after the Substantial Completion Date of such Stage, or the earlier termination of this Agreement; provided, that: (a) Contractor shall be liable for and reimburse Owner for the amount of any deductibles under Owner's or Common Facilities Owner's applicable insurance policies, not to exceed up to [***] per occurrence, with respect to any physical loss or damage or destruction the extent due to the negligence or fault of a Contractor Group member that occurs after Substantial Completion of the applicable Stage, or the earlier termination of this Agreement; and (b) under no circumstances shall this Section 11.3.2 be interpreted to relieve Contractor of its other obligations or liabilities under this Agreement, including Contractor's obligations to remedy Defective Work under Article 10. OWNER AND THE COMMON FACILITIES OWNER HEREBY RELEASE CONTRACTOR FROM ALL COSTS AND LIABILITY FOR PHYSICAL LOSS, DAMAGE TO OR DESTRUCTION OF A STAGE OR A COMPONENT THEREOF AFTER THE SUBSTANTIAL COMPLETION DATE OF SUCH STAGE, OR THE EARLIER TERMINATION OF THIS AGREEMENT, IN EXCESS OF CONTRACTOR'S RISK OF LOSS AS SPECIFICALLY STATED IN THIS SECTION 11.3.2.

ARTICLE 12

OWNERSHIP OF DOCUMENTATION AND INTELLECTUAL PROPERTY

12.1 Ownership of Work Product by Owner.

12.1.1 Owner and Contractor acknowledge that during the course of, and as a result of, the performance of the Work, Contractor, its Affiliates, or its Suppliers will create or prepare or have created or prepared for the Liquefaction Project certain data, analyses, reports, plans, operating and maintenance procedures and manuals, Drawings, Specifications, calculations, or other technical tangible manifestations of Contractor's efforts (whether written or electronic), including a full and complete set of Drawings and technical documentation with respect to each Stage and the other Deliverables in accordance with the requirements of Appendix A, Attachment A-1 to Appendix A and Appendix U (hereinafter individually or collectively referred to as "**Work Product**"). Work Product prepared by Contractor, its Affiliates, or its Suppliers shall be "works made for hire," and subject to this Section 12.1.1 and Section 12.1.2, and to any Licensor's rights under Section 12.6, all rights, title and interest to the Work Product, including any and all copyrights in the Work Product, shall be owned by Owner irrespective of any copyright notices or confidentiality legends to the contrary which may have been placed in or on such Work Product by Contractor, its Affiliates, Suppliers or any other Person. If, for any reason, any part of or all of the Work Product is not considered a work made for hire for Owner or if ownership of all right, title and interest in the Work Product shall not otherwise vest in Owner, then Contractor agrees that such ownership and copyrights in the Work Product, whether or not such Work Product is fully or partially complete, shall be automatically assigned from Contractor to Owner without further consideration, and Owner shall thereafter own all right, title and interest in the Work Product, including all copyright interests.

12.1.2 If Contractor, using commercially reasonable efforts, is unable to procure the ownership of Work Product prepared by Suppliers who are not Affiliates of Contractor (it being understood that any Supplier that is an Affiliate of Contractor shall comply with the requirements of Sections 12.1.1 and 12.2) for Owner as set forth in Section 12.1.1, or all of the rights to use or disclose such Work Product or the Third Party Proprietary Work Product embedded therein in accordance with Section 12.2, then, at a minimum, Contractor shall procure from such Supplier an irrevocable, perpetual and royalty-free license (including the right to assign its right without consent to any purchaser of an interest in the LNG Facility) granting to Owner the right to use, disclose and copy such Work Product and the Third Party Proprietary Work Product embedded therein for any purpose relating to the LNG Facility or the Liquefaction Project as described in Sections 12.2.2(a) and 12.2.2(b), or modify such Work Product for any purpose related to the scope of work performed by such Supplier. Upon Owner's request, Contractor shall provide Owner a list of the Suppliers to which this Section 12.1.2 applies and a copy of applicable provisions of the applicable Supply Contracts containing such restrictions.

12.1.3 Notwithstanding anything to the contrary herein, Contractor shall not be required to obtain rights to Work Product as set forth in this Section 12.1 from Vendors providing bulk commodities or generic "off-the-shelf" Equipment.

12.1.4 For the avoidance of doubt, any proprietary Intellectual Property rights owned by any Licensor or its Affiliates shall not constitute Work Product under this Agreement.

12.1.5 Notwithstanding anything to the contrary in this Section 12.1: (a) Contractor may, subject to compliance with its confidentiality obligations under Section 14.1, retain one (1) record set of the Work Product, and Contractor's Suppliers that furnish any part of the Equipment may retain copies of any Work Product generated by such Supplier, subject to compliance with confidentiality obligations in accordance with Section 14.1; and (b) Contractor may use the Work Product as internal reference material in its general construction and engineering business; provided, that Contractor has delivered the Work Product to Owner in accordance with Section 12.2; provided, further, that Contractor shall not disclose any Work Product relating to the performance or operation of the LNG Facility to any third party without Owner's express prior written consent.

12.2 Delivery and Use of Work Product.

12.2.1 Delivery. Upon Substantial Completion of such Stage or the earlier termination or cancellation of this Agreement, Contractor shall deliver to Owner a full and complete set of all Work Product prepared or created with respect to each Stage in accordance with the requirements of Appendix U.

12.2.2 Use. Owner shall have the right to use all of the Work Product:

(a) in connection with the design, construction, licensing, commissioning, start-up, testing, operation, maintenance, modification or decommissioning of the LNG Facility;

(b) in connection with the proceedings of any Governmental Authorities with respect to the LNG Facility;

(c) as internal reference material by Owner or its Affiliates (including any individuals other than Competitors engaged by Owner as part of its staff augmentation plans, subject to such Persons entering into a confidentiality agreement with Owner with substantially similar terms to those stated in Section 14.2); in connection with the LNG Facility (including any expansion thereof) or any other project; and

shall have the right to use the engineering Deliverables for any purpose of Owner or its Affiliates as determined by Owner, including the expansion of the LNG Facility or any other project; provided, however, Owner shall not grant a Competitor a license to use the engineering Deliverables on any other project in which neither Owner nor an Affiliate of Owner has an ownership interest.

12.2.3 Limitations on Disclosure. Notwithstanding Owner's right to use the Work Product as described in the foregoing, Owner shall not disclose [***].

12.2.4 Release. Owner hereby releases Contractor from all liability arising out of Losses (including its indemnity obligations under Section 15.3) relating in any way to or arising out of the use by or on behalf of Owner, Common Facilities Owner or any other Affiliate of Owner or Common Facilities Owner of the Work Product: (a) for any purpose other than in connection with the design, construction, licensing, commissioning, start-up, testing, operation, maintenance, modification or decommissioning of the LNG Facility; and (b) in connection with the modification of the LNG Facility performed by Persons other than Contractor; provided, however, that the foregoing shall not apply to Contractor's warranty obligations, which shall be governed by and determined in accordance with Article 10.

12.3 Contractor Intellectual Property. Notwithstanding Section 12.1, as between Owner and Contractor, Contractor shall retain ownership of all proprietary Intellectual Property owned by Contractor or its Affiliates as of the Effective Date, or developed or improved by Contractor or its Affiliates in connection with Work or the Liquefaction Project or otherwise, including the Piping Special Supports (hereinafter referred to as "**Contractor Intellectual Property**"), regardless of whether such Contractor Intellectual Property is included in the Work Product, and nothing in Section 12.1 and this Section 12.3 shall result in a transfer of ownership of any Contractor Intellectual Property or the proprietary Intellectual Property owned and developed by Contractor's Suppliers for any project other than the LNG Facility and the Liquefaction Project ("**Third Party Proprietary Work Product**"). With respect to Contractor Intellectual Property embedded in the Work Product or the LNG Facility, and subject to Section 12.6.1, any Third Party Proprietary Work Product relating to the Work or the LNG Facility, Contractor hereby grants Owner, and Contractor shall cause the applicable Suppliers to grant Owner, an irrevocable, perpetual and royalty-free license (including the right to assign its rights without consent to any purchaser of an interest in all or part of the LNG Facility) to use, disclose, modify and copy such Contractor Intellectual Property and Third Party Proprietary Work Product for any permitted purpose as described in Section 12.2. Without limiting Contractor's obligations with respect to the Contractor Intellectual Property, all Supply Contracts

(excluding Supply Contracts with Affiliates but including CIMTAS) shall contain provisions consistent with Section 12.1 and this Section 12.3 except as provided in Section 12.1.2, Section 12.1.3 and Section 12.6.1.

12.4 Owner Intellectual Property. All written materials, plans, drafts, Drawings, Specifications, computer files or other documents (if any) prepared or furnished by Owner, its Affiliates or Other Contractors (“**Owner Intellectual Property**”) shall at all times remain the property of Owner (or such Affiliates or Other Contractors), and Contractor shall not make use of any Owner Intellectual Property for any other project or for any other purpose than as set forth herein. All Owner Intellectual Property, including all copies thereof, shall be returned to Owner upon the earlier of Final Completion of Stage II or the termination of this Agreement, except that Contractor may, subject to its confidentiality obligations as set forth in Article 14, retain one (1) record set of such documents.

12.5 Limited License to Contractor. With respect to Owner’s Intellectual Property relating to the Work or the LNG Facility, until the earlier of Substantial Completion of Stage II or the cancellation or termination of this Agreement, Owner hereby grants Contractor a royalty-free license to use, disclose, modify and copy Owner’s Intellectual Property for any purpose relating to the LNG Facility or the Liquefaction Project, and allow Suppliers to do the same to the extent necessary for such Suppliers to perform the Work, in all cases subject to Contractor’s compliance with its confidentiality obligations as set forth in Article 14. Owner also hereby grants Contractor a royalty-free license to use the Intellectual Property embedded in the Work Product (to the extent such Intellectual Property is not Contractor Intellectual Property, Third Party Proprietary Work Product or Intellectual Property rights of a Licensor) in its general construction and engineering business subject to Contractor’s compliance with its confidentiality obligations under Article 14.

12.6 Technology.

12.6.1 All Intellectual Property rights in data or information derived in whole or in part from Technical Licensor Information, including Intellectual Property rights in Work Product prepared or developed by Contractor or the Licensor under or in connection with this Agreement where such Work Product is derived in whole or in part from the Technical Licensor Information, shall vest directly in the relevant Licensor that provides such information, data or Work Product. Notwithstanding the foregoing, the respective Licenses shall be the exclusive documents governing Intellectual Property rights as between Contractor and the relevant Licensor. The Licenses shall be the exclusive documents governing the licensing to Owner of Intellectual Property rights for the practice of the Technology.

12.6.2 Contractor shall familiarize itself with and incorporate the Technology in its construction of the LNG Facility in accordance with each applicable Licensor’s guidelines. Pursuant to and in accordance with the Licenses, each Licensor has licensed or sublicensed, or shall license or sublicense, Owner to use its Technology in connection with the LNG Facility and Contractor has secured or will secure said licenses or sublicenses from the Licensor as necessary. Subject to Section 15.3, Contractor agrees that notwithstanding, but without prejudice to Owner’s rights under, each License, Contractor shall be responsible for:

- (a) the incorporation of the Technology into the construction of the LNG Facility;
- (b) the construction, commissioning, start-up, testing and completion of the LNG Facility incorporating the Technology;
- (c) the provision of all work, services, information and documents to be supplied by each Licensor to Contractor in connection with the Work;
- (d) the rectification of any Defect in the LNG Facility resulting from the Technology in accordance with Section 10.3;
- (e) liaising with each Licensor and acting as a single point of responsibility for Owner in respect of the construction, commissioning, start-up, testing and completion of the LNG Facility (incorporating the Technology) in accordance with this Agreement, and Contractor affirms that it has the skills and experience necessary to review the Technology for sufficiency with the different aspects of the Work and shall be responsible to Owner for any and all damages arising from the acts, defaults and omissions of each Licensor, in connection with Sections 12.6.2(a) to 12.6.2(d) above, inclusive, as fully as if they were the acts, defaults or omissions of Contractor, its agents, employees or workmen.

12.6.3 To the extent necessary to allow Owner to use and sell LNG during any period prior to Substantial Completion of a Stage, Contractor shall as part of the Work obtain and grant to Owner a non-exclusive, royalty-free, irrevocable license (or sublicense) and right to use and sell products obtained by the use or operation of Equipment furnished by a Licensor and practice of the process furnished by a Licensor.

ARTICLE 13

REPRESENTATIONS AND WARRANTIES

13.1 Representations and Warranties of Contractor. Contractor covenants, represents, and warrants to Owner that:

13.1.1 Organization, Standing and Qualification. Contractor is a corporation, duly organized, validly existing, and in good standing under the laws of the State of Delaware, and has full power and authority to execute, deliver and perform its obligations hereunder and to engage in the business it presently conducts and contemplates conducting. Contractor is and during the term of this Agreement shall be duly licensed or qualified to do business and in good standing under the laws of the State of Texas and in each other jurisdiction wherein the nature of the business transacted by it makes such licensing or qualification necessary and where the failure to be licensed or qualified would have a material adverse effect on its ability to perform its obligations hereunder.

13.1.2 Enforceable Agreement. This Agreement has been duly authorized, executed, and delivered by or on behalf of Contractor and is, upon execution and delivery, the

legal, valid, and binding obligation of Contractor, enforceable against Contractor in accordance with its terms, except as such enforceability may be limited by applicable bankruptcy, insolvency or similar laws affecting creditors' rights generally and by general equitable principles.

13.1.3 No Conflict. The execution, delivery and performance by Contractor of this Agreement: (a) will not conflict with or cause any default under: (i) its organizational documents; (ii) any indenture, mortgage, chattel mortgage, deed of trust, lease, conditional sales contract, loan or credit arrangement or other agreement or instrument to which Contractor is a party or by which it or its properties may be bound or affected; or (iii) any Applicable Laws; and (b) shall not subject the Liquefaction Project or the LNG Facility or any component part thereof, or the Site or any portion thereof, to any Lien other than as contemplated or permitted by this Agreement.

13.1.4 Government Approvals. The Contractor Permits either have been obtained by Contractor and are in full force and effect on the date hereof or shall be obtained by Contractor and shall be in full force and effect on or prior to the date on which they are required, under this Agreement and Applicable Laws, to be in full force and effect, so as to permit Contractor to commence and prosecute the Work to completion in accordance with the Project Execution Plan and the Project Schedule. Other than with respect to the Contractor Permits, none of the execution, delivery or performance by Contractor of this Agreement requires the consent or approval of, or the giving of notice to or registration with, or the taking of any other action in respect of, any Governmental Authority.

13.1.5 No Suits, Proceedings. There are no actions, suits, proceedings, patent or license infringements, or investigations pending or, to Contractor's knowledge, threatened against it at law or in equity before any court (U.S. or otherwise) or before any Governmental Authority (whether or not covered by insurance) that individually or in the aggregate could result in any material adverse effect on the business, properties, or assets or the condition, financial or otherwise, of Contractor or in any impairment of its ability to perform its obligations under this Agreement. Contractor has no knowledge of any violation or default with respect to any order, writ, injunction, or decree of any court or any Governmental Authority that may result in any such materially adverse effect or such impairment.

13.1.6 Patents. Contractor owns or has the right to use all Intellectual Property rights, other than Owner Intellectual Property, necessary to perform the Work without conflict with the rights of others.

13.1.7 No Hiring. To the fullest extent permitted by Applicable Laws, Contractor shall not, and shall not permit any of its Affiliates to, at any time during the performance of the Work and until the later of (a) thirty (30) Days after the Final Acceptance Date of Stage II; (b) six (6) Months after the date on which the last of any Disputes, if any, are finally resolved; and (c) one year after the termination of this Agreement for any reason, directly or indirectly, solicit for employment or hire any of those employees, members of management or individuals serving in a supervisory capacity for Owner or the Common Facilities Owner or any of their respective members or Affiliates who have or are currently working on, supervising or managing the Work, or served or are serving on corporate governance bodies of Owner or the Common Facilities

Owner or their respective members or Affiliates; provided, however, that merely placing a general solicitation, advertisement or recruitment that is not directed specifically to any such employees or individuals shall not be a breach or violation of Contractor's obligations under this Section 13.1.7.

13.1.8 Financial Condition. Contractor is financially solvent, able to pay its debts as they mature, and possessed of sufficient working capital to complete its obligations under this Agreement.

13.1.9 Licenses. Contractor represents and warrants that it has a valid contractor's license in the appropriate category or specialty issued by the Texas Department of Licensing and Regulation, and that such license shall remain in full force and affect at all times during the performance of the Work. Contractor further represents and warrants that valid engineering licenses have been issued by the Texas Board of Professional Engineers both to it as a firm and to the professionals designated to supervise the Work for which such licenses are required, and that such licenses shall remain in full force and affect at all times during the performance of the Work. All Persons who perform any portion of the Work have and shall at all times during the performance of the Work have all business and professional certifications required by Applicable Laws to perform such Work.

13.1.10 No Suspension or Debarment Actions. Contractor is not now, nor has Contractor ever been, suspended, debarred or proposed for suspension or debarment from bidding on any work offered by a Governmental Authority. No such suspension or debarment actions have been commenced or threatened against Contractor or any of its Affiliates or their respective officers, directors, shareholders, managers, agents, consultants or employees. There is no valid basis for the suspension or debarment of Contractor or such other Persons from bidding on contracts or subcontracts for or with any Governmental Authority. No cure notice or show cause notice has been issued by any Governmental Authority with respect to Contractor or such other Persons and remains outstanding.

13.2 Representations and Warranties of Owner and Common Facilities Owner. Owner and Common Facilities Owner each severally and not jointly covenants, represents, and warrants to Contractor that:

13.2.1 Organization, Standing and Qualification. Owner and Common Facilities Owner are each a limited liability company, duly formed, validly existing and in good standing under the laws of the State of Delaware, and each has full power and authority to execute, deliver and perform its obligations hereunder and to engage in the business such Party presently conducts and contemplates conducting. Each of Owner and Common Facilities Owner is and shall be duly licensed or qualified to do business and in good standing in each jurisdiction wherein the nature of the business transacted by it makes such licensing or qualification necessary and where the failure to be licensed or qualified would have a material adverse effect on its ability to perform its obligations hereunder.

13.2.2 Enforceable Agreement. This Agreement has been duly authorized, executed, and delivered by or on behalf of Owner and Common Facilities Owner and is, upon

execution and delivery, the legal, valid, and binding obligation of Owner and Common Facilities Owner, enforceable against Owner and Common Facilities Owner in accordance with its terms, except as such enforceability may be limited by applicable bankruptcy, insolvency or similar laws affecting creditors' rights generally and by general equitable principles.

13.2.3 No Conflict. The execution, delivery and performance by Owner and Common Facilities Owner of this Agreement will not conflict with or cause any default under: (a) such Person's organizational documents; (b) any indenture, mortgage, chattel mortgage, deed of trust, lease, conditional sales contract, loan or credit arrangement or other agreement or instrument to which such Person is a party or by which it or its properties may be bound or affected; or (c) any Applicable Laws.

13.2.4 Governmental Approvals. No authorization, approval, exemption, or consent by any Governmental Authority is required in connection with the execution, delivery, and performance of this Agreement by Owner or Common Facilities Owner.

13.2.5 No Suits, Proceedings. There are no material actions, suits, proceedings, or investigations pending or, to Owner's or Common Facilities Owner's respective knowledge, threatened against it at law or in equity before any court (U.S. or otherwise) or before any Governmental Authority (whether or not covered by insurance) that individually or in the aggregate could result in any materially adverse effect on the business, properties, or assets or the condition, financial or otherwise, of Owner or Common Facilities Owner, as applicable, or in any impairment of its ability to perform such Party's obligations under this Agreement. Neither Owner or Common Facilities Owner has knowledge of any violation or default with respect to any order, writ, injunction, or any decree of any court or any Governmental Authority that may result in any such materially adverse effect or such impairment.

ARTICLE 14

CONFIDENTIALITY

14.1 Contractor's Obligations.

14.1.1 Contractor hereby agrees that Contractor and its Affiliates and their respective employees, officers, directors and agents shall not (without in each instance obtaining Owner's prior written consent) disclose, make commercial or other use of, or give or sell to any Person, any of the following information, whether disclosed prior to or after the Effective Date: (a) any Work Product, Owner-Furnished Information and other information of Owner Group members or Other Contractors, other than to Suppliers as necessary for such Supplier to perform any Work and subject to the restrictions set forth herein; or (b) any other information which is conspicuously marked and identified in writing as confidential and relates to the business, products, services, research or development, actual or potential clients or customers, financing of the LNG Facility, designs, methods, discoveries, trade secrets, research, development or finances of Owner or any Owner Affiliate, or relating to similar information of a third party who has entrusted such information to Owner or any Owner Affiliate (hereinafter individually or collectively, "**Owner Confidential Information**"); provided, however, nothing herein shall

prohibit Contractor from using the Work Product, and Contractor shall be permitted to re-use the Work Product, in its general construction and engineering business, subject to Contractor first removing: (i) all references to Owner and the LNG Facility; (ii) any Owner-Furnished Information and other information of Owner Group members; and (iii) any information relating to the performance or operation of the LNG Facility. Prior to disclosing any Owner Confidential Information as permitted in subclause (i) of this Section 14.1.1 to any Supplier (excluding Affiliates of Contractor, but including CIMTAS), Contractor shall bind such Supplier to the confidentiality obligations contained in this Section 14.1. Contractor and Contractor Group shall not disclose to or discuss with a third party any affairs of any Owner Group member without specific authorization of Owner. The Parties agree that Contractor may disclose Owner Confidential Information without the consent of Owner to:

(a) Contractor's Affiliates and directors, officers, employees, consultants, accountants, auditors, insurance brokers and underwriters, and legal counsel of it and its Affiliates who need to know such Confidential Information for the performance of the Work and who have been informed of the confidential nature of the Confidential Information and, with respect to any such Persons that are not Affiliates of Contractor or directors, officers or employees of Contractor or its Affiliates, who have agreed to be bound by the confidentiality obligations as stated in this Section 14.1;

(b) any Governmental Authority when required by any Applicable Laws binding on Contractor; provided, that: (i) Contractor shall provide advance notice of such disclosure requirement to Owner; and (ii) such disclosure shall be subject where applicable to Section 14.5;

(c) any stock exchange on which the shares of Contractor or any of its Affiliates are listed or are in the process of being listed, where rules of the stock exchange require the disclosure be made; provided, that Contractor shall provide advance notice of such disclosure requirement to Owner and shall cooperate with Owner so that Owner may seek a protective order or other appropriate remedy; and

(d) any mediation or arbitration tribunal or court in a proceeding pursuant to Article 20,

provided, that Contractor shall be liable to Owner Group for any Claims and expenses (including court costs, attorneys' fees and disbursements, and other litigation costs) suffered or incurred by Owner Group arising out of any breach of Contractor's confidentiality obligations pursuant to this Section 14.1 by any Person to whom Owner Confidential Information was directly or indirectly disclosed by Contractor, pursuant to this Section 14.1, excluding any such disclosure by any Person to whom Owner Confidential Information has been disclosed in accordance with Section 14.1.1(b).

14.1.2 The confidentiality obligations contained herein shall be in addition to, and not in lieu of, the confidentiality obligations contained in any other agreement governing the Owner Confidential Information, including the License(s). Contractor shall and shall cause all Contractor Group members to comply with the confidentiality restrictions contained in such

other agreements where Owner has either: (a) provided or caused to be provided to Contractor a copy of such agreement; or (b) informed Contractor of the specific confidentiality obligations under such agreement. Contractor shall and shall cause all Suppliers to sign confidentiality agreements with such Other Contractors as Owner may reasonably request. Where Contractor has signed a separate License with a Licensor with respect to its Technology, the terms of that License shall apply as between Contractor and such Licensor as to the disclosure of such Technology and other Licensor information.

14.2 Owner's Obligations. For the sake of clarity, the terms and conditions in this Agreement shall not supersede in any manner the terms and conditions in any agreement between Owner and any Licensor or with or between any Affiliates thereof. The confidentiality provisions contained in the Licenses shall exclusively govern the disclosure by Owner of the Technology and the matters covered by such confidentiality provisions. Except as otherwise expressly provided in this Section 14.2, Owner shall have no obligation of confidentiality with respect to any information disclosed to Owner by or on behalf of Contractor Group in connection with the performance of this Agreement. Owner shall maintain such Contractor Confidential Information strictly confidential and shall not disclose such Contractor Confidential Information, subject to the other terms of this Article 14.

14.2.1 Permitted Disclosure. The Parties agree that Owner may disclose Contractor Confidential Information without the consent of Contractor to the following Persons that are not Competitors:

(a) any member of the Owner Group and their respective accountants, auditors, insurance brokers and underwriters, and legal counsel who need to know such Confidential Information in connection with the Liquefaction Project, or to its Affiliates in connection with any other project in accordance with Section 12.2.2(c), and who have been informed of the confidential nature of the Confidential Information and, with respect to any such Persons that are not Affiliates of Owner or directors, officers or employees of Owner or its Affiliates, who have agreed to be bound in writing to confidentiality obligations substantially similar to those stated in this Section 14.2 or are otherwise subject to confidentiality obligations as a matter of law or professional practice;

(b) any Person when required by any Applicable Laws binding on Owner or a member of the Owner Group; provided, that: (i) the Person who is subject to such disclosure requirement shall provide advance notice of such disclosure requirement to Contractor; and (ii) such disclosure shall be subject where applicable to Section 14.5;

(c) any Person pursuant to the rules of any stock exchange on which the equity interests of Owner or any of its Affiliates are listed or are in the process of being listed, which rules require the disclosure be made; provided, that Owner shall provide advance notice of such disclosure requirement to Contractor and shall cooperate with Contractor so that Contractor may seek a protective order or other appropriate remedy;

(d) any Person: (i) that is an actual or prospective Lender and their respective agents, consultants and advisors; (ii) in connection with an offering memorandum,

prospectus or similar sales document for a capital markets offering; and (c) that is any rating agency, in each case for purposes of acquiring financing or other borrowed funds, subject in each case to the extent reasonably practicable (and reflecting standard policy and customary market practice of rating agencies and Lenders to execution of confidentiality agreements) to such Persons first agreeing in writing to hold such information or documents confidential under terms substantially similar to those stated in this Section 14.2 and Section 14.6, or are otherwise subject to confidentiality obligations as a matter of law or professional practice;

(e) bona fide transferees or prospective transferees of all or a portion of Owner's, Parent's or any member of Parent's direct or indirect interests in the LNG Facility or this Agreement, or of a direct or indirect interest in Owner; provided, that such Persons first agree in writing to hold such information or documents confidential under terms substantially similar to those stated in this Section 14.2 and Section 14.6, and where applicable, comply with the requirements of Section 14.2.3;

(f) customers or potential customers of Owner; provided, that Owner first binds such Persons in writing to confidentiality obligations with substantially similar protections to those contained in this Article 14;

(g) potential equity investors in any future expansion of the Liquefaction Project, subject to such Persons first agreeing in writing to hold such information or documents confidential under terms substantially similar to those stated in this Section 14.2 and Section 14.6, and subject to Section 14.2.3;

(h) Other Contractors and other actual or prospective contractors and subcontractors engaged or proposed to be engaged by Owner or its Affiliates or any other member of the Owner Group, or by any Other Contractors, contractors or subcontractors in connection with the construction, operation, maintenance, repair or decommissioning of the LNG Facility, the Liquefaction Project, the Equipment or other operations at the LNG Facility, to the extent such disclosure is reasonably necessary to secure contracts with such Persons or for such Persons to fulfill their duties; provided, that Owner first binds such Persons in writing to confidentiality obligations with substantially similar protections to those contained in this Article 14 and in the case of Other Contractors or prospective contractors and subcontractors, Contractor's pricing and financial information shall not be disclosed; and

(i) any mediation or arbitration tribunal or court in any proceeding involving Contractor or any Supplier, including any proceeding with respect to a Dispute pursuant to Article 20;

provided, that Owner shall be liable to Contractor for any Claims and expenses (including court costs, attorneys' fees and disbursements, and other litigation costs) suffered or incurred by Contractor arising out of any breach of the provisions of this Section 14.2 by any Person (other than Contractor, other Contractor Group members or Persons to whom Contractor or Contractor Group members have disclosed such information) to whom Contractor Confidential Information has been directly or indirectly disclosed by Owner, pursuant to this Section 14.2, excluding any such disclosure by any Person to whom Contractor Confidential Information has been disclosed

in accordance with Section 14.2.1(b). If any of the Persons described above in this Section 14.2.1 is a Competitor, Owner shall not disclose Contractor Confidential Information to such Competitor without Contractor's prior written consent.

14.2.2 No Limitation on Work Product. Notwithstanding the foregoing, but subject to Section 12.2.3 regarding disclosure to Competitors, [***].

14.2.3 Potential Equity Investors. Notwithstanding anything to the contrary in Section 14.2.1, Owner and the Common Facilities Owner shall not disclose Contractor Confidential Information to any potential equity investor except in accordance with the following:

(a) if the potential equity investor is not an "accredited investor" (as defined in the Securities Act of 1933, as amended), prior to disclosure of Contractor Confidential Information to such potential equity investor, such potential equity investor shall have executed a mutually agreeable reasonable confidentiality agreement [***];

(b) if the potential equity investor is an "accredited investor" (as defined in the Securities Act of 1933, as amended), then Owner and the Common Facilities Owner may disclose Contractor Confidential Information to such potential equity investor without that potential equity investor executing a confidentiality agreement and release directly with Contractor; [***]; and

(c) [***].

14.3 Exceptions. Notwithstanding Sections 14.1 and 14.2, Confidential Information shall not include: (a) information which at the time of disclosure or acquisition is in the public domain, or which after disclosure or acquisition becomes part of the public domain without violation of this Article 14; (b) information which at the time of disclosure or acquisition was already in the possession of the Receiving Party or its employees or agents and was not previously acquired from the Disclosing Party or any of its employees or agents directly or indirectly, other than directly or indirectly disclosed or acquired through any other agreements between the Parties related to the LNG Facility or the Liquefaction Project; (c) information which the Receiving Party can show was acquired by such Person from a third party without any confidentiality commitment, if, to the best of Receiving Party's or its employees' or agent's knowledge, such third party did not acquire it, directly or indirectly, from the Disclosing Party or any of its employees or agents under an obligation of confidentiality; or (d) information independently developed by the Receiving Party without benefit of the Confidential Information, but specifically excluding the Work Product.

14.4 Remedies. Without prejudice to the rights and remedies otherwise available to any Party, each Party agrees that money damages would not be an adequate remedy for any breach of Section 14.1 or Section 14.2 and that each Party shall be entitled to specific performance and other equitable relief by way of injunction if another Party or any of its Affiliates or any other Person to whom such Party directly or indirectly disclosed Owner Confidential Information or Contractor Confidential Information, as applicable, breaches or

threatens to breach either such Section. Each Party further agrees to waive any requirement of the posting of a bond in connection with any such equitable relief. Each Party agrees to reimburse the other Party for all costs and expenses, including reasonable attorney's fees and disbursements, incurred by such Party in enforcing the terms of this Article 14. The remedies in this Section 14.4 shall not be deemed exclusive remedies for a breach of Section 14.1 or Section 14.2 but shall be in addition to all other remedies available at law or in equity to the non-breaching Party.

14.5 Legal Demand for Information. If a Party or any of its Affiliates or the representatives of such Party or any of its Affiliates, receives a request, through a subpoena or order issued by a court or by any Governmental Authority, to disclose all or any part of the Owner Confidential Information or Contractor Confidential Information, as applicable, received by it, such Party shall:

14.5.1 notify the Person from whom such data or information was received promptly of the existence, terms, and circumstances surrounding such request;

14.5.2 cooperate where possible with such Person on the advisability of taking legally available steps to resist or narrow such request; and

14.5.3 if disclosure of such data or information is required to prevent the Person compelled to make disclosure from being held in contempt or subject to other penalty, furnish only such portion of the data or information as, in the opinion of such Person's counsel, it is legally compelled to disclose, and exercise commercially reasonable efforts to obtain an order or other reliable assurance that confidential treatment will be accorded to the disclosed data and information.

14.6 Term. The confidentiality obligations of the Parties under this Article 14 shall continue until the date that is: (i) five (5) years after the Substantial Completion Date of Stage II; or (ii) if this Agreement is terminated prior to the Substantial Completion Date of Stage II, five (5) years after the date of termination of this Agreement.

ARTICLE 15

INDEMNIFICATION

15.1 Contractor Indemnity and Release.

15.1.1 Contractor Group Employees. Contractor shall, to the maximum extent allowed by Applicable Laws, release, and as a separate obligation, protect, defend, indemnify and hold harmless the Owner Indemnified Parties from and against any and all Losses arising from the bodily injury, illness or death of any Contractor Group member, due to, arising out or resulting from the performance of the Work or Contractor's obligations under this Agreement EVEN IF CAUSED OR ALLEGED TO BE CAUSED IN WHOLE OR IN PART BY THE NEGLIGENCE (WHETHER SOLE, JOINT OR CONCURRENT), FAULT, STRICT LIABILITY, GROSS NEGLIGENCE, WILLFUL MISCONDUCT, BREACH OF DUTY

(STATUTORY OR OTHERWISE), THE BREACH OR VIOLATION OF ANY APPLICABLE LAWS, OR THE BREACH OF CONTRACT, OF OWNER OR ANY OTHER OWNER INDEMNIFIED PARTY.

15.1.2 Contractor Indemnities. Contractor shall, to the maximum extent allowed by Applicable Laws, protect, defend, indemnify and hold harmless the Owner Indemnified Parties from and against any and all Losses arising from:

(a) bodily injury, illness, or death of any Person other than a Contractor Group member or an Owner Indemnified Party, to the extent caused by the negligence or fault of a member of the Contractor Group;

(b) loss of, damage or destruction of any property that is owned or leased by any Person other any member of Contractor Group or an Owner Indemnified Party to the extent caused by the negligence or fault of a member of the Contractor Group;

(c) citations, notice of violations or complaints, assessments, fines, penalties or other sanctions (including costs incurred by Contractor or Owner to perform remedial action to address the violation of, or to make the Work conform with, Applicable Law; provided, that in the case of costs incurred by Owner, Owner has provided Contractor with notice of such costs and an opportunity to perform the remedial action to the extent allowed under Applicable Law) that may be assessed by any and all Governmental Authorities in connection with the Work due to violations of Applicable Laws by any member of the Contractor Group; provided, further, that, Contractor's indemnity obligations under this Section 15.1.2(c) shall exclude any portion of the amount of such fines, penalties, citations or sanctions attributable to (i) violations of Applicable Laws by any member of the Owner Indemnified Parties, or (ii) Pre-Existing Hazardous Materials except as otherwise set forth in Section 15.1.2(f);

(d) a breach by any member of Contractor Group of Contractor's confidentiality obligations towards any Licensor in connection with the Work;

(e) (i) pollution, contamination or Hazardous Material or the Release of Hazardous Materials which originates from items brought onto the Site by or on behalf of Contractor Group; (ii) any Release of Hazardous Materials, or solid waste, generated from the Hazardous Materials brought onto the Site by or on behalf of any member of Contractor Group; (iii) the use of Hazardous Materials by any member of the Contractor Group, in connection with the performance of the Work, which use includes the storage, transportation, processing or disposal of Hazardous Materials by any member of the Contractor Group; (iv) any enforcement or compliance proceeding commenced by or in the name of any Governmental Authority because of an alleged, threatened or actual violation of any Applicable Laws by any member of the Contractor Group with respect to Hazardous Materials that are referenced in subclause (i) through (iii) of this Section 15.1.2(e), in connection with the performance of the Work; and (v) the release of Hazardous Materials caused by a Defect in the Work; EXCEPT TO THE EXTENT THAT SUCH LOSSES ARISE FROM THE NEGLIGENCE (WHETHER SOLE, JOINT OR CONCURRENT), FAULT, STRICT LIABILITY, GROSS NEGLIGENCE, WILLFUL MISCONDUCT, BREACH OF DUTY (STATUTORY OR OTHERWISE), THE

BREACH OR VIOLATION OF APPLICABLE LAWS OR THE BREACH OF CONTRACT OF OWNER, OR ANY OTHER OWNER INDEMNIFIED PARTY;

(f) Contractor's failure to avoid working in affected areas of the Site where there are known, to Contractor or Subcontractor, Archeological Finds or Pre-Existing Hazardous Materials, or stop working in accordance with and comply with its other obligations under Section 2.17.4 in the affected area on the Site where Contractor (or a Subcontractor) has encountered any previously unknown Archeological Find or Pre-Existing Hazardous Materials, to the extent the Losses of the Owner Indemnified Parties due to the Pre-Existing Hazardous Materials are exacerbated by such failure; PROVIDED, HOWEVER, THAT CONTRACTOR'S MAXIMUM OBLIGATION UNDER THIS SECTION 15.1.2(f) SHALL NOT EXCEED [***], AND OWNER AND THE COMMON FACILITIES OWNER HEREBY RELEASE CONTRACTOR FROM ALL COSTS AND LIABILITY IN EXCESS THEREOF;

(g) Contractor's failure to prepare and file the affidavit of completion in accordance with the requirements of Section 2.9.4;

(h) Claims filed by any employee of Contractor, any Supplier (including Affiliates of Contractor), or any employee of any Supplier (including Affiliates of Contractor), in each case, for costs incurred or for compensation arising out of any such employee's or any such Supplier's performance of any part of the Work pursuant to (1) a Supply Contract or the performance of Work by an Affiliate of Contractor; or (2) any employer-employee relationship (including independent contractor relationship) between, on the one hand, Contractor or any Supplier, and, on the other hand, any such employee (or independent contractor); provided that, with respect to claims filed by any Supplier that is not an Affiliate of Contractor, or an employee of a Supplier, where that Supplier is not an Affiliate of Contractor, Contractor has received payment from Owner of undisputed amounts owed in accordance with this Agreement;

(i) any insurance policy required to be provided by Contractor or a Subcontractor hereunder in accordance with Article 16, having been vitiated as a result of Contractor's failure to comply with any of the requirements set forth in such policy, or any other act or omission of Contractor or any Supplier that vitiates such insurance policy; and

(j) the failure of Contractor or any Supplier to pay Taxes for which Contractor is responsible under this Agreement, including any fines or penalties assessed as a result of Contractor's failure to timely pay such Taxes; provided, that the foregoing shall not limit Contractor's right to reimbursement of those Texas Sales and Use Taxes for which Contractor is entitled to reimbursement in accordance with Section 7.5.2 or to reimbursement of Customs Duties for which Contractor is entitled to reimbursement under Section 7.3.2;

in each case due to, arising out of or resulting from the performance of the Work, or Contractor's obligations under this Agreement.

15.1.3 Contractor Other Indemnities. Contractor shall, to the maximum extent allowed by Applicable Laws, protect, defend, indemnify and hold harmless the Owner

Indemnified Parties from and against any and all Losses arising from loss of, damage or destruction of Construction Equipment or other property owned or leased by any member of Contractor Group, due to, arising out of or resulting from the performance of the Work, or Contractor's obligations under this Agreement EVEN IF CAUSED OR ALLEGED TO BE CAUSED IN WHOLE OR IN PART BY THE NEGLIGENCE (WHETHER SOLE, JOINT OR CONCURRENT), FAULT, STRICT LIABILITY, GROSS NEGLIGENCE, WILLFUL MISCONDUCT, BREACH OF DUTY (STATUTORY OR OTHERWISE), THE BREACH OR VIOLATION OF ANY APPLICABLE LAWS, OR THE BREACH OF CONTRACT, OF OWNER OR ANY OTHER OWNER INDEMNIFIED PARTY PROVIDED, HOWEVER, THAT IF A COURT OR OTHER FACT FINDER THAT HAS JURISDICTION DETERMINES THAT ANY OF THE INDEMNITIES PROVIDED IN THIS SECTION 15.1.3 DOES NOT COMPLY WITH APPLICABLE LAWS, SUCH INDEMNITY SHALL APPLY EXCEPT TO THE EXTENT THAT SUCH LOSSES ARISE FROM THE NEGLIGENCE (WHETHER SOLE, JOINT OR CONCURRENT), FAULT, STRICT LIABILITY, GROSS NEGLIGENCE, WILLFUL MISCONDUCT, BREACH OF DUTY (STATUTORY OR OTHERWISE), THE BREACH OR VIOLATION OF APPLICABLE LAWS OR THE BREACH OF CONTRACT OF OWNER, OR ANY OTHER OWNER INDEMNIFIED PARTY.

15.1.4 Contractor Release. CONTRACTOR HEREBY RELEASES THE OWNER INDEMNIFIED PARTIES FROM AND AGAINST ANY AND ALL LOSSES ARISING FROM THE CIRCUMSTANCES AND EVENTS DESCRIBED IN SECTION 15.1.2(a) THROUGH AND INCLUDING SECTION 15.1.2(j), AND SECTION 15.1.3, TO THE EXTENT OF THE INDEMNITY OBLIGATION DESCRIBED THEREIN, AND SUCH RELEASE SHALL APPLY EVEN IF THE UNDERLYING INDEMNITY OBLIGATION IS FOUND TO BE UNENFORCEABLE. CONTRACTOR ALSO HEREBY RELEASES THE OWNER INDEMNIFIED PARTIES FROM AND AGAINST ANY AND ALL LOSSES ARISING FROM THE CIRCUMSTANCES AND EVENTS DESCRIBED IN SECTION 15.1.3 EVEN IF SUCH LOSSES ARE CAUSED OR ALLEGED TO BE CAUSED IN WHOLE OR IN PART BY THE NEGLIGENCE (WHETHER SOLE, JOINT OR CONCURRENT), FAULT, STRICT LIABILITY, GROSS NEGLIGENCE, WILLFUL MISCONDUCT, BREACH OF DUTY (STATUTORY OR OTHERWISE), THE BREACH OR VIOLATION OF APPLICABLE LAWS OR THE BREACH OF CONTRACT OF OWNER, OR ANY OTHER OWNER INDEMNIFIED PARTY.

15.2 Owner Indemnity and Release.

15.2.1 Owner Employees. Owner shall, to the maximum extent allowed by Applicable Laws, release, and as a separate obligation, protect, defend, indemnify and hold harmless the Contractor Indemnified Parties from and against any and all Losses arising from the bodily injury, illness or death of any Owner Indemnified Party due to, arising out of or resulting from the performance of Owner's obligations under this Agreement, EVEN IF CAUSED OR ALLEGED TO BE CAUSED IN WHOLE OR IN PART BY THE NEGLIGENCE (WHETHER SOLE, JOINT OR CONCURRENT), FAULT, STRICT LIABILITY, GROSS NEGLIGENCE, WILLFUL MISCONDUCT, BREACH OF DUTY (STATUTORY OR OTHERWISE), THE BREACH OR VIOLATION OF ANY APPLICABLE LAWS, OR THE BREACH OF

CONTRACT, OF CONTRACTOR OR ANY OTHER MEMBER OF THE CONTRACTOR GROUP.

15.2.2 Owner Indemnities. Owner shall, to the maximum extent allowed by Applicable Laws, protect, defend, indemnify and hold harmless the Contractor Indemnified Parties from and against any and all Losses arising from:

(a) bodily injury, illness, or death of any Person other than a Contractor Group member or an Owner Indemnified Party, to the extent such Losses: (i) are in excess of the coverage available with respect to such covered Loss under the insurance policies provided by Contractor in accordance with Article 16 and Appendix MM; and (ii) are caused by the negligence or fault of an Owner Indemnified Party;

(b) loss of, damage or destruction of any property that is owned or leased by any Person other any member of Contractor Group or an Owner Indemnified Party, to the extent such Losses: (i) are in excess of the coverage available with respect to such covered Loss under the insurance policies provided by Contractor in accordance with Article 16 and Appendix MM; and (ii) are caused by the negligence or fault of an Owner Indemnified Party;

(c) due to any violations of Applicable Laws by any Owner Indemnified Party, including citations, notice of violations or complaints, Owner's obligations under the Tax Abatements (without limiting Contractor's obligations under Section 2.7.10), assessments, fines or penalties that may be assessed by any and all Governmental Authorities; provided, that Owner's indemnity obligations under this Section 15.2.2(c) shall exclude any portion of the amount of such fines, penalties, citations or sanctions attributable to (i) violations of Applicable Laws by any member of the Contractor Group, or (ii) Pre-Existing Hazardous Materials to the extent of Contractor's indemnity obligation under Section 15.1.2(f) applies;

(d) a breach by Owner of any confidentiality obligations of Owner towards any Licensor in connection with the Liquefaction Project; and

in each case due to, arising out of or resulting from the performance of Owner's obligations under this Agreement.

15.2.3 Owner Other Indemnities. Owner shall, to the maximum extent allowed by Applicable Laws, protect, defend, indemnify and hold harmless the Contractor Indemnified Parties from and against any and all Losses arising from:

(a) loss of, damage or destruction of any property that is owned or leased by any Owner Indemnified Party (other than the Work, a Stage or any component of the LNG Facility prior to Substantial Completion Date of a Stage, or the termination of this Agreement, if earlier);

(b) loss of, damage to or destruction of the Work, a Stage or any component of the LNG Facility after the Substantial Completion Date of a Stage, or the

termination of this Agreement, if earlier; in excess of Contractor's liability under Section 11.3.2; and

(c) Pre-Existing Hazardous Materials that were present at the Site prior to Contractor's entry thereupon, Hazardous Materials or Archeological Finds, in each case other than to the extent of such Losses for which Contractor is responsible under Section 15.1.2(e) or 15.1.2(f);

in each case due to, arising out of or resulting from the performance of the Owner's obligations under this Agreement EVEN IF CAUSED OR ALLEGED TO BE CAUSED IN WHOLE OR IN PART BY THE NEGLIGENCE (WHETHER SOLE, JOINT OR CONCURRENT), FAULT, STRICT LIABILITY, GROSS NEGLIGENCE, WILLFUL MISCONDUCT, BREACH OF DUTY (STATUTORY OR OTHERWISE), THE BREACH OR VIOLATION OF ANY APPLICABLE LAWS, OR THE BREACH OF CONTRACT, OF CONTRACTOR OR ANY OTHER MEMBER OF THE CONTRACTOR GROUP; PROVIDED, HOWEVER, THAT IF A COURT OR OTHER FACT FINDER THAT HAS JURISDICTION DETERMINES THAT ANY OF THE INDEMNITIES PROVIDED IN THIS SECTION 15.2.3 DOES NOT COMPLY WITH APPLICABLE LAWS, SUCH INDEMNITY SHALL APPLY EXCEPT TO THE EXTENT THAT SUCH LOSSES ARISE FROM THE NEGLIGENCE (WHETHER SOLE, JOINT OR CONCURRENT), FAULT, STRICT LIABILITY, GROSS NEGLIGENCE, WILLFUL MISCONDUCT, BREACH OF DUTY (STATUTORY OR OTHERWISE), THE BREACH OR VIOLATION OF APPLICABLE LAWS OR THE BREACH OF CONTRACT OF CONTRACTOR OR ANY OTHER MEMBER OF THE CONTRACTOR GROUP.

15.2.4 Owner Release. OWNER HEREBY RELEASES THE CONTRACTOR INDEMNIFIED PARTIES FROM AND AGAINST ANY AND ALL LOSSES ARISING FROM THE CIRCUMSTANCES AND EVENTS DESCRIBED IN SECTION 15.2.2(a) THROUGH AND INCLUDING SECTION 15.2.2(d), AND SECTION 15.2.3(a) THROUGH AND INCLUDING SECTION 15.2.3(c), TO THE EXTENT OF THE INDEMNITY OBLIGATION DESCRIBED THEREIN, AND SUCH RELEASE SHALL APPLY EVEN IF THE UNDERLYING INDEMNITY OBLIGATION IS FOUND TO BE UNENFORCEABLE. OWNER ALSO HEREBY RELEASES THE CONTRACTOR INDEMNIFIED PARTIES FROM AND AGAINST ANY AND ALL LOSSES ARISING FROM THE CIRCUMSTANCES AND EVENTS DESCRIBED IN SECTION 15.2.3(a) THROUGH AND INCLUDING SECTION 15.2.3(c) EVEN IF SUCH LOSSES ARE CAUSED OR ALLEGED TO BE CAUSED IN WHOLE OR IN PART BY THE NEGLIGENCE (WHETHER SOLE, JOINT OR CONCURRENT), FAULT, STRICT LIABILITY, GROSS NEGLIGENCE, WILLFUL MISCONDUCT, BREACH OF DUTY (STATUTORY OR OTHERWISE), THE BREACH OR VIOLATION OF APPLICABLE LAWS OR THE BREACH OF CONTRACT OF CONTRACTOR, OR ANY OTHER CONTRACTOR INDEMNIFIED PARTY. NOTHING IN THIS SECTION 15.2.4 LIMITS THE RELEASE PROVIDED BY OWNER AND THE COMMON FACILITIES OWNER UNDER SECTION 11.3.2.

15.3 Intellectual Property Infringement.

15.3.1 Contractor Indemnity. Except as otherwise provided in Section 15.3.2, Contractor shall protect, defend, indemnify and hold harmless the Owner Indemnified Parties from and against any and all Losses on account of or by reason of any Claim or suit by a third party for alleged infringement or misappropriation of any Intellectual Property resulting from the design, the Contractor-Furnished Items or any other Work performed by Contractor pursuant to this Agreement, the EDSA or the SWSA; provided, that with respect to Intellectual Property provided by Contractor with respect to the Liquefaction Technology Licensor, Contractor's indemnity, defense and hold harmless obligations under this Section 15.3.1 shall not exceed the indemnity provided by the Liquefaction Technology Licensor. If, by reason of any such suit or threatened action concerning Intellectual Property, Owner is enjoined from using any Contractor-Furnished Items or part thereof, or from conducting any operation, Contractor, at its own expense, shall:

(a) diligently procure the right to use such Contractor-Furnished Items or infringing or misappropriating operation;

(b) substitute equivalent but non-infringing or non-misappropriating Contractor-Furnished Items or operation; or

(c) modify the Contractor-Furnished Items or operation to make it or them non-infringing or non-misappropriating but at least equivalent to the infringing or misappropriating Equipment or operation in terms of quality and functionality;

provided, that any substitution or modification shall be acceptable to Owner.

15.3.2 Exclusions. The indemnity set forth in Section 15.3.1 shall not apply to Losses arising out of or in connection with alleged infringement or misappropriation of Intellectual Property based on or arising from any combination or unauthorized use of any of the Work by Owner or the Common Facilities Owner with any product not furnished hereunder where the infringement or misappropriation of Intellectual Property would not have arisen but for such combination or unauthorized use.

15.3.3 Technology. In the event of a Claim involving a License, Contractor agrees to provide all reasonable assistance to Owner through the provision of documents and technical expertise toward resolution of such Claim.

15.3.4 Owner's Use of Certain Intellectual Property. If Owner or the Common Facilities Owner uses Third Party Proprietary Work Product or Contractor Intellectual Property for purposes other than those relating to the LNG Facility, and Owner or the Common Facilities Owner, as applicable, does not engage Contractor to perform work related to such purposes, Owner shall indemnify, defend and hold harmless the Contractor Indemnified Parties with respect to any Claims arising from such use.

15.4 Notice of Claims. Contractor shall promptly give Owner notice of any Claim made or proceeding commenced against Contractor or, to Contractor's knowledge, another Contractor Indemnified Party, for which Contractor or such other Contractor Indemnified Party claims to be entitled to indemnification under this Agreement, including a copy of any documents served with respect to the Claim by a third party claimant. Contractor shall promptly give Owner notice of any loss or damage to the Work or Equipment and assist Owner with any potential Claim associated with such loss or damage. Owner shall promptly give Contractor notice of any Claim made or proceeding commenced against Owner or, to Owner's knowledge, another Owner Indemnified Party, for which Owner or such Owner Indemnified Party claims to be entitled to indemnification under this Agreement, including a copy of any documents served with respect to the Claim by a third party claimant. Failure to provide notice as required pursuant to this Section 15.4 in a timely manner shall not affect the indemnification obligations provided hereunder except to the extent an Indemnitor shall have been actually and materially prejudiced as a result of such failure. Any Person indemnified under this Agreement shall use commercially reasonable efforts to mitigate the Losses for which it is indemnified.

15.5 Defense of Third Party Claims.

15.5.1 Notice of Third Party Claims. In the event a Claim is asserted or a proceeding is commenced against an Indemnitee by a Person that is not a party to this Agreement with respect to any matter that may give rise to a claim for indemnification against an Indemnitor (a "**Third Party Claim**"), the Indemnitee shall promptly give the Indemnitor notice of such Third Party Claim including a copy of any documents served with respect to the Third Party Claim, and thereafter, the Indemnitee shall promptly deliver to the Indemnitor copies of all material notices and documents (including court papers) received by the Indemnitee relating to the Third Party Claim; provided, that failure to provide such notice, or deliver copies of all notices and documents, in a timely manner shall not affect the indemnification provided hereunder except to the extent the Indemnitor shall have been actually and materially prejudiced as a result of such failure.

15.5.2 Participation in Defense. If a Third Party Claim is made against an Indemnitee, the Indemnitor shall be entitled to participate in the defense thereof and, if it so chooses and acknowledges its obligation to indemnify the Indemnitee therefor, to assume and control the defense thereof with counsel selected by the Indemnitor and reasonably satisfactory to the Indemnitee. Should the Indemnitor so elect to assume the defense of a Third Party Claim, the Indemnitor shall not be liable to the Indemnitee for legal expenses subsequently incurred by the Indemnitee in connection with the defense thereof, except to the extent that the Indemnitee is entitled to indemnification against such expenses pursuant to this Article 15. If the Indemnitor assumes such defense, the Indemnitee shall have the right to participate in the defense thereof and to employ counsel, at its own expense, separate from the counsel employed by the Indemnitor; provided, however, that the Indemnitor shall, except as otherwise provided in this Section 15.5, control such defense. The Indemnitor shall be liable for the fees and expenses of counsel employed by the Indemnitee for any period during which the Indemnitor has not assumed the defense thereof or fails to continue to defend against thereof. If the Indemnitor chooses to defend any Third Party Claim as set forth in the first sentence of this Section 15.5.2,

the Indemnitor shall notify the Indemnitee of the agreement of the Indemnitor to do so; provided, that: (a) the Indemnitor shall keep the Indemnitee advised of all material events with respect to such Third Party Claim; and (b) the Indemnitor shall obtain the prior written approval of the Indemnitee before ceasing to defend against such Third Party Claim or entering into any settlement, adjustment or compromise of such Third Party Claim involving injunctive or similar equitable relief being asserted against any Indemnitee or any of its Affiliates (which approval shall not be unreasonably withheld, conditioned or delayed). The Indemnitee shall not admit any liability with respect to, or settle, compromise or discharge, such Third Party Claim without the Indemnitor's prior written consent (which consent shall not be unreasonably withheld, conditioned or delayed). No Indemnitor will, without the prior written consent of each Indemnitee, settle or compromise or consent to the entry of any judgment in any pending or threatened Third Party Claim in respect of which indemnification may be sought hereunder (whether or not any such Indemnitee is a party to such action), unless such settlement, compromise or consent by its terms obligates the Indemnitor to pay the full amount of the liability in connection with such Third Party Claim and includes an unconditional release of all such Indemnified Parties from all liability arising out of such Third Party Claim.

15.5.3 Exceptions. Notwithstanding anything contained herein to the contrary, the Indemnitor shall not be entitled to have sole control over the defense, settlement, adjustment or compromise of: (a) any Third Party Claim (other than a Claim by a Supplier, but without limiting Section 15.3.1) that seeks an order in equity, injunction or other equitable relief against an Indemnitee or any of its Affiliates; (b) any Third Party Claim in which both the Indemnitor and the Indemnitee are named as parties and either the Indemnitor or the Indemnitee determines with advice of counsel that there may be one or more legal defenses available to it that are different from or additional to those available to the other party or that a conflict of interest between such parties may exist in respect thereof. Also notwithstanding anything contained herein to the contrary, the Indemnitor shall not be entitled to have sole control over (and if the Indemnitee so desires, the Indemnitee shall have sole control over) the defense, settlement, adjustment or compromise of any proceeding relating to an alleged criminal violation of Applicable Laws.

15.5.4 Failure to Assume Defense. If the Indemnitor elects not to assume the defense, settlement, adjustment or compromise of an asserted Third Party Claim, fails to timely and properly notify the Indemnitee of his, her or its election as herein provided, or, at any time after assuming such defense, fails to diligently defend against such Third Party Claim in good faith or if the Indemnitee is otherwise entitled pursuant to this Agreement to have control over the defense, settlement or compromise of any indemnification claim, the Indemnitee may pay, defend, settle, adjust or compromise such asserted Third Party Claim (but the Indemnitor shall nevertheless be required to pay all Losses reasonably incurred by the Indemnitee in connection with such payment, defense, settlement, adjustment or compromise to the extent required in accordance with this Agreement).

15.6 Enforceability. To the maximum extent allowed by Applicable Laws, each Party hereby irrevocably waives any right to contend that any of the indemnities set forth in this Article 15 are unenforceable under the Texas anti-indemnity statute (Title 2 Texas Insurance Code §151.102, *et. seq.*) or any other Applicable Law.

ARTICLE 16

INSURANCE

16.1 Contractor Insurance Requirements. By no later than the FNTP Date, Contractor shall obtain the lines of insurance, the insurance coverages and limits of liability as set forth in Appendix MM. Prior to the FNTP Date, Contractor shall obtain the insurance as required under the LNTP, as applicable, if and when issued. Contractor shall, and shall cause each Supplier, as applicable, to enroll in Contractor's insurance program and, as applicable, to maintain all such lines of insurance, insurance coverages and limits of liability as set forth in Appendix MM, without interruption through the earlier of the date on which each such Person's final portion of the Work is performed, including any Corrective Work, or the termination of all of the Work; provided, that Contractor and each Supplier shall maintain such lines of insurance and insurance coverages during any period of extended coverage as described in Appendix MM. With respect to any Supplier not performing any of the Work as of such date, Contractor shall cause such Supplier to, as applicable, enroll in Contractor's insurance program and, as applicable, obtain the lines of insurance, the insurance coverages and limits of liability as set forth in Appendix MM by no later than the date on which such Supplier first performs any portion of the Work. Contractor shall have the sole responsibility for determining the lines of insurance, the insurance coverages and limits of liability required to be obtained by the Suppliers in accordance with reasonably prudent business practices. Notwithstanding that the Subcontractors may provide certain insurance coverages, Contractor shall be fully responsible for any Losses arising out of or resulting from the Work performed by the Subcontractors and any other Person performing any of the Work on behalf of Contractor.

16.2 Costs. Contractor acknowledges and agrees that the cost of obtaining the insurance coverage required under this Article 16 that is obtained by Contractor or any Supplier, is included in the Contract Price. Contractor shall exclude from the Contract Price, and shall require such Supplier to exclude from the contract price of the applicable Supply Contracts, and in each case from the hourly or unit rates of such Person if used in connection with the performance of any of the Work on a time and materials basis in accordance with this Agreement, the cost of maintaining any duplicative insurance coverage with respect to such Person's activities at the Site.

16.3 Rating and Form. Contractor shall, and shall require all Suppliers to, purchase and maintain the insurance required under Appendix MM from an insurance company or companies qualified to do business and duly authorized or licensed in the State of Texas, and in the applicable jurisdictions at locations where Work is performed that are outside of the State of Texas. All such insurance coverages obtained by Contractor shall be written by an insurance company or companies with a minimum credit rating of A from Standard & Poor's or A-, VIII from A.M. Best, or an equivalent credit rating from another internationally recognized credit rating agency reasonably acceptable to Owner; provided, that state run agencies that provide any such insurance shall not have to satisfy such credit rating requirements.

16.4 Waiver and Subrogation. Contractor shall, and shall require all Suppliers to, waive all rights of recovery, including subrogation, and whether because of deductible or self-

insured retention clauses, inadequacy of limits of any insurance policy, insolvency of any insurer, limitation or exclusions of coverage, and all insurance policies obtained by Contractor or any Supplier under Appendix MM, shall include a waiver of subrogation in favor of Owner, the Common Facilities Owner and the other members of the Owner Indemnified Parties. Such waiver of subrogation shall include any and all rights of recovery whether based in equity, common law or by contract, and shall provide that it shall be effective to the maximum extent allowed by Applicable Laws as to any Person, even if such Person: (a) would otherwise have a duty of indemnification, contractual or otherwise; (b) did not pay the insurance premium directly or indirectly; or (c) does not have an insurable interest in the property damaged. Without limiting the foregoing, Contractor shall require all insurance policies (including policies of Contractor and all Suppliers) in any way relating to the Construction Equipment to include all such waivers as described in this Section 16.4.

16.5 Loss Payees. Notwithstanding that Contractor shall obtain the construction all-risk property and marine cargo insurance coverage for the Work and the LNG Facility pursuant to Appendix MM, Owner, the Common Facilities Owner, the Lenders and Contractor shall be loss payees under such policies. Contractor shall prepare and submit any claims, “proof of loss” and other statements or certifications required by the insurers, and work with the insurers to maximize recovery under such policies. At Owner’s written request, Contractor shall provide Owner with copies of such claims, “proof of loss” and other statements or certifications required by the insurers. Payment of proceeds from such insurance policies shall be made as follows as respects any one occurrence:

16.5.1 Payment of Proceeds from Insurer. The first proceeds paid by insurers, whether interim payments or final settlement payment, under the construction all-risk insurance or marine cargo insurance for property damage to the Work, not to exceed the lesser of the amount of the claim or [***] per claim, shall be paid by such insurers directly to Contractor, which shall only be used by Contractor for the repair, replacement or other necessary Work in connection with repairing or replacing the lost or damaged Work. Contractor’s receipt of proceeds shall be subject to Contractor having prepared and submitted a restoration plan to Owner and the Lenders, as applicable, and Owner’s approval of such restoration plan, not to be unreasonably withheld or delayed. Any proceeds paid in excess of [***] per claim, whether interim payments or final settlement payment, shall be paid to Owner or its designee (or collateral agent). Contractor shall include its costs for the repair, replacement or other necessary Work completed by Contractor that are in excess of [***] per claim, on Invoices submitted by Contractor under this Agreement for such repair, replacement or other necessary Work, together with supporting documentation reasonably demonstrating the claims for such costs have been submitted to its insurers, and, subject to Section 11.3.1(c), Owner shall release proceeds received from the insurers to Contractor to pay for such costs, in accordance with Section 16.5.2.

16.5.2 Owner’s Release of Proceeds to Contractor.

(a) Subject to receipt of Invoices and supporting documentation as described in Section 16.5.1, Owner will release proceeds from the construction all-risk insurance or marine cargo insurance that have been paid to Owner, whether interim payments or final

settlement payments, for the completion of repairs, replacement or other necessary Work by Contractor in accordance with the approved restoration plan, as follows: (i) for the first [***] of such proceeds received by Owner or its designee (or collateral agent), Owner shall pay such proceeds to Contractor within ten (10) Business Days after Owner's (or its designee's or collateral agent's) receipt of such proceeds from the insurers; (ii) for the next [***] of such proceeds received by Owner or its designee (or collateral agent), Owner shall pay such proceeds, or shall cause such proceeds to be paid, to Contractor within fifteen (15) Business Days after Owner's or its designee's (or collateral agent's) receipt of such proceeds from the insurers; (iii) for any such proceeds in excess of [***] received by Owner or its designee (or collateral agent), Owner shall pay such proceeds, or shall cause such proceeds to be paid, to Contractor within thirty (30) Business Days after Owner's or its designee's (or collateral agent's) receipt of such proceeds from the insurers. Without limiting the provisions of Section 11.3.1(c), in no case shall Owner pay any proceeds to Contractor in excess of costs incurred by Contractor for such repair, replacement or restoration, less the amount of proceeds that Contractor received directly from the insurers, and in no case, other than with respect to the risk of physical loss or damage to the Work for which Owner bears the risk of loss pursuant to Section 11.3.1(a), shall Owner be obligated to pay Contractor any amount in excess of the proceeds that Owner receives from the insurers, notwithstanding that Contractor's costs may exceed the amount of such proceeds. Notwithstanding the foregoing, under no circumstances shall Owner be required to pay any such proceeds to Contractor if Owner or its Lender elects not to repair or rebuild the Work.

(b) If Owner does not release the proceeds it has received from insurers to Contractor in accordance with this Section 16.5.2, Contractor shall have the right to not commence, or if the Work to repair or restore the damaged Work has already commenced, to suspend, the repair or restoration of the Work to which such proceeds apply upon ten (10) Business Days prior notice to Owner. Contractor shall commence, or recommence, as applicable, such repair or restoration Work upon receipt of such proceeds, subject to Contractor's right to receive a Change Order pursuant to Section 8.3.1(n) in connection with any such delay or suspension of such repair or restoration Work, to the extent that such delay or suspension adversely impacts Contractor's cost or schedule to perform the Work as determined in accordance with Section 8.4.

16.6 Determination of Insurance Coverages. Contractor acknowledges and agrees that the insurance coverages required to be provided by Contractor and the Suppliers pursuant to this Article 16 and Appendix MM, are intended to, and Contractor agrees that such coverages do, provide coverage for Contractor's indemnification obligations under this Agreement to the extent such obligations are insurable. Contractor and all Suppliers shall each be solely responsible for determining the appropriate amount of insurance, if any, that Contractor or such Supplier desires or determines is appropriate that is in excess of or in addition to the insurance coverages set forth on Appendix MM, and the cost of all such excess coverage shall be at Contractor's or such Subcontractor's or Supplier's cost and expense, including types of coverage, limits of liability and costs of such excess coverage. To the maximum extent permitted by Applicable Laws, the extent of coverage or limits of liability otherwise required under this Article 16 shall not be construed as a limitation on the nature or extent of Contractor's or any Subcontractor's or Supplier's obligations under this Agreement or with respect to the Work, as applicable.

16.7 Additional Insured Coverage. To the maximum extent permitted by Applicable Law, Owner, the Common Facilities Owner and such other Persons as described on Appendix MM shall be named as additional insureds on the policies required under Appendix MM (but not including any Workers' Compensation, Employer's Liability, Contractor's Equipment or Professional Liability policies), carried and maintained by Contractor and its Suppliers, to the extent of Contractor's or such Supplier's liability under this Agreement or the applicable Supply Contract.

16.8 Deductibles. To the maximum extent permitted under Applicable Law and as required pursuant to and in accordance with Article 15, Contractor shall, and shall require all Suppliers to, be responsible for and pay any deductibles or self-insured retentions in connection with the insurance policies and coverages required to be maintained by Contractor or such Supplier under Appendix MM.

16.9 Certificate of Insurance.

(a) On or before the date that Contractor is required to obtain the insurance coverage as required under this Article 16, Contractor shall provide certificates of insurance and any endorsements required under Appendix MM to Owner. Contractor shall not commence performance of any portion of the Work on the Site, or of the applicable portion of the Work, for which insurance coverage is required to be provided under this Article 16 until such certificates have been provided to Owner. If Owner does not allow Contractor to commence performance of the applicable Work due to Contractor's failure to provide such certificates of insurance, such action by Owner shall not constitute an Owner-Caused Delay. Upon Owner's written request, Contractor shall provide Owner with copies of certificates of insurance coverage provided by Suppliers under this Article 16 and this Appendix MM. All certificates of insurance, endorsements and insurance policy copies required to be provided pursuant to this Section 16.1 shall be submitted to:

Sempra LNG
Supply Management
488 8th Avenue
San Diego, CA 92101
E-mail: [###]@sempraglobal.com

with a copy to: Sempra Energy
Insurance & Risk Advisory
488 8th Avenue
San Diego, CA 92101
E-mail: [###]@sempra.com

(b) If any of the insurance coverages are required to remain in force after Final Completion, an additional certificate of insurance evidencing continuation of such coverage shall be submitted with the Final Invoice, and upon renewal of such insurance coverages during the duration of the required period.

(c) All certificates of insurance required to be provided pursuant to this Article 16 shall include the following:

- (i) Owner and any other Person required pursuant to this Agreement shall be identified as certificate holders, with correct mailing addresses;
- (ii) Identification on the certificate of insurance of the named insured, which must match that on this Agreement or the relevant Supply Contract;
- (iii) Insurers affording each coverage, policy dates of each coverage, all coverages and limits required under Appendix MM and signatures of authorized representatives of the insurance company or broker issuing said policy of insurance;
- (iv) A list of all endorsements attached to the policies of insurance required hereunder, in which endorsement forms are to be identified, as applicable; and
- (v) Producer of the certificate, with correct address and phone.

16.10 Dividends and Refunds. All dividends, premium refunds, return premiums, premium discounts, retentions, or credits payable or available under any of the insurance policies maintained by Contractor or any Supplier shall belong to Contractor or such Supplier, as the case may be, and are hereby assigned to Contractor or such Supplier. At the request of Contractor or such Supplier, Owner shall execute and deliver to Contractor or such Supplier any waiver, release, assignment, direction, or authorization, which Contractor, such Supplier, any insurer or underwriter may require for such purpose, for the benefit of Contractor.

16.11 No Waiver. Failure of Contractor or any Supplier to provide insurance as required hereunder, or Owner's failure to require evidence of insurance, or to notify Contractor of any breach by Contractor or any Supplier of these requirements, shall not be deemed to be a waiver by Owner of any of the terms and conditions of this Agreement, nor shall those actions be deemed to be a waiver of the obligations of Contractor to defend, indemnify, and hold harmless the Owner Indemnified Parties as required under this Agreement.

16.12 No Limitation. None of the requirements contained herein as to types or limits of insurance coverages to be maintained by Contractor or any Suppliers are intended to, and to the maximum extent permitted by Applicable Laws shall not, in any manner limit, qualify or quantify the liabilities and obligations of Contractor under this Agreement, or of Contractor or any Supplier as otherwise provided by Applicable Laws.

16.13 Owner's Property Insurance. If and to the extent that Owner maintains property insurance following Substantial Completion of a Stage, Owner shall procure, pay the premiums for and maintain all risk property insurance covering such Stage. Such insurance coverage shall be provided on an "all risk" replacement cost basis and shall not contain an exclusion for resultant damage caused by faulty workmanship, design or materials. The insurance policy, if any, obtained by Owner pursuant to this Section 16.13 shall provide for a waiver by the insurance carrier of all rights of subrogation, including any and all rights of recovery whether

based in equity, common law or by contract, against the members of the Contractor Group in respect of loss or damage to such Stage.

16.14 Territorial Limits. All policies required to be carried under this Agreement shall be valid in the U.S. and have such additional territorial and navigational limits as are necessary for the various locations of the Work.

16.15 Failure of Contractor to Maintain Policies. If at any time the insurance provided by Contractor hereunder is reduced or is not renewed or maintained in full force and effect, then (without limiting the rights of Owner in respect of any default that arises as a result of such failure) Owner may at its option maintain the insurance required hereby. In such event Owner may withhold the cost of insurance premiums expended for such replacement insurance from any payments to be made to Contractor. Anything in this Agreement to the contrary notwithstanding, the occurrence of any of the following shall in no way relieve Contractor from any of its obligations under this Agreement: (a) failure by Contractor to secure or maintain the insurance coverage required hereunder; (b) failure by Contractor to comply fully with any of the insurance provisions of this Agreement; (c) failure by Contractor to secure such endorsements on the policies as may be necessary to carry out the terms and provisions of this Agreement; (d) the insolvency, bankruptcy or failure of any insurance company providing insurance to Contractor; (e) failure of any insurance company to pay any claim accruing under its policy; or (f) losses by Contractor or any of its Subcontractors not covered by insurance policies.

16.16 Unavailability of Insurance. If any insurance (including the limits, coverage, endorsements, policy terms, conditions or deductibles thereof) hereby required to be maintained, other than insurance required by Applicable Laws, shall not be available in the market on commercially reasonable terms, including price, Owner and Contractor shall not unreasonably withhold their agreement to waive such requirement to the extent that maintenance thereof is not so available; provided, however, that the Party seeking the waiver shall request any such waiver in writing from the other Party, together with reasonable documentation supporting the need for the waiver, and it shall not be unreasonable for Owner to withhold such waiver if a waiver is subject to Lender approval but is not agreed to by the Lenders. Any such waiver shall be effective only so long as such insurance shall not be available in the market on commercially reasonable terms, including price. Notwithstanding anything to the contrary in this Article 16, including this Section 16.16, Contractor will not be excused from its obligations to provide insurance under this Agreement as a result of increased costs of such insurance arising out of or related to Contractor's negligence or failure to perform its obligations under this Agreement.

16.17 Contractor's Insurance is Primary. The insurance policies of Contractor and its Suppliers shall state that such coverage is primary and non-contributory to any other insurance or self-insurance available to or provided by Owner or the other members of the Owner Indemnified Parties.

16.18 Severability. All policies (other than the Worker's Compensation insurance) shall insure the interests of the Owner and the other members of the Owner Indemnified Parties regardless of any breach or violation by Contractor or any other Contractor Group member of warranties, declarations or conditions contained in such policies, any action or inaction of Owner

or others, any foreclosure relating to the Liquefaction Project or any change in ownership of all or any portion of the Liquefaction Project.

16.19 Copy of Policy. Following the issuance of a Limited Notice to Proceed or the Full Notice Proceed, as applicable, and the inception of the respective insurance policies in accordance with such Limited Notice to Proceed, or Appendix MM following the Full Notice to Proceed, as applicable, Contractor shall promptly provide Owner certified copies of each of the insurance policies of Contractor, or if the policies have not yet been received by Contractor, then with binders of insurance, duly executed by the insurance agent, broker or underwriter fully describing the insurance coverages effected.

16.20 Reports. Contractor will advise Owner and Lenders in writing promptly of (a) any material changes in the coverage or limits provided under any policy required by this Article 16 and Appendix MM; and (b) any default in the payment of any premium and of any other act or omission on the part of Contractor or its Suppliers which may invalidate or render unenforceable, in whole or in part, any insurance being maintained by Contractor or its Suppliers pursuant to this Article 16 and Appendix MM.

16.21 Control of Loss. If commercially feasible, all policies of insurance required to be maintained pursuant to this Article 16 and Appendix MM wherein more than one insurer provides the coverage on any single policy, shall have a clause (or a separate agreement among the insurers) wherein all insurers have agreed that the lead insurers shall have full settlement authority on behalf of the other insurers.

16.22 Loss Survey. All policies of insurance required to be maintained to this Appendix MM wherein more than one insurer provides the coverage on any single policy, shall have a clause (or a separate agreement among the insurers) wherein all insurers have agreed upon the employment of a single firm to survey and investigate all losses on behalf of the insurers.

16.23 Miscellaneous Policy Provisions. All insurance policies providing Construction All Risk and Marine Cargo shall: (a) not include any annual or term aggregate limits of liability except as expressly stated in Appendix MM; (b) not have any aggregate limits of liability apply separately with respect to the Liquefaction Project; (c) have aggregate limits for Named Windstorms and Storm Surge, Flood and Earth Movement and (d) if commercially feasible, not include a clause requiring the payment of additional premium to reinstate the limits after loss except for insurance covering the perils of Named Windstorms and Storm Surge, Flood and Earth Movement; provided that the resulting initial premium is agreed by Owner and Contractor.

16.24 Lender Requirements. Contractor agrees to cooperate with Owner and as to any commercially feasible, reasonable changes in or additions to the foregoing insurance provisions made necessary by requirements imposed by Lender (including additional named insured status, additional insured status, notice of cancellation, certificates of insurance); provided that any resulting costs of increased coverage shall be reimbursed by Owner; provided, further, that no such requirements shall materially adversely affect Contractor's risk exposure. All policies of insurance required to be maintained pursuant to this Article 16 and Appendix MM shall contain

terms and conditions reasonably acceptable to Owner after consultation with the Lenders and the Lenders' insurance advisor. Contractor shall cause its insurance broker(s) to provide Broker(s) Letters of Undertaking to Owner and its Lenders, in a form acceptable to Owner, Lenders, and Contractor's insurance brokers, in respect of the insurances specified in Sections 2, 3, 5, 11 and 12 of Appendix MM. Contractor shall also require its insurance brokers to assist Owner, Contractor and the respective insurers with the potential assignment of the insurances specified in Sections 2, 3, 5, 11 and 12 of Appendix MM to Owner and the Common Facilities Owner, as Owner requests, in the event of a termination of this Agreement pursuant to Section 19.1 or 19.3; provided, however, that Contractor does not make any representation as to whether the insurers will accept an assignment of such insurances.

16.25 No Limitation of Requirements. Nothing in this Article 16 or Appendix MM shall be construed to limit the requirements or obligations of Contractor under this Agreement, including the waivers of subrogation and waivers of claims contained in this Article 16 or Appendix MM.

ARTICLE 17

FINANCIAL SECURITY

17.1 Contractor Guarantee. Simultaneously with the execution of this Agreement, Contractor shall deliver to Owner the Contractor Guarantee in the form set forth in Appendix Y whereby Contractor Guarantor shall guarantee the full and punctual payment and performance of all obligations of Contractor under this Agreement. Contractor shall cause the Contractor Guarantor to maintain its corporate existence. Contractor acknowledges and agrees that any assignment of the Contractor Guarantee by the Contractor Guarantor, including by operation of law, without the prior written consent of Owner, shall be a material breach of Contractor's obligations under this Section 17.1.

17.2 Contractor Letter of Credit.

17.2.1 Generally. Within three (3) Business Days after the FNTF Date, and as a condition precedent to Owner's obligation to make payments under this Agreement on and after such date, Contractor shall deliver to Owner, and maintain in existence throughout the term of this Agreement as set forth in this Section 17.2, an irrevocable stand-by letter of credit in the form of Appendix X, naming Owner and the Common Facilities Owner as beneficiary, in an amount equal to the greater of: (a) [***] of the Contract Price as of such date; or (b) the total amount of the Contract Price paid to Contractor to date, but in any event not to exceed [***] of the Contract Price as of such date, issued by a Creditworthy Bank in the United States of America and that may be drawn upon presentation in New York, New York ("Letter of Credit"). Within ten (10) Business Days after the date that is twelve (12) Months after the FNTF Date, Contractor shall, to the extent it has not otherwise done so, increase such Letter of Credit to an amount equal to [***] of the Contract Price as of such date. If at any time the bank issuing the Letter of Credit ceases to be a Creditworthy Bank or ceases to have a branch in New York, New York where the Letter of Credit may be drawn upon presentation, Contractor shall replace the

Letter of Credit within ten (10) Days with an equivalent instrument issued by a Creditworthy Bank in the United States of America.

17.2.2 Owner's Right to Draw. Owner shall have the right to draw down on or collect against such Letter of Credit upon Owner's demand in the event of the following: (a) as provided under Section 9.9.4; (b) monies owed from Contractor to Owner under this Agreement for which Owner has invoiced Contractor and Contractor has failed to pay within the period required; (c) the occurrence of a Contractor Event of Default, including a failure by Contractor to pay any amount owing to Owner for Delay Liquidated Damages or Performance Liquidated Damages when due; or (d) any breach by Contractor of its obligations under this Agreement which has not arisen to a Contractor Event of Default, [***]. The amount drawn on the Letter of Credit shall not be greater than the amount that Owner, at the time of the drawing, reasonably estimates is owed it under this Agreement. In addition, if at any time the bank issuing the Letter of Credit ceases to be a Creditworthy Bank, or the issuing bank notifies Owner pursuant to the terms of the Letter of Credit that the issuing bank has decided not to extend the Letter of Credit beyond the then current expiration date and Contractor has not, at least thirty (30) Days before the then current expiration date, delivered to Owner a replacement letter of credit substantially identical to the Letter of Credit from a Creditworthy Bank meeting the requirements in this Section 17.2, Owner shall have the right to draw or collect against the Letter of Credit for all remaining funds and hold them as security in lieu of the Letter of Credit until Contractor replaces the Letter of Credit with an equivalent instrument issued by a Creditworthy Bank in the U.S. that has a branch in New York, New York where the Letter of Credit may be drawn upon presentation. Partial drawings shall be permitted under the Letter of Credit.

17.2.3 Increases. In addition to the increases contemplated in Section 17.2.1, Contractor shall, if the Contract Price is increased by [***] or more, increase the amount of the Letter of Credit issued to Owner within ten (10) Days after acceptance of the relevant Change Order (which shall include the cost to increase the Letter of Credit) which causes the Contract Price to exceed such [***] threshold. In connection with any such increase, Owner shall return the Letter of Credit then held by Owner to Contractor upon Owner's receipt of a replacement Letter of Credit that complies with the requirements of this Section 17.2. If Contractor increases the Letter of Credit by amendment, Owner shall retain the original Letter of Credit and the amendments thereto.

17.2.4 Reductions. Upon the achievement of Substantial Completion and payment of all Delay Liquidated Damages owing with respect to Stage I and, if applicable, increasing the amount of the Letter of Credit or posting of a separate Letter of Credit with respect to Performance Liquidated Damages in accordance with Section 9.10.1, and provided that no Contractor Event of Default has occurred that is then continuing, Contractor may decrease the amount of the Letter of Credit to an amount equal to the sum of: (a) [***] of the Contract Price; plus (b) an amount equal to damages claimed under any Disputes then pending hereunder; plus (c) unless Contractor has posted a separate Letter of Credit with respect to Performance Liquidated Damages in accordance with Section 9.10.1, an amount equal to the increase to the amount of the Letter of Credit that Contractor is required to provide pursuant to Section 9.10.1. Upon the achievement of Substantial Completion and payment of all Delay

Liquidated Damages owing with respect to Stage II and, if applicable, increasing the amount of the Letter of Credit or posting of a separate Letter of Credit with respect to Performance Liquidated Damages in accordance with Section 9.10.1, Contractor may decrease the amount of the Letter of Credit so that the stated amount of such Letter of Credit is equal to the sum of: (a) [***] of the Contract Price; plus (b) an amount equal to damages claimed under any Disputes then pending hereunder; plus (c) unless Contractor has posted a separate Letter of Credit with respect to Performance Liquidated Damages in accordance with Section 9.10.1, an amount equal to the increase to the amount of the Letter of Credit that Contractor is required to provide pursuant to Section 9.10.1. Subject to Substantial Completion of Stage II having occurred, upon the expiration of the Warranty Period for Stage I, Contractor may decrease the amount of the Letter of Credit so that the stated amount of such Letter of Credit is equal to the sum of: (a) [***] of the Contract Price; plus (b) an amount equal to damages claimed under any Disputes then pending hereunder; plus (c) unless Contractor has posted a separate Letter of Credit with respect to Performance Liquidated Damages in accordance with Section 9.10.1, an amount equal to the amount of the Letter of Credit that Contractor is required to provide pursuant to Section 9.10.1. To obtain any such decrease, Contractor must submit to the issuing bank a certificate, in the form attached to the Letter of Credit as Annex 1 to Appendix X, jointly signed by Contractor and Owner confirming that the relevant conditions for reducing the amount of the Letter of Credit have been satisfied, and setting forth the amount of the reduction. Owner shall promptly execute such a certificate tendered by Contractor when all of the relevant conditions for reducing the amount of the Letter of Credit have been satisfied. Upon the expiration of the Warranty Period for Stage II, Owner shall return the Letter of Credit and any amendments thereto to Contractor.

17.3 Further Assurances. Prior to the FNTF Date, Contractor shall review the most recent audited financial statements for Contractor and Contractor Guarantor with Owner's chief financial officer and Parent's chief financial officer (or their respective designees) at a location of Owner's option. Owner shall not have any right to make copies or to retain such financial statements that are provided for review. The information made available to Owner during this review shall be considered Contractor's Confidential Information; provided, however, that notwithstanding anything to the contrary in Section 14.2, in no event shall Owner or the Common Facilities Owner or any of its Affiliates, including Parent, disclose any information made available to Owner during such reviews to any other Person without Contractor's prior written consent. Thereafter, as soon as practicable, but in no event later than one hundred eighty (180) Days after the end of each fiscal year of Contractor, Contractor shall provide Owner with the most recent annual "general fact statement" of Contractor and Contractor Guarantor, together with (a) a cover letter from Contractor and Contractor Guarantor's external auditor confirming that (i) such general fact statement is a true and accurate extract from the Contractor Guarantor's audited financial statements for the previous fiscal year, and (ii) that the financial statements from which such general fact statement were taken were prepared in accordance with U.S. GAAP consistently applied, and (b) a letter from Contractor Guarantor's controller representing and warranting that there has not been a Material Adverse Change to the financial condition of the Contractor or Contractor Guarantor in the prior fiscal year. The information made available for Owner's review and/or provided to Owner under this Section 17.3 shall be considered Contractor's Confidential Information (provided however, Owner shall not disclosure such information without Contractor's prior written consent). If at any time during the term of this

Agreement, a Material Adverse Change of the Contractor Guarantor occurs and Owner requests that Contractor provide additional financial assurance, then Contractor shall immediately, at its option, provide additional security to Owner by doing any of the following: (1) providing a guarantee to Owner for the benefit of Owner that is in the form as set forth in Appendix Y (other than for conforming changes) from an Affiliate of Contractor (and from no other Person) that directly or indirectly wholly owns the equity interests of the Contractor, is domiciled in the U.S. and that meets the “**Contractor Guarantor Minimum Net Worth**” of [***]; (2) restoring the Contractor’s Guarantor’s net worth to at least equal Contractor Guarantor Minimum Net Worth; or (3) delivering to Owner an additional Letter of Credit that is in the form of Appendix X (other than for conforming changes, including consistent with the draw conditions set forth below) in an amount equal to the difference between the Contractor Guarantor Minimum Net Worth and the then-current net worth of Guarantor (the “**Contractor Guarantor Letter of Credit**”). Owner shall only be able to draw upon the Contractor Guarantor Letter of Credit in the event (a) in full, if the letter of credit will expire within thirty (30) Days and has not been extended; (b) in full, if there has been a Contractor Event of Default in accordance with Section 19.3.1(k); and (c) in full or in part, up to the amount of Contractor Guarantor’s liability to Owner, if a judgment has been rendered against the Contractor Guarantor and Owner has fully drawn, or concurrently fully draws, the Letter of Credit. Such Contractor Guarantor Letter of Credit (or proceeds from a draw thereon pursuant to subclause (a) above in this Section 17.3 that have not otherwise been applied against Contractor Guarantor’s liability to Owner or the Common Facilities Owner) shall be returned to Contractor once there is no longer a Material Adverse Change of Contractor Guarantor (specifically, a Contractor Guarantee provided by a Contractor Guarantor that meets the Contractor Guarantor Minimum Net Worth is provided). For the purposes of this Section 17.3, a “**Material Adverse Change**” means (i) adverse changes, events or effects that have occurred, which could reasonably be likely to materially adversely affect the business, operations, properties, condition (financial or otherwise), net worth, assets or liabilities of Contractor Guarantor, such that Contractor Guarantor no longer has adequate liquidity, nor access to additional liquidity, in order to perform its obligations under the Contractor Guarantee should Owner make a claim thereunder due to the occurrence of a Contractor Event of Default; or (ii) the net worth of Contractor Guarantor falls below the Contractor Guarantor Minimum Net Worth. For purposes of clarity, notwithstanding the foregoing provisions, [***].

ARTICLE 18

FORCE MAJEURE AND EXCUSABLE DELAY

18.1 Effect of Force Majeure or Excusable Event.

18.1.1 Event of Force Majeure Not a Default. Any delays in or failure of performance by the affected Party, other than the obligation to pay monies or post security hereunder, shall not constitute a default (or an Event of Default) hereunder if and to the extent such delays or failures of performance are demonstrably caused by Force Majeure events.

18.1.2 Relief for Force Majeure and Excusable Event.

(a) Remedies. Subject to Section 18.1.3 and Section 18.1.4, Contractor's sole remedy for the occurrence of a Force Majeure event or an Excusable Event affecting Contractor, including delays in the commencement, prosecution or completion of the Work, shall be:

(i) an extension to the applicable Guaranteed Substantial Completion Dates and changes to the Key Date Schedule if and to the extent Contractor is actually and demonstrably delayed in the performance of Critical Path Items as a result of such Force Majeure event or Excusable Event, such that, based on the CPM Schedule and using critical path analysis, Contractor will fail to achieve Substantial Completion by the then-current Target Substantial Completion Date; provided, that the Guaranteed Substantial Completion Date shall only be adjusted on a day-for-day basis as such demonstrated delay to the Target Substantial Completion Date; provided, further, that such adjustment shall be limited by the following: (1) to the extent that Contractor has failed to comply with the mitigation requirements in Section 18.2.4; (2) in the case of (A) any change to Import Laws with respect to the importation into the United States or other procurement of Equipment from the country of Turkey or (B) any change to the Applicable Laws of the country of Turkey, extensions to applicable Guaranteed Substantial Completion Dates and changes to the Key Day Schedule shall be limited to the extent Contractor has failed to comply with the Contractor Mitigation Plan and, such failure directly resulted in the schedule impact for which relief from the change to Import Laws or Applicable Laws in (A) and (B), respectively, is sought; or (C) any event which would otherwise qualify as a Force Majeure Event if such event occurs in, or affects a Supplier located in, the country of Turkey, then in each such case, to the extent that Contractor has failed to comply with the Contractor Mitigation Plan (and Contractor shall in no event be entitled to any such extension or changes to the extent Contractor's failure to comply causes delays which would reasonably not be expected to have occurred had Contractor complied with the Contractor Mitigation Plan); and (3) in the case of a Force Majeure event, to the extent that Contractor has failed to comply with its obligations with respect to hurricane preparedness and other emergency responses, as applicable, as described in the Plans (and Contractor shall in no event be entitled to any such extension or changes to the extent Contractor's failure to comply causes delays which would reasonably not be expected to have occurred had Contractor complied with the Plans);

(ii) if Contractor's reasonable costs to perform the Work as a result of an event of Force Majeure or an Excusable Event actually and demonstrably increase despite Contractor's commercially reasonable efforts to mitigate any such increases in accordance with Section 18.2.4, then, subject to Sections 18.1.2(a)(iii), 18.1.2(a)(iv) and 18.1.2(a)(v) the Contract Price shall be adjusted by the sum of: (A) the increase in the actual costs (without contingency, overhead, margin, fees or profit, [***]) incurred by Contractor because of such event of Force Majeure or Excusable Event in accordance with Section 8.4.1(b); less (B) any savings or costs not incurred because of such event of Force Majeure or Excusable Event; less (C) costs incurred due to the failure to take the remedial actions required pursuant to Section 18.2.4.

(iii) with respect to an event of Force Majeure, Contractor shall not be entitled to or receive any adjustment to the Contract Price for costs incurred due to delay caused by the event of Force Majeure unless the delay in the Work resulting from such event of Force Majeure, alone or in conjunction with other events of Force Majeure that have previously occurred, continues for a period of at least [***] Days; once delays in the Work resulting from events of Force Majeure exceed [***] Days of delay, Contractor may include costs incurred due to delay caused by the event of Force Majeure on Change Orders requested under Section 8.3.1, subject to the following Sections 18.1.2(a)(iii)(A) and 18.1.2(a)(iii)(B);

(A) Owner's total liability under this Agreement for any Contract Price adjustments or payment of costs for all events of Force Majeure occurring during the term of this Agreement (other than with respect to Contract Price adjustments solely for the costs of repairing or replacing damaged or destroyed Work arising from an Excepted Risk) shall not exceed [***] in the aggregate, except:

(1) in the case of costs to repair or replace damaged or destroyed Work arising from an Excepted Risk, for which such [***] cap shall not apply; and

(2) if both of the following are satisfied: (I) delays in the Work resulting from events of Force Majeure have exceeded [***] Days; and (II) Contract Price adjustments or Owner's payment of costs resulting from Force Majeure events have reached [***], then once further delays in the Work resulting from Named Windstorms or other Excepted Risks (alone or in conjunction with other Excepted Risks that have previously occurred after the [***] Day period described in Section 18.1.2(a)(iii)) exceed [***] Days, Contractor shall have the right to an adjustment to the Contract Price equal to [***] of delay costs related to any such further delays in the Work incurred beginning on Day [***] and thereafter;

(B) notwithstanding anything to the contrary in this Agreement, if the construction all risk property insurance obtained by Contractor pursuant to Article 16 and Appendix MM allows for recovery of any costs for delay caused by an event of Force Majeure, Contractor shall first seek recovery of such costs under such insurance and shall not be entitled to include such costs on any Change Order request made hereunder unless and until such costs are not recoverable under such insurance;

(iv) adjustments to the Contract Price in the case of (A) any change to Import Laws with respect to the importation into the United States or other procurement of Equipment from the country of Turkey or (B) any change to the Applicable Laws of the country of Turkey, adjustment to the Contract Price shall be limited to the extent Contractor has failed to comply with the Contractor Mitigation Plan and such failure directly resulted in the cost impact for which relief from the change to Import Laws or Applicable Laws in (A) and (B), respectively, is sought; or (C) any event which would otherwise qualify as a Force Majeure Event if such event occurs in, or affects a Supplier located in, the country of Turkey, shall be limited in each such case if Contractor has failed to comply with the Contractor Mitigation Plan such that Contractor shall not receive an adjustment to the Contract Price to the extent that Contractor has failed to comply with the Contractor Mitigation Plan; and

(v) if an Excusable Event consisting of a Change in Law occurs, then the provisions of Section 8.4.1(c) shall also apply.

(b) Requirement for Change Order. Any adjustment to any of the Guaranteed Substantial Completion Dates, the Key Date Schedule or the Contract Price (with corresponding adjustments to the Milestones and the Payment Schedule) made in accordance with Section 18.1.2(a) shall be recorded in a Change Order.

18.1.3 Concurrent Delay. Notwithstanding the provisions of Article 8 or this Article 18, to the extent that Contractor would otherwise be entitled to an extension of the Key Date Schedule and the Guaranteed Substantial Completion Date for either or both Stage I and Stage II under Section 18.1.2 due to the occurrence of a Claim Submission Event, but the performance of the Work was or would have been suspended, delayed or interrupted by any cause event, condition or circumstance which does not constitute a Claim Submission Event, [***].

18.1.4 Other Limitations. Notwithstanding anything to the contrary herein, the Parties understand and agree that regardless of how, if at all, Contractor compensates its Suppliers with respect to the occurrence of an event of Force Majeure or Excusable Event (whether by direct cost, extension of schedule, or otherwise), Contractor's sole remedies and rights hereunder for adjustments to the Key Date Schedule or the Guaranteed Substantial Completion Dates, or for changes to the Contract Price, shall only be as set forth in this Section 18.1. Contractor acknowledges and agrees that Contractor bears the risk that any adjustments to the price or schedule that Contractor grants any of its Suppliers as a result of the occurrence of an event of Force Majeure or Excusable Event, if any, shall be different than the adjustments made pursuant to any Change Order that the Parties agree to pursuant to this Section 18.1. Line items on any Supply Contract change order which purport to set forth an adjustment as a result of an event of Force Majeure or Excusable Event shall not be deemed conclusive evidence that the event of Force Majeure or Excusable Event actually caused such delay or increase in cost.

18.1.5 Owner Relief. Owner's obligations under this Agreement shall be suspended to the extent that performance of such obligations is prevented by Force Majeure.

18.1.6 Payment Obligations. Notwithstanding Section 18.1.5, no obligation of a Party to pay moneys under or pursuant to this Agreement shall be suspended or excused by reason of Force Majeure.

18.2 Notice of Occurrence and Contractor Notice Regarding Impact.

18.2.1 Notice of Occurrence. Any Party claiming that a Claim Submission Event has occurred that is reasonably anticipated to affect such Party's ability to perform its obligations hereunder shall, within [***] Business Days after such Party becomes aware or reasonably should have become aware of the event of Claim Submission Event, give notice to the other Party of the occurrence of such event. Failure to provide such notice within such [***] Business Day period shall reduce such Party's claim for which such notice was required if such Party

acted in bad faith in not submitting such notice or the other Party is prejudiced as a result of not getting such notice within such period.

18.2.2 Notice of Impact. In addition to its obligations under Section 18.2.1, if Contractor claims there is a Claim Submission Event, Contractor shall: (a) within thirty (30) Business Days after it becomes aware or reasonably should have become aware of such condition, notify Owner in writing of the nature and cause of such event, its anticipated duration and effect upon the performance of such Party's obligations, and the estimated cost (if eligible) of such Claim Submission Event, and state any action being taken to avoid or minimize its effect; (b) state whether and to what extent the condition is reasonably expected to delay the Substantial Completion Date for a Stage or any other Key Date Items as set forth on the Key Date Schedule; and (c) state whether Contractor requests a Change Order pursuant to Article 8 with respect thereto (an "**Impact Notice**"). Failure to provide an Impact Notice within such [***] Business Day period shall reduce Contractor's claim for which such notice was required if Contractor acted in bad faith in not submitting such Impact Notice or Owner is prejudiced as a result of not getting the Impact Notice within such period. The Party claiming that a Claim Submission Event occurred shall have a continuing obligation to deliver to the other Party additional documentation or analysis supporting its claim regarding the occurrence of such Claim Submission Event promptly after such information is available to the Party claiming such Claim Submission Event. The burden of proof shall be on the Party claiming to be affected by such Claim Submission Event (which burden of proof also extends to all of claiming Party's claims for relief hereunder). All costs incurred by a Party to document the existence of the Claim Submission Event, including such costs necessary to document the impact (whether cost or schedule related) of such events, shall be borne exclusively by the Party which makes such claim and shall not be subject to reimbursement hereunder.

18.2.3 Claim Submission. By the applicable Claim Submission Deadline, the Party that was affected by such Claim Submission Event shall give written notice to the other Party of (in accordance with the provisions of Section 8.9): (a) all Claims hereunder for relief as a result thereof; (b) the length of time such Claim Submission Event was in effect; (c) the effect such Party claims the Claim Submission Event had on the Contract Price (if eligible), as applicable; and (d) the effect such Party claims such Claim Submission Event had on the Guaranteed Substantial Completion Dates and the other Key Date Items (if eligible). If Contractor submits a preliminary Claim by the initial Claim Submission Deadline and the Claim Submission Deadline is extended, Owner shall be under no obligation to review or respond to the preliminary Claim and the Owner Change Order Review Period shall not commence until the final Claim has been submitted. Because a delay in issuing its claim beyond the Claim Submission Deadline will prejudice Owner's ability to reasonably verify whether the cost or schedule extension claimed by Contractor were actually and demonstrably incurred by Contractor as a result of such Claim Submission Event, Contractor and Owner have agreed that a failure to deliver such notice (with such Claim, if any) by the Claim Submission Deadline is a reasonable and enforceable basis to deny relief hereunder as a result of the occurrence of such event (whether the claim for such relief is Contract Price related, Project Schedule related, or both). Oral notice, shortness of time or Owner's actual knowledge of a particular circumstance

shall not waiver, satisfy, discharge or otherwise excuse Contractor's compliance with the requirements of this Section 18.2.

18.2.4 Scope of Suspension; Duty to Mitigate. The Party affected by an event of Claim Submission Event shall act diligently to overcome, remove or mitigate the effects of the event of Claim Submission Event, including mitigating the duration, costs and impacts arising from such Claim Submission Event. Among other things, the Party affected by such event of Claim Submission Event shall, as reasonably practicable under the given circumstances, adopt measures in anticipation of the occurrence of a Claim Submission Event in an effort to mitigate potential damage.

18.2.5 [***].

18.2.6 No Claims if Limited or Full Notice to Proceed Not Issued. Notwithstanding [***], or the provisions of Section 18.2.5, in no event will Contractor be entitled to any relief hereunder for any Claim Submission Event, or any other act or omission for which Contractor would otherwise be entitled to a Change Order hereunder, which occurs prior to the earlier to occur of the Bridging LNTP Date, the Non-Bridging LNTP Date or the FNTP Date, if this Agreement is terminated for any reason prior to such date.

18.3 Suspension and Evacuation Due to Named Windstorms. Where a Force Majeure event consisting of a Named Windstorm poses a substantial degree of risk to the Site, Contractor shall be entitled to suspend the Work occurring at the Site, and evacuate its and its Subcontractors' staff and labor from the Site to the extent that Contractor, after direct consultation with Owner, reasonably considers to be necessary as a result of such actual or threatened event. Upon the passing of the Force Majeure event consisting of a Named Windstorm, Contractor shall resume Work at the Site and cause its and its Subcontractors' applicable staff and labor to return to the Site. Contractor shall be entitled to a Change Order in respect of any such evacuation from the Site in accordance with the agreed evacuation plan. Such Change Order shall (a) include the reasonable costs necessarily incurred by Contractor as a result of the suspension and evacuation to the extent directly incurred: (i) in preparing the Work on the Site to safely weather such Named Windstorm; (ii) as a result of demobilization of Contractor's personnel and Construction Equipment from the Site, to a safe location prior to the Named Windstorm; or (iii) as a result of remobilization of Contractor's personnel and applicable Construction Equipment from the off-Site to the Site after the Named Windstorm; and (b) adjustments to the Guaranteed Substantial Completion Dates and the other Key Date Items as determined in accordance with Section 8.4.1(a).

18.4 Labor Impacts. Where a Named Windstorm that impacts the Port Arthur region results in a shortage or unavailability of craft or labor to perform the Work, despite Contractor's attempts to mitigate the impacts of such Force Majeure event on the Work in accordance with Section 18.2.4, Contractor shall consult with Owner as to the actions that Contractor will take to overcome such shortage or unavailability, including short-term incentives, accommodations, per diems and other actions reasonably designed to overcome such shortage or unavailability. Contractor may request a Change Order in accordance with Section 8.3.1(h) with respect to the cost of any such actions to overcome such shortage or unavailability of craft or labor to perform

the Work taken by Contractor that have been agreed in writing by Owner; provided, that any Change Order requested by Contractor in connection with the foregoing shall only provide for payment of costs incurred by Contractor to overcome such unavailability of craft or labor delays (or an adjustment to the Contract Price), and Owner shall have the right hereunder to accept or reject such Change Order in its sole and absolute discretion. If Owner accepts such Change Order, then Contractor shall not have any right under this Agreement to any extension to the Guaranteed Substantial Completion Dates and the other Key Date Schedule as a result of any shortage or unavailability of craft or labor as a result of such Named Windstorm, except to the extent agreed in such Change Order. If Owner exercises its rights to reject such Change Order request, then, if such shortage or unavailability of craft or labor delays Contractor in the performance of Critical Path Items such that, based on the CPM Schedule and using critical path analysis, Contractor will fail to achieve Substantial Completion by the Target Substantial Completion Date, then, subject to Contractor's compliance with its duty to mitigate in accordance with Section 18.2.4 and Contractor's having implemented and followed the actions agreed with Owner pursuant to this Section 18.4, Contractor may, as its sole and exclusive remedy hereunder resulting from such shortage or unavailability of craft or labor caused by such Named Windstorm, request a Change Order in accordance with Section 8.3.1(h) with respect to adjustments to the Guaranteed Substantial Completion Dates and the other Key Date Items as determined in accordance with Section 8.4.1(a), but Contractor shall not otherwise be entitled to any adjustment to the Contract Price as a result of such shortage or unavailability. Contractor shall include all Change Order claims allowed pursuant to this Section 18.4 by the Claim Submission Deadline with respect to the Named Windstorm.

ARTICLE 19

TERMINATION AND SUSPENSION

19.1 Owner's Termination for Convenience. Owner shall have the right to terminate this Agreement or Contractor's performance of all of the Work without any cause and providing any reason, by providing Contractor with a written notice of termination, to be effective upon receipt by Contractor.

19.1.1 Payment for Termination for Convenience.

(a) Upon any termination for convenience by Owner pursuant to this Section 19.1, Contractor shall, subject to the remaining provisions of this Section 19.1.1, be paid the sum of: (i) with respect to Work for which Contractor is to be paid based on the completion of Milestones, the reasonable value of the Work performed prior to termination as determined in accordance with Section 19.1.1(d), but in no event more than the Milestone Payment Amount for the Milestone to which such Work relates; plus (ii) with respect to Work for which Contractor is to be paid based on progress or on a time and materials basis, the reasonable value of the Work performed prior to termination determined in accordance with Section 6.2.4 and the Payment Schedule, or in accordance with Section 6.3.4 and Appendix KK, as applicable; plus (iii) costs incurred to perform Work for which a Change Order is pending that is not disputed by Owner at the time of termination, to the extent such costs are actually incurred prior to the date of termination; (iv) reasonable demobilization costs incurred by Contractor, submitted in

accordance with this Section 19.1.1; plus (v) reasonable and prudent cancellation fees or charges under any Supply Contracts (not including any Supply Contracts with Affiliates) imposing a contractual obligation on Contractor with respect to such cancellation costs, that are not assigned to Owner pursuant to Section 19.7; less (vi) that portion of the Contract Price previously paid to Contractor.

(b) If, at the date of such termination, Contractor has purchased, prepared or fabricated any Equipment or other component of the LNG Facility off the Site for subsequent incorporation into the LNG Facility, and: (i) Contractor delivers such Equipment, portion of Equipment or such component to the Site as directed by Owner, or to such other place as Owner shall reasonably direct; (ii) title to such Equipment, portion of Equipment or such component is transferred to Owner or the Common Facilities Owner, as applicable, free and clear of all Liens, charges or encumbrances; and (iii) the Supply Contract for the procurement of such Equipment is assigned to Owner or the Common Facilities Owner, as applicable, the Equipment and such component of the LNG Facility shall be included in the Work for which Contractor shall be paid.

(c) Contractor shall submit all of its close-out and demobilization costs, including any cancellation fees or charges that it has submitted to Owner for payment, to Owner for verification and audit within [***] Days following the effective date of termination.

(d) With respect to payments made for reaching Milestones, the Parties recognize and agree that the amount and timing of the Milestone Payments have been determined in part to provide a mutually agreeable cash flow to Contractor and do not necessarily represent the value of the Work performed under the Milestones. As such, in the event of a termination for convenience, Contractor shall not be entitled to the full compensation for such Milestones performed but instead shall be entitled to the reasonable value of the Work actually performed without Defects. Contractor shall provide Owner with full documentation to support any claim for payment pursuant to this Section 19.1.1.

(e) In no event shall: (i) Contractor be entitled to receive payment for Work performed to repair or replace loss or damage to the Work if Contractor has received proceeds from insurance policies obtained under Article 16 in connection with such loss or damage; (ii) Contractor be entitled to receive any amount for overhead, contingency or risk on Work not performed, or anticipatory profit; or (iii) the amount to be paid to Contractor pursuant to this Section 19.1.1, together with all other amounts previously paid to Contractor under this Agreement, exceed the Contract Price.

(f) Notwithstanding anything to the contrary herein, if this Agreement is terminated prior to the FNTP Date but after issuance of one or more Limited Notices to Proceed, the maximum amount paid to Contractor under this Section 19.1.1 shall not exceed the aggregate amount of the Maximum LNTP Payment Amounts as set forth in such Limited Notices to Proceed.

19.1.2 SOLE AND EXCLUSIVE REMEDY. NOTWITHSTANDING ANYTHING TO THE CONTRARY IN THIS AGREEMENT, IN THE CASE OF A

TERMINATION OF THIS AGREEMENT PURSUANT TO WHICH THIS SECTION 19.1 SHALL OR WILL APPLY PURSUANT TO THE TERMS OF THIS AGREEMENT, CONTRACTOR'S SOLE AND EXCLUSIVE REMEDIES, WHETHER IN TORT, CONTRACT OR OTHERWISE AGAINST OWNER OR THE COMMON FACILITIES OWNER, AS APPLICABLE, SHALL BE STRICTLY LIMITED TO THE RIGHT TO PAYMENT IN ACCORDANCE WITH THIS SECTION 19.1. NOTHING IN THIS SECTION 19.1.2 SHALL PRECLUDE CONTRACTOR FROM PURSUING DISPUTES UNDER ARTICLE 20 FOR DISPUTED CHANGE ORDERS PENDING AT THE TIME OF TERMINATION.

19.2 Owner Suspension for Convenience. Owner may, for any reason and in its sole and absolute discretion, at any time and from time to time, by written notice to Contractor, suspend the carrying out the Work or any part thereof, whereupon Contractor shall suspend the carrying out of such suspended Work for such time or times and in such manner as Owner may require, and shall take reasonable steps to minimize any costs associated with such suspension and shall take such further actions as are described in Section 19.6. Upon Owner's notice of termination of such suspension, Contractor shall promptly recommence the Work under the same terms and conditions and, to the extent possible, with the same materials, Equipment, Construction Equipment, labor and other resources that were employed prior to the suspension.

19.3 Default by Contractor.

19.3.1 Contractor Events of Default. Each of the following shall constitute a "**Contractor Event of Default**":

(a) Contractor shall fail to pay or cause to be paid when due any amount payable by Contractor to Owner in accordance with the terms and conditions of this Agreement, and such failure continues and is not cured within [***] Business Days after written notice from Owner regarding such failure;

(b) Contractor shall fail to provide or maintain in effect a Letter of Credit required to be provided by Contractor after Contractor has initially provided such Letter of Credit, or Contractor shall fail to provide additional assurances in accordance with Section 17.3, and such failure continues and is not cured within [***] Business Days after written notice from Owner regarding such failure;

(c) Contractor shall fail to provide or maintain in effect the Contractor Guarantee required to be provided by Contractor, or Contractor Guarantor breaches, defaults or fails to comply with any material covenant or material obligation of Contractor Guarantor under the Contractor Guarantee, and such failure, breach, failure to comply or event of default continues and is not cured within [***] Business Days after written notice from Owner regarding such failure, which cure in the case of a breach, default or failure to comply by Contractor Guarantor may include Contractor's delivery of a replacement Contractor Guarantee that cures such failure, breach or event of default from a Person acceptable to Owner in Owner's sole discretion; provided, however, that if such replacement Contractor Guarantor satisfies the

requirements of Section 17.3, Owner's acceptance of such Person shall not be unreasonably withheld;

(d) Contractor's Abandonment of the Work;

(e) Contractor shall fail to perform any material covenant or material obligation hereunder not otherwise addressed in this Section 19.3.1, and Contractor shall fail to commence the cure of such failure within [***] Days after receipt of notice from Owner identifying such failure, or if, having commenced the cure within such period, Contractor shall fail (i) to diligently pursue such cure in a manner in compliance with this Agreement; (ii) to cure such failure within [***] Days after Contractor's receipt of such notice, or such longer period of time as Contractor and Owner agree is reasonably necessary to complete such cure; or (iii) provided that Contractor has ordered the Equipment necessary to effectuate such cure within [***] Days of receipt of Owner's notice of Contractor's failure to perform such material covenant or obligation, if it is not reasonably possible to cure such failure to perform within such [***] Day period due to extended delivery times of Equipment necessary to effectuate such cure, then Contractor shall be afforded an extended cure period (reflecting the delivery time for such Equipment and a reasonable period of time for installation) to enable Contractor to cure such failure while at all times exercising all practicable diligence and expediting the delivery of the long lead Equipment;

(f) Contractor shall fail to provide or maintain the insurance coverage as required under this Agreement, and such failure continues and is not cured within [***] Business Days after written notice from Owner regarding such failure;

(g) subject to Owner having paid undisputed amounts owed to Contractor in accordance with this Agreement, Contractor shall fail to discharge or bond Liens filed by any Subcontractor as required under this Agreement;

(h) subject to Owner having paid undisputed amounts owed to Contractor in accordance with this Agreement, Contractor shall fail to make undisputed payments to Subcontractors for labor or materials owed in accordance with the respective Subcontracts, and such failure continues and is not cured within [***] Business Days after written notice from Owner regarding such failure;

(i) any representation or warranty under Article 13 made by Contractor hereunder shall prove to be incorrect (and, with respect to those contained in Section 13.1.5, shall have been incorrect as of the Effective Date), such failure continues and is not cured within [***] Days after written notice from Owner regarding such failure, and such failure has a material adverse effect upon the Liquefaction Project or Contractor's ability to perform its obligations under this Agreement;

(j) Contractor shall: (i) generally not, or shall be unable to, or shall declare in writing its inability to, pay its debts as such debts become due and such failure is not cured by Contractor within [***] Business Days; (ii) file or have filed against it a petition in

bankruptcy; or (iii) have a trustee or receiver appointed with respect to all or a portion of its properties or affairs;

(k) the Contractor Guarantor shall: (i) generally not, or shall be unable to, or shall declare in writing its inability to, pay its debts as such debts become due; (ii) file or have filed against it a petition in bankruptcy; or (iii) have a trustee or receiver appointed with respect to all or a portion of its properties or affairs, and such failure continues and is not cured by Contractor within ten (10) Business Days, which cure may include Contractor's delivery of a replacement Contractor Guarantee from a Person acceptable to Owner in Owner's sole discretion;

(l) Contractor incurs Delay Liquidated Damages equal to the Delay LD Cap, without regard to whether such Liquidated Damages have actually been paid;

(m) (i) Contractor fails to propose a reasonable Recovery Plan in accordance with Section 4.4.2 (without regard as to whether or not Owner has approved the proposed Recovery Plan, but without limiting Owner's right to challenge the reasonableness of such plan); or (ii) Contractor provides a Recovery Plan but fails to materially comply with that Recovery Plan, and in either case such failure continues and is not cured within [***] Business Days after written notice from Owner regarding such failure;

(n) if at any time prior to the Guaranteed Substantial Completion Date for a Stage, Contractor's performance of the Work is delayed such that such Stage is not projected to achieve Substantial Completion until after the Guaranteed Substantial Completion Date for such Stage to such an extent that the Delay LD Cap for such Stage would be met, and either: [***].

(o) Contractor is required pursuant to Section 17.3 to provide either an alternative parent company guarantee or an additional letter of credit to Owner as set forth in Section 17.3, and Contractor fails to provide such parent company guarantee or additional letter of credit within [***] Business Days following Owner's request for such assurance.

Contractor's attempt to cure any failures as described in any of the foregoing shall not restrict or prohibit Owner from exercising its rights under Section 19.3.2 with respect to any other Contractor Event of Default that may occur during such cure period.

19.3.2 Owner's Remedies.

(a) Upon the occurrence of a Contractor Event of Default, Owner may, at its option, undertake any one (1) or more of the following:

(i) cure the same and recover from Contractor or offset against amounts otherwise owing to Contractor or draw from the Letter of Credit the reasonable and substantiated amounts expended by Owner in effecting the cure;

(ii) suspend performance of Contractor's obligations hereunder;

(iii) terminate this Agreement; provided, however, that in the case of a Contractor Event of Default as described in Section 19.3.1(n) with respect to a Stage, Owner may only terminate this Agreement prior to the Guaranteed Substantial Completion Date for such Stage; or

(iv) subject to the provisions of Sections 4.3.2(d), 5.2.2(c) and 19.3.1(n), Article 15, Article 20 and Article 21, including the exclusions, apportionment and limitations of liability and the Parties' mutual waiver of any right of equitable rescission therein, exercise any other rights available to Owner at law or in equity.

(b) In addition, Owner shall be entitled to suspend performance of Contractor's obligations hereunder immediately upon written notice to Contractor (without waiting for the expiration of the cure periods specified in this Section 19.3.2) for such period and to such extent as may be reasonable in the circumstances in a case where the Contractor Event of Default gives rise to an emergency with respect to the safety of Persons or property, including the Work. All remedies for a Contractor Event of Default shall be cumulative and the exercise of one (1) shall not preclude the exercise of another.

19.3.3 Additional Owner Rights Upon Termination for Contractor Event of Default.

(a) If Owner terminates this Agreement for a Contractor Event of Default, then Owner may in its sole and absolute discretion: (i) enter onto the Site and take possession of all equipment, tools, supplies, scaffolding and machinery rented by Contractor for purposes of completing the Work (but not including any equipment, tools, supplies, scaffolding and machinery owned by Contractor or its Affiliates), and all Equipment and Work Product; (ii) take assignment of any or all of the Supply Contracts (excluding Affiliates of Contractor but including CIMTAS and any other Affiliate of Contractor that is no longer wholly directly or indirectly owned by Contractor, the Contractor Guarantor or any Person that directly or indirectly owns the equity interests of Contractor Guarantor); and (iii) complete the Work either itself or through others.

(b) Upon termination of this Agreement by Owner for a Contractor Event of Default, Contractor shall not be entitled to any further payments of the Contract Price except for Work previously performed and such other amounts as calculated using the principles in Section 19.1.1, less that portion of the Contract Price previously paid to Contractor (and subject to Owner's right to withhold payments under this Agreement). In no event shall the amount paid to Contractor pursuant to this Section 19.3, together with all other amounts previously paid to Contractor under this Agreement, exceed the Contract Price, nor shall Contractor be entitled to payment of any such amounts until Contractor's liability for damages hereunder has been determined in accordance with Section 19.3.3(c).

(c) In the event of a termination of this Agreement for a Contractor Event of Default pursuant to this Section 19.3.3, the Parties agree that Owner shall be entitled to all damages, losses and actual and reasonable costs and expenses incurred by Owner arising out of or resulting from such Contractor Event of Default, including: (i) any and all Delay Liquidated Damages that have accrued in accordance with Section 4.3.1 prior to the date of termination, subject to the termination date having occurred after the Guaranteed Substantial Completion Date of a Stage; and (ii) Owner's actual and reasonable costs (at fully burdened rates for internal personnel costs) of replacing Contractor and mobilizing one (1) or more other contractors in order to complete the Work above the remaining unpaid portion of the Contract Price, including: (A) all actual and reasonable costs of preparing requests for proposals, soliciting and negotiating with contractors; (B) all actual and reasonable costs for the replacement contractors to mobilize, review and understand the LNG Facility, the Liquefaction Project and related documents, and meet with the Liquefaction Project participants in order to get to substantially the same position as Contractor was at the point of termination; and (C) all actual and reasonable costs for the replacement contractors to complete the Work as soon as reasonably practicable and to warrant all Work otherwise completed by Contractor. Upon determination of the total cost of the Work, Owner shall notify Contractor in writing of the amount, if any, that Contractor shall pay Owner or Owner shall pay Contractor. Contractor acknowledges that in the event of such a termination, Owner may enter into a fixed price contract for the completion of the LNG Facility and that the cost to complete the LNG Facility in such event may greatly exceed the cost hereunder.

(d) IF IT IS DETERMINED FOR ANY REASON THAT A CONTRACTOR EVENT OF DEFAULT HAD NOT OCCURRED OR THAT OWNER WAS NOT ENTITLED TO TERMINATE THIS AGREEMENT PURSUANT TO THIS SECTION 19.3, SUCH TERMINATION WILL BE DEEMED TO BE A TERMINATION FOR CONVENIENCE PURSUANT TO SECTION 19.1 AND CONTRACTOR'S SOLE AND EXCLUSIVE REMEDIES WHETHER IN TORT, CONTRACT OR OTHERWISE AGAINST OWNER OR THE COMMON FACILITIES OWNER, AS APPLICABLE, SHALL BE STRICTLY LIMITED TO THE RIGHT TO PAYMENT AS PROVIDED IN SECTION 19.1.1.

19.4 Default by Owner.

19.4.1 Owner Events of Default. Each of the following shall constitute an "**Owner Event of Default**":

(a) Owner shall fail to pay or cause to be paid any amount payable by Owner to Contractor when due in accordance with the terms and conditions of this Agreement, except for any sum that (i) Owner has Disputed in accordance with Section 6.4; or (ii) Owner has the right to withhold or offset payment thereof under Section 6.5, and such failure shall continue and is not cured within ten (10) Business Days after written notice from Contractor regarding such failure;

(b) any representation or warranty made by Owner hereunder shall prove to be false or incorrect, such failure shall continue and is not cured within [***] Days after written notice from Contractor regarding such failure, and such defect shall have a material adverse effect upon Owner's ability to perform its obligations under this Agreement; or

(c) Owner: (i) shall generally not, or shall be unable to, or shall declare in writing its inability to, pay its debts as such debts become due; or (ii) shall file or have filed against it a petition in bankruptcy; or (iii) shall have a trustee or receiver appointed with respect to all or a portion of its properties or affairs, and such failure shall continue and is not cured within [***] Business Days after written notice from Contractor regarding such failure.

19.4.2 Contractor's Remedies. Upon the occurrence of an Owner Event of Default specified in Section 19.4.1:

(a) Contractor may serve Owner with a notice of intent to suspend the Work (a "**Suspension Notice**") on or after [***] Days after the occurrence of an Owner Event of Default that is continuing as of the date of such Suspension Notice, effective immediately or on such later date as Contractor indicates in the date of the Suspension Notice, and may thereafter suspend the Work; and

(b) on or after [***] Days after the suspension of the Work in accordance with Section 19.4.2(a) and provided that the Owner Event of Default is continuing as of such date, Contractor may serve Owner with a notice of intent to terminate this Agreement (a "**Termination Notice**") effective immediately or within [***] Days thereafter, and if the Owner Event of Default has not cured by the termination date indicated in the Termination Notice, this Agreement shall terminate in accordance with the Termination Notice;

provided, that in either case upon cure of such Owner Event of Default by Owner, the aforementioned rights shall no longer be applicable.

19.4.3 Mitigation. After Contractor shall have suspended the Work under Section 19.4.2, Contractor shall take reasonable steps towards mitigating the costs and expenses it incurs hereunder.

19.4.4 Termination due to Suspension or Force Majeure. If all or a substantial portion of the Work is suspended by Owner pursuant to Section 19.2 for [***] consecutive Days or [***] Days in the aggregate, or is stopped due to one (1) or more Force Majeure events for [***] Days in the aggregate, Contractor may terminate this Agreement upon [***] Days prior written notice to Owner; provided, however, in the case of Force Majeure events, if Owner agrees to pay delay costs in accordance with Section 18.1.2(a)(ii) beginning on Day [***], without applying the [***] Day threshold or the [***] limitation on Owner's liability as set forth in Section 18.1.2(a)(ii), Contractor shall not have the right to terminate this Agreement under this Section in connection with such Force Majeure events.

(a) IF THIS AGREEMENT IS TERMINATED PURSUANT TO SECTION 19.4.2 OR SECTION 19.4.4, CONTRACTOR'S SOLE AND EXCLUSIVE REMEDY SHALL BE PAYMENT OF THE AMOUNTS THAT WOULD BE OWING PURSUANT TO SECTION 19.1.1, AND CONTRACTOR:

(i) AGREES THAT SUCH PAYMENT SHALL BE THE SOLE AND EXCLUSIVE REMEDY OF CONTRACTOR, WHETHER IN TORT, CONTRACT OR OTHERWISE, WITH RESPECT TO THE TERMINATION OF THIS AGREEMENT; AND

(ii) HEREBY WAIVES AND RELEASES (AND SHALL CAUSE THE OTHER MEMBERS OF THE CONTRACTOR GROUP TO WAIVE AND RELEASE) THE OWNER GROUP FROM LIABILITY FOR ANY CLAIMS AND EXPENSES (INCLUDING COURT COSTS, ATTORNEYS' FEES AND DISBURSEMENTS, AND OTHER LITIGATION COSTS) SUFFERED BY ANY CONTRACTOR GROUP MEMBER IN CONNECTION WITH SUCH TERMINATION.

19.5 Cure Rights of Lenders.

19.5.1 Right to Cure. Each Lender shall have the right to cure any Owner Event of Default or other breach of this Agreement, which shall include reasonable rights of access, if requested by such Lender, and the right to receive reasonably requested information, if either is necessary for such Lender to cure such Owner Event of Default or other breach; provided, that such Lender shall not receive any right of access or information beyond that to which Owner is entitled to hereunder.

19.5.2 Notices. If Owner provides Contractor with the identity and contact information of any Lender, Contractor shall provide such Lender with a copy of each notice by Contractor of an Owner Event of Default, Suspension Notice, Termination Notice, notice terminating this Agreement, notice of Force Majeure, Impact Notice and written amendment to or waiver of rights under this Agreement proposed by Contractor to Owner (other than a Change Order) with respect to this Agreement at the same time, and in the same manner, as Contractor furnishes such notice to Owner.

19.6 Contractor General Obligations Upon Suspension. During any suspension of the Work, Contractor shall properly protect and secure such suspended Work in such manner as Owner may reasonably require. Unless otherwise instructed by Owner, Contractor shall during any suspension, subject to Owner making the undisputed payments due to Contractor during such suspension, including pursuant to Change Orders issued under Section 8.3.1 as a result of such suspension, maintain its staff and labor on or near the Site and otherwise be ready to proceed expeditiously with the Work upon receipt of Owner's further instructions; provided, that after a period of thirty (30) Days, Contractor may fully demobilize the Work; provided, further, that, during any suspension of the Work, notwithstanding any demobilization, and until termination of this Agreement, Contractor shall maintain, at a minimum, Site management and security (the cost of which shall be included in the Change Order, if any, issued pursuant to Section 8.3.1(e) or 8.3.1(i), as applicable).

19.7 Contractor General Obligations Upon Termination. Upon termination of this Agreement under this Article 19, Contractor shall, using GECP: (a) discontinue the Work on the date and to the extent specified in the notice of termination; (b) place no further orders under Supply Contracts, or any other items or services except as may be necessary for completion of such portion of the Work as is not discontinued; (c) unless Owner elects to take assignment of a

Supply Contract, promptly make commercially reasonable efforts to cancel the Supply Contracts on terms reasonably satisfactory to Owner; (d) assist Owner in the maintenance, protection, and disposition of Work in progress; (e) cooperate with Owner in the efficient transition of the Work; (f) cooperate with Owner in the transfer of the Work Product, including Drawings and Specifications, Permits, Licenses; and (g) thereafter execute only that portion of the Work as may be necessary to preserve and protect Work already in progress and to protect Equipment at the Site, or in storage off-Site or while in transit, and to comply with any Applicable Laws. Owner may, at its sole option, take assignment of any or all of the Supply Contracts, including Supply Contracts with CIMTAS but excluding other Affiliates of Contractor.

19.8 Termination for Delay in FNTP Date. If the FNTP Date does not occur on or before the date that is [***] Years after the Effective Date and the Parties have not reached agreement as to how to proceed with the Agreement on or before such date, either Party may terminate this Agreement in its sole discretion at any time after such date by providing the other Party with a written notice of termination, to be effective upon receipt by the receiving Party. Notwithstanding anything to the contrary herein, if this Agreement is terminated pursuant to this Section 19.8, except in connection with a Limited Notice to Proceed and subject to Section 19.1.1(f), Contractor shall not have any right to receive any payment hereunder, and Owner shall have no obligation to make any payment to Contractor hereunder, in connection with the termination of this Agreement.

19.9 WAIVER OF CERTAIN RIGHTS. CONTRACTOR waives any right it may have under any Applicable Laws or EQUITABLE PRINCIPLES to suspend performance of the Work or terminate this Agreement, except as expressly authorized by this Article 19.

ARTICLE 20

DISPUTE RESOLUTION

Any disputes, controversies or claims between Owner and Common Facilities Owner on the one hand, and Contractor on the other hand (the “**Disputing Parties**”) arising under or related to this Agreement (a “**Dispute**”), including the construction, validity, enforceability, breach, termination of this Agreement, that is not resolved in the ordinary course by the Parties, shall be resolved in accordance with the procedures established in this Article 20. References to Owner in this Article 20 shall be read and understood to include a reference to Common Facilities Owner. Common Facilities Owner hereby agrees and appoints Owner as its attorney-in-fact to pursue any Claims or Disputes that Common Facilities Owner may have against Contractor hereunder or in connection with this Agreement or the Work.

20.1 Notice of Dispute. Either Disputing Party shall give notice to the other Party in writing that a Dispute has arisen (“**Dispute Notice**”).

20.2 Informal Dispute Resolution.

20.2.1 Executive Officer Negotiation. If the Disputing Parties have failed to resolve the Dispute within [***] Business Days after the Dispute Notice was given, the

Disputing Parties shall seek to resolve the Dispute by negotiation between the executive officers of each Disputing Party. Such executive officers shall endeavor to meet and attempt to amicably resolve the Dispute. If the Disputing Parties are unable to resolve the Dispute for any reason through negotiation within [***] Business Days after the Dispute Notice was given, then the Dispute shall be finally resolved in accordance with the following provisions of this Article 20.

20.2.2 Designated Claims. If (a) the executive officers of each Disputing Party have met and the Disputing Parties are unable to resolve a Dispute or Disputes in accordance with Section 20.2.1 through negotiation within thirty (30) Business Days after the applicable Dispute Notice was given; and (b) such Dispute is a Designated Claim (as defined in Appendix XX), the Disputing Parties shall be entitled to inspect and copy the documents in accordance with Appendix XX to the extent permitted therein.

20.2.3 Early Arbitration. Notwithstanding anything to the contrary in Section 20.2 or Section 20.3, arbitration may be initiated before completion of negotiation or mediation pursuant to Section 20.2 or Section 20.3, if necessary, and only to the extent necessary, to preserve a Party's rights or to avoid irreparable harm pending resolution of the Dispute, but any such proceedings shall be limited to those purposes until the negotiation or mediation is completed or the time for negotiation has expired.

20.3 Mediation.

20.3.1 Initiation of Mediation. If a Dispute is not resolved by the negotiations described in Section 20.2, either Party may initiate mediation; provided, however, that if Owner has exercised its copy and inspection rights under Appendix XX, and subject to Section 20.3.3, such mediation shall not commence until Owner has had a reasonable opportunity to review the Books and Records and other documents produced or required to be produced pursuant to Appendix XX. The Parties shall work together for period of [***] Days to jointly choose a mediator, but if the Parties cannot agree on a mediator, then the mediation and the identification of the mediator shall be initiated by the method prescribed in the AAA Rules in effect at the time the Dispute arises. The mediation shall be attended by representatives of Owner and Contractor that have sufficient authority to resolve the Dispute or have ready access to persons with such authority.

20.3.2 Conduct of Mediation. Unless Owner and Contractor otherwise agree, the mediation shall be administered by the AAA and conducted by an independent mediator and in accordance with the AAA Rules in effect at the time of the Dispute Notice. The mediation shall be conducted in Houston, Texas, and the Parties shall endeavor to conduct the mediation within [***] calendar days after the notice initiating mediation is delivered, unless a different time is agreed to by the Parties or the Parties have not provided all of the documents required under Appendix XX.

20.3.3 Mandatory Mediation. Subject to Section 20.2.3, completion of the negotiations and mediation is a condition precedent to the initiation of arbitration and no Dispute shall be brought either separately or together with other claims or disputes, unless such Dispute first has been the subject of negotiations and mediation; provided, however, that with respect to a

Designated Claim, Owner and Contractor shall each have the right to immediately commence an arbitration pursuant to Section 20.4 with respect to any such claim at any time after the end of the negotiating period in Section 20.2.2.

20.4 Arbitration and Arbitration Procedures. Any Dispute that is not settled pursuant to Section 20.2 or Section 20.3 shall be finally settled by arbitration in accordance with the AAA Rules in effect at the time of the Dispute Notice (except as they may be modified herein or by mutual agreement of the Disputing Parties), as follows:

20.4.1 Location; Arbitration Request. The place of arbitration shall be Houston, Texas, and the language of the arbitration shall be English. The Disputing Party initiating recourse to arbitration shall submit a request for arbitration (“**Request for Arbitration**”) as provided under the AAA Rules. Any questions regarding the enforceability of the arbitration requirements set forth herein, or the arbitration of claims arising out of or relating to the Work or this Agreement shall be resolved by an arbitration tribunal selected in accordance with this Agreement.

20.4.2 Arbitration Tribunal. The arbitration proceeding shall be conducted by a tribunal (the “**Tribunal**”) comprised of three (3) neutral and impartial arbitrators selected in accordance with the process and each having the qualifications set forth in this Section 20.4. Each of the Disputing Parties shall nominate one (1) arbitrator by filing a notice of appointment of such arbitrator with the AAA in accordance with the AAA Rules. If a Party fails to nominate an arbitrator in accordance with this Section 20.4.2, the AAA shall appoint an arbitrator in accordance with this Section 20.4 and the AAA Rules. Within [***] Days after the nomination or appointment of the second arbitrator, the two (2) party-nominated or appointed arbitrators shall nominate the third arbitrator to serve as chairperson of the Tribunal. In the event that the party-nominated or appointed arbitrators are unable to agree on the third arbitrator within the time provided by this Section 20.4.2, any arbitrators or the chairperson of the Tribunal shall, as necessary, be appointed by the AAA in accordance with the AAA Rules.

20.4.3 Qualifications of Arbitrators. Each of the three (3) arbitrators is to be experienced with the engineering and construction industry or disputes on large construction projects. At least two (2) of the arbitrators, including the chairperson, shall be attorneys with at least fifteen (15) years of legal experience relating to the engineering and construction industry, or retired judges with experience in disputes with respect to large construction projects. A non-lawyer arbitrator, if any, shall have at least twenty (20) years of experience in the engineering and construction industry and shall be trained and have served as an arbitrator. All arbitrators shall be fluent in English.

20.4.4 Discovery. Each Disputing Party shall have the right to request the other Disputing Party and any nonparties to produce documents and to request depositions of the other Disputing Party and other Persons. In making any determination regarding the scope of production, including the production of documents and depositions, the arbitration tribunal selected under Section 20.4.2 shall be guided by the Federal Rules of Civil Procedure as applied by the United States District Court for the Southern District of Texas.

20.4.5 Expedited Procedures. In the event that Owner and Contractor do not agree upon whether Mechanical Completion for a Stage, Ready for Start-Up for a Stage, or Substantial Completion of a Stage has been achieved pursuant to Section 9.2.2, 9.4.2 or 9.8, respectively, either Party may initiate an expedited arbitration process pursuant to this Section 20.4.5 by delivering a notice of such expedited arbitration to the other Party. In the case of any such expedited arbitration: (a) the provisions of Section 20.3 shall not be applicable; (b) the thirty (30) Business Day period referred to in Section 20.4.2 shall be reduced to a ten (10) Day period; (c) the Parties shall use good faith efforts to promptly resolve any Disputes regarding discovery; (d) the arbitration hearing shall be commenced as promptly as possible, giving due consideration to the nature and complexity of the Dispute; and (e) the Parties shall request that the arbitration tribunal issue its final award or awards within twenty (20) Days after the conclusion of the arbitration hearings. In no event shall the provisions of this Section 20.4.5 be construed or be deemed to limit or modify Owner's right to conduct audits pursuant to this Agreement.

20.5 Entry of Judgment. The award of the Tribunal shall be final and binding upon the Parties as from the date the Parties are notified of the award by the Tribunal, and shall be the sole and exclusive remedy between the Parties regarding any Disputes, issues or accounting presented to the Tribunal. Judgment upon any award may be entered and enforced in any court having jurisdiction over a Party or any of its assets. To the extent permitted by Applicable Laws, the Parties hereby waive any right to appeal from or challenge any arbitral decision or award, or to oppose enforcement of any such decision or award before a court or any Governmental Authority, except with respect to the limited grounds for modification or non-enforcement provided by any applicable arbitration statute or treaty. For the purpose of the enforcement of an award, the Parties irrevocably and unconditionally submit to the jurisdiction of a competent court in any jurisdiction in which a Party may have assets and waive any defenses to such enforcement based on lack of personal jurisdiction or inconvenient forum.

20.6 Fees and Expenses. Each Party shall bear its own costs, expenses and attorney's fees, including any disbursements and costs of arbitration, associated with the resolution of Disputes in accordance with this Article 20, and shall share equally the costs of mediation and arbitration, as applicable. Notwithstanding anything to the contrary herein or in the AAA Rules, none of the mediators or the arbitrators shall have the authority to allocate the costs or expenses of the Dispute resolution proceedings.

20.7 Joinder; Consolidation. In order to facilitate the comprehensive resolution of related Disputes, all Disputes between the Parties arising under or related to this Agreement and all Disputes between Owner, Contractor and any of Owner's or Contractor's respective Suppliers may be brought in a single arbitration.

20.7.1 Joinder. The Parties to this Agreement are bound, each to each other, by the arbitration provisions in this Agreement. Each Party to this Agreement agrees, and Owner and Contractor, as applicable, shall use commercially reasonable efforts to cause each of Owner's or Contractor's respective Other Contractors and Suppliers that are Affiliates of Contractor or that have entered into a Supply Contract directly with Contractor, to agree to be

joined as an additional party to any arbitration begun under this Agreement or any other agreement related to the LNG Facility between Owner, Contractor or any of Owner's or Contractor's respective Other Contractors and Suppliers, and each Party to this Agreement consents to the joinder of any Other Contractors or Suppliers, in accordance with AAA Rules. Neither Owner nor Contractor shall object to the joinder of any Supplier or Other Contractor that has agreed to be joined as an additional party.

20.7.2 Consolidation. Upon the request of any Party to an arbitration proceeding constituted under this Agreement, the AAA may consolidate such arbitration proceeding with any other arbitration proceeding arising under or related to this Agreement and other agreement related to the LNG Facility between Owner, Operator or Owner's or Contractor's respective Other Contractors and Suppliers, as provided in the AAA Rules. In deciding whether to consolidate, the AAA may take into account any circumstances it considers to be appropriate including whether (a) there are issues of fact or law common to the proceedings so that a consolidated proceeding would be more efficient than separate proceedings; and (b) any Party would be prejudiced by consolidation due to undue delay or otherwise. If the parties to the arbitrations to be consolidated are not the same, then the Parties shall have fifteen (15) Days from receipt of the order of consolidation to nominate a three (3) member tribunal to serve as arbitrators for the consolidated arbitration, and if no such agreement is reached, all three (3) arbitrators shall be appointed by the AAA. The Parties waive any right they may have to appeal or to seek interpretation, revision or annulment of such order of consolidation under the AAA Rules or in any court. The Parties agree that upon such an order of consolidation, they will promptly withdraw their claims and any counterclaims and terminate any arbitration brought under this Article 20, the subject of which has been consolidated into another arbitral proceeding under this Section 20.7.2.

20.8 Confidentiality. Any Dispute Notice pursuant to Section 20.1, informal Dispute resolution pursuant to Section 20.2, mediation pursuant to Section 20.3, or arbitration pursuant to Section 20.4 relating to a Dispute (including a settlement resulting from an arbitral award, documents exchanged or produced during an arbitration proceeding, and memorials, briefs or other documents prepared for the arbitration) shall be confidential and may not be disclosed by the Parties, their employees, officers, directors, counsel, consultants, and expert witnesses, except (a) (in accordance with Article 14) to the extent necessary to enforce this Article 20, including the consolidation of related Disputes as set forth in Section 20.7, or any arbitration award; (b) to enforce other rights of a party to the Dispute; (c) to the Lenders and the Independent Engineer, and their respective employees, officers, directors, counsel and consultants, in accordance with and subject to the provisions of Article 14; or (d) as required by Applicable Laws or the rules of any stock exchange applicable to the Person making such disclosure; provided, however, that breach of this confidentiality provision shall not void any settlement, expert determination or award.

20.9 Continuation of Work During Dispute. Notwithstanding any Dispute, Contractor shall continue to prosecute all of the Work diligently and in a good and workmanlike manner in conformity with this Agreement. Except to the extent provided in Section 19.4, Contractor shall not cease performance of the Work or its obligations hereunder, or permit the performance of the

Work to be delayed. Owner shall, subject to its right to withhold or offset amounts pursuant to this Agreement, continue to pay Contractor amounts not in Dispute in accordance with this Agreement; provided, however, that in no event shall the occurrence of any negotiation or litigation prevent or affect Owner from exercising its rights under this Agreement, including Owner's right to terminate pursuant to Article 19.

ARTICLE 21

LIMITATION ON LIABILITY

21.1 CONTRACTOR OVERALL LIMIT OF LIABILITY. NOTWITHSTANDING ANY OTHER PROVISIONS OF THE AGREEMENT TO THE CONTRARY, EXCEPT AS EXPRESSLY DESCRIBED IN THIS SECTION 21.1, CONTRACTOR SHALL NOT BE LIABLE TO EITHER OR BOTH OWNER AND THE COMMON FACILITIES OWNER UNDER THIS AGREEMENT, OR ANY CAUSE OF ACTION RELATED TO THE SUBJECT MATTER OF THIS AGREEMENT, WHETHER IN CONTRACT, TORT OR OTHERWISE, FOR CUMULATIVE AGGREGATE AMOUNTS IN EXCESS OF THE MAXIMUM LIABILITY CAP, AND, SUBJECT TO THE FOLLOWING PROVISIONS OF THIS SECTION 21.1, OWNER AND THE COMMON FACILITIES OWNER HEREBY RELEASE CONTRACTOR FROM ANY LIABILITY IN EXCESS OF THE MAXIMUM LIABILITY CAP; PROVIDED, THAT, NOTWITHSTANDING THE FOREGOING, BUT IN ANY EVENT SUBJECT TO SECTION 21.2, THE LIMITATION OF LIABILITY SET FORTH IN THIS SECTION 21.1 SHALL NOT APPLY TO: (A) CONTRACTOR'S OBLIGATION TO PERFORM AND COMPLETE THE WORK NECESSARY TO ACHIEVE SUBSTANTIAL COMPLETION FOR EACH STAGE OF THE LNG FACILITY (SUBJECT TO CONTRACTOR'S RIGHT TO PAY PERFORMANCE LIQUIDATED DAMAGES WITH RESPECT TO A GUARANTEED PERFORMANCE LEVEL TO WHICH A MINIMUM PERFORMANCE STANDARD APPLIES IN ACCORDANCE WITH SECTION 9.10); (B) CONTRACTOR'S OBLIGATIONS UNDER ARTICLE 15; AND (C) CONTRACTOR'S OBLIGATION TO DELIVER TO OWNER FULL LEGAL TITLE TO AND OWNERSHIP OF ALL OR ANY PORTION OF THE WORK AND THE LNG FACILITY FREE AND CLEAR OF ANY LIENS OR OTHER ENCUMBRANCE IN ACCORDANCE WITH THIS AGREEMENT; IN ALL CASES EVEN IF THIS AGREEMENT IS TERMINATED FOR A CONTRACTOR EVENT OF DEFAULT. IN NO EVENT SHALL AMOUNTS INCURRED BY CONTRACTOR TO PERFORM THE WORK, INCLUDING TO REPAIR OR REPLACE DEFECTIVE WORK, PRIOR TO SUBSTANTIAL COMPLETION OF A STAGE, OR TO PERFORM ITS OBLIGATIONS HEREUNDER THAT ARE COVERED BY PROCEEDS RECEIVED FROM INSURANCE COVERAGE OBTAINED BY CONTRACTOR PURSUANT TO ARTICLE 16, BE COUNTED AGAINST THE LIMITATION OF LIABILITY SET FORTH IN THIS SECTION 21.1.

21.2 LIMITATION ON CONSEQUENTIAL, PUNITIVE AND OTHER DAMAGES. NOTWITHSTANDING ANY OTHER PROVISIONS OF THIS AGREEMENT TO THE CONTRARY, NEITHER OWNER NOR THE COMMON FACILITIES OWNER, NOR CONTRACTOR, SHALL BE LIABLE TO THE OTHER (OR TO ANY OTHER PERSON

CLAIMING THROUGH THEM OR UNDER THIS AGREEMENT) PURSUANT TO THIS AGREEMENT OR UNDER ANY CAUSE OF ACTION RELATED TO THE SUBJECT MATTER OF THIS AGREEMENT, WHETHER IN CONTRACT, TORT (INCLUDING NEGLIGENCE), STRICT LIABILITY, PRODUCTS LIABILITY, PROFESSIONAL LIABILITY, INDEMNITY, CONTRIBUTION, OR ANY OTHER CAUSE OF ACTION FOR (A) SPECIAL, INDIRECT, INCIDENTAL, PUNITIVE OR CONSEQUENTIAL LOSSES OR DAMAGES; OR (B) LOSS OF PROFITS, LOSS OF USE, LOSS OF PRODUCT, LOSS OF PRODUCTIVITY, LOSS OF OPPORTUNITY, LOSS OF REVENUES, LOSS OR COST OF OBTAINING OR MAINTAINING FINANCING, COST OF CAPITAL, LOSS OF OR REDUCTION IN BONDING CAPACITY, LOSS OF GOODWILL, BUSINESS INTERRUPTION OR CLAIMS BY OWNER'S CUSTOMERS, WHETHER OR NOT ANY OF THE FOREGOING ARE CONSIDERED OR CLASSIFIED AS DIRECT, SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES, AND OWNER, THE COMMON FACILITIES OWNER AND CONTRACTOR ON BEHALF OF THEMSELVES AND ANY OTHER PERSON CLAIMING THROUGH THEM OR UNDER THIS AGREEMENT, HEREBY WAIVE AND RELEASE EACH OTHER FROM ALL SUCH LOSSES AND DAMAGES. THE WAIVER, RELEASE AND LIMITATION OF LIABILITY SET FORTH IN THIS SECTION 21.2 SHALL NOT APPLY TO THE DELAY LIQUIDATED DAMAGES SET OUT IN SECTION 4.3 OR THE PERFORMANCE LIQUIDATED DAMAGES SET OUT IN SECTION 5.2, OR, IF SUCH LIQUIDATED DAMAGES AMOUNTS ARE FOUND TO BE UNENFORCEABLE DUE TO A CHALLENGE BY CONTRACTOR OR CONTRACTOR'S GUARANTOR, TO ANY ACTUAL DAMAGES PAYABLE IN LIEU OF SUCH LIQUIDATED DAMAGES AMOUNTS. IF CONTRACTOR OR CONTRACTOR GUARANTOR SEEKS AN ORDER FROM A COURT OR A FINDING BY AN ARBITRATOR TO INVALIDATE OR REDUCE ANY OF THE LIQUIDATED DAMAGES AMOUNTS SET FORTH IN THIS AGREEMENT, CONTRACTOR SPECIFICALLY AGREES TO PAY OWNER ALL ACTUAL DAMAGES INCURRED BY OWNER IN CONNECTION WITH THE FAILURE TO ACHIEVE THE APPLICABLE GUARANTEED SUBSTANTIAL COMPLETION DATE OR GUARANTEED PERFORMANCE LEVELS, AS APPLICABLE; PROVIDED, THAT THE FOREGOING SHALL NOT LIMIT CONTRACTOR'S RIGHTS TO DISPUTE WHETHER OR NOT LIQUIDATED DAMAGES ARE ACTUALLY OWED. DAMAGES CLAIMED BY THIRD PARTIES (BUT NOT INCLUDING ANY OWNER INDEMNIFIED PARTIES OR CONTRACTOR INDEMNIFIED PARTIES) FOR WHICH CONTRACTOR OR OWNER HAVE A DUTY TO INDEMNIFY THE OTHER PARTY PURSUANT TO THIS AGREEMENT, SHALL NOT BE SUBJECT TO THE LIMITATIONS SET FORTH IN THIS SECTION 21.2. THE LIMITATIONS SET FORTH IN THIS SECTION 21.2 SHALL APPLY TO ANY SUPPLIER THAT INCLUDES A SIMILAR WAIVER AND LIMITATION ON LIABILITY IN FAVOR OF OWNER IN THE SUPPLY CONTRACTS SUCH SUPPLIER ENTERS INTO WITH RESPECT TO THE WORK.

21.3 APPLICABILITY OF LIABILITY LIMITATIONS. EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAWS, OR AS OTHERWISE STATED IN THIS AGREEMENT TO THE CONTRARY, THE WAIVERS, RELEASES, EXCLUSIVE REMEDY PROVISIONS, DISCLAIMERS OF LIABILITY, LIMITATIONS AND APPORTIONMENTS

OF LIABILITY SET FORTH IN THIS AGREEMENT SHALL APPLY EVEN IN THE EVENT OF THE NEGLIGENCE (WHETHER SOLE, JOINT OR CONCURRENT), GROSS NEGLIGENCE, WILLFUL MISCONDUCT, STRICT LIABILITY, BREACH OF DUTY (STATUTORY OR OTHERWISE), BREACH OF CONTRACT, VIOLATION OF LAW OR OTHER LEGAL FAULT OF THE PERSON WHOSE LIABILITY IS WAIVED, DISCLAIMED, LIMITED OR FIXED, A PRE-EXISTING DEFECT, OR ANY OTHER CAUSE WHATSOEVER, AND SHALL EXTEND TO A PARTY'S AFFILIATES AND ITS AND THEIR DIRECTORS, OFFICERS, EMPLOYEES AND AGENTS. [***].

21.4 EXCLUSIVE REMEDIES. IT IS THE INTENT OF THE PARTIES THAT TO THE EXTENT THAT THERE ARE SPECIFIC REMEDIES SET OUT IN THIS AGREEMENT THAT ARE IDENTIFIED AS THE SOLE AND EXCLUSIVE REMEDIES, SUCH REMEDIES SHALL BE THE SOLE AND EXCLUSIVE RIGHTS AND REMEDIES OF THE PARTIES FOR THE OBLIGATIONS AND LIABILITIES TO WHICH SUCH REMEDIES ARE EXPRESSLY STATED TO APPLY, NOTWITHSTANDING ANY OTHER REMEDIES THAT MAY OTHERWISE BE AVAILABLE AT LAW OR IN EQUITY. NOTWITHSTANDING THE FOREGOING, TO THE EXTENT THIS AGREEMENT DOES NOT SET FORTH A SPECIFIC REMEDY, THE PARTIES MAY EXERCISE ANY RIGHTS AND OBTAIN ANY REMEDIES AVAILABLE AT LAW OR IN EQUITY, OTHER THAN RESCISSION, AND EACH PARTY EXPRESSLY WAIVES ANY RIGHT OF RESCISSION THAT MAY OTHERWISE BE APPLICABLE.

ARTICLE 22

NOTICES

22.1 Address Information. Any notices and communications required or permitted to be given hereunder shall be sufficient in all respects if given in writing and delivered personally or sent by bonded overnight courier, or mailed by U.S. Express Mail or by certified or registered United States Mail with postage fully prepaid, or sent by facsimile transmission or other electronic transmission (provided that any such facsimile or other electronic transmission is confirmed either orally or by written confirmation), addressed to the appropriate Party at the address for such Party shown below or at other such address as such Party shall have designated by written notice delivered to the Party giving such notice:

If to Contractor: Bechtel Oil, Gas and Chemicals, Inc.
3000 Post Oak Blvd.
Houston, TX 77056
E-mail: [###]@bechtel.com
Attn: Bhupesh Thakkar

With a copy to: Bechtel Oil, Gas and Chemicals, Inc.
3000 Post Oak Blvd.
Houston, TX 77056
E-mail: [###]@bechtel.com
Attn: Manager of Legal

If to Owner: Port Arthur LNG, LLC
2925 Briarpark Drive, Suite 900
Houston, TX 77042
E-mail: [###]@sempraglobal.com
Attn: Karim El Kheishy

With a copy to: Sempra Energy LNG
488 8th Avenue
San Diego, CA 92101
E-mail: [###]@sempraglobal.com
Attn: Martin Hupka

If to Common Facilities Owner: PALNG Common Facilities Company, LLC
2925 Briarpark Drive, Suite 900
Houston, TX 77042
E-mail: [###]@sempraglobal.com
Attn: Karim El Kheishy

With a copy to: Sempra Energy LNG
488 8th Avenue
San Diego, CA 92101
E-mail: [###]@sempraglobal.com
Attn: Martin Hupka

Whenever any notice is required to be given by Applicable Laws or this Agreement, a written waiver thereof, signed by the Person entitled to notice, whether before or after the time stated therein, shall be deemed equivalent to the giving of such notice.

22.2 Deliveries of Notices; Revised Notice Information. Unless otherwise provided herein, any notice given in accordance with this Agreement shall be deemed to have been given: (a) when delivered to the addressee in person or by courier; (b) when transmitted by electronic transmission during normal business hours, or if not transmitted during normal business hours, at the commencement of normal business hours on the next Business Day; or (c) upon actual receipt by the addressee after such notice has either been delivered to an overnight courier or deposited in the United States Mail, as the case may be. A Party may change the address and address for electronic transmissions to which such communications are to be addressed, by giving written notice to the other Party in the manner provided in Section 22.1.

22.3 Routine/Technical Correspondence. Owner and Contractor shall establish channels of communication for routine and technical correspondence pursuant to Appendix S that do not comply with this Article 22. Notwithstanding establishment and use of such alternate channels of communication, any notices of an Event of Default, claims, Disputes and similar communication and correspondence shall not be effective unless and until delivered pursuant to and in accordance with this Article 22.

ARTICLE 23

MISCELLANEOUS

23.1 Entire Agreement. This Agreement, together with the Contractor Guarantee and the Direct Agreement, sets forth all of the understandings and agreements between the Parties solely with respect to the subject matter hereof and supersede all prior agreements, negotiations, understandings and representations, whether written or oral, between the Parties with respect to the subject matter hereof. Each Party represents and warrants to the other that it has not relied on any information or representations, express or implied, provided by the other Party or any promises made by the other than as expressly contained in this Agreement.

23.2 Amendments. This Agreement may not be amended, modified, varied or supplemented except by an instrument in writing signed by Owner and Contractor.

23.3 Waiver. Unless otherwise specifically indicated herein, any waiver, consent or acceptance or rejection of any kind or character by any Party of any term or condition set forth in this Agreement, or of any breach or default hereunder, shall be given or withheld in the sole and absolute discretion of the waiving, consenting, accepting or rejecting Party and all such waivers, consents, acceptances and rejections shall be in writing. No delay or omission to exercise any right, power or remedy accruing to any Party as the result of any breach or default hereunder shall impair any such right, power or remedy, nor shall it be construed to be a waiver of any such breach or default, or an acquiescence therein, or of or in any similar breach or default thereafter

occurring, nor shall any waiver of any single breach or default be deemed or otherwise constitute a waiver of any other breach or default theretofore or thereafter occurring.

23.4 Effect of Review, Acceptance and Inspection. No acceptance or rejection of, inspection of or failure to inspect, review or non-review of, or rejection of or failure to reject, nor any comments with respect to any of the Work by Owner pursuant to this Agreement shall relieve Contractor of any of its obligations, guarantees or warranties hereunder.

23.5 Governing Law. This Agreement shall be governed by, and construed in accordance with, the laws of the State of Texas, without giving effect to its principles of conflicts of laws. The United Nations Convention on Contracts for the International Sale of Goods shall not apply to this Agreement and shall be disclaimed in and excluded from any Supply Contracts entered into by Contractor in connection with the Work or the LNG Facility.

23.6 Severability. If any provision of this Agreement or the application thereof to any Party or circumstance is held invalid or unenforceable to any extent: (a) the remainder of this Agreement and the application of that provision to the other Party or other circumstances is not affected thereby; and (b) the Parties shall negotiate in good faith to replace that provision with a new provision that is valid and enforceable and that effects the intent of the Parties in such original provision.

23.7 Assignment and Assumption of Obligations.

23.7.1 Assignment. This Agreement may be assigned to other Persons only upon the prior written consent of the non-assigning Party hereto, except Owner may, upon notice to Contractor, assign this Agreement, in whole or part, to any of its Affiliates or any of its co-venturers or to any Person who acquires an ownership interest in Owner or the LNG Facility; provided, however, that if this Agreement is assigned in part to any Person, that Owner shall remain fully liable for the performance of Owner's obligations hereunder; provided, further, that if this Agreement is assigned in its entirety to any such Person, that such assignee provides Contractor with a statement signed by a duly authorized officer of such assignee confirming that such assignee has sufficient funds, which may be through financing, to fulfill its monetary obligations under this Agreement, and in either case, the assignment would not violate any Applicable Law. Furthermore, Owner may assign, pledge or grant a security interest in this Agreement and any form of security provided by Contractor hereunder, and all claims resulting from any failure of performance with any provision of this Agreement, to any Lender without Contractor's consent. When duly assigned in accordance with the foregoing, this Agreement shall be binding upon and shall inure to the benefit of the assignee; provided, that any assignment by Contractor pursuant to this Section 23.7 shall not relieve Contractor of any of its obligations or liabilities under this Agreement. Any assignment not in accordance with this Section 23.7 shall be void and without force or effect, and any attempt to assign this Agreement in violation of this provision shall grant the non-assigning Party the right, but not the obligation, to terminate this Agreement at its option for Default.

23.7.2 Successors and Assigns. This Agreement shall be binding upon and inure to the benefit of the Parties, their successor and permitted assigns.

23.8 Further Assurances. Contractor and Owner agree to provide such information, execute and deliver any such instruments and documents and to take such other actions as may be necessary or reasonably requested by the other Party that are not inconsistent with the provisions of this Agreement and that do not involve the assumptions of obligations greater than those provided for in this Agreement, in order to give full effect to this Agreement and to carry out the intent of this Agreement. In addition, Contractor agrees to cooperate with any Lender: (a) to supply such information and documentation; (b) to grant such written consents to the assignment of this Agreement; (c) to execute such amendments to this Agreement as any Lender may require to the extent that the requested changes do not adversely affect the rights, obligations and liability limitations of Contractor hereunder and Contractor's entitlement to payment in accordance with this Agreement; and (d) to take such action or execute such documentation as any Lender shall reasonably require.

23.9 No Third Party Beneficiaries. This Agreement is entered into for the benefit of the Parties only, and except as may be specifically set forth herein, no other Person shall be entitled to enforce any provision hereof or otherwise be a third party beneficiary hereunder; provided, that the Lenders shall be third party beneficiaries of Section 2.29, Section 19.5 and Section 23.7. Nothing in this Agreement shall otherwise be construed to create any duty to, or standard of care with reference to, or any liability to, any Person other than a Party.

23.10 Excluded Interests. The execution of this Agreement shall not be deemed to convey any estate or legal title in the Site or the LNG Facility. Each Party expressly acknowledges that it has not relied on any representation or warranty of the other Party in relation to this Agreement except for any representation or warranty expressly set out or referred to in this Agreement; provided, that nothing in this Section 23.10 shall operate so as to exclude or prevent a claim for fraudulent misrepresentation.

23.11 No Advertising.

23.11.1 No Signage. Contractor shall have no right, without the express prior written consent of Owner, to erect or otherwise display any type of advertising upon or adjacent to the Site or the LNG Facility.

23.11.2 No Advertisements. Without Owner's express prior written consent, Contractor shall not publish or permit to be published or supplied to the press or other news media (excluding in-house magazines and speeches) any photographs of or information regarding the Work, including the award of this Agreement or Owner's business or business activities.

23.12 Survivability. All representations, warranties, covenants and agreements made herein shall be considered to have been relied upon by the Parties and shall survive the execution and delivery of this Agreement. Notwithstanding anything in this Agreement or implied by law to the contrary, each provision of this Agreement which by its nature is intended to survive the termination, cancellation, completion or expiration of this Agreement, including any express limitations of or releases from liability shall continue as a valid and enforceable obligation of the Party notwithstanding any such termination, cancellation, completion or expiration.

23.13 Ethical Business Considerations.

23.13.1 Obligations of the Parties. In connection with each Party's activities with respect to this Agreement, the LNG Facility and the Liquefaction Project, each of the Parties hereby agrees that:

(a) without limiting Section 13.1.7, such Party shall not enter into any business arrangement with any director, employee or agent of the other Party without prior written notification to such other Party;

(b) such Party shall comply with all Applicable Laws, and such Party has not and shall not engage in any activity that would cause such Party to be in violation of any Applicable Laws;

(c) such Party shall comply with the U.S. Foreign Corrupt Practices Act and all other applicable U.S. anti-bribery anti-money laundering, anti-terrorism and economic sanctions laws and regulations; these obligations include not making payments directly or indirectly that are prohibited by the U.S. Foreign Corrupt Practices Act and not dealing with Persons designated by the U.S. Department of Treasury as "specially designated nationals" or "blocked persons", or by the U.S. Department of State as "foreign terrorist organizations"; each Party covenants that neither it nor any of its Affiliates is or has been designated by the U.S. Government as "a specially designated national", "blocked person" or "foreign terrorist organization", or similarly designated by the United Nations;

(d) such Party represents and warrants that, as of the Effective Date, except by virtue of ownership of publicly-traded securities, no Government Official owns any interest in such Party, whether directly or indirectly through Affiliates, or has any right to any revenues or dividends or other distributions of such Party; no Party nor any of its direct or indirect parent companies shall assign or transfer any interest in such Party or such direct or indirect parent company or any right to any revenues or dividends or other distributions of such Party or such direct or indirect parent company to any Government Official, except as a consequence of such Government Official's purchase of publicly-traded securities; and

(e) such Party has not, nor shall such Party, pay or give, offer to pay or give, promise to pay or give, or authorize the payment of giving of, money or any other thing of value to:

(i) a Government Official; or

(ii) to any other Person while knowing, or being aware of a high probability, that all, or a portion, of such money or thing of value will be offered, given, or promised, directly or indirectly, to a Government Official, in violation of the U.S. Foreign Corrupt Practices Act or any Applicable Laws, or in order to influence an act or decision of a Government Official in his official capacity (including a decision to fail to perform his official functions) or cause a Government Official to influence an act or decision of a Governmental

Authority or instrumentality thereof for the purpose of assisting either Party to obtain or retain business.

23.13.2 Suppliers. If any Supplier or any Supplier's employees or agents violates the provisions of this Section 23.13, as it applies to such Supplier and its employees and agents pursuant to this Section 23.13.2, Contractor shall, if so required by Owner, terminate the relevant Subcontract with immediate effect and thereafter shall not permit or allow such Supplier or its Affiliates to perform any of the Work or any other services with respect to the Work, the LNG Facility or the Liquefaction Project after the date of termination. Contractor shall require, and shall require all Suppliers (excluding Affiliates of Contractor but including CIMTAS) to require, in all agreements in connection with the Work, their agreement to the provisions of this Section 23.13, including:

(a) that the Suppliers and its employees and agents shall comply with the provisions of Section 23.13.1 in relation to themselves;

(b) an express obligation to notify Contractor immediately of any such violation or of such Supplier's having reasonable grounds for suspecting that such violation has occurred; and

(c) if such violation has occurred:

(i) an express obligation to immediately reimburse Contractor, out of any and all monies paid to such Supplier, an amount equal to the amount of the payment or the value of the gift to a Government Official that gives rises to such violation, which amount Contractor agrees in turn to reimburse to Owner immediately on receipt;

(ii) an express obligation to reimburse each Owner Group member and Contractor for all reasonable legal and investigatory expenses directly incurred by it arising out of such violation; and

(iii) an express right in favor of Contractor to terminate the relevant Supply Contract effective upon notice, and thereafter Contractor shall not permit or allow such Supplier or its Affiliates to perform any of the Work or any other services with respect to the Work, the LNG Facility or the Liquefaction Project after the date of termination.

(d) Contractor shall notify Owner immediately on receipt of notification or otherwise becoming aware of any such violation.

23.13.3 Audit. A representative authorized by Owner (and, if such representative is a Third Party, subject to such Person entering into a mutually agreeable non-disclosure agreement with Contractor with customary terms covering such Books and Records of Contractor and its Suppliers, as applicable) may, subject to any applicable data privacy laws and the attorney-client or work product privileges and upon reasonable notice, audit relevant Books and Records of Contractor and any Supplier related to the Work and all transactions or matters related to this Agreement or any Supply Contract for the purpose of determining compliance with

this Section 23.13; provided, that such audits shall not be conducted with respect to Contractor or a given Supplier more than once in a six (6) Month period.

23.14 Counterpart Execution. This Agreement may be executed in any number of counterparts and each such counterpart shall be deemed an original Agreement for all purposes. A signature delivered by facsimile or other electronic means shall be deemed to be an original signature for purposes of this Agreement.

23.15 Expenses. Each Party shall be responsible for and bear all of its own costs and expenses incurred in connection with the preparation and negotiation of this Agreement.

23.16 Relationship of Parties. The rights, duties, obligations and liabilities of the Parties under this Agreement shall be individual, not joint or collective. It is not the intention of the Parties to create, nor shall this Agreement be deemed or construed to create, a partnership, joint venture or other association or a trust. This Agreement shall not be deemed or construed to authorize any Party to act as an agent or employee for the other Party for any purpose whatsoever except as explicitly set forth in this Agreement. In their relations with each other under this Agreement, the Parties shall not be considered fiduciaries.

23.17 Drafting. Each provision of this Agreement shall be construed with the recognition that both Parties participated in the drafting of the same. Thus, any rule of construction that requires this Agreement to be construed against the drafting Party shall not be applicable.

[Remainder of page intentionally left blank]

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their duly authorized officers as of the date and year first above written.

OWNER:

PORT ARTHUR LNG, LLC

By: /s/ Michael R. VanderMate

Name: Michael R. VanderMate

Title: Vice President – Engineering & Construction

CONTRACTOR:

BECHTEL OIL, GAS AND CHEMICALS, INC.

By: /s/ Darren Mort

Name: Darren Mort

Title: Senior Vice President

And only for the purposes of Sections 4.3.2(d), 5.2.2(c), 10.6, 11.1, 11.3.2, 12.2, 13.2, 14.2, 15.1.2(f) and 15.3, the opening paragraph of Article 20, Article 21, and the waivers and releases, disclaimers of liability, and limitations and apportionments of liability set forth herein:

COMMON FACILITIES OWNER:

PALNG COMMON FACILITIES COMPANY, LLC

By: /s/ Michael R. VanderMate

Name: Michael R. VanderMate

Title: Vice President – Engineering & Construction

{Signature page to Engineering, Procurement and Construction Contract}

APPENDIX A
SCOPE OF WORK

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1.0 INTRODUCTION

This Appendix A is the Scope of Work referenced in the Agreement. This Appendix A is comprised of this main document, all referenced documents, and includes all of the attachments to this Appendix A, which are hereby incorporated by reference. Capitalized terms used but not defined in this Appendix A have the meanings given to those terms in the Agreement. Acronyms, terms and symbols have the meaning set forth in Appendix K to the Agreement.

Prior to the Full Notice to Proceed, during the EDSA (Engineering Design Services Agreement) Contractor performed certain front-end engineering design work under the EDSA. The related Deliverables generated by the Contractor under the EDSA are listed in the master document index included as Attachment A-3. The Contractor shall progress the engineering and design for the LNG Facility as per the design requirements listed in the Basis of Design, design criteria, Specifications, Drawings, engineering calculations supporting the design, plans and ancillary

documents that establish the scope of the LNG Facility and associated facilities that are to be further engineered (detailed design) and constructed in accordance with the Agreement and this Appendix A.

Any changes to the documents issued under the EDSA, as listed in Attachment A-3, shall be considered part of the engineering and design progression of the Work and are included in the Scope of Work of the Contractor.

Contractor shall complete all aspects of the LNG Facility design, including any that was not completed under the EDSA or the SWSA. In the performance of the Work, Contractor may modify certain aspects of the Deliverables as necessary to meet the requirements of the Agreement subject to Contractor's compliance with the requirements in Sections 2.4.6 and 2.25.4 of the Agreement. Notwithstanding, Contractor shall not make modifications that would adversely impact the safety or operability of the LNG Facility.

Contractor shall perform all engineering and design required to meet its obligation under the Agreement. This includes engineered Drawings, data sheets, associated engineering documents, procurement inspections, expediting, testing for all the systems, and commissioning.

2.0 LIQUEFACTION PROJECT OVERVIEW

The Port Arthur LNG Facility is to be located on a tract of land owned by Port Arthur LNG, LLC on the Sabine-Neches Waterway as depicted in Figure 1 below.

Figure 1: Location of Port Arthur LNG Facility



Feed gas for liquefaction will be supplied through a high-pressure feed line with pipeline quality gas in accordance with Basis of Design.

2.1 THE LNG FACILITY

The LNG Facility, will include two (2) identical LNG Trains each capable of producing a loaded capacity of 5.84 million tonnes per annum (MTPA) (6.195 MTPA net in LNG Tank), two (2) full containment 160,000 m³ LNG Tanks, one (1) marine LNG carrier Berth with associated loading facilities, NGL extraction, storage and delivery facilities, piping and infrastructure, utilities, and all other facilities.

More specifically, the LNG Facility shall consist of the systems and facilities outlined below. The LNG Facility description and design requirements are as set forth in the Basis of Design, Appendix B to the Agreement:

- Process Facilities separate for each LNG Train
 - Inlet Gas Receiving
 - Mercury Removal
 - Acid Gas Removal Unit (AGRU)
 - Gas Dehydration
 - NGL Extraction / condensate stabilization
 - Liquefaction (MR and Propane Refrigeration and End Flash Gas System)
- Process Facilities Common for both LNG Trains
 - Ground and Marine Flare Systems
 - LNG Storage and Loading
 - Condensate Storage and truck loading
 - Refrigerant Unloading and storage
 - Boil-off Gas System
 - Start-up Fuel Gas System
 - Amine Storage
 - Feed gas distribution pipelines including takeoffs to both LNG trains.
- Utilities and Support Facilities Separate for each LNG Train
 - Amine drains
 - Hot oil system
 - Waste Heat Recovery Unit (WHRU)
 - Fuel gas system
 - Defrost gas system
 - H₂S scavenger beds
 - Thermal oxidizer system

- Utility cooling (Tempered Water)
- ISBL powerhouses and analyzer shelters
- Utilities and Support Facilities Common for both LNG Trains
 - Utility and Instrument Air
 - Nitrogen system
 - Fresh Water (Potable) System
 - Demineralized Water System
 - Firewater System
 - Spill containment system for each LNG Train into a common containment sump
 - Fire and gas detection system
 - Wastewater Collection and Disposal
 - Stormwater Collection and Disposal
 - Sanitary Sewer System
 - Marine Facilities
 - Ø LNG Loading Berth and Access Trestle
 - Ø LNG Berth Shore protection and navigational aids
 - Ø Ship Turning Basin and Berthing Pocket
 - Ø Material Off-Loading Facility (MOF)
 - Ø Pioneer Dock
 - Ø Pre-turnover dredging of shoaling and maintenance dredging
 - OSBL Powerhouses, GIS Substation and Analyzer Shelters
 - Other plant infrastructure such as plant roads, berm, fencing, gates etc.
 - LNG impoundment basins
 - Essential power generation system
 - Security, control, and telecommunication (including communication tower) systems
- Permanent Plant Buildings
 - Jetty control building (South)
 - Main control building
 - Administration and Maintenance shop
 - Emergency response / first aid building
 - Laboratory building
 - Entrance guardhouses (North and South)

- Hazardous chemical storage building
- Prefabricated Electrical powerhouses with the instrument I/O rooms
- Prefabricated main substation
- Prefabricated Analyzer Shelters
- On-Site Roads
 - Heavy haul road (inclusive of Oilfield Rd. bridge crossing)
 - Primary and access roads within the LNG Facility
- Storm protection perimeter Berm
- Fencing
 - Perimeter security fence
 - Permanent fencing
 - Temporary fencing
- Entry substation pad, drill pad, and access roads
- On-Site Laydown yards
- Nitrogen metering station support structure

3.0 KEY PROJECT DOCUMENTS

The Work is governed by the Agreement, including this Appendix A and its attachments hereto, and the Basis of Design as set forth in Appendix B.

The Scope of Work in this Appendix A shall be executed in accordance with the plans set forth and referenced in the Project Execution Plan, Appendix W to the Agreement.

Document numbering shall be in accordance with the requirements in Attachment U-1 to Appendix U to the Agreement and in the Document Management Plan as referenced in Appendix W to the Agreement.

4.0 ENGINEERING

This section outlines Contractor's engineering Scope of Work under the Agreement.

4.1 PROCESS ENGINEERING

As part of the process engineering Scope of Work, Contractor shall develop and/or progress Drawings, calculations, datasheets, and other associated engineering documents in order to bring them to their final issue status in accordance to Attachment A-1.

The following documents listed in Attachment A-3 shall be reissued if there is a scope change or a Defect that requires it:

- Process Basis of Design;
- Process and utility flow diagrams;
- Heat and material balances for all design cases;
- Material selection diagrams;
- process datasheets for Equipment
- Steady state process models;

The following documents will be issued per Attachment A-1.

- Utility summaries
- Datasheets for instruments including all control valves, safety valves, on/off valves, RO, flow meter, analyzers, etc.
- Piping and instrumentation diagrams
- Flare Load Summary
- Design calculations and development of:
 - System hydraulics;
 - Surge analysis;
 - Line sizing;
 - Sizing of the relief system, including relief valves;
 - Insulation system for cryogenic services, material selection, thickness;
 - First fill volume for refrigerant, hot oil, amine;
 - Emergency depressurization calculations;
- Cause and effect diagrams (CED)
- HAZOP and LOPA for vendor packages
- Lists:
 - Equipment list
 - Line designation tables (LDTs);
 - Line Case Summaries (LCSs);
 - List of chemicals & catalysts

4.1.1 Process Design Documents

Attachment A-1 lists the required process design documents and Contractor design Deliverables. Contractor has developed process and mechanical data sheets for Equipment under the EDSA which shall be deemed incorporated herein, as listed in Attachment A-3. Any updates to the process design shall be marked on a new revision of the existing datasheets and other documents in accordance with the final version of the Heat & Material Balances for the various operating cases.

4.1.2 Equipment List

Contractor shall maintain and issue a sized Equipment list, inclusive of Equipment weights, based upon the final Equipment design.

4.1.3 Process Flow Diagrams (PFD) and Utility Flow Diagrams (UFD)

Contractor shall update and maintain the Process Flow Diagrams and Utility Flow Diagrams as required during the performance of the Work until the Substantial Completion Date of Stage II.

4.1.4 Process and Utility Summaries

Contractor shall maintain the process utility and emissions summaries during the performance of the Work until the Substantial Completion Date of Stage II.

4.1.5 Piping and Instrumentation Diagrams (P&IDs)

Contractor shall develop and maintain all P&IDs, including all utility, auxiliary, interconnecting P&IDs, through commissioning and start-up of each Stage and until the Substantial Completion Date of Stage II.

P&IDs shall comply with the requirements of 49 CFR 193 and NFPA 59A.

HAZOP and LOPA reviews have been completed in the EDSA and certain recommendations resulting from those reviews have been implemented into the design of the LNG Facility. The Contractor shall verify that remaining HAZOP actions items and recommendations have been included in the LNG Facility design during detailed design. Any changes to the P&IDs shall be managed under management of change protocol.

Contractor shall redraw P&IDs provided by Vendors using AutoCAD after the Vendors' final submittal of P&IDs so that a full set of P&IDs for the LNG Facility are available using common symbology.

4.1.6 Line Lists

Contractor has developed LDTs for all lines shown on the Contractor developed P&IDs as listed in Attachment A-3. Line calculation summaries will be used by Contractor in determining the final line sizes on the LDTs and shall provide information for instrumentation and pipe stress

calculations. The final line size will be documented in the LDTs during the detailed engineering phase in accordance with Contractor's process design guidelines, and Contractor's heat and material balances. Updates to the LDTs shall be made for subsequent revisions of P&IDs.

4.1.7 Simulation

Contractor shall work with the Equipment Suppliers to develop a dynamic simulation model, as further detailed in Appendix B and the Specifications, for the main units of the LNG Facility, and shall utilize these models to confirm the control philosophy of major Equipment including the anti-surge control system of the compressors, MCHE operation, and mitigation of the relief scenarios and flare loads. Contractor shall include control logic and details for such Equipment included in the design. Contractor shall also use the dynamic simulation model to demonstrate that during the transient scenarios, the design temperatures and pressures of such Equipment will not be exceeded.

Contractor shall make the latest version of the dynamic and steady simulation models available to Owner.

4.1.8 RAM Study

Contractor shall update the Owner-provided reliability, availability and maintainability (RAM) analysis as part of the Work with a targeted (but not Contractor guaranteed) availability of at least 95%. Contractor shall update such study early during the Work and shall submit the updated study to Owner in accordance with Attachment A-1. If the results of the updated RAM analysis are below 95%, the Parties shall meet and confer about such results.

4.1.9 Relief Valves and Flare System Design

Contractor shall develop potential flaring scenarios and determine the relief loads as per the Relief Design Basis in Appendix B.

Contractor shall generate a hydraulic model of each flare system.

4.1.10 Flare Relief and Liquid Disposal System

The flare will be designed as a multi-point ground flare system. The ground flare will be designed in a [***] configuration. Each [***] flare cell will contain a wet flare and dry flare runners. A radiation fence will be provided to separate each flare cell.

4.1.11 Marine Flare System

Contractor shall provide a marine flare system for the purpose of collecting and processing the boil-off gas from the LNG Tanks and return vapor from the LNG loading facilities, which will include the vapor return from ship loading operations and also the gas-up and warm ship cooldown operations on the south Berth.

4.1.12 Nitrogen Supply System

4.1.12.1 Primary Supply

Gaseous nitrogen will be imported through a pipeline routed adjacent to the Site. A metering station for the imported nitrogen will be located on a skid placed on top of a raised platform outside of the perimeter fence around the LNG Facility.

Contractor shall interface with the third-party supplier, Air Liquide, throughout the design, construction, and commissioning phases. Contractor shall also be responsible for construction of the raised platform, procurement and installation of permanent fencing around the nitrogen metering station, and the design, procurement and construction of the nitrogen distribution system and connection to the interface point, which is the metering station check valve outlet.

Contractor shall provide the nitrogen supplier, Air Liquide, with access to the raised platform for metering station construction, routine check-ups and maintenance of instruments and valves located on the skid.

4.1.12.2 Back-up Supply

Back-up nitrogen Equipment, consisting of two (2) leased liquid nitrogen dewars and associated vaporizers inside the utilities area, shall be provided by Airgas, an Air Liquide company, for use when gaseous nitrogen may not be available from the pipeline, under a lease and maintenance agreement with Contractor. The lease shall be assigned to Owner upon Substantial Completion of Stage I.

The lease agreement shall include the supply of liquid nitrogen dewars and associated vaporizers in accordance with the requirements defined in Appendix B. For clarity, Contractor shall be responsible for the installation of the leased liquid nitrogen Equipment, commissioning and startup in accordance with Appendix W.

4.1.13 Demineralized Water System

Contractor shall engage a Supplier to provide a leased demineralized water system in accordance with the requirements defined in Appendix B. The lease shall be assigned to Owner upon Substantial Completion of Stage I.

For clarity, Contractor shall be responsible for the design, lease, installation and construction of the demineralized water system, including connection to the interface point. Contractor shall also be responsible for the commissioning and start-up in accordance with Appendix W.

4.2 ROTATING AND PACKAGED EQUIPMENT

Contractor shall be responsible for the engineering and procurement of all rotating Equipment for the facility and shall conduct reviews for packaged Equipment details provided by Equipment Suppliers. This includes progression and finalization of datasheets, material requisitions, bid

evaluation and review of vendor engineering documents and Drawings. Contractor's responsibilities also include the inspections, expediting, testing (per Appendices T-1 and T-2), and the installation and commissioning of such Equipment packages.

4.2.1 General Requirements

Rotating and packaged Equipment shall be capable of unattended outdoor operation (unless indoor installation is required by design), and shall be engineered, designed, fabricated, inspected, tested and delivered in accordance with the Agreement.

All Equipment and materials for construction shall meet the applicable Specifications and suitably designed for its intended electrical area location and hazardous area classifications.

Rotating and packaged Equipment shall be pre-assembled, pre-piped and pre-wired skid mounted units, to the extent possible. All necessary interconnecting piping, interconnecting wiring, cabinets, loose materials and hook-up valves / piping shall be supplied with the packaged units or by Contractor to provide the complete unit assembly. Equipment and skids shall be appropriately designed and packaged for conditions customarily encountered during shipping and handling.

Suppliers shall conduct special studies for Equipment, such as finite element analysis and computational fluid dynamics, etc., where required by Contractor or recommended by the Supplier. Contractor shall work with the Equipment Suppliers to identify the specific testing requirements, obtain recommendations for lubricants to be used, and identify spare parts required for the continuous operation for the life of the Equipment package.

4.2.2 Refrigeration Compression Trains

Baker Hughes, (BH) has been selected as the Supplier for the propane, HP MR, LP MR, & MP MR refrigeration compression trains. [***].

Contractor shall be responsible for the procurement (manufacture), proper design, inspection, testing, supply, installation, preservation, site testing and performance of such Equipment, as well as, the interface with the LNG Facility integrated control and safety system (ICSS).

4.3 VESSELS, TANKS & COLUMNS

All vessels, tanks, columns and towers shall be designed, fabricated, inspected, tested, and installed, in compliance with the requirements specified on the engineering Drawings, mechanical data sheets, Specifications, and Applicable Codes and Standards.

Contractor, and selected Vendors, shall be responsible for supplying and installing all appurtenances including nozzles, man-ways, davits and/or hinges, ladders and platforms as required for the vessels, tanks, columns and towers.

All shop fabricated vessels, tanks, columns and towers shall be pressure tested at the fabrication facilities and painted in accordance with the specifications provided prior to release from the

Supplier's facilities. All Equipment shall be packaged in accordance with the mode of transportation and adequately protected for shipping and transportation prior to release from the Supplier's facilities and preservation procedures implemented for field storage and after installation prior to operation and referenced in Appendix B.

Contractor shall issue the required Drawings and specifications for erection, inspection, testing, external painting and internal lining if applicable.

4.4 LNG TANKS

Contractor shall perform all engineering activities required for the design of full containment LNG Tanks to meet its obligation under the Agreement. This includes development of engineering Drawings and supporting calculations, data sheets, procurement documentation, inspections / testing / expediting reports and schedules for Factory and Site Acceptance Tests (FAT / SAT).

The Contractor shall also be responsible for the development of documentation required for the testing, pre-commissioning, commissioning and cooldown of the LNG Tank(s) and associated piping systems in accordance with the Specifications in Appendix B.

Contractor shall be responsible for sourcing water of adequate quantity and quality for hydro-testing and disposal purposes in compliance with the applicable regulatory requirements.

Each LNG Tank shall include three (3) in-tank pumps and one (1) spare pump column, in accordance with Specification for LNG Tanks as shown in Appendix B. The LNG Tank scope does not include logs or elevators.

4.5 HEAT EXCHANGERS

The Work includes preparation of data sheets, material requisitions, bid evaluation and review of Supplier engineering documents and Drawings for the heat exchangers.

The liquefaction unit is designed around the Main Cryogenic Heat Exchanger (MCHE), which is designed and fabricated by Air Products and Chemicals, Inc. (APCI). Contractor shall coordinate activities with APCI for the design reviews and testing of the MCHE. In addition to the above, the Contractor shall also be responsible for the interface, coordination, transportation, installation, and insulation of the MCHE. The initial pre-cooldown and final cooldown of the MCHE shall be conducted by the Contractor in conjunction with the APCI start-up representatives in accordance with Appendix W.

The engineering, design and fabrication of shell and tube, brazed aluminum and air-cooled heat exchangers shall be in accordance with the relevant project Specifications and Applicable Codes and Standards.

Contractor shall verify and confirm the thermal and mechanical design of each piece of equipment with the responsible Supplier of each shell and tube heat exchanger, which shall include a vibration analysis.

Contractor shall review electric heaters and heater system designs from the applicable Suppliers to confirm the thermal and mechanical designs. Additionally, functional testing of the local control system will also be required. All electrical Drawings and wiring diagrams are to be submitted by the applicable Suppliers to Contractor for review and approval.

Brazed aluminum core exchangers are provided with aluminum flanges. Insulation block made from Micarta or Owner approved equivalent shall be used to insulate core from structural steel. Contractor shall verify that the design conditions shown on the applicable Supplier's data sheet are in accordance with the process data for each stream. The brazed aluminum heat exchanger is to be built in accordance with ALPEMA requirements.

The fuel gas heater designs, as submitted by the applicable Supplier, shall be checked for process condition accuracy. Contractor is responsible for all Drawings from the applicable Supplier, including controls schematic and power supply.

All anchor bolts required for the installation of the heat exchangers shall be sized by Contractor to safely handle weight, pullout, thermal, seismic and wind loadings and any other applied loads. The required bolts are to be provided by Contractor.

4.6 TRUCK LOADING, UNLOADING, AND WEIGH STATIONS

Contractor shall design, procure, install and commission the unloading station for incoming propane, ethane, diesel fuel, liquid nitrogen, hot oil, and amine delivered by truck.

Contractor shall design, procure, install and commission the loading station for outgoing condensate (C5+) and process waste water to be removed by truck.

Contractor shall also design, procure, install and commission the weigh stations for the applicable truck tankers trucks entering and leaving the LNG Facility as described above and for other deliveries of consumables. Contractor shall include all hardware and software required to collect and archive historical data of the weigh system, including a printer to issue loading/unloading tickets to the trucks at an outdoor workstation that interfaces with scale. Scales shall be inspected and certified by the Department of Agriculture. See also Section 4.10.22.14 of this [Appendix A](#).

Contractor shall specify requirements for hose connection sizes and types, grounding, spill protection, containment, and all required safety and environmental measures for loading and unloading stations.

Minimum horizontal distances from any trucks to the property line and to adjacent facilities inside the property line shall be in accordance with NFPA 30. Sufficient room shall be provided

for trucks with a capacity up to 8,000 gallons in the loading/unloading area to turn around without having to back-up and obstruct other traffic.

A safety barrier (bollards) shall be provided between the storage tanks and the truck loading/unloading area where required.

4.7 DESIGN ELEMENTS

4.7.1 Welding

Contractor shall develop Liquefaction Project welding Specifications and procedures which shall cover shop and Site fabrication in accordance with Attachment A-1 and Appendix U. The Specifications and procedures shall include key performance indicators for shop and Site welding.

All welding and weld inspections shall be performed and shall meet the requirements of such welding Specifications and procedures.

4.7.2 Chemical Cleaning

Contractor shall identify the extent of chemical cleaning to be carried out for each Stage and perform all such chemical cleaning. Contractor shall prepare a chemical cleaning procedure for each application defining the following:

- Fluids to be used for cleaning
- Operating conditions that must be achieved during the cleaning process
- Duration of the cleaning process
- Acceptance criteria
- Disposal of the cleaning fluids
- Safety and environmental precautions to be implemented

4.7.3 Cathodic Protection (CP)

As part of the Work, Contractor shall develop details of the cathodic protection system, specifying the type of system to be installed for specific locations in the LNG Facility. The cathodic protection system shall protect external surfaces of marine steel piles and sheet piling (in the immersion zone), underground CS or SS piping, Equipment, tanks, which contain water as described in the Specification for Cathodic Protection referenced in Appendix B.

Contractor shall also be responsible for the supply and installation of the cathodic protection system including all insulation flange/gasket sets and/or pipe isolation joints necessary to electrically separate the underground portions from the above ground facilities. Details of these components and applied coating shall also be provided to Owner.

4.7.4 Positive Material Identification

Contractor shall implement a program as required per the Specification for “Positive Material Identification (PMI)” and is listed in Appendix B.

4.7.5 Material Certification

Contractor shall ensure that where required, Equipment, bulk piping and other applicable materials are supplied with material certifications, including third party certificates, to meet the quality assurance and quality control (QA/QC) requirements in accordance with Appendix R. Such material certifications shall include documented traceability per the Specification for “Material Traceability for Hydrocarbon Services” referenced in Appendix B. Where required, Equipment and pressure components shall be certified in accordance with ASME codes, and non-pressure components and piping shall be certified in accordance with ASTM codes.

4.7.6 Noise

Contractor shall design and build the LNG Facility to satisfy the noise requirements in Appendix B and Appendix G.

Where noise control measures (e.g. silencers, acoustic insulation) are required, to meet the Specification set forth in Appendix B, Contractor shall include noise control measures in the design and in the Supplier purchase requirements (as applicable).

4.7.7 Acoustically/Flow Induced Vibration

Contractor shall prepare a vibration study to assess anticipated flow induced or acoustically induced vibration, and deliver a report documenting the results of this assessment and associated calculations.

4.7.8 Painting, Coating and Galvanizing

Equipment and piping shall be supplied, painted and coated in accordance with the procedures set forth in Appendix B. Contractor shall follow the color coding for the finish coat of the LNG Facility in accordance with the “Surface Preparation and Coating Procedures” referenced in Appendix B. Bulk piping (except valves) shall be painted prior to being supplied to the Site. Bulk piping shall be painted / color coded in accordance with the “Surface Preparation and Coating Procedures” referenced in Appendix B.

Structural steel shall be supplied with hot dipped galvanized protection in accordance with the procedures set forth in Appendix B. The Specification for galvanized steel shall also govern the repair procedures to be used for structural steel.

4.7.9 Insulation and Fireproofing

Contractor shall design all piping, Equipment and structural steel requiring insulation / fireproofing to be insulated and/or fireproofed in accordance with the Specifications listed in

Appendix B. Equipment and piping shall be supplied with insulation vertical support rings, and/or fireproofing clips. Insulation and fireproofing material shall be supplied and installed by Contractor, its Suppliers, or at the module yard. Contractor's Drawings shall clearly indicate the type, thickness and extent of insulation and fireproofing. Cold service/acoustic insulation provided shall be in accordance with the Specifications listed in Appendix B.

4.8 PIPING

Contractor shall engineer, design, procure, fabricate, install, test (pneumatic, hydro, and service) and commission all piping systems in accordance with the P&IDs, Specifications, and Applicable Codes and Standards. Contractor shall ensure Owner requirements as specified in Appendix B are incorporated into the final design.

Pneumatic test requirements supported by test packs shall identify stored energy classification i.e. large or small volume. Closure weld requirement and acceptance criteria shall be identified.

Contractor shall specify weld-end valves as the default valve selection for cryogenic services as per Appendix B. Owner approved valve substitutions shall be indicated on the P&IDs.

4.8.1 Piping Isometric Drawings

Contractor shall produce dimensioned isometric Drawings of all piping systems, regardless of pipe size, except where a Vendor does not provide isometric drawings for a piping system. Isometric Drawings shall be identified by the corresponding line number on the P&IDs. Each isometric drawing, including the fabricated spool isometrics shall also contain the complete Bill of Material (BOM) for the Drawing.

4.8.2 Piping Plot Plans

Contractor shall be responsible for the definition and location of Equipment on plot plans through detailed design. If required, the Contractor shall further sub-divide and create additional plot plan drawings at smaller scales. Contractor shall indicate all Equipment, structures, pipe racks, sleeper-ways, accessways, maintenance envelopes, building outlines, marine facilities, jetties, roads, detention ponds, impoundments, drainage ditches, and other major civil features such that the safe construction, operation and maintenance of the LNG Facility can be adequately demonstrated.

Contractor shall consider the Equipment spacing and location for personnel safety while maintaining access ways for proper operation and maintenance of the LNG Facility. Equipment that produces regulated emissions, Equipment that impacts vapor dispersion, spill containment trenches and impoundment basins/containment areas may not be relocated without written authorization from Owner.

4.8.3 Piping 3D Model

Contractor shall develop a scaled 3-dimensional model of the LNG Facility to demonstrate to Owner an acceptable plant layout. The model will be reviewed by Owner at the following specific review gates: 30% design, 50% design, and 90% design. The dates of these reviews shall be agreed between Contractor and Owner.

Contractor shall establish and maintain a method of tracking Owner comments. Contractor shall close Owner comments by incorporation into final design and obtaining Owner approval through tag review and sign-off of comments by Owner.

The 3D model shall represent all plant equipment, structural steel, concrete, piping, instruments (off-line and in-line), electrical equipment, cable trays, buildings and roads. Sufficient detail is required to indicate adequate clearances exist to safely construct, operate and maintain the LNG Facility in accordance with the "Plant Design and Layout Criteria" in Appendix B. Additionally, Contractor shall conduct interference checks against the 3D model so that final Issued for Construction (IFC) designs are clash free and compliant with minimum clearance requirements.

Contractor shall request that the Vendors of packaged Equipment, compressor and ground flare supply 3D model geometry for all such Equipment. Any such Vendor-supplied 3D model geometry shall be incorporated into the Liquefaction Project 3D Model viewer for the LNG Facility. In the event that a Vendor does not provide the 3D model geometry, Contractor shall recreate such 3D Model geometry directly into S3D geometry (without intelligent attributes attached) that includes piping tie in locations for the LNG Facility.

4.8.4 Piping Supports

Contractor shall be responsible for development of standard and custom engineered pipe supports that will be incorporated into the design of the LNG Facility.

4.8.5 Piping Stress Analysis

Contractor is responsible for the mechanical integrity for all piping systems. Contractor shall include in the design of the LNG Facility the effects of loads imposed by all piping components, pressure testing, dynamic and transient effects, and thermal displacement to prevent transmission of excessive movements and forces to Equipment connections and structures.

Contractor shall provide piping systems with sufficient flexibility covering all ranges of operating and design conditions to prevent transmission of excessive loads and forces onto Equipment and structures. Flexibility shall be achieved through pipe routing with flexible fittings (e.g. 90° ells) rather than specifying expansion joints.

Contractor shall follow piping flexibility and stress analysis criteria in accordance with "Stress and Support Design Criteria" as described in Attachment B.

4.8.6 Piping Material Control

Contractor shall utilize an electronic system for the purchase, expediting, control, reporting, inventory, material tracking, and logistics evaluation of the piping bulk materials. The system shall have the capability of importing data from the 3D model.

Contractor shall create material requisitions from the electronic system and procure all pipe, fittings, flanges, valves, supports, specialty items and bolts and gaskets required to fabricate and install all piping systems for the LNG Facility. Reports from the system shall identify overall bulk material requirements which can be disseminated into construction areas and required onsite dates. All piping bulk materials shall comply with the piping class Specifications.

4.8.7 Ergonomic Design

Contractor shall perform multiple 3D Model reviews for the LNG Facility, to ensure that adequate access is provided for the safe operation and maintenance of all Equipment in accordance with the “Plant Design and Layout Criteria” in Appendix B. Items to be considered in these reviews shall include the following:

- Stairs / ladders needed for accessing Equipment and instrumentation.
- Valve manoeuvring space (distance and height from the valve);
- Clearances around Equipment for maintenance activities;
- Platforms needed for operation and maintenance of Equipment;
- Access for maintenance Equipment, such as cranes, fork-lifts, welding machines (based on the maintenance envelope);
- Provision of adequate lighting around Equipment, including Instrumentation; and
- Permanent access to maintain critical instrumentation, such as permeant access to valve stations, positioners and solenoids of critical service control valves, emergency shutdown valves (ESDVs), blowdown valves (BDVs), anti-surge valves, and any instrumentation critical to the operation and safety of the LNG Trains.

Human Factors Engineering (HFE) requirements are limited to the criteria set forth in the “Plant Design and Layout Criteria” referenced in Appendix B, with the exception of the ergonomics study to be performed on the Central Control Room (CCR) referenced in Section 4.10.2 of this Appendix A.

4.9 CIVIL & STRUCTURAL

4.9.1 Site Geotechnical Data

The civil design of the LNG Facility shall be based on the geotechnical data requested by Contractor and identified in Appendix B.

4.9.2 Site Preparation

Contractor shall prepare the engineering recommendations and design based on Contractor's interpretation of the geotechnical data and reports referenced in Appendix B. Subsequently, the Site shall be prepared in accordance with Contractor's recommendations and design, as well as any other applicable Specifications included in Appendix B.

Site preparation includes, clearing and grubbing, stripping, cut and fill (general fill and structural fill), drainage system and berm, fencing, and construction of roads, pre-settlement (wick drainage) design, soil stabilization, finished grade and paving, DMM, and underground piping.

4.9.3 Soil Stabilization

Contractor shall prepare the soil stabilization recommendations and design based on Contractor's interpretation of the geotechnical data reports referenced in Appendix B. Soil stabilization shall be performed in accordance with Contractor's recommendations and design, as well as any other applicable Specifications referenced in Appendix B.

Contractor shall also develop a test program for shallow soil mixing and wick draining during the early stages of the Work to confirm the mix design in the above geotechnical recommendation.

4.9.4 Finish Grading

Contractor shall prepare the finish grading recommendations and design based on Contractor's interpretation of the geotechnical data reports referenced in Appendix B. The high point of finish grading on site (excluding berms) shall be +7.0 ft NAVD88 based on the survey as requested by Contractor and identified in Appendix B.

The Contractor shall build up layers to the final grading elevations in accordance with the Drawings, Specifications and the engineering recommendations developed by Contractor based on Contractor's interpretation of the geotechnical data reports referenced in Appendix B. Contractor shall develop a detailed paving plan based on its conceptual Drawings.

4.9.5 Drainage

Contractor shall develop and implement an overall Site drainage plan showing the sheet flow direction, conveyer system (ditches, culverts) and the outfall discharge quantities based on the Site plot plan and the Site drainage Drawing listed in Appendix B. In designing the Site drainage plan, Contractor shall ensure that the Work does not have an adverse impact on the surrounding areas beyond the limits of construction in accordance with Applicable Laws, the Permits and Appendix B.

Drainage systems shall be provided for the proper discharge and disposal of effluents from the sanitary sewer, the process, the utilities, and the contaminated / clean (non-contaminated) surface water streams in accordance with the Specifications, the spill containment Basis of Design in Appendix B and the Permits.

In order to meet these design objectives, the drainage systems are classified as follows:

- Clean (uncontaminated) storm water system: Clean storm water shall be directed off site through outfalls to the Sabine-Neches Waterway.
- Oil-contaminated drainage system (oily water contained by paved, curbed areas): Potential contaminated oily water will be contained in curbed areas that will have a local sump; a vacuum truck will be utilized to evacuate contaminated water from the system.
- Sanitary Sewer: Sanitary sewage from the facility will be pumped from the Sanitary Lift Stations inside the facility to an offsite sanitary treatment facility for processing.

Contractor shall also design and maintain adequate temporary drainage through the construction phase of the Liquefaction Project. Contractor shall also implement best management practices to manage stormwater run-off during construction in accordance with the applicable provisions of the Environmental Plan and Contractor's storm water pollution prevention plan.

4.9.6 Berm/Levee

Contractor shall design and build the berm in accordance with Appendix B. Contractor shall maintain the berm through Substantial Completion of Stage II. The berm is required to be functional before any permanent plant rotating, exchangers, electrical or control systems Equipment is stored or installed on the Site.

4.9.7 Roads, Paving and Fencing

The entrance and exit ramps from newly relocated Highway 87 to the LNG Facility shall follow the design and construction in accordance with Permits, other local requirements, and engineering Drawings and Specifications listed in Appendix B.

Areas that may receive accidental spills from contaminants shall be surfaced with liquid tight concrete paving or other impermeable liners. Areas where spills are not likely to occur may be covered with concrete, bituminous paving, grass or gravel layer to prevent wind and water erosion.

The paving shall be designed to accommodate the anticipated traffic loads, and loads from mobile cranes at designated areas according to the lifting plan and mechanical handling study as listed in Attachment A-1 including outriggers and maintenance vehicles.

Roads and paving shall be in accordance with the Project Specification for Roads and Paving and is listed in Appendix B.

A security fence shall be mounted on the berm all around the perimeter of the LNG Facility as per the Site Security Plan requirements listed as a part of Appendix Q as well as Drawings as listed in Attachment A-3. The security fence shall consist of 8 foot high chain-link perimeter fence equipped with additional 1 feet high barbed wire (6 strand) and razor wire on top of the fence. Contractor shall design, procure and install vapor fencing as required by the "Summary of Exponent Analysis" findings as referenced in Appendix B.

Fencing shall be in accordance with the Project Specification for “Fencing and Gates” in [Appendix B](#) and the Site Security Plan included as part of Contractor’s HSSE Program in [Appendix Q](#).

Temporary fencing shall be provided by the Contractor as per the Site Security Plan, included as part of [Appendix Q](#) to segregate work areas of others as it deems necessary.

4.9.8 Piling

Contractor shall engineer, design, supply, test and install all piling required for the Liquefaction Project based on the geotechnical data reports in [Appendix B](#). The detailed piling Drawings, to be delivered as part of the Work, shall show coordinate locations, type, and details of piles, such as cross section and length, and cut-off elevation, and connection to the foundation. The number and length of piles for each foundation shall be determined, taking into account the group effect modification factor and the down drag effect in order to stay within the allowable differential settlement permitted for the foundation under consideration.

Piling shall be in accordance with the applicable Specifications referenced in [Appendix B](#).

Contractor shall develop a test pile program during early stages of the Work to confirm the piling design. Additionally, Contractor shall complete the full test pile program as part of piling production to meet Permit and technical requirements as listed in [Appendix B](#).

4.9.9 Foundations

Foundations shall meet the requirements of the Design Criteria for Structures and Foundations listed in [Appendix B](#). Contractor shall design foundations for specific loading conditions such as static and dynamic, wind and earthquake in addition to dead and live loads, and hydro loads for pipe testing, and using geotechnical data provided in [Appendix B](#).

It is anticipated that the majority of foundations will be supported on piling. Contractor shall perform piling selection, design and installations in accordance with the piling Specifications as listed in [Appendix B](#).

4.9.10 Pipe Racks

Contractor shall design pipe racks in accordance with the Design Criteria for Structures and Foundations as listed in [Appendix B](#).

4.9.11 Structures

Contractor shall include platforms, stiles, stairs, ladders and railings required for maintenance and operability. The location of these structures shall be determined during engineering and confirmed via the 3D model reviews. The design, erection and installation shall meet the requirements of the applicable Specifications and Design Criteria for Structures and Foundations as listed in [Appendix B](#).

4.9.12 Permanent Plant Buildings

The buildings are set forth in the building list referenced in [Appendix B](#). Contractor shall design the architectural buildings to meet the Specification for “Permanent Plant Buildings”, and the Vendor supplied buildings (powerhouses and analyzer shelters) to meet the Specifications in the parent equipment Specifications listed in [Appendix B](#).

Contractor shall design buildings to meet Site specific criteria for blast overpressure and natural occurrences set forth in “Overpressure and Impulse Calculations” referenced in [Appendix B](#).

Contractor’s designs shall consider long term maintenance of the buildings. Exterior finishes that do not require maintenance and are suitable for the environmental location, such as bricks, pigmented concrete, metal siding or architectural blocks shall be used where practical.

The heating, ventilation, and air conditioning (HVAC) systems for occupied buildings and buildings where control system equipment is located shall be designed to provide positive building pressure by use of an air purifier that uses outside air for makeup. The HVAC system in buildings where widely varying heat loads may affect cooling capabilities shall be zoned and balanced. Single-pass, water-cooled units shall not be used. Electric resistance air heaters for building heat and humidity control are preferred.

For more details about buildings and HVAC refer to the “HVAC Systems Basis of Design for Plant Buildings” as listed in [Attachment A-3](#).

Instrumentation and telecommunication systems as well as the fire protection / detection system shall be designed and constructed per Specifications as listed in [Appendix B](#). Where specified, buildings shall have the same fire control panel manufacturer, model number (to be dictated by Fire and Gas control system manufacturer).

4.9.13 LNG Impoundment and Spill Containment

The sizing of the LNG impoundment basin shall be based on a design spill of LNG as defined in NFPA 59A “Standard for the Production, Storage, and Handling of Liquefied Natural Gas (LNG)” and 49 CFR 193 “Liquefied Natural Gas Facilities: Federal Safety Standards”.

Impoundment basins and spill containment shall be in accordance with the “Spill Containment Design Basis” listed in [Appendix B](#).

Spill from the storage tanks and trucks that contain refrigerant or hydrocarbon material shall be contained in its own impoundment. Impoundment basins and trenches designed and built in accordance with project Drawings and Specifications as referenced in [Appendix A-1](#).

4.9.14 Liquid Storage Facilities

The storage of refrigerants, NGL (C5+ condensate), amine, hot oil, and liquid nitrogen and the associated truck loading/unloading area shall be located downwind of any potential ignition

sources. The distance between storage tanks containing flammable material and buildings shall be in accordance with API 2510 and NFPA 30.

4.9.15 Grouting of Equipment and Base Plates

Cement mortar grout, non-shrink cementations, and epoxy grout shall be used for grouting the base plates and equipment skirts and shall be in accordance with the Specifications referenced in Appendix B.

4.10 CONTROL SYSTEMS

4.10.1 General

Contractor shall engineer, design, procure, install, test, commission and perform all the functional checks for all control systems and instrumentation in Liquefaction Project as described herein and appendices. This includes engineered Drawings, data sheets, associated engineering documents, and procurement and field installation of the control system instrumentation, inspections, expediting, required testing for the systems, complete loop checking and commissioning.

The control and operating philosophy for the Liquefaction Project is described in the “Control Systems Design Criteria”, as referenced in Appendix B.

The integrated control system and field instrumentation is considered the “Integrated Control and Safety System” (ICSS). The ICSS shall be made up of the following systems:

- Basic Process Control System (BPCS)
 - Alarm Management System (AMS)
 - Instrument Asset Management System (IAMS)
 - Data Historian System (Process Historians and Enterprise/Shadow Historian)
- Safety Instrument System (SIS)
 - High Integrity Pressure Protection System (HIPPS)
- Fire and Gas System (FGS)
- Control Network

The Instrumentation and Control Systems of the following subsystems shall interface with the ICSS:

- Closed circuit television system (CCTV)
- Machinery control and monitoring system (MCMS)
- Switchgear and medium voltage motor control centers (MCC) ENMCS monitoring interface to BPCS
- General Electric (G.E.) Mark VI controls for the gas turbines / compressors

- Gas Chromatography, Analyzers and Calorimeters (GC)
- 3rd Party mechanical package Equipment programmable logic controllers (PLC)
- LNG Tank gauging system (TGS)
- Truck Scales System (TSS)
- Plant Information Management System (PIMS)
- CCC Anti-Surge Systems
- Measurement devices (compliance and inventory)
- Analyzer Management and Data Acquisition system (AMADAS)
- Ship to Shore link system
- Loading Arms Control systems

The following systems are stand alone:

- Marine Navigational Aids and Monitoring system
- Public address and general alarm system (PAGA)

Contractor's Scope of Work shall be to interface with Owner's systems as follows:

- Pipeline Metering and Nitrogen Metering Stations

Contractor shall install Single Mode Fiber Optic and related hardware and configuration from the LNG Facility (utility powerhouse) to the inlet gas pipeline metering skid and the nitrogen metering station.

Owner will provide a communication list in Microsoft Excel format to Contractor for implementation in the ICSS. Contractor shall configure ICSS as per the communication list, including configuration of points in BPCS, configuration of graphics in BPCS, configuration of points into the historians, configuration of flow and energy totalizers (daily, weekly, Monthly) for each flow paths and total flows in metering skid. The total number of configured points will be limited to one hundred fifty (150) within Contractor's Scope of Work.

- Energy and Mass balance reconciliation application

Contractor shall reserve space in the ICSS server cabinets for Owner to install the EMBR server with a communication link to the Enterprise Historian.

The Human Machine Interface (HMI) for the ICSS and for control systems shall be the BPCS. Where indicated on P&IDs, the systems listed above shall be accessed through the HMIs. The variables, graphic points and readings associated with the package equipment controls shown on the vendor P&IDs will be displayed on local HMIs and shall also be displayed/mimicked on the dedicated BPCS HMIs.

Contractor shall update the project Specification "Human Machine Interface (HMI) Graphics" as listed in Attachment A-3 as part of the Work. The updated Specification will be based on the

selected ICSS system and the graphics shall follow EEMUA-201 Process plant control desks utilizing Human-Computer Interfaces” and ANSI/ISA-101.01 HMI standard for process automation. The new graphics shall be gray/blue scale, where the use of color shall be reserved only for abnormal process situations.

Contractor shall develop/design the ICSS HMIs/Graphics in conjunction with Owner. Graphics shall be reviewed and approved by the Owner. In case of vendors offers more than one HMIs software solution, Contractor shall provide the latest and more advance solution available for Owners approval for the long-term operability of the project and to extend the life of the product.

At a minimum, graphics HMIs/graphics shall have 4 different levels

Level 1: Overview of project

Level 2: Primary operating display

Level 3: System/Subsystem detail displays

Level 4: Diagnostic displays, Interlocks, Fist-Outs, Procedures, Documentation

The ICSS shall interface with remote subsystems. The remote subsystems located between buildings shall be connected using Fiber Optic cable. (See ICSS System Block Diagram as referenced in [Appendix B](#)). Field instrumentation shall be wired to a Remote IO (RIO) which shall fiber optic cables to connect with ICSS Control system cabinet located in the IO Room of the Electrical sub-station.

4.10.2 Control Room Ergonomic and Expandability Study

A Control Room Ergonomic Study (including human factors, lighting design of CCR, console arrangement planning, glare and reflection studies, and final CCR layout) shall be conducted in accordance with the Specification, “Basic Process Control System (BPCS)”, regarding the operating console desk arrangement. The expandability study will review control room, IO rack and server room to determine if there is sufficient space for Equipment associated with a fourth LNG Train. The findings of the Control Room Ergonomic and Expandability Studies shall be presented to Owner with impact to be evaluated for scope inclusion. These studies will review the following:

- Control panels for the current Liquefaction Project
- The addition of control panels for two additional LNG Trains
- Additional ICSS racks so as to support a four train LNG Facility
- Additional telecommunications Equipment cabinets so as to support a four train LNG Facility
- The fiber optic cables terminations for Trains 3 and 4 in the control room.

ICSS Operator consoles including desk in the Central Control Room shall be supplied for all the ICSS systems.

4.10.3 Cybersecurity

Contractor shall cybersecure the ICSS systems as require in Site Security Plan. Contractor shall incorporate into the detail design ICSS cybersecurity minimum requirements per Specification for Integrated Control and Safety System (ICSS) referenced in Appendix B.

4.10.4 Instrumentation

Contractor shall engineer, design, procure, and install all field instrumentation. The Scope of Work shall include inspection, factory acceptance test (FAT), storage and preservation of equipment at Site prior to installation, site acceptance test (SAT), pneumatic hook-ups, wiring, calibration at manufacture's facilities and at Site, continuity checks, functional, loop diagrams for field checking, and commissioning, as required. Additional specialty loops (for instance gas chromatographs) requirements shall also be included.

Contractor shall prepare data sheets for all instruments in scope as shown on the relevant P&IDs. Contractor shall coordinate with Mechanical package suppliers and obtain datasheets of all the instruments supplied with the package.

All instruments shall be designed and supplied for their intended application, location, and hazardous area classification. Transmitters shall be explosion proof, smart 4-20 mA plus HART with LCD indication and mounted on manifolds.

All instruments shall be calibrated and tested in the Vendor facility before shipment. Contractor shall obtain calibration certificates from suppliers for all the instrumentation including mechanical packages. Contractor shall inspect, and conduct loop testing of the instrumentation system during construction.

Contractor shall comply with instrumentation action items resulting from HAZOP, SIL, and Alarm Rationalization reviews, and revise all affected documents and Drawings to include recommendations from the reviews.

All transmitters and valve positioners shall be 4-20 mA plus "HART Protocol" compliant.

The Contractor shall use SmartPlant–Instrumentation for developing an Instrumentation Database in accordance with Attachment U-1 to Appendix U.

Contractor shall design and implement partial stroke testing (PST) for all the ESD and critical valves, using positioners to record the movement of the valve in the BPCS. Initialization of the "partial stroke" test shall be performed from the BPCS.

Fire-rated valves in ESD and critical systems shall be in compliance with the Project Loss Prevention Philosophy, Fire Zone Layout Drawings, as well as the Specification for General Instrumentation listed in Appendix B.

Contractor shall provide all bulk materials required to install the instrumentation.

Contractor shall take into account all RTDs for cool down of cryogenic systems in accordance with Specifications, and RTDs shall be permanently installed and the temperatures shall be displayed in the BPCS.

Contractor shall preserve and store Instrumentation and Control Systems in accordance with the Equipment Preservation Plan (PAL-PJT-PMT-STD-00-GEN-0001) as included in Appendix W.

4.10.5 Instrument Process Data

Contractor shall be responsible to develop the instrument data sheets for instruments including flow elements, control valves, analyzers, pressure relief valves, ESD & isolation valves, blow down valves and other instruments.

4.10.6 Piping and Instrumentation Diagrams (P&IDs)

Contractor shall develop the control and instrumentation details for all systems shown on the Contractor developed P&IDs as the engineering design progresses.

4.10.7 Instrument Index

Contractor shall develop a single project database as the instrument index for the instrumentation systems, including instrument indexes when provided by Vendors.

4.10.8 Major Process Control Loop Narratives

Contractor shall develop process control narratives for major control loops. These control schemes specify the general operation of systems and Equipment within the LNG Trains and their auxiliary support systems. Contractor shall develop final control logic narratives and interlocks descriptions during the engineering phase.

4.10.9 Loop Diagrams

Contractor shall develop loop diagrams for each instrument loop. The diagrams shall start at the field device and end at the indication or control device. The diagrams shall indicate the instrument tag number, wire number and ICSS I/O number.

4.10.10 Cause and Effect Diagrams

Contractor has developed Cause & Effects Diagrams to incorporate interlock and shutdown logics as per the Project P&IDs, Equipment Process Data Sheets.

Contractor shall complete the development of the cause and effect diagrams, following criteria as shown below:

- a. Improving readability
- b. Standardization between areas

- c. Utilization of standard cause and effect terminology used in the LNG industry
- d. Include input from packaged Equipment Vendors' cause and effect
- e. Recommendations from the HAZOP, PHAs, and SIL studies

4.10.11 Instrumentation on Packaged Equipment

Instrumentation on packaged equipment shall be consistent with the other plant instrumentation and in accordance with Instrumentation for Packaged Equipment Specification and is listed in Appendix B.

4.10.12 Instrument/Electrical Interfaces

Instrument/electrical interface shall be a combination of soft (connected through ENMCS) and hardwired signals.

Contractor shall engineer and design the instrument/electrical interface and procure the interposing relay panels or remote input output (RIO) interface cabinets.

ENMCS (Electrical Network Monitoring Control System) controllers shall be independent from BPCS controllers and provided by Electrical ENMCS shall be located in individual Power Houses and shall have share the plant backbone fiber optic network. ENMCS controller information shall be made available to plant operator on a dedicated console in the center control room.

4.10.13 Analyzers

Contractor shall engineer, design and procure the analyzers. Field analyzers shall be installed close to the sample probe. Gas chromatographs requiring environmentally controlled installation will be in 'Analyzer Houses' with their associated components, including calibration system. Contractor shall engineer, design, procure, install and commissioned all the analyzers including subcomponents such as sampling probes and conditioning system.

Sample probes shall be designed in accordance with Specification for Packaged Analyzer System as referenced in Appendix B.

4.10.14 Instrument Protection and Accessibility

Instrument installations shall be designed for safe and convenient access for operation, calibration, other routine maintenance, as well as for ease of construction and instrument protection (winterization). Field transmitters located in hazardous areas shall be accessible from both sides without requiring turning or movement that may compromise the electrical seal.

4.10.15 Instrument Winterization

Heat tracing of instruments / impulse lines shall be provided as required for specific systems. Diaphragm seal instruments are preferred over heat traced instruments where applicable.

4.10.16 Instrument and Control Systems Installation and Field Testing

Instrument installation shall be in accordance with the Specifications referenced in Appendix B. Contractor shall prepare a project-specific procedure, as required in Attachment A-1.

4.10.17 Instrument Process Connections and Instrument Air Lines

Contractor shall prepare instrument installation details for all process and utility system instruments. Typical installation details, which include tube fittings, pipe fittings, and root valves required for each instrument type shall be shown in the instrument index. P&IDs requiring these instruments will only show the device with a reference provided for details.

4.10.18 Instrument Power and Grounding

Contractor shall design an instrument power system and a grounding system to provide an accurate voltage point measurement, protect personnel, and prevent digital bit signal mixing, RF and electrical interference.

Contractor shall develop the grounding design in accordance with the Specifications and Applicable Standards and Codes (for instance, the National Electrical Code) and vendor recommendations.

All plant automation systems and critical instruments shall be provided with back-up power from the UPS system.

Electrical power distribution system for control panel boards and UPS systems shall be designed and procured by Contractor. Contractor shall also design and procure instrumentation power feeders including fuses and/or breakers distributed from the main power supplies.

4.10.19 Location Plans

Contractor shall provide instrument location plans for all instrumentation and instrument equipment, junction/remote IO boxes, and control panels.

Instrument air supply main header routes shall be identified on the applicable Drawings with offtakes to the LNG Trains and other facilities, identifying the piping line numbers and the instrument air take-off valves.

Tagging and elevations shall be identified on the applicable Drawing.

4.10.20 Wiring

Wiring diagrams developed shall include:

- a. Cable schedules listing details for the cable type, class, length, start and finish points for all cables;
- b. Junction box wiring diagrams, showing terminal connection details, core and cable numbering, cable run detail from the junction boxes to the individual instruments, including details for multi-core cables;
- c. Electrical installation detail showing typical cable gland arrangements and miscellaneous electrical installation detail; and
- d. Fiber Optic Patch Panels termination connection details, block diagrams for fiber optics cables.

4.10.21 Junction Boxes for Instrumentation

Contractor shall supply separate field junction boxes (JB) / Remote-IO box for BPCS Signals, SIS, FGS, PLCs.

The following sparing philosophy shall be implemented for junction boxes:

- a. physical space in the junction boxes (at least 20% at Substantial Completion of the Stage)
- b. terminal strip/terminal blocks, and wired pairs (at least 20% at Substantial Completion of the Stage).

4.10.22 Plant Automation

Contractor shall engineer, design, procure and install the ICSS. Contractor shall establish/solve communications protocol between systems. Contractor shall advise where the ICSS configuration, programming, graphics configuration, engineering, testing and integration shall be performed. The ICSS shall be based on the following sub-systems:

4.10.22.1 Basic Process Control System (BPCS)

The BPCS shall be the operator HMI interface for all process control and monitoring systems for the facility. The primary function of this system is to produce, monitor, and control quality of LNG at design flow rates.

Controllers and servers for the LNG Facility shall be integrated. Control and measurement signals from PLCs (package equipment), truck scales system, SIS, FGS system, cool down temperatures, LNG storage, LNG cooldown, and loading operations shall also be displayed on the DCS consoles.

Contractor shall provide auto-tuning software. Contractor shall use OTS tuning parameters as initial set up during start up and commissioning of the facility, and Contractor shall fine tune the control loops as required.

4.10.22.2 Enterprise Historian

Contractor shall specify, procure, configure, install interface and test the OSI-PI Enterprise Historian. Enterprise Historian will be in Level 4 in accordance with ICSS block diagrams. Enterprise Historian shall collect and store all the ICSS points of the LNG Facility including packaged Equipment. Contractor shall include licensing for a minimum of 50 users.

Contractor shall provide access to Historian, Historian tools and Historical data, as soon as Historian is energized on site, as Owner will have to configure operation reports as preparation to readiness for Operation.

4.10.22.3 Safety Instrumented Systems (SIS) and HIPPS (High Integrity Pressure Protection System)

The primary function of this system is to predict unsafe operating conditions and provide protection for critical process equipment and systems. Each LNG Train and the Common Facilities systems shall be provided with independent SIS and HIPPS.

SIS shall be engineered for the LNG Terminal based on IEC 61508 and 61511 (ANSI-ISA-84).

SIL 3 is defined as the maximum level for the LNG Terminal.

4.10.22.4 Fire and Gas System for Process (FGS)

A fire & gas detection and alarm system with a fully redundant controller shall provide continuous fire and gas surveillance throughout the LNG Facility to alert personnel of the presence of gas, fire or smoke.

The FGS shall consist of smart gas detectors, flame detectors, heat sensors, smoke detectors, manual pull stations, and other fire mitigation equipment for surveillance/protection of all the outdoor process areas, and indoor shelters/buildings in accordance with Applicable Laws.

Refer to the Specification for fire and gas system in [Appendix B](#), for additional details.

4.10.22.5 Fire and Gas System Panels for Buildings

Building fire alarm control panel (FACP) shall communicate with the ICSS-FGS through ethernet or modbus/TCP IP.

4.10.22.6 Alarm Management System (AMS)

Contractors shall develop, design and install the AMS following ANSI/ISA–18.2-2016 Management of Alarm Systems for the Process Industries to improve and manage safety, quality, and productivity of the facility.

Contractor shall follow all the Alarm Management Lifecycle stages per ANSI/ISA–18.2-2016 Management.

Contractor shall develop an Alarm Philosophy for the Liquefaction Project and conduct alarm rationalization studies for alarms generated in ICSS and in packages equipment.

Contractor shall develop and deliver:

- a) Master alarm database per ANSI/ISA–18.2-2016
- b) A fully developed and configured Software Package for the facility.

An effective alarm management system ensures that deviations from desired state/mode are communicated effectively to and prioritized for the console operator. The alarm system is primarily for the console operators and configuration of the alarm system to focus on operation needs.

The AMS shall capture alarm and events of all ICSS systems/sub-systems and chronologically log the events in an event database. It shall be possible to export the event database to various other applications for analysis.

The ALMS shall have the following minimum requirements:

- a) Alarm Metrics, Benchmark and Analyze the alarms in given period
- b) Alarm Shelving
- c) Dynamic Alarming
- d) First Out multi-alarm suppression
- e) During start-up, the Operators shall be able to Shelve the process areas and equipment not in service.

The AMS shall be configured using Enhanced and Advanced Alarming techniques to shelve alarms when rotary equipment is not running, i.e. low current or low speed shall be disabled when the equipment is not running. Contractor shall identify those alarms during the Alarm rationalization studies. AMS shall have Dynamic Flood Suppression

AMS and alarms in general shall comply with ANSI/ISA–18.2-2016 metrics in section 16.9 Alarm Performance Metric Summary

4.10.22.7 Instrument Asset Management System (IAMS)

This system shall be provided by the BPCS OEM (Original equipment manufacturer).

SIS to BPCS HART protocol demodulation shall be provided by the SIS OEM.

Propane and mixed refrigerant compressors and all the other packaged equipment shall be supplied with IAMS connectivity thru HART multiplexers.

The primary function of the system is to maintain data on plant Equipment such that Equipment maintenance requirements can be identified prior to the failure of the units.

4.10.22.8 Public Address and General Alarm System (PAGA)

A field-proven design of the PAGA system shall be provided to inform personnel of an abnormal situation and support safe evacuation of the LNG Facility.

The PAGA System provides specific alarm tones, pre-recorded or live voice messages, to all or selected areas of the facility by use of loudspeakers. In areas with a high ambient noise level, flashing lights (beacons) complement voice messages and audible alarms.

Alarms can be initiated either manually from any one of the dedicated access panels or automatically from the Fire and Gas Detection System and/or Emergency Shutdown System main panel. Voice messages can be generated either from the microphones at dedicated access panels or from telephones in the facility.

PAGA system shall be provided for indoors and outdoors locations.

4.10.22.9 Machine Condition Monitoring System (MCMS)

A permanent on-line MCMS shall be provided by Contractor to continuously monitor the performance and condition of all critical rotating Equipment, such as the refrigeration compressors, their gas turbine drivers, and other pumps/compressors installed in the LNG Trains and the common support facilities.

The primary function of this system is to safeguard critical Equipment through motion detection measurements; collection of equipment performance data to predict any abnormalities and provide early notification of deterioration and unit condition changes.

Part of the function of this system is the diagnosis of machine performance and assistance in the predictive maintenance for selected Equipment.

Hardware and software required for the MCMS shall be supplied by Contractor. Data collection and archiving shall be in rack mounted servers located in indoor cabinets with local HMI.

Contractor to provide five (5) licenses for sole use by Owner.

4.10.22.10 Programmable Logic Controller Network (PLC)

The primary function of this system is to provide package equipment control system applications. Communication networks shall also be used for maintenance as well as for local control. The control and maintenance network for PLCs shall be independent.

All the PLCs shall be supplied with HART multiplexers for analog input/output signals, HART multiplexers shall be connected to the Asset Management System (AMS). The propane and mixed refrigerant compressor control systems supplied by GE Oil & Gas shall also be connected to the AMS.

Anti-surge controllers shall have the same control and maintenance networks as the PLCs.

4.10.22.11 LNG Tank Gauging System (TGS)

A LNG Tank Gauging System (TGS) shall be provided to provide overfill protection and stratification monitoring, with alarms to warn of potential rollover conditions. The TGS shall have the capability of measuring / providing tank level, temperature and density profiles over the tank height plus provide calculation data for tank inventory. The TGS shall be designed as a fully redundant system and data communication to the BPCS shall be redundant.

4.10.22.12 Anti-Surge System

Anti-Surge Systems shall be provided where specified in the mechanical datasheets. Contractor shall coordinate activities with Vendors that provide compressors, anti-surge valves, flow measurement devices (orifice and venturies) to ensure that the anti-surge system is installed and tuned to the design requirement of the compressors and the LNG Facility.

4.10.22.13 Maintenance Network associated with package equipment

The primary function of this system is to communicate with the IAMS and PLC systems. The system will be programmed and configured to provide online trouble shooting capabilities for various systems.

4.10.22.14 Truck Scale System (TSS) (Weigh Station)

The primary function of this system is to weigh the product trucks prior to and after loading/unloading to determine the weight of their shipping cargo. The TSS shall interface with the BPCS using ethernet or modbus TCP/IP or OPC, data shall be collected in the historian.

4.10.22.15 Plant Information Management System (PIMS)

The primary function of this system is to provide many different types of LNG Facility information to desktop applications.

Contractor shall supply a desktop PC on the operating console and configure it to the LAN.

4.10.22.16 Analyzer Management and Data Acquisition System (AMADAS)

An analyzer management and data acquisition system shall be provided to measure the performance, availability and maintainability of a broad variety of all process analyzers and other critical instruments inside analyzer shelters. AMADAS shall be used to optimize the performance of the gas chromatographs, process analyzers, and help in determining when maintenance is required.

Contractor shall update the Specification for the Packaged Analyzer Systems to include the AMADAS requirements as part of the Work.

4.10.22.17 Control Network

Contractor shall be responsible for the control network for the LNG Facility. Contractor shall continue detailed design of the ICSS- Block Diagrams as referenced in Appendix B, and shall incorporate details of Supplier packaged Equipment, details of the ICSS Supplier selected scope, and Specifications into the design of the control network.

The control network shall be detail designed by Contractor in coordination with its Vendors and their networking and telecommunications SMEs.

The fiber optic communications network shall be the primary media for communication for the LNG Facility control network. Separate cabinets shall be provided for the ICSS system (not to be combined with the telecommunications cabinets) with dedicated ICSS patch panels and including switches, routers and media converters for the ICSS system. All communications systems shall be redundant.

The fiber optic communication network shall also be designed with a minimum of 50% spare capacity at Substantial Completion for fiber optic cable fibers and all fibers will be terminated in patch panels in accordance with the Specification “Telecommunications Design Criteria” referenced in Appendix B.

4.10.23 Operator Training Simulator (OTS)

In accordance with the requirements listed in Appendix P, the OTS shall be provided as outlined below:

[***].

4.10.24 Special Tools and Software

Contractor shall supply all the special tools required to calibrate, connect and configure all control systems that are part of the LNG Facility. This shall include tough books (field hardened) and tools suitable for Class 1 Div. 2 for PLCs and GC troubleshooting, Hart Handhelds, Gas Calibration Kits for Gas Detectors, Pressure Calibration Handhelds, Device Net/Modbus Handhelds, PLCs, and configuration software. Any special tools included as part of the control system purchase orders will be turned over to Owner as per the requirements of the Agreement.

All software and licenses provided shall be accompanied by their original installation media (CD, DVD, USB) where applicable and installation certificate where applicable. and The software, licenses and installation certificates provided to Owner shall be sufficient for Owner to re-install in new computers in case of failure of the original devices.

Contractor shall request each Supplier to generate a list containing all software information, licenses, operating systems information, special tools, laptops, printers, handhelds and any software, special tools or ship loose item provided by Supplier.

Contractor shall compile a list of all software, special tools, USB dongles licensing drivers, original installation drives (CDs, DVDs, Hard drives, USBs), laptops and documentation, for transfer to Owner prior to Substantial Completion.

This list shall contain, as a minimum, the following information

- a) Package/System equipment
- b) Project PO number, in case vendor has a different PO number, this needs to be included
- c) Vendor information, including contact information
- d) Item description, Software or license description
- e) Manufacture/developer of the good provided
- f) Model, Serial number, Software Version, year of release as applicable for each good
- g) If the good is a license or software, Contractor shall describe in what fashion was the software provided, i.e. USB, CD media, DVD media, certificate from manufacture with serial number information for registration over internet or phone.
- h) Project reference documentation.

4.11 ELECTRICAL

The electrical system shall be designed to provide:

- Safety for operations and maintenance personnel
- Reliability and flexibility
- A coordinated protection system
- Equipment properly rated for continuous operations
- Adequate short circuit ratings (interrupting capacity)
- Adequate and coordinated insulation levels

4.11.1 Electrical Equipment

The electrical systems to be engineered, procured, constructed, and commissioned by the Contractor include:

- 230 kV transmission lines from Entergy's Sandling substation interface point, including OPGW from Entergy's demarcation point
- 230 kV GIS switchgear or GIS switchyard in the plant with associated equipment and interface to Entergy's Sandling substation
- 230/34.5 kV Transformers
- Distribution transformers (Oil filled and Dry type)
- Pre-fabricated powerhouses
- 34.5kV, 13.8kV, 4.16kV, 480V switchgears and MCCs as applicable
- AC UPS systems
- DC Systems for Electrical control and protection
- Lighting / Small Power Transformers & Panelboards
- Indoor and outdoor lighting, including area and street lighting
- Cables
- Metal enclosed Cable Bus
- Raceway systems including cable trays & channel
- ENMCS system
- Grounding systems
- Lightning protection systems
- Aircraft warning lights
- Junction boxes and local control stations
- Electrical heat tracing systems
- Any other equipment / systems / materials required to provide safe functioning and proper interface with the plant Electrical systems.
- Essential Power System
- Cathodic Protection System
- Power factor correction

The Essential power generation system shall provide back-up power for essential loads. Contractor shall develop a load list for essential users and size the system accordingly. The results of a preliminary analysis indicates that the system shall consist of three (3) Essential Power generators. These generators shall be diesel engine driven generators each with minimum nominal rating of 3MW Prime, 4160 V, 3-phase, 60 Hz and 0.8 pf, dedicated load centers,

MCCs, auto transfer switches (ATS) and any other electrical components required for an operational standby power supply system. Rating of the generators shall be verified by the Contractor at the time of purchase.

The electrical system shall be designed to permit safe, logical and sequential energization of the system, both during initial startup of the plant and during restarting the plant after any power blackouts. An energization sequence / narrative detailing the above shall be submitted by the Contractor to the Owner for review.

4.11.2 Electrical Deliverables

Contractor shall produce all electrical engineering and design Deliverables listed in Attachment A-1 and required to accurately and sufficiently describe the distribution system layout and associated details.

4.11.3 One Line Diagrams

One-line diagrams to be developed by Contractor as part of the Work are listed in Attachment A-1. Contractor shall develop detailed one line diagrams. The following ratings will be confirmed by study/calculations and incorporated during engineering:

- Transformer Ratings
- Switchgear and MCC Continuous Ratings
- Switchgear and MCC Short Circuit Ratings
- Essential Power System Ratings and Requirements
- Continuous Ratings and Short Circuit Ratings of Any Other Electrical Distribution System Component

Contractor shall produce an overall one line diagram delineating each powerhouse and shall consider provisions for future expansions during engineering.

4.11.4 Electrical System Study

Contractor shall carry out an electrical system studies using ETAP software.

Contractor shall ensure that the following studies/calculations are executed:

- Load Flow Studies including power Factor Correction Study
- Fault Current Studies
- Motor Starting Conditions
- Harmonic Distortion Studies
- Arc-Flash Study
- Grounding Studies

- Cable Sizing Calculations including thermal calculations for the under-ground duct banks
- Protection Coordination Study
- Electrical Load List
- Electrical Equipment List
- CT & VT sizing calculations as needed and saturation curves as supplied by Vendors
- UPS sizing in the form of a load list
- Typical lighting calculations
- Lightning protection risk assessment study
- Relay setting
- Relay configuration files as submitted by Vendors
- Battery and charger calculations as submitted by Vendors

4.11.5 Uninterruptable Power Supplies (UPS)

Contractor shall design the UPS System in accordance with PIP ELSAP04 and Project datasheets.

4.11.6 DC Power Supplies Including Switchgears

DC power supply system including switchgear will be provided by the Powerhouse / substation Supplier who shall determine the DC power supply system requirements, engineer and design, procure, install, commission and verify the operation of all DC power supply systems including those used for operating switchgears, and transformers.

The Suppliers shall prepare detailed one-line diagrams for all DC power supply systems. Suppliers shall size batteries and chargers and verify that minimum voltages are maintained as specified and required by the Suppliers. Redundant battery chargers shall be provided for DC power supply system(s).

4.11.7 Electrical Heat Tracing

Contractor shall design, procure, install and verify the correct operation of the electrical heat tracing system including dedicated distribution panels located throughout the LNG Facility.

4.11.8 Electrical Equipment Powerhouses / Buildings

Contractor shall perform engineering and develop Drawings for electrical equipment powerhouses / buildings to meet the requirements of the LNG Facility as set forth in the Agreement.

The power houses and electrical buildings shall be designed and constructed in accordance with the requirements of the Specification PIP ELSSG11 and the Project datasheets.

4.11.9 Cable Routing/Cable Trays

Contractor shall develop the cable routing/cable tray Drawings and a cable database.

Contractor shall furnish and install a complete raceway system, which shall include channel, conduits, flexible conduits, cable trays, under-ground ducts, wire-ways, cabinets and boxes, and all other materials and devices required to provide a complete system for support and protection of electrical conductors.

4.11.10 Essential Power Supply System

The essential power supply system shall be rated for operation at 4160/480 V and shall act as a hub for local essential (e.g. lighting, power, instrument, HVAC, UPS) power needs.

4.11.11 Arc-Flash Labeling

Contractor shall label all electrical enclosures/panels in accordance with Contractor's Arc-Flash Study.

4.11.12 Electrical Interface Coordination

Contractor shall be responsible for interface activities between various systems and equipment, verifying and establishing interface processes during Vendor document review, for efficient functionality of systems after field installation and hook-up to the power supply systems.

4.12 TELECOMMUNICATIONS

Contractor shall follow and provide telecommunication systems as required in the Site Security Plan as listed in Appendix Q and the Specifications for such Work as listed in Appendix B.

Telecommunications system shall include the following sub-systems:

- Telecommunication infrastructure (fiber optic cables, ethernet cables, coaxial cables, electrical cables; Electrical installations, and any other activity related to Telecommunication);
- VoIP Telephone System;
- Plant Business LAN;
- Security LAN;
- Hot-Lines;
- Closed Circuit TV System (CCTV System);
- Public Address and Intercom System (PA/I);
- Access Control/Security System;
- Intrusion Detection System;

- Trunked Radio System;
- Marine VHF Radio System

Contractor shall produce all Telecoms engineering and design Deliverables required to accurately and sufficiently describe the telecoms systems listed above as set forth in Attachment A-1.

Contractor's engineering package shall include the following types of Deliverables:

- Specifications
- Manufacturers' Datasheets
- Cable Schedule
- Cable Routing Plans
- FAT/SAT Test Procedures
- Power and Heat Load Calculations
- Telecom Equipment List
- Site Equipment Location Plans
- Equipment and Installation Details
- Wiring Diagrams
- General Arrangement Drawings
- Telecom Equipment Location Plans
- Equipment Room Layouts
- Equipment Elevations
- Cable Termination Diagrams
- System Block Diagrams
- Radio Coverage Studies
- PA/I Coverage Study

Contractor shall integrate any required related system to the Telecom GPS Master Clock such as the PAGA, access control system and security systems as required in this Appendix A, Appendix B and the Site Security Plan per Appendix Q.

Contractor shall determine the locations of telecommunications outlets throughout the buildings in the LNG Facility. Wifi shall be provided inside buildings per the telecommunication block diagrams and outside as necessary to provide wifi coverage for the truck weigh station.

Contractor shall supply telecommunication systems as listed in the "Telecommunication Design Criteria" Specification as referenced and the block-diagrams in Appendix B:

Equipment
Infrastructure-All Systems
Fiber Optic Cable and Copper Cable
Conduit/Cable Tray
All Electrical Installations
All mechanical and civil works and installations related to Telecommunication systems
UPS and batteries
All Junction Boxes (indoors and outdoors)
Fiber Optic Patch panels
Cat6 Patch Panels
Racks/Enclosures including electrical power
Engineering and Deliverables
Telephone VoIP system
IP PBX
VoIP Switches
VoIP Servers
VoIP Phones (/Prefabricated Power Houses and Building)
Ethernet RJ45 Sockets (wall jacks) for all buildings
Conference Phones
Conference Room Equipment
Engineering and Deliverables (with input from Owner for Owner's supplied equipment)
Networking Devices for LAN
Core Switches
Distribution Switches
Access Switches
Switches with SFP ports and STP pluggable connectors
Cisco Wireless Access Points (WAPs)
WAP Controllers
Firewalls for all Telecommunications systems provided by Contractor that interfaces with Business LAN
Racks/Enclosures for Owner use (with input from Owner)
Rack Mounted Power Distribution Units/Strips (PDUs)
Ethernet RJ45 Sockets (wall jacks, floor, ceiling for WAP and conference rooms, etc.)
Ethernet and Fiber Optic patch cable to networking devices
Master telecom GPS clock with antenna installation, software and synchronization of systems provided by Contractor
Engineering and Deliverables (with input from Owner for Owner's supplied equipment)
Hot Lines
Hotlines and Associate Equipment
Engineering and Deliverables
CCTV
All CCTV cameras
Printers for the security CCTV system
Servers with redundant power supply and redundant storage units
Workstations for Operations (Process CCTV)

Equipment
Workstations for Security and CCTV
Software Licenses
Engineering and Deliverables
PAGA
PAGA System
Speakers/beacons outdoor
Speakers indoor
PAGA access panels
Engineering and Deliverables
Access Control/Security System
Core Switches
Distribution Switches
Access Switches
Switches with SFP ports and STP pluggable connectors
Access control panels
Magnetic or strike locks for doors
Cards Readers
Servers and Workstations and Monitors for Access Control
Automated personnel turnstiles
Intercommunications stations
Engineering and Deliverables
Intrusion Detection System
Fiber optic intrusion detection system
Engineering and Deliverables
Permanent Radio System
Radio Tower
Antennas and Repeaters
Radio system components
Radios Handhelds with batteries, batteries chargers and accessories
Fixed Radios (for Operations)
Fixed Marine Radios
Engineering and Deliverables

4.12.1 Racks/Enclosures for Owner use

Contractor shall reserve physical space for Owner to Install their Business LAN active Equipment in all building locations where telecommunications are provided, Cabinets shall be ready to be used, fully wired and power up.

4.12.2 Fiber Optic Cable Network (FOCN)

Contractor shall engineer, design, procure, install, test, and provide all associated Deliverables for the FOCN in accordance with Attachment A-1.

4.12.3 Telecommunication Testing

Contractor shall perform all tests as listed in the Specification for "Installation and Testing of Telecommunications Cables" referenced in Appendix B. Contractor shall develop testing procedures for the performance of such tests.

Contractor shall also develop and submit FAT/SAT testing procedures for all telecommunication systems and components provided.

Telecommunications systems integrator personnel shall be on Site and at the shop for execution of acceptance testing as defined in Appendix T-1.

4.13 SITE SECURITY

Contractor shall design and install the Site security systems in compliance with the requirements for Site security as listed in the Site Security Plan as referenced in Appendix Q and the Specifications referenced in Appendix B.

The Site security system shall be provided that will include the following:

- Intrusion Detection and Assessment system
- Security CCTV system (combination of fixed and Point-Tilt-Zoom cameras)
- Security Access Control System (buildings, guard houses, jetty areas)
- Lighting including lighting of the berm, the fence, and the surrounding area
- Fence System
- Biometric checking system
- Gates and wedge barriers for vehicular access points

4.14 FIRE PROTECTION & SAFETY SYSTEMS

Contractor shall engineer, design, procure, install, inspect and commission all Equipment, instrumentation and materials required for the fire and gas detection, and fire protection systems for the LNG Trains and the Common Facilities in accordance with applicable Specifications and Applicable Codes and Standards, including 49 CFR 193 and NFPA 59A, and Appendix B. Contractor, as a minimum, shall complete the Vendor and DECN Hazard and Operability (HAZOP) study, and define the required protection method during the EPC phase of the Project.

The residual risks shall be mitigated via fire & gas (FGS) system and fire protection means.

The fire detection and protection basis of engineering shall be on guidelines provided in the “Loss Prevention Philosophy” listed in Appendix B.

FGS detector location layouts shall be designed based on identified sources and the associated cause and effect to be implemented into the facility Integrated Control and Safety System (ICSS).

Firefighting means shall be provided throughout the LNG Facility to quickly extinguish or control any fire incident at its incipient stage with the suitable agent, including but not limited to, water, foam, dry chemical, carbon dioxide or other gaseous extinguishing systems.

An underground firewater network shall be designed to supply firewater where required. The fire water network shall be sized according to the fire water demand calculated during the EDSA and verified as part of the Work. Two firewater storage tanks sized for a minimum of two (2) hours of operation each shall be provided. Two (2 x 50%) diesel firewater pumps and 1 x 50% electric motor driven fire water pump is provided. Tug boat connections shall be provided to pump river water into the system as back up to the fresh fire water system.

All fire protection equipment shall be UL/FM approved.

Contractor shall also identify the areas which hazardous material may come in contact with personnel and provide safety shower and eyewash stations not more than 50 ft from the risk source.

Contractor shall develop P&IDs, Equipment data sheets, and location Drawings for the LNG Trains during engineering. Contractor shall verify fire water line sizes, pipe Specifications and all system hydraulics.

4.14.1 F&G Cause and Effect Diagrams

Contractor has developed Fire and Gas Cause & Effects Diagrams to incorporate interlock and shutdown logics as per the Fire Zones, Project P&IDs, Building Fire Control Panels, Equipment Process Data Sheets.

Contractor shall complete the development of the Fire and Gas cause and effect diagrams, following criteria as shown below:

- a. Consistency of fire and gas protection across OSBL and ISBL.
- b. Standardization between areas
- c. Utilization of standard cause and effect terminology used in the LNG industry
- d. Utilization of packaged Equipment fire and gas cause and effect and fire and gas detectors.
- e. Recommendations from the HAZOP and LOPA studies

4.15 LNG LOADING, WARM LNG TANKER GAS-UP AND COOL-DOWN

Contractor shall engineer, design, procure, install, and commission all necessary LNG Loading Equipment and facilities to allow for warm LNG Tanker gas-up and cool-down, on the Berth, and associated vapor handling in a safe manner.

The following scenarios are to be considered:

- Preparation for ship arrival
- Operation with Off-Spec Vapor Return from the LNG tanker during the Gas-Up and Cooldown Operation.
- BOG management during ship loading

As part of the Liquefaction Project, the south Berth shall accommodate the gas-up and cool-down requirements as listed in this [Appendix A](#) and in [Appendix B](#).

4.16 MARINE

Marine design shall be in accordance with the Specifications and requirements in [Appendix B](#).

4.16.1 Marine Facilities

The marine facilities include:

- LNG Loading Berth: one south Berth capable of berthing tankers from 125,000 m³ to 266,000 m³ (QMAX) capacity, with a design loading rate of 12,000 m³/hr.
- Access trestle supporting a pipe rack and roadway providing access to the berths
- Material Offloading Facility (MOF) consisting of a quayside structure to import Equipment and Contractor Equipment during performance of the Work
- Contractor shall construct at least one Pioneer Dock; if Contractor elects to construct additional pioneer docks, it shall do so at its own cost and in compliance with all Owner Permits.
- Ship turning basin and LNG berthing basin, including navigational aids and dredging including pre-turnover dredging of shoaling and maintenance dredging. The dredging depth shall be defined as what is outlined in the Specification for “Dredging Works, Marine Facilities Design Criteria for LNG Loading Berths” and “Marine Facilities Design Criteria for Material Offloading Facility” as referenced in [Appendix B](#).
- Shore protection at the Berth pocket, MOF dredging slope and turning basin east bank slope.

4.16.2 Marine Analyses

The design of the marine structures for the jetties shall meet all requirements according to the Applicable Codes and Standards and shall consider the likely failure mechanisms.

As part of the marine facilities design, the following analysis shall be performed:

- Basin and berth geometry
- Shore protection analysis and design
- LNG berth topside equipment
- Surge and drift analysis
- Dredging requirement
- Mooring load analysis in accordance with OCIMF – Mooring Equipment Guidelines (Fourth Edition 2018). Static and dynamic mooring studies to determine the optimum mooring arrangement for the Berth.

4.16.3 Marine Berth and LNG Loading Platform

Contractor shall engineer, design, procure, fabricate, and install the marine Berth and loading platform in accordance with the Specifications and Applicable Codes and Standards provided in Appendix B, as applicable.

The Berth shall consist of a pile supported LNG Loading platform, breasting dolphins, mooring dolphins, and a trestle with combination pipe rack / roadway connecting to the onshore LNG Facility.

4.16.4 Ship Turning Basin and Berth Pocket Layout

The ship turning basin in the Sabine-Neches Waterway and LNG Berth basin arrangements have been assessed by the “Fast-Time Desktop Navigation Simulations” and “Focused Q-Max Ship handling Simulations” as referenced in Appendix B.

The turning basin is 1700 ft, which is 1.5 times the overall length of the largest ship with the fleet of design vessels. Contractor shall review and validate the results of the navigation simulation with respect to the Site conditions, including bathymetry, berth layout, environmental conditions and other factors. The berth pockets and turning basin shall accommodate the maximum allowable ship motion as specified in the guidelines PIANC, International Association of Ports and Harbors. The design depth of the berths should take into account various factors, in addition to the maximum draft of the design vessel and required under keel clearance.

4.16.5 Dredging and Disposal

Contractor shall be responsible for all dredging requirements for the Berths, Berth basin, MOF, and Pioneer Doc. The Berth basin shall be based on the criteria specified in the in the Marine Facilities Design Criteria for LNG Loading Berths (PAL-T0-MAR-DEC-24-GEN-0001) and the Marine Facilities Design Criteria for Material Offloading Facility (PAL-T0-MAR-DEC-80-GEN-0001).

Contractor shall be responsible for the disposal of such dredged material in accordance with Applicable Law and the Permits and otherwise at the approved and permitted disposal locations as specified in the Marine Facilities Design Criteria for LNG Loading Berths (PAL-T0-MAR-

DEC-24-GEN-0001) and the Marine Facilities Design Criteria for Material Offloading Facility (PAL-T0-MAR-DEC-80-GEN-0001).

4.16.6 Shore Protection Design

Shore protection shall be designed for the LNG Berth pocket, MOF dredging slope, and Turning Basin East Bank in accordance with CIRIA, PIANC, and USACE Coastal Engineering Manual guidelines.

4.16.7 Navigation Aids

Navigation aids shall be provided as required to allow safe ship navigation for the LNG Facility. The aids to navigation shall be in accordance with the International Association of Lighthouse Authorities (IALA) Maritime Buoyage System B. The location, color, and intensity for these navigation lights shall be in compliance with U.S. Coast Guard regulations.

The location of navigation sector lights and range buoys are outlined in the Marine Drawings and the “Project Specification for Aids to Navigation” identified in Appendix B and shall be confirmed with the Sabine Pilots Association.

4.16.8 Material Offloading Facility (MOF)

Contractor may elect to use the Sabine-Neches Waterway and connected water ways to bring in large Equipment and heavy construction materials to the Site during construction. Contractor shall construct a MOF at the location as shown on the overall site plan, as part of the Work. The MOF layout and function are to be designed to receive roll-on / roll-off / lift-on / lift-off vessels as approved by the U.S. Army Corps of Engineers and the U.S. Coast Guard, which will not include tug berth capability. The MOF shall be designed for use by Owner following Substantial Completion of Stage I. Contractor shall design the MOF in accordance with the Agreement, and shall construct the MOF, including sheet piling, dredging and piling. Contractor shall also construct a heavy haul road from the MOF location to the Site to allow transport of heavy loads.

4.17 TIE INS

The design of the LNG Facility shall allow for the isolation/removal of the entire scope of the LNG Tank and supporting Facility as well as the 2nd Berth and support facilities.

The LNG Facility design shall include tie-ins for future expansion of Train 3 to ensure continuous operations of the LNG Facility, in accordance with the “Pre-Investment Plan” as referenced in Appendix B.

4.18 TECHNICAL DEVIATION AND MANAGEMENT OF CHANGE PROTOCOLS

Any technical deviations shall be handled in accordance with Section 2.25.4 of the Agreement.

5.0 ENGINEERING SUPPORT GROUPS

5.1 REGULATORY

Contractor shall designate a single individual to act as the coordinator to support preparation of the technical components of FERC package submissions and coordinate with Owner with respect to other Permit submissions. The coordinator shall also participate in coordination meetings with Owner, including Governmental Authorities as necessary, and manage the FERC technical package tracking sheet.

Per section 4.4.2.1 of the FEIS, Contractor shall plan for the ICWW crossing of a dredge pipeline, in accordance with the applicable Owner Permit, in the case that it becomes a requirement for the Project.

Contractor shall provide training to Contractor personnel working on the Site and/or ship canal to stop work in the vicinity of any threatened or endangered species and notify Owner's Environmental Inspector. During the performance of the Work, Contractor must continuously observe the potential impact of the Work to the environment and wildlife. Contractor shall comply with Section 4.6.1.3 of the FEIS. Contractor shall utilize nesting inhibitors within on-site Construction parking areas such as installation of colorful pennant strings, etc. If manatees are present within the impacted Project waters, Contractor must comply with the requirements of Section 4.7.3 of the FEIS.

The Traffic Impact Assessment conducted by Contractor under the EDSA shall serve as the basis of a Traffic Management Plan. Contractor shall develop and implement a Traffic Management Plan in compliance with FERC Order condition number 23 for use in connection with the Work. Contractor shall update such plan from time to time to ensure continuing compliance with FERC requirements.

All construction activities shall be conducted in accordance with the requirements of the applicable air quality standards provided under the Owner Permits.

In accordance with Section 2.10 of the Agreement, Contractor shall satisfy the requirements of the conditions of the FERC Order except to the extent described in Section 13 of this Appendix A or as clarified in Appendix J-3.

Without limiting the generality of the foregoing, with respect to the requirements for a quantitative analysis under Condition 106 of the FERC Order, Contractor shall, as part of the Work, prepare and submit the following Deliverables to Owner:

- Fire Protection Evaluation Report (including firewater demand calculations)
- Fire Water Layout Drawings
- Passive Fireproofing Layout

- Passive Fire Protection Schedule

These Deliverables will detail locations and Equipment utilizing active and passive fire protection, Supplier data for the thickness of passive fire protection, as well as calculations demonstrating flow rates and durations of any fire water, as well as compliance with API 2510.

5.2 IT/IS & DOCUMENT CONTROL

Contractor shall provide documentation for the Work as required by the Agreement, Appendix U and Attachment U-1 to Appendix U.

5.3 PROJECT HANDOVER

Contractor will develop a records retention and turnover plan (RRTP) that will identify the various document types and disposition of same at Project close-out with requirements, formats, and timing to comply with Appendix U, and the Document Management Plan as referenced in Appendix W.

5.4 PROJECT CONTROLS

As part of the Work, Contractor shall utilize project controls tools and personnel to appropriately monitor, track and report on the progress of the Project as set forth in the Project Controls Plan as part of Appendix W, the Project Execution Plan and Appendix S.

6.0 PROCUREMENT, MATERIALS MANAGEMENT & LOGISTICS

Contractor shall requisition, bid, evaluate, purchase, inspect, expedite, customs clear, deliver, store, manage, and preserve the equipment and materials required for the complete fabrication, erection, construction, installation, commissioning, testing, and operation of the LNG Facility as defined in Agreement.

6.1 PROCUREMENT PLAN

Contractor's Procurement & Contracting Strategy Management Plan and Logistics & Materials Management Plan, which are each part of the Project Execution Plan, Appendix W to the Agreement, address procurement, Supplier and Subcontractor management, expediting, materials management, logistics and related data and reporting.

Where practical, in procurement of Equipment packages, Contractor shall develop a plan to maximize the commonality of Equipment and components.

6.2 PURCHASE ORDER AND SUBCONTRACTS MANAGEMENT

Contractor shall develop a comprehensive procurement and subcontracting program, indicating planned Purchase Orders and Subcontracts together with the scope of each Purchase Order and Subcontract and the identification of critical items.

The requirements of Section 2.7 of the Agreement shall be complied with during all procurement and subcontracting activities.

6.3 PROCUREMENT AND SUBCONTRACTING REPORTING

Contractor shall provide procurement and subcontracting reporting in accordance with the Agreement, Appendix S, and Appendix W.

6.4 OWNER PARTICIPATION DURING SUPPLIER POST-AWARD MEETINGS:

Owner shall be allowed to participate in post-award kickoff meetings with selected Vendors. Such participation is only required with the Supplier that has been selected by Contractor's bid evaluation process, are only for the significant Equipment listed below and are only for the technical portion of such meeting. The intent of such participation is to review the Supplier technical scope of work and responsibilities under the applicable Purchase Order.

- Amine contactor internals
- Amine regenerator internals
- Molecular sieve dehydrators
- Demethanizer internals
- Mercury removal beds
- H2S scavenger
- LNG tank in-tank pumps
- Expander/compressors
- Booster compressors
- EFG compressors
- BOG compressors
- Ground flare
- Cold recovery exchanger
- Air coolers
- Thermal oxidizer
- LNG Loading Arms

- Main Cryogenic Heat Exchanger
- Powerhouses
- Main Step-down Transformers
- Distribution Transformers
- 230kV GIS
- 230kV Overhead line

6.5 EXPEDITING

Contractor shall develop an expediting plan which defines the levels of expediting, which largely depends on the type of Purchase Orders, the requirements of critical Supplier data, current market conditions and the applicable Supplier's fabrication location. Such plan shall become part of the Project Execution Plan set forth in Appendix W.

Contractor shall report the status of purchase requisitions, inquiries, orders, shop fabrications, expediting, inspection and delivery of Equipment, instruments and materials in accordance with Appendix S. Reporting should include data on "Received on Site" dates and "Required on Site" dates to demonstrate support of the construction/installation sequence as required in Appendix S-2.

6.6 LOGISTICS AND MATERIALS MANAGEMENT

Contractor shall perform the Work in accordance with its Logistics & Materials Management Plan as included in Appendix W.

6.6.1 Logistics

The delivery location of Liquefaction Project Equipment is dependent on material type, required on Site dates, and other logistical considerations. Contractor shall ensure logistics of Equipment deliveries, fabrications, inspections, and transfers are done in a safe and timely manner.

Shipping instructions shall be prepared and issued to the extent possible as part of the applicable Purchase Orders and shall, among other things, comply with the provisions of the Agreement.

6.6.2 Home Office Materials Management

Contractor shall provide a Home Office Materials Management plan which will outline detailed planning, milestone control and monitoring of materials activities for each requisition. The plan shall be developed based on the CPM Schedule, taking into account lead times for activities and materials as well as construction priorities.

6.6.3 Site Materials Management

Contractor shall inspect all Equipment as soon as practicable upon receipt and at delivery to the area where the Work is being performed. Contractor shall take appropriate measures for immediate repair or replacement of damaged materials.

Contractor shall address the following:

- Material receiving
- Material tracking (which may include using bar codes or other equivalent technology)
- Equipment and material storage
- Record of condition of Equipment and materials received at the Site
- Preventative maintenance (further described below)
- Inspection of materials upon receipt at Site
- Material controls
- Shortage and damage reports
- Storage locations including lay down control, layout and sizing, warehousing and climate controlled storage (as necessary)
- Surplus materials control

6.6.4 Inspection

Contractor shall provide a Quality Surveillance Plan and Inspection and Test Plans, that satisfies the requirements of the Project Quality Plan, codes, Specifications, Drawings, procedures and the Agreement as part of the Work. Quality is essential to the inspection process, therefore Contractor will require that all supplier documentation/records are generated, maintained and included in the details of all inspections/surveillances performed to the extent required under the Agreement. Level of Inspections shall also consider equipment criticality, order complexity, and country of origin.

6.7 EQUIPMENT PRESERVATION PLAN

Contractor shall comply with its Equipment preservation plan, as described in Appendix W. This plan identifies the requirements for preservation from purchase, through delivery to site, receipt at jobsite, storage at jobsite, installation at jobsite through LNG Facility start-up (CSU requirement). This plan shall be updated as required during the Work as required as detailed design activities are completed.

Contractor's responsibilities for all Equipment includes inspections, expediting, and participation in testing, delivery, handling and preservation of Equipment in accordance with manufacturer's Specifications while in transit, while in storage on Site, and after installation up to Substantial Completion of the Stage in which such Equipment is installed.

7.0 CONSTRUCTION

7.1 HEALTH, SAFETY, SECURITY AND ENVIRONMENT (HSSE)

Contractor is committed to an incident and injury-free environment for all personnel on the Liquefaction Project. Through education and training, the work force will be made aware of the hazards associated with constructing a facility of this magnitude and how to avoid and deal with them in a safe and productive manner. This objective shall be achieved through implementation of Contractor's approved HSSE Program as referenced in Appendix Q. Contractor's HSSE Program will include Owner's goals of ZERO injuries. This includes a high standard of Site Safety, Occupational Health Security and Environmental Management, with these requirements also being maintained by all Subcontractors and other personnel working at the Site.

7.2 QUALITY ASSURANCE AND QUALITY CONTROL

Contractor has developed a Quality Assurance Plan as set forth in Appendix R to the Agreement. As part of the Work, Contractor shall also develop a Construction Quality Control Program which is consistent with the requirement in this Appendix A and is based on a craft philosophy that stresses "doing it right the first time" and "Build it Clean, Built it Tight" concepts, as well as an aggressive inspection program coupled with the total involvement of craft personnel.

7.3 SCOPE OF CONSTRUCTION

The Contractor will construct all temporary infrastructure necessary to support the construction effort including heavy haul roads, offices, warehouses, and other needed facilities as listed in the Construction Execution Plan set forth in Appendix W.

For LNG Jetty construction, a sheet pile wall will be installed around the loading platform to allow land-based construction of the loading platform. Installation of such sheet pile wall is planned to be completed prior to commencement of the dredging of the berth pocket. The sheet pile wall will be left in place once construction of LNG Jetty is complete.

Contractor shall be responsible for mud control on Site, including use of wheel wash stations, dust control and construction debris clean-up on Site, including street sweeping equipment, to mitigate excessive mud and debris on Highway 87.

Contractor will supply all pre-construction provisions to the Site and the Work Site including preparation of the Site and the Work Site for all construction activities. Site prep work, including clearing and grubbing, raising the Site, and the construction of the pioneer dock and associated material handling equipment.

Contractor shall identify and mark gas wells that it locates on the Site and provide protective bollards around each such well. Existing utility lines and pipelines adjacent to the existing Highway 87 will be abandoned in place by third party owners or Owner's Other Contractors. Contractor shall remove and dispose of the abandoned pipelines within the Site from Oilfield

Road and south to the edge of the Site (see Attachment A-4 of this Appendix A for approximate coordinates and length of pipelines to be removed), up to a maximum depth of sixty feet (60’)). Some of the utilities may require demolition by Contractor as needed to construct the LNG Facility. Existing and abandoned wells shall be lowered (as in the Berth area) and plugged by third parties.

Contractor has developed a construction execution plan as part of the Project Execution Plan (PEP). The construction objectives of the Liquefaction Project are as follows;

- a. Targeting zero lost time accidents and zero recordable injuries.
- b. Creating a safe working environment through the identification and elimination of hazardous conditions and unsafe acts.
- c. Emphasizing quality to produce a best in class product.
- d. Minimizing impact to the environment during construction and meeting the requirements of Applicable Laws.
- e. Completing all the construction activities in a safe manner within the prescribed schedule requirements and to the requisite level of quality.
- f. Making full, effective use of GECP and (CECP) Construction Environmental Control Plan
- g. Provide a competent and trained and motivated work force committed to the Liquefaction Project construction objectives.
- h. Create a working environment that involves all members and recognizes the contribution of every individual and promotes positive employee relations.
- i. Be a good neighbor in our communities throughout the construction phase and conduct our business in a professional and ethical manner at all times and in compliance with Owner policies and the Social Management Plan as included in Appendix W.
- j. Employ the practice of continuous improvement throughout the course of the Liquefaction Project, fostering a practice of transparency and collaboration between Owner, Contractor and workers to improve Contractor’s construction team’s performance throughout the Liquefaction Project.

Contractor’s night time noise limit at the Noise Level Receptor shall be in compliance with FERC’s Guidance Manual Section 4.9.2.3. Specifically, the night-time construction noise limit would be 10 dB above the background levels at the Noise Level Receptor.

7.4 WORK PERMITS

Contractor shall make timely arrangements and be responsible for issuing the necessary work permits for any work that is conducted by Contractor, its Suppliers and their respective representatives. Contractor shall produce and implement a procedure for Contractor and its Suppliers compliance with the requirements of the Contractor HSSE Program and permitting process, including LOTO, PTW, Flange Isolations, etc.

Where applicable, Contractor shall ensure that no Work proceeds until the appropriate safe work permit has been issued. Contractor shall understand all aspects of the safe work permit prior to starting the Work. In addition, the Contractor shall communicate the safe work permit information to all personnel performing such Work prior to starting the Work.

Contractor shall construct the Liquefaction Project based on Contractor's standard procedures that includes the concept of "Build it Clean/Keep it Clean" that minimizes the potential for contaminating the Equipment and piping with construction debris, abandoned tools and materials.

Contractor shall develop a Pre-Commissioning plan for blowing or flushing the piping to remove residual water and debris with acceptance criteria. The plan shall indicate spools to remove and other openings that shall remain open until the lines are flushed.

7.5 TRAFFIC PLAN AT SITE

Contractor shall develop a comprehensive Traffic Management Plan for the Liquefaction Project to assure prompt and safe access to the Site for all persons performing the Work, while minimizing disruption to regular activities or scheduled events in the surrounding areas and will be based on Traffic Impact Analysis that is approved by the applicable Governmental Authority.

The traffic management / control plan shall address the requirements of the surrounding communities, as well as other applicable considerations: (a) off-site parking for construction personnel and transport of such personnel to the Site; (b) deliveries of major Equipment to the Site; and (c) any traffic control requirements of any Governmental Authority.

The traffic management Plan includes the following:

- Recommended routings for delivery of equipment and materials to the project site.
- Heavy Equipment delivery routes and any special measures to be undertaken to prepare the route for deliveries.
- Types of equipment to be used for transportation of materials.
- It will promote safe and organized transportation of the workers to and from the site.
- Capabilities of the port loading facilities.
- Maximum shipping envelopes will be addressed for barge and road deliveries.

- Transportation companies with knowledge of the general region will be identified.
- How traffic will safely enter and exit the Site at the main entrance during peak demand periods.

Contractor will utilize temporary traffic control and a temporary light system as potential mitigations, and has excluded in this Scope of Work any other traffic mitigation measures, such as the design or construction of acceleration/deceleration or turning lanes on the existing or relocated Highway 87.

7.6 CONSTRUCTABILITY

As part of the construction strategy, Contractor shall provide constructability support during early engineering activities and the procurement phase of the Work. Contractor shall provide constructability input to make optimal use of construction knowledge (including development of the subcontracting and construction plans, and model reviews). Plans shall describe how Contractor's constructability input will be obtained and implemented during engineering, fabrication and on-Site construction.

A constructability program will be developed for use during the Work that incorporates elements of a traditional constructability program and is designed to embrace a broad scope of safety, cost and schedule savings ideas. The program will be construction, start-up and operations driven to help simplify the design. The reviews will focus on a design that keeps construction, operations and maintenance activities in mind but meets the Specifications.

The program will promote and encourage creativity, innovation and teamwork among the participants. Construction personnel from Contractor will actively participate in the engineering design review optimizing constructability, safety, ease of construction, rate of construction, etc. Contractor shall consider items such as:

- Shop fireproofing vs. field fireproofing
- Vessel internals assembly in shop
- Installation of all paint coating of Equipment in shop
- Determine amount of vessel insulation prior to erection
- Pipe and platform installation on vessels prior to erection
- Maximize the extent of shop fabrication and testing of piping
- Consider semi-automatic welding process on straight run pipe and on fabricated spools where feasible
- Standardize foundation sizes for reuse of forms
- Prefabrication of concrete manholes or sumps prior to installation
- Standardize bottom of foundation elevations
- Minimize or eliminate irregular foundation shapes

- Identify the type and extent of grouting for vessels, skids and compressors, considering supplier recommendations.
- Consider prefabrication of manholes, valve boxes, sumps etc.
- Where practical perform dissimilar welds in the shop
- Design and order valves early to avoid delays
- Reduce number of welding procedures and qualifications
- Provide anchor bolt templates from Suppliers on vessels over 12 ft in diameter
- Ship air coolers preassembled, with instructions and necessary provisions for field installation.
- Standardize size of rebar to reduce number of sizes
- Use of embedded plates on vertical concrete surfaces instead of anchor bolts to eliminate precise bolting positions
- Prefabrication of analyzer houses
- Locate column splices just above platforms to eliminate scaffolding installation
- Standardize pipe supports for ease of installation
- Locate spring supports for installation at platform levels to avoid scaffolding installation
- Consider special internal cleaning, prior to erection, of pipe to lube oil flushed to reduce the flushing time
- Review lessons learned from similar projects of this nature
- Consider use of common scaffold supplier and erector

Contractor shall hold regular constructability meetings during the design phase.

7.7 LABOR SURVEY AND LABOR RELATIONS

Contractor delivered a Labor Study as listed in Attachment A-3. Such study surveyed workforce and crafts that are forecasted to be available during the time of construction and included Contractor's analysis of potential labor concerns. The study identified the available qualified labor in the area, the expected regions from which the labor would be sourced, the specific crafts and numbers of qualified available personnel or anticipated shortages. As part of the Work, the study shall be updated by Contractor at least annually.

Contractor shall use a suitable screening method in the recruitment of all labor so that personnel on the Site and the Work Site are in good health, are suitable for their planned work duties and can successfully participate in the Site safety and Injury free programs. Contractor shall maintain records at the Work Site of all persons screened for work.

7.8 SECURITY

Contractor has established appropriate security measures to maintain the security of the Site and the Work Site and protect the Work in accordance with the “Site Security Plan” as part of Appendix Q. Contractor shall comply with the Site Security Plan.

Contractor’s Site Security Plan addresses site entry and identification requirements; temporary and permanent fencing; code of conduct on Site employee termination and removal; guard services.

7.9 FIELD CHANGES; DEFECTS

Contractor shall implement a “design change proposal” procedure for the identification and resolution of any proposed changes to the design during the construction phase of the Work. This Field Design Change Control procedure shall identify the reasons why the change is required and the proposed change. The Field Design Change Control procedure shall describe how all changes are controlled through engineering and how all agreed changes are incorporated into the Drawings. A register of design changes and design queries shall be maintained during the construction phase. All design changes implemented at Site shall be captured in the As-Built documentation and submitted to Owner for record as required in Appendix U.

During prefabrication, pre-assembly and installation of goods at the Site, Contractor shall keep a register of Defects identified by its own QA/QC inspection team, or by Owner or any other Person in accordance with Contractor’s procedures. All such identified Defects shall be rectified in accordance with the Section 2.21 and Article 10 of the Agreement.

7.10 HSSE RISK ASSESSMENT

Risk Assessment Hazard and Effects Management Process methodology shall be used to identify and assess Health & Safety and Environmental Hazards during field erection and testing up to start up. These hazards may be identified at any stage of the Work; e.g., Owner data, existing Drawings, site survey investigations, design and constructability reviews, or information that may emerge during the construction, commissioning and start-up phases.

Once potential hazards are identified, the health and safety risks must be assessed. The assessment shall characterize the risk in terms of severity and probability.

From the risk assessment, a method statement shall be developed, which at best would eliminate the risk or would contain the risk to an acceptable level. If the Work is similar to other Work that has already been assessed for risk, the original assessment may be modified to suit the specific circumstances. The Project Risk Register shall be maintained by the Contractor through all phases and shall be made accessible to the Owner.

All risk assessments, (together with associated job specific method statements) generated throughout the duration of the Work shall be retained by:

- Contractor's jobsite manager; and
- Contractor safety management

Contractor shall carry out full risk assessments in regard to all of its construction operations.

7.11 HEAVY LIFT AND TRANSPORTATION

Contractor shall conduct rigging studies for all lifts over 50 tons, multiple crane lifts, or lifts exceeding 90% of the crane capacity unless a lower % capacity is required in accordance with Applicable Law. Each such study shall be prepared by Contractor and made available to Owner at its request. The rigging studies for all lifts over 50 tons, multiple crane lifts, or lifts exceeding 90% of the crane capacity (unless a lower % capacity is required in accordance with Applicable Law) shall be prepared and certified by a competent Rigging Engineer and included in the Rigging Execution Plan as part of the Construction Execution Plan referenced in Appendix W. The study shall include the following:

- a. Check and verify certified weight and dimensions of the load to be lifted.
- b. Cranes shall be inspected and certified for the purpose for which they will be used.
- c. Dimensional plan and elevation Drawings, showing all stages of movement of the load from initial to final installed position.
- d. Angles of chain blocks or wire rope slings during the operation and method of attachment to the load and supporting steelwork or structure.
- e. Details of skid beams, channels and packing arrangements under beams or channels.
- f. Method statement for entire lifting operation, indicating how the Construction Equipment will be installed, load erected and Construction Equipment removed.
- g. Itemized check list for the entire lifting operation.
- h. Center of gravity calculations for Equipment.
- i. Crane model.
- j. Crane configuration.
- k. Crane capacity at working radius and required boom length including copy of the crane chart for which information was taken.
- l. Required sizes and capacities of slings, shackles and lifting beams including all certifications for these items.
- m. Verification of lifting points on the load to be lifted.

- n. Structural calculations if lifting frames/beams are to be used.
- o. Crane accessibility and placement for the lift.
- p. Possible interference from erected items and structures.
- q. Load bearing of the crane and bearing capacity of the ground.
- r. Underground and/or overhead installations that may affect lift and protective measures as required.

7.12 SITE FACILITIES AND LOGISTICS

7.12.1 Temporary Sanitation Facilities

Contractor shall provide adequate toilets and washing facilities for all visitors, employees, Owner and Suppliers at the Work Site. These facilities shall be strategically located close to Contractor designated major Work areas and / or parking lots, office buildings, trailers, and tents. Waste from these facilities shall be collected and transported to an offsite treatment plant. Contractor shall establish and maintain clean conditions on the Site and the Work Site during the Project for all visitors, employees, Owner / Contractor personnel and the Subcontractors. Temporary sanitation facilities will include maintained hand washing stations adequately replenished with water, hand cleaner and paper towels, and emptied trash receptacle. Contractor will maintain a clean work site with temporary sanitation facilities well-organized trash collection and removal. Contractor shall provide segregated male and female facilities with locks for privacy.

7.12.2 Temporary Construction Power and Utilities

Contractor shall provide temporary distribution facilities to extend utilities from the point(s) of outlet designated by the applicable utility service provider to the point(s) of use required by the Contractor to perform any construction activities or the support thereof.

Upon Substantial Completion of each Stage of the Work, Contractor shall remove all temporary and/or construction power, materials, facilities and equipment used in connection with the extension of any permanent utilities and repair any damage caused as a result in accordance with the Agreement. Underground utilities (i.e., temporary power cable and temporary water lines) shall be de-commissioned, capped and left in place. Contractor shall maintain records of all utilities both above and underground throughout the construction phase. Any temporary underground piping and electrical cabling not removed after completion of work, shall be de-energized, capped, and marked on Underground Drawings to indicate the As-Built version of the system left in place.

The temporary construction power distribution system shall be designed, paid for and installed by Contractor.

Contractor shall provide and maintain all temporary electrical facilities on the Site and the Work Site.

Contractor shall design, provide, and install all necessary generation, transformation, and distribution of construction power required to perform the Work.

All cords leads or electric power equipment shall be designed and maintained in accordance with the Applicable Codes and Standards and shall be used in accordance with the Contractor HSSE Program.

Water from the Sabine-Neches waterway will be used by Contractor and/or its Subcontractors as “construction water” for dust control, cement slurry, earthwork and the LNG tank hydrotest provided that such use is approved and permitted by Governmental Authorities.

7.13 TEMPORARY FACILITIES

Contractor shall provide all temporary facilities used during the Work, as required by the Agreement. The temporary facilities for the Liquefaction Project shall be designed to adequately support the needs of Contractor, Subcontractors and the Liquefaction Project. Access, egress, drainage, utilities, parking, cool down zones, lunch areas, lightning protection areas, lay down areas, off or on-site temporary laydown yards, temporary climate controlled building, warehouse and temporary utility routings shall all be reviewed for a safe, functional, and environmentally sensitive installation. Planning associated with the erection of these facilities must receive a high priority at the outset of the Project.

A temporary facilities plan has been developed by Contractor and is referenced in Appendix W. Such plan addresses offices and facilities, underground utilities, parking, construction water, construction waste, temporary laydowns, and removal of facilities. Contractor shall comply with its temporary facilities plan.

Contractor shall supply the following Temporary facilities to accommodate Owner’s field personnel (peak at 94 personnel) in accordance with Contractor’s Temporary Facilities Plan (PAL-PJT-CON-PLN-00-GEN-0003; 26196-100-G90-GAM-00002):

- one main office complex;
- two satellite field offices; and
- related communication infrastructure (open internet connection, desk phones).

7.14 TOOLS AND EQUIPMENT

All construction Equipment and tools shall be supplied by Contractor. A “Tools and Construction Equipment Inspection Program” shall be developed as part of the Work which shall meets all

statutory requirements, the Specifications listed in Appendix B, be in good working condition, be well maintained and be protected in accordance with the Agreement.

Safety harnesses, safety lines, Self-Retracting lines shall also be subject to the inspection program.

7.15 FIELD EXECUTION

Contractor shall be responsible for the management of all activities at the Site and the Work; in particular for safety, construction progress, and the quality of the Work performed by Contractor, its Subcontractors, and all Supplier personnel.

7.16 BORROW PITS

Contractor shall prepare a Site Fill Materials Plan. Contractor shall also identify any borrow pits identified for use and/or the proposed supplier of fill materials for the Site or the Work Site as needed to meet the Liquefaction Project's design requirements. Contractor is responsible to assure the borrow pit is permitted for use by applicable Governmental Authorities. Contractor is to make any necessary contractual arrangements, including for mud management, with borrow pit Suppliers and shall pay all costs therewith.

7.17 DISPOSAL SITES

Contractor will maintain options to dispose stripped materials. The disposal locations will be either the laydown area 2 on the Site or at off-site locations. Contractor shall prepare a Spoils Disposal Plan as part of the Work. Contractor shall also identify all offsite locations proposed for spoils disposal of materials for Site or Work Site preparation. Contractor is responsible to assure any offsite disposal location utilized by Contractor is permitted for use by applicable Governmental Authorities. Contractor's storm water pollution prevention plan (SWPPP) shall be implemented at the onsite disposal area.

7.18 LINE AND EQUIPMENT LABELING

Contractor shall label all lines and Equipment in accordance with the PALO-PIP-SPE-0021 – Identification and Labeling of Piping Systems.

8.0 COMMISSIONING, COMPLETION, AND ACCEPTANCE

Contractor shall prepare and submit a detailed commissioning and start-up plan to Owner for review and comments as required by the Agreement.

Contractor shall develop procedures that define Contractor's strategy to limit flaring of natural gas during pre-commissioning, commissioning and start-up phases. GECP shall be applied by the Contractor in developing these procedures.

Contractor's commissioning and start-up plan may utilize Contractor's standard procedures and work processes to execute commissioning and start-up activities, as modified to address all project specific requirements, and in any event shall include detailed procedures for all, commissioning and start-up activities for each system and subsystem. Pre-commissioning includes inspections, cleaning and other activities which are carried out after construction completion for a given system/subsystem is achieved, at ambient temperature and without the presence of process fluids. Catalyst and chemicals will be charged where practical to do so. Commissioning includes tests, inspections and adjustments carried out after pre-commissioning activities for a given system/subsystem are completed, as far as practical, and prior to the introduction of hydrocarbons (Feed Gas) in accordance with the Agreement. Contractor's commissioning and start-up plan shall include forms, document flow, schedule, certification scheme, status monitoring method and commissioning and start-up requirements checklists for each system and subsystem.

Prior to Ready for Start-Up (RFSU), Contractor and Owner shall jointly conduct a pre-safety start-up review. Procedures should also be made available that clearly define the HSSE, compliance, emergency response requirements and the roles and responsibilities of all team Members at Site, which also includes Owner personnel.

Any temporary piping and instrumentation shall be removed prior to conducting Performance and Functional Tests.

8.1 TRAINING OF O&M PERSONNEL

During the EPC period, the Contractor will develop a Training Program in accordance with Appendix P.

The Contractor shall develop O&M related documentation required for pre-commissioning, commissioning, start-up and operations of all system and sub-systems of the LNG Facility as required by the Agreement.

Contractor shall develop and provide an Operator Training Simulator (OTS) suitable for training Owner's Operating Personnel in accordance with Section 4.10.23 of this Appendix A and Appendix P.

8.2 COMMENCEMENT OF COMMISSIONING & START-UP

Contractor shall commence commissioning and start-up activities in accordance with the Agreement. Contractor shall execute all Work required for commissioning and start-up of each Stage.

Contractor shall provide a commissioning manager and a commissioning team. The commissioning team shall have a major interface with the construction team so that commissioning is completed in the correct sequence by system, all commissioning inspections and tests are conducted in accordance with the Agreement, and all required certificates and documents are completed for turnover.

After the completion of the Training Program, the Owner's Operating Personnel will work under the supervision of the Contractor's Commissioning & Start-Up team to participate in pre-commissioning, commissioning, start-up and subsequent operations activities, until Substantial Completion and handover of each Stage of the LNG Facility to the Owner.

Prior to the introduction of Hydrocarbons or other operating fluids, the Contractor and Owner's Operating Personnel will conduct a Pre-Start-up Safety Review (PSSR) for the facility to ensure that all Systems and Sub-Systems are ready for Operation.

9.0 OPERATIONAL INTERFACES

Contractor shall familiarize itself with all construction interfaces and carry out the on-site activities, including construction, hot taps, start-up, commissioning and testing, in a safe and efficient manner.

- Key Interfaces and Tie-ins
 - Feed Gas Supply
 - Imported Power Supply
 - Potable Water Supply
 - Nitrogen Supply
 - Sanitary waste disposal
 - Telecommunications

10.0 SIMOPS

Contractor shall Implement a SIMOPS process, in accordance with the SIMOPS plan in Appendix W, including a SIMOPS risk screening workshop, in the early phases of the Liquefaction Project to allow planning and sequencing of activities to eliminate risks associated with performing certain activities simultaneously. The early planning shall give an insight as to which activities shall be more suited to work together.

The following steps shall be considered to document hazards and associated mitigation measures:

- SIMOPS Risk screening workshop
- SIMOPS Activity Hazard Identification and Risk Assessment

- Risk Management

Contractor shall develop SIMOPS activity specific work plans for each specific work activities identified in the SIMOPS risk screening workshop. The SIMOPS activity specific work plan shall include, but not be limited to, the following:

- Description of the scope of work to be covered by their organization relative to the SIMOPS
- Roles and responsibilities – including organization and reporting lines/ requirements
- Procedures and controls
- SIMOPS risk and mitigations
- Work Method Statements as required
- JHA / STARRT card requirements
- Contingency plans
- Emergency response Plan
- Establishment of who has overall charge of the work

An Activity Specific Work Package shall be prepared for activities recorded on a SIMOPS register. The work package shall contain the pertinent activity-specific information for each of the SIMOPS.

11.0 PERFORMANCE TESTING

Please refer to Appendix G and Section 9.7 of the Agreement

12.0 SHIP ARRIVAL & CARGO TRANSFER

Contractor may have to cease all construction activities on the Berth when an LNG Tanker is approaching, or is in the process of being loaded or unloaded, and departing.

When an LNG Tanker approaches the Berth, an announcement will be made via the LNG Facility's paging system to warn personnel of the approaching LNG Tanker and to stop performing all Work in the affected areas. Contractor will be advised of the practicality and timing of resuming such Work.

13.0 SCOPE OF WORK EXCLUSIONS

The below listed items are excluded from Contractor's Scope of Work:

- Landscaping associated with the completed LNG Facility;
- Shoreline protection between the MOF and the North Berth and between the South Berth and the south end of LNG Facility;
- Any required vapor cloud dispersion modelling;
- Acquisition of frequency license of the ship/marine radios for communication between ship and shore in the jetty marine building;
- After Substantial Completion of a Stage, the supply of finished surface gravel fill to maintain such Stage and drainage through the stormwater system of such Stage;
- Supply of general office furniture, cubicles, and office tools required for the workshop and warehouse for the LNG Facility;
- Supply of all laboratory equipment and laboratory instrument management systems (LIMS) for the laboratory; and
- Compensation to Texas Parks and Wildlife Department for lost recreational opportunities related to seasonal hunting and the relocation of the existing WMA access road and construction of the alternate access road connecting to the relocated SH 87.
- With respect to the following items as required under the referenced FERC Order conditions:

[***].

SEVERANCE AGREEMENT AND MUTUAL RELEASE

This Severance Agreement and Mutual Release (the "Agreement") is made by and between SEMPRA ENERGY, a California corporation (the "Company") and George W. Bilicic ("Bilicic") (jointly referred to as the "Parties" or individually referred to as a "Party") as of the Effective Date (as defined below).

WHEREAS, Bilicic and the Company previously entered into that certain Severance Pay Agreement, dated July 17, 2019 (the "Severance Pay Agreement").

WHEREAS, Bilicic's right to receive certain severance pay and benefits pursuant to the Severance Pay Agreement is subject to and conditioned upon Bilicic's execution and non-revocation of a general release of claims with the Company and its subsidiaries and affiliates.

WHEREAS, Bilicic's right to receive the Consulting Payment set forth in Section 14(e) of the Severance Pay Agreement is subject to and conditioned upon Bilicic's execution and non-revocation of a general release of claims with the Company and its subsidiaries and affiliates and Bilicic's adherence to the covenants described under Section 14 of the Severance Pay Agreement.

NOW, THEREFORE, in consideration of the promises and the mutual covenants contained herein, the adequacy of which is hereby acknowledged, the Parties hereby agree as follows:

1. Separation Date. Bilicic will cease acting as an officer of the Company and his employment with the Company ended on March 30, 2020 (the "Separation Date"). Pursuant to California Labor Code Section 202(a), Bilicic will receive his final wages through the Separation Date, less deductions required by law, including any accrued but unused vacation time, no later than 72 hours after the Separation Date. Bilicic will also be reimbursed for any outstanding employment-related expenses. This Agreement is not a condition of employment or continued employment or a condition of receiving a raise or a bonus. On the Separation Date, Bilicic will be deemed to have resigned from all positions that he holds with the Company and its affiliates, and Bilicic will execute any instrument reasonably requested by the Company or its affiliates to effectuate or commemorate such resignation.

2. Severance Benefits. In exchange for Bilicic entering into this Agreement and not revoking it, and for the covenants and releases contained herein, and without conceding that Bilicic has good reason for resignation as defined by the Severance Pay Agreement, the Company will treat Bilicic's separation from the Company as a resignation for good reason and provide Bilicic with the severance benefits described below and vest the shares granted to him on June 17, 2019, as described below. Bilicic acknowledges that the amounts and benefits set forth in this Section 2 fully satisfy any entitlement Bilicic's may have to any payments or benefits from the Company, including under the Severance Pay Agreement. Bilicic further acknowledges that no part of the severance payments described in this Section 2 consist of wages owed to Bilicic for his employment through the Separation Date.

(a) The Company will pay Bilicic a lump sum payment of One Million, Six Hundred and Twenty-Four Thousand Dollars (\$1,624,000.00), less applicable withholdings, which is equal to the Pre-Change in Control Severance Payment to which Bilicic would be entitled under Section 4 of the Severance Pay Agreement were Bilicic to have resigned with good reason. Pursuant to Section 409A of the Internal Revenue Code of 1986, as amended (the “Code”), payment will be made on the earlier of (i) a date that is six months and one (1) day after the Separation Date; and (ii) the date of Bilicic’s death.

(b) The Company will pay Bilicic a lump sum payment of One Million, Six Hundred and Twenty-Four Thousand Dollars (\$1,624,000.00), less applicable withholdings, which is equal to the Consulting Payment to which Bilicic would be entitled under Section 14(e) of the Severance Pay Agreement were Bilicic to have resigned with good reason. Such payment will be made within ten (10) days following the Effective Date. For the avoidance of doubt, the services to be performed by Bilicic in exchange for such Consulting Payment will relate strictly to the duties that Bilicic had for the Company prior to the Separation Date, and will not, among other things, in any way relate, directly or indirectly, to investment banking services or related services or other similar activities.

(c) The Company will also provide Bilicic with the severance benefits set forth in Sections 4(c), (d) and (e) of the Severance Pay Agreement. For the avoidance of doubt, the value of the services set forth in Sections (c), (d) and (e) of the Severance Pay Agreement shall not be subject to liquidation or exchange for any other benefit. For purposes of the outplacement services described in Section 4(d) of the Severance Pay Agreement, such services will be provided by an outplacement services provider of Bilicic’s choosing, and the Company shall pay such provider directly for such services subject to the conditions and limitations set forth in Section 4(d) of the Severance Pay Agreement.

(d) The time-based restricted stock unit (“RSU”) awards granted to Bilicic on June 17, 2019 that Bilicic holds as of the date of this Agreement (which relate to approximately 31,427 shares of Company common stock) will fully vest on the tenth (10th) day after Separation Date. The vested shares underlying the RSU awards shall be delivered to Bilicic by the Company’s online share plan administrator, net of shares required to satisfy applicable tax withholding obligations, promptly following the vesting date.

3. Mutual Release of Claims. As a material inducement for the payment of the severance and benefits set forth herein, and except as otherwise provided in this Agreement, Bilicic on behalf of himself and on behalf of his heirs, family members, executors, agents and assigns, on the one hand, and the Company, on the other hand, hereby irrevocably and unconditionally release, acquit and forever release and discharge the other from, and agree not to file any suit, claim or complaint in a court of law or other proceeding, concerning any and all Claims either Party 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 Bilicic 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, penalties, debts and expenses (including attorneys’ fees and costs actually incurred) of any nature whatsoever, known or unknown, suspected or unsuspected, which Bilicic or the Company had or may have, own or hold against any of the Releasees up until and including the Effective Date; *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, penalties, debts and expenses (including attorneys’ fees and costs actually incurred) arising under Bilicic’s continuing obligations under his Confidential Information and Invention Assignment Agreement, dated July 9, 2019 (the “Confidentiality Agreement”) and the Severance Pay Agreement. Claims released pursuant to this Agreement by the Parties include, but are not limited to, all claims relating to or arising out of Bilicic’s employment relationship with the Company and the termination of that relationship; all rights arising out of alleged violations of any contracts, express or implied, including the Severance Pay Agreement; any tort claim; any claim that Bilicic failed to perform or negligently performed or breached Bilicic’s duties during employment at the Company; any legal restrictions on the Company’s right to terminate employment relationships; and any federal, state or other local common law, statute, regulation, ordinance or law of any other type, including, without limitation, all state and federal laws and regulations prohibiting discrimination or harassment 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, nor does it limit Bilicic’s right to receive any vested payments or benefits to which he is entitled under any Company benefit plan (including, without limitation, any of the Company’s qualified retirement plans or non-qualified deferred compensation plan), which payments or benefits will be paid or provided pursuant to the terms of the applicable governing documents. Notwithstanding the above, Bilicic’s right to file or participate in an administrative claim or investigation by the Equal Employment Opportunity Commission, or any other local, state, or federal administrative body or government agency against the Company, which is guaranteed by law, cannot be and is not waived. However, to the extent permitted by law, and except as to Securities and Exchange Commission whistleblower awards, Bilicic agrees that if such an administrative claim is made against the Company or any Releasee(s) on Bilicic’s behalf, Bilicic shall not be entitled to recover any individual monetary relief or other individual remedies beyond the separation benefits identified in this Agreement since Bilicic’s release of claims herein bars Bilicic from recovering such monetary relief from the Company.

4. Release of Unknown Claims. The Parties 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. The Parties 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 THAT THE CREDITOR OR RELEASING PARTY DOES NOT KNOW OR SUSPECT TO EXIST IN HIS OR HER FAVOR AT THE TIME OF EXECUTING THE RELEASE, AND THAT, IF KNOWN BY HIM OR HER, WOULD HAVE MATERIALLY AFFECTED HIS OR HER SETTLEMENT WITH THE DEBTOR OR RELEASED PARTY.

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, the Parties expressly acknowledge that this Agreement is intended to include in its effect, without limitation, all Claims which are known and all Claims which the Parties do not know or suspect to exist in Bilicic's or the Company's favor at the time of execution of this Agreement and that this Agreement contemplates the extinguishment of all such Claims.

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.

5. No Pending Lawsuits. Bilicic and the Company represent and warrant that neither Bilicic nor the Company have any lawsuits, charges, claims, grievances, or actions of any kind pending against the Releasees, on behalf of Bilicic/itself or on behalf of any other person or entity, and that, to the best of their knowledge, Releasees possesses no such claims (including, but not limited to, under the Family and Medical Leave Act, the California Family Rights Act, the Fair Labor Standards Act, the California Labor Code and/or workers' compensation claims).

6. No Cooperation. The Parties agree that they will not knowingly encourage, counsel, or assist any attorneys or their clients in the presentation or prosecution of any disputes, differences, grievances, claims, charges, or complaints by any third party against any of the Releasees, unless under a subpoena or other court order to do so. Bilicic agrees to immediately notify the Company upon receipt of any such subpoena or court order, and to furnish to the Company, within three (3) business days of its receipt, a copy of such subpoena or other court order.

7. Indemnification. As a further material inducement to the Company to enter into this Agreement, Bilicic hereby agrees to indemnify and hold each of the Releasees harmless from all loss, costs, damages, penalties, or expenses, including without limitation, attorneys' fees, incurred by the Releasees, arising out of any breach of this Agreement by Bilicic or the fact that any representation made in this Agreement by Bilicic was false when made.

As a further material inducement to Bilicic to enter into this Agreement, the Company hereby agrees to indemnify and hold each of the Releasees harmless from all loss, costs, damages,

penalties 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.

8. Future Issues

(a) This Agreement shall not in any way be construed as an admission by the Company that it has acted wrongfully with respect to Bilicic or any other person, or that Bilicic has any rights whatsoever against the Company, and the Company specifically disclaims any liability to or wrongful acts against Bilicic 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 Bilicic that he has acted wrongfully with respect to the Company, or that Bilicic failed to perform his duties or negligently performed or breached his duties, or that the Company had good cause to terminate Bilicic's employment.

(b) If Bilicic is a party or is threatened to be made a party to any proceeding by reason of the fact that Bilicic was an officer or director of the Company, the Company shall indemnify Bilicic 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 Bilicic in connection with that proceeding; *provided, further*, that Bilicic acted in good faith and in a manner Bilicic reasonably believed to be in the best interest of the Company. The limitations of Section 317 of the Corporations Code of the State of California and the Company's Bylaws shall apply to this assurance of indemnification.

(c) Bilicic agrees 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, Bilicic agrees to meet with and provide to the Company or its designated attorneys, representatives or agents all information and knowledge Bilicic has relating to the subject matter of any such proceeding. The Company agrees to reimburse Bilicic for any reasonable costs Bilicic incurs in providing such cooperation.

9. Arbitration of Disputes. 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 Bilicic and the Company, including, but not limited to, disputes relating to this Agreement, or if Bilicic prosecutes a claim he purported to release by means of this Agreement ("Arbitrable Dispute"), the Parties agree to resolve that Arbitrable Dispute through final and binding arbitration under this section. Bilicic also agrees to arbitrate any Arbitrable Dispute which involves any other released party who offers or agrees to arbitrate the dispute under this section. Bilicic's 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, the Parties waive any right to a jury trial or a court bench trial. The Parties also agree that any arbitration shall be initiated and conducted only on an

individual basis. Accordingly, the Parties hereby waive any right for any dispute to be brought, heard, decided or arbitrated as a class and/or collective action (“Class and/or Collective Action Waiver”), and the arbitrator will have no authority to hear or preside over any such claim. Notwithstanding any other clause contained in this agreement to arbitrate, the preceding sentence will not be severable from this agreement in any instance in which a Claim is brought as a class and/or collective action. To the extent the Class and/or Collective Action Waiver is determined to be invalid, unenforceable or void, any class and/or collective action must proceed in a court of law and not in arbitration. The Parties also hereby waive any right for any dispute to be brought, heard, decided or arbitrated as a private attorney general representative action and the arbitrator will have no authority to hear or preside over any such claim (“Representative Action Waiver”). The Representative Action Waiver does not apply to any claim Bilicic brings in arbitration as a private attorney general solely on his own behalf and not on behalf of or regarding others. The Representative Action Wavier will be severable from this Agreement in any case in which there is a final judicial determination that the Representative Action Waiver is invalid, unenforceable, unconscionable, void or voidable. In such instances and where the claim is brought as a private attorney general, such private attorney general claim must be litigated in a civil court of competent jurisdiction, but all other provisions of this Agreement, including, without limitation, the Class Action Waiver will continue to apply.

In addition, unless all parties agree in writing otherwise, the arbitrator shall not consolidate or join the arbitrations of more than one employee. Further, neither Party may seek, nor may the arbitrator award, any relief that is not individualized to claimant or that affects other employees. If a court decides that the applicable law precludes enforcement of any of this section’s limitation as to a particular claim or particular remedy for a claim, then that claim or remedy (and only that claim or remedy) must be severed from the arbitration and may be brought in court.

Arbitration shall take place in San Diego, California under the then-current employment arbitration rules and procedures of JAMS (the JAMS rules are available at <https://jamsadr.com/rules-employment-arbitration>), 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 Bilicic is the party initiating the claim, Bilicic will contribute an amount equal to the filing fee to initiate a claim in the court of general jurisdiction in the state in which Bilicic is employed by the Company. Each party shall pay for its own costs and attorneys’ fees. 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 is required to issue a written award and opinion, and any judgment or award issued by an arbitrator may be entered in any court of competent jurisdiction. 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

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 Age Discrimination in Employment Act of 1967, as amended, should Bilicic 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 9 supersedes any existing arbitration agreement between the Company and me as to any Arbitrable Dispute. Notwithstanding anything in this Section 9 to the contrary, a claim for benefits under an Employee Retirement Income Security Act of 1974, as amended, covered plan shall not be an Arbitrable Dispute.

10. Effective Date. The Parties understand that this Agreement is final and binding eight (8) days after its execution and return (the "Effective Date"). Should Bilicic nevertheless attempt to challenge the enforceability of this Agreement as provided in Section 9 or, in violation of that section, through litigation, as a further limitation on any right to make such a challenge, Bilicic 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 Bilicic 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 Bilicic and shall place such monies in an interest-bearing escrow account pending resolution of the dispute between Bilicic 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 Bilicic and the Company shall be immediately rescinded with no requirement of notice.

11. Notices. 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: Sempra Energy
488 8th Avenue
San Diego, CA 92101
Attn: Randall Clark

To Bilicic: c/o Vedder Price, P.C.
222 N. LaSalle Street, Suite 2600
Chicago, Illinois 60601
Attn: Daniel Lange

12. Review and Revocation Periods. Bilicic acknowledges that he is waiving and releasing any rights Bilicic may have under the Age Discrimination in Employment Act of 1967 ("ADEA"), and that this waiver and release is knowing and voluntary. Bilicic acknowledges that

the consideration given for this waiver and release is in addition to anything of value to which Bilicic was already entitled. Bilicic further understands and acknowledges that Bilicic has been given a period of twenty-one (21) 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 twenty-one (21) day period as Bilicic wish prior to signing. In the event Bilicic signs this Agreement and returns it to the Company in less than the 21-day period identified above, Bilicic hereby acknowledges that Bilicic has freely and voluntarily chosen to waive the time period allotted for considering this Agreement, and that the Company has not promised Bilicic anything or made any representations not contained in this Agreement to induce Bilicic to sign this Agreement before the expiration of the twenty-one (21) day period. Bilicic is encouraged, at his personal expense, to consult with an attorney before signing this Agreement. Bilicic understands and acknowledges that whether or not Bilicic does so is his decision. Bilicic may revoke this Agreement within seven (7) days of signing it. If Bilicic wishes to revoke, Bilicic must deliver written notice of revocation to the Ruth Zadikany at Mayer Brown LLP, 350 S. Grand Avenue, 25th Floor, Los Angeles, CA 90071 or rzadikany@mayerbrown.com, no later than the close of business on the seventh (7th) day after Bilicic has signed the Agreement. If revoked, this Agreement shall not be effective and enforceable, and Bilicic will not receive payments or benefits under Section 2 of this Agreement, as applicable. The Parties agree that changes, whether material or immaterial, do not restart the running of the 21-day period described above.

13. Section 409A. All payments and benefits payable under this Agreement are intended to comply with the requirements of Section 409A of the Code. Notwithstanding the foregoing, 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 Section 409A(a)(2), (3) and (4) of the Code and the Treasury Regulations thereunder To the extent that any payments under this Agreement are subject to Section 409A of the Code, the provisions of Section 9 of the Severance Pay Agreement shall apply.

14. Return of Company Property. Bilicic represents and warrants that he has returned all of the Company's property, including all work in progress, files, photographs, notes, records, credit cards, keys, access cards, computers, and other Company or customer documents, products, or property that Bilicic has received in the course of his employment, or which reflect in any way any confidential or proprietary information of the Company. Bilicic also warrants that he has not downloaded or otherwise retained any information, whether in electronic or other form, belonging to the Company or derived from information belonging to the Company.

15. Confidential Information; Public Releases.

(a) Bilicic acknowledges and reaffirms his continuing obligations under the Confidentiality Agreement. The Parties understand and agree that nothing in this Agreement is intended to interfere with or discourage Bilicic's good-faith disclosure to any governmental entity related to a reasonably suspected violation of the law. The Parties further understand and agree that

Bilicic cannot be held criminally or civilly liable under any Federal or State trade secret law for the disclosure of a trade secret that (a) is made (i) in confidence to a Federal, State, or local government official, either directly or indirectly, or to an attorney; and (ii) solely for the purpose of reporting or investigating a suspected violation of law; or (b) is made in a complaint or other document filed in a lawsuit or other proceeding, if such filing is made under seal.

(b) The Parties understand and agree that the Company shall take any and all necessary action to satisfy its reporting and disclosure obligations in connection with Bilicic's separation and this Agreement, including filing the requisite forms with the Securities and Exchange Commission ("SEC"). The Company hereby agrees to provide Bilicic with an advance draft of any Form 8-K, press release or other document that will be released to the public to the extent any such document relates to the termination of Bilicic's employment with the Company. Bilicic shall promptly review any such draft and provide comments thereto, which the Company shall reasonably consider; *provided*, that nothing in this sentence shall (i) require the Company to incorporate Bilicic's comments in any such document, the final content of which will be decided by the Company in its sole discretion; and/or (ii) interfere with the Company's ability to satisfy its disclosure obligations under applicable law. The Parties understand and agree that a copy of this Agreement is required to be filed with the SEC no later than the time the Company files its next Quarterly Report on Form 10-Q. The Parties understand and agree that in the event that Bilicic is a "named executive officer" as such term is defined by Item 402 of Regulation S-K, for the year-ended December 31, 2020, (i) the Company will be required to disclose certain terms of this Agreement and other matters as it relates to Bilicic's compensation and shareholdings, and (ii) Bilicic agrees to provide the Company with his beneficial ownership of equity securities of the Company and its subsidiaries as required by Item 403 of Regulation S-K.

16. Entire Agreement. This Agreement constitutes the entire agreement of the parties hereto and supersedes any and all other agreements, with the exception of Bilicic's continuing obligations under the Severance Pay Agreement and the Confidentiality Agreement, with respect to the subject matter of this Agreement, whether written or oral, between the Parties. All modifications and amendments to this Agreement must be in writing and signed by the Parties.

17. No Representation. The Parties 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 Pay Agreement.

18. Severability. 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.

19. Counterparts. This Agreement may be executed in counterparts.

[Signature page follows. Remainder of page intentionally left blank]

With the benefit of representation and advice of counsel, the Parties have read the foregoing Severance Agreement and Mutual Release, and accept and agree to the provisions it contains and hereby execute it voluntarily and with full understanding of its consequences. The Parties acknowledge that they are receiving valuable consideration in exchange for the execution of this Agreement to which they would not otherwise be entitled.

DATED: March 30, 2020

/s/ George W. Bilicic

George W. Bilicic

DATED: March 30, 2020

/s/ Randall L. Clark

By: Randall L. Clark

Title: Senior V.P. and Chief Human Resources Officer
Sempra Energy

Bilicic acknowledges that he first received this Agreement on March 28, 2020.

/s/ George W. Bilicic

George W. Bilicic

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER
PURSUANT TO RULES 13a-14 AND 15d-14

I, J. Walker Martin, certify that:

1. I have reviewed this report on Form 10-Q 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 13a-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 the 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.

May 4, 2020 /s/ J. Walker Martin

J. Walker Martin
Chief Executive Officer

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER
PURSUANT TO RULES 13a-14 AND 15d-14

I, Trevor I. Mihalik, certify that:

1. I have reviewed this report on Form 10-Q 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 13a-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 the 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.

May 4, 2020 /s/ Trevor I. Mihalik

Trevor I. Mihalik
Chief Financial Officer

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER
PURSUANT TO RULES 13a-14 AND 15d-14

I, Kevin C. Sagara, certify that:

1. I have reviewed this report on Form 10-Q 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 13a-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 the 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.

May 4, 2020 /s/ Kevin C. Sagara

Kevin C. Sagara
Chief Executive Officer

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER
PURSUANT TO RULES 13a-14 AND 15d-14

I, Bruce A. Folkmann, certify that:

1. I have reviewed this report on Form 10-Q 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 13a-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 the 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.

May 4, 2020 /s/ Bruce A. Folkmann

Bruce A. Folkmann
Chief Financial Officer

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER
PURSUANT TO RULES 13a-14 AND 15d-14

I, J. Bret Lane, certify that:

1. I have reviewed this report on Form 10-Q 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 13a-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 the 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.

May 4, 2020 /s/ J. Bret Lane

J. Bret Lane

Chief Executive Officer

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER
PURSUANT TO RULES 13a-14 AND 15d-14

I, Mia L. DeMontigny, certify that:

1. I have reviewed this report on Form 10-Q 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 13a-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 the 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.

May 4, 2020 /s/ Mia L. DeMontigny

Mia L. DeMontigny
Chief Financial Officer

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER
PURSUANT TO 18 U.S.C. SECTION 1350

Pursuant to 18 U.S.C. Sec 1350, as created by Section 906 of the Sarbanes-Oxley Act of 2002, the undersigned principal executive officer of Sempra Energy (the "Company") certifies that:

- (i) the Quarterly Report on Form 10-Q of the Company filed with the Securities and Exchange Commission for the quarter ended March 31, 2020 (the "Quarterly 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 Quarterly Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

May 4, 2020

/s/ J. Walker Martin

J. Walker Martin

Chief Executive Officer

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER
PURSUANT TO 18 U.S.C. SECTION 1350

Pursuant to 18 U.S.C. Sec 1350, as created by Section 906 of the Sarbanes-Oxley Act of 2002, the undersigned principal financial officer of Sempra Energy (the "Company") certifies that:

- (i) the Quarterly Report on Form 10-Q of the Company filed with the Securities and Exchange Commission for the quarter ended March 31, 2020 (the "Quarterly 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 Quarterly Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

May 4, 2020

/s/ Trevor I. Mihalik

Trevor I. Mihalik

Chief Financial Officer

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER
PURSUANT TO 18 U.S.C. SECTION 1350

Pursuant to 18 U.S.C. Sec 1350, as created by Section 906 of the Sarbanes-Oxley Act of 2002, the undersigned principal executive officer of San Diego Gas & Electric Company (the "Company") certifies that:

- (i) the Quarterly Report on Form 10-Q of the Company filed with the Securities and Exchange Commission for the quarter ended March 31, 2020 (the "Quarterly 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 Quarterly Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

May 4, 2020

/s/ Kevin C. Sagara

Kevin C. Sagara

Chief Executive Officer

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER
PURSUANT TO 18 U.S.C. SECTION 1350

Pursuant to 18 U.S.C. Sec 1350, as created by Section 906 of the Sarbanes-Oxley Act of 2002, the undersigned principal financial officer of San Diego Gas & Electric Company (the "Company") certifies that:

- (i) the Quarterly Report on Form 10-Q of the Company filed with the Securities and Exchange Commission for the quarter ended March 31, 2020 (the "Quarterly 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 Quarterly Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

May 4, 2020 /s/ Bruce A. Folkmann

Bruce A. Folkmann
Chief Financial Officer

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER
PURSUANT TO 18 U.S.C. SECTION 1350

Pursuant to 18 U.S.C. Sec 1350, as created by Section 906 of the Sarbanes-Oxley Act of 2002, the undersigned principal executive officer of Southern California Gas Company (the "Company") certifies that:

- (i) the Quarterly Report on Form 10-Q of the Company filed with the Securities and Exchange Commission for the quarter ended March 31, 2020 (the "Quarterly 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 Quarterly Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

May 4, 2020

/s/ J. Bret Lane

J. Bret Lane

Chief Executive Officer

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER
PURSUANT TO 18 U.S.C. SECTION 1350

Pursuant to 18 U.S.C. Sec 1350, as created by Section 906 of the Sarbanes-Oxley Act of 2002, the undersigned principal financial officer of Southern California Gas Company (the "Company") certifies that:

- (i) the Quarterly Report on Form 10-Q of the Company filed with the Securities and Exchange Commission for the quarter ended March 31, 2020 (the "Quarterly 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 Quarterly Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

May 4, 2020

/s/ Mia L. DeMontigny

Mia L. DeMontigny

Chief Financial Officer