Chapter 240
Gulf Coast LNG Export Futures

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240100. SCOPE OF CHAPTER

The Rules of this Chapter are limited in application to the Gulf Coast LNG Export Futures Contract. The procedures for trading, clearing, delivery and settlement of the Gulf Coast LNG Export Futures contract not specifically covered in the Rules of this Chapter or in Chapter 7 shall be governed by the general Rules of the Exchange.

The Rules of this Chapter shall apply to all LNG bought or sold for future delivery on the Exchange with delivery at a Loading Port.

For the purpose of the Rules of this Chapter, capitalized terms shall have the meanings set forth in Section 1.1 of Appendix A, unless the context otherwise requires.

240101. CONTRACT SPECIFICATIONS

Full Cargo Lots of LNG shall be physically delivered pursuant to a separate and independent Transaction set forth in Appendix A. The Contract delivery point shall be a Loading Port.

The quality of LNG delivered shall comply with the Specifications.

240102. TRADING SPECIFICATIONS

The Contract value shall be the Final Settlement Price, multiplied by ten thousand (10,000), multiplied by the number of Contracts to be delivered. The unit of trading shall be 10,000 MMBtu.

A loading tolerance of plus or minus two percent (2%) shall be permitted. Such loading tolerance may be exercised by either the Seller or the Buyer with respect to operational matters regarding the Loading Port or operational matters regarding the LNG Ship, and without regard to commercial considerations.

The delivery period associated with a specific Contract shall be the seven calendar days starting with and including Sunday through and including Saturday ("Ticket Week"). Trading in Contracts requiring delivery in specific Ticket Weeks shall be conducted for such Ticket Weeks as determined by the Exchange. The Exchange may in its discretion list a Contract for each of four to five Ticket Weeks per calendar month depending on the number of Sundays in a calendar month. Trading in a Contract requiring delivery in a specific Ticket Week shall commence on the day fixed by the Exchange.

240102.A. Prices and Price Fluctuations

The minimum fluctuation for the Contract shall be $0.001 (one tenth of one cent) per MMBtu. Prices shall be quoted in dollars and cents per MMBtu.

240102.B. Final Settlement Price

The Final Settlement Price of the Contract shall be the basis for delivery.

240102.C. Trading Hours

The Exchange shall establish trading hours for the Contract from time to time.

240102.D. Position Limits, Exemptions, Position Accountability and Reportable Levels

The applicable position limits and accountability levels, in addition to the reportable levels, are set forth in the Position Limit, Position Accountability and Reportable Level Table in the Interpretations & Special Notices Section of Chapter 5.

A Buyer or Seller seeking an exemption from position limits for bona fide commercial purposes shall apply to the Market Regulation Department on forms provided by the Exchange, and the Market Regulation Department may grant qualified exemptions in its sole discretion.

Refer to Rule 559 for requirements concerning the aggregation of positions and allowable exemptions from the specified position limits.

240102.E. Termination of Trading

All Contracts requiring delivery in a specific Ticket Week for a given calendar month shall simultaneously expire three business days prior to the first calendar day of the month prior to the first expiring Ticket Week .

Any Contracts remaining open after the last day of trading ("**Last Trading Day**") must be either:

1. Settled as between Buyer and Seller by receipt and delivery of On Spec LNG or Off Spec LNG no earlier than the first calendar day of the corresponding delivery Ticket Week and shall be initiated no later than the last calendar day of the delivery Ticket Week pursuant to a Transaction set forth in Appendix A; or

2. Liquidated by means of an Exchange for Related Position pursuant to Rule 538. An Exchange for Related Position is permitted in an expired Contract until 4:00 PM CT on the fourth Business Day after the Last Day of Trading of the expiring Ticket Weeks.

240103. DELIVERY MATCHING PROCEDURES

240103.A. Notices of Intention to Deliver

Clearing Members carrying open short Sellers positions after trading has ceased shall give the Clearing House a notice of intention to deliver ("**Notice of Intention to Deliver**") by 1:00 PM CT on the fifth (5th) Business Day after the Last Trading Day. The Notice of Intention to Deliver shall be in the form prescribed by the Clearing House and shall indicate the name of the Sellers that intend to deliver, the number of Contracts subject to delivery, the scheduled Loading Date, the Loading Port and any additional information that the Clearing House may require.

240103.B. Notices of Intention to Accept

Clearing Members carrying open long Buyers positions after trading has ceased shall give the Clearing House a notice of intention to accept delivery ("**Notice of Intention to Accept**") by 1:00 PM CT on the fifth (5th) Business Day after the Last Trading Day. The Notice of Intention to Accept shall be in the form prescribed by the Clearing House and shall indicate the name of the Buyers that intend to take delivery, the number of Contracts subject to acceptance of delivery, the preferred Loading Date, preferred Loading Port and such additional information that the Clearing House may require.

240103.C. Allocation and Notice Day

On the fifth (5^{th}) Business Day after the Last Trading Day the Clearing House shall:

1. Allocate Notices of Intention to Deliver and Notices of Intention to Accept by matching, to the extent possible, the size of Buyer and Seller positions, Loading Ports and Loading Dates in the applicable Ticket Weeks;

2. Provide the allocated and matched Notices of Intention to Deliver to each Buyer's Clearing Member and Notices of Intention to Accept to each Seller's Clearing Member;

3. As specified in Appendix C, adjust a portion of Buyer's positions (when such Buyer has excess positions in comparison to its matched Seller) and assign those positions to another Buyer for the acceptance of physical delivery (when such Buyer has a shortfall of positions in comparison to its matched Seller). Any excess or shortfall in the Buyer's position shall be cash adjusted per Appendix C and shall be within a threshold determined and published by the Exchange; and

4. Record each Buyer and each Seller as Parties that are matched.

5. Prior to the Allocation and Notice Day, the Clearing House may conduct a preliminary assignment allocation process to facilitate Clearing Members in aggregating or liquidating open positions.

240103.D. Matched Buyers and Sellers for Delivery

1. Each Transaction for the physical delivery of LNG is entered into when Parties with expired but open Contract positions are matched for delivery in accordance with this Rule 240103.

2. By holding open positions into the Allocation and Notice Day for matching for delivery, the matched Buyer and Seller are deemed to have entered into a Transaction as a single, separate and independent legally binding agreement. Each Transaction is a valid and legally binding obligation of, and shall be enforceable against, the Parties.

3. Buyer and Seller agree and understand that all responsibility for any obligation to physically deliver LNG pursuant to a Contract remains solely with Buyer and Seller.

4. Delivery of LNG shall be deemed completed as the LNG passes the Delivery Point.

5. All deliveries shall be conducted in conformity with the Marine Operations Manual.

240103.E. Timing of Delivery

Delivery shall take place no earlier than the first calendar day of the Ticket Week and shall be initiated no later than the last calendar day of the Ticket Week, unless adjusted in accordance with the requirements and conditions of a Transaction.

240103.F. Loading Date

1. On the Allocation and Notice Day, the Loading Date will be disclosed by the Seller's Clearing Member to the matched Buyer's Clearing Member. The Loading Date may be amended upon the mutual consent of the Buyer, Seller and the Terminal Operator and if amended, notice shall be given to the Clearing House. An amendment can occur on any valid Business Day by 5:00 PM CT, provided, however, such amendment shall occur no later than one (1) Business Day prior to the scheduled Loading Date.

2. Upon the Parties' agreement under Section 11.2 to effect delivery at a different time, notice shall be given to the Buyer's Clearing Member and Seller's Clearing Member (as applicable to each Party) and the Clearing House.

3. In accordance with Section 7 of the Agreement, upon nominating the delivery vessel in compliance with the requirements of the Terminal Operator, the Buyer shall document such nomination with the Clearing House on the same Business Day by 5:00 PM CT.

4. In accordance with Section 7 of the Agreement, upon approving or rejecting the nomination in accordance with the Marine Operations Manual, the Seller shall document the approval or rejection with the Clearing House on the same Business Day by 5:00 CT.

240104. DELIVERY MARGINS AND PAYMENTS

1. The Seller's Clearing Member shall obtain from the Selling Customer delivery margin in a form acceptable to the Clearing House in an amount fixed from time to time by the Clearing House. The Buyer Clearing Member shall obtain from the Buying Customer delivery

margin in a form acceptable to the Clearing House in an amount fixed from time to time by the Clearing House. For the avoidance of doubt, if the day in which the margin is to be obtained falls on a Saturday, Sunday or a banking holiday in New York, the margin will be due on the preceding Business Day.

2. Upon receipt by the Selling Customer of the applicable bill of lading details and the independent surveyor's report indicating the delivered quantity and quality in respect of a delivery of LNG ("**B/L Details**"), the Selling Customer shall provide a copy of such B/L Details by e-mail or fax to the Buying Customer (who shall in turn provide a copy to the Buyer's Clearing Member) and the Seller's Clearing Member. Thereafter the following shall occur:

   (a) Within one (1) Business Day of the Seller's Clearing Member and Buyer's Clearing Member receiving the B/L Details, the Seller's Clearing Member and Buyer's Clearing Member shall submit a notice of such receipt and the B/L Details to the Clearing House (the "**Delivery Notice**").

   (b) Upon receiving all Delivery Notices and provided that the Clearing House has not received a Seller Delivery Failure Notice from the Buyer's Clearing Member or Buying Customer, the Clearing House shall in accordance with Clearing House Rules, release the delivery margin provided by the Seller's Clearing Member to the Seller's Clearing Member. If the B/L Details indicate that LNG delivered is Off Spec, the Clearing House may (but shall have no obligation to) hold the delivery margin provided by the Seller's Clearing Member (whether in whole or in part) until such time as the Clearing House determines in its sole discretion, and release to Buyer's Clearing Member or Seller's Clearing Member, as appropriate.

3. Not later than 12:00 PM CT on the third (3rd) Business Day prior to the Payment Date, the Selling Customer shall notify, in writing, the Seller's Clearing Member of the bank account to which payment shall be made. The Seller's Clearing Member shall notify the Buyer's Clearing Member who shall in turn notify the Buying Customer.

4. Not later than 12:00 PM CT on the Payment Date:

   (a) Payment of amounts due shall be made by wire transfer of immediately available funds into the bank account nominated by the Seller. Each payment shall be for the full amount due, without reduction, withholding or set-off for any reason (including any exchange charges, bank transfer charges or other fees).

      (i) The Buying Customer shall notify, by e-mail or fax, the Buyer's Clearing Member of the details of the transfer of funds. The Buyer's Clearing Member shall notify, in writing, the Seller's Clearing Member who shall in turn notify the Selling Customer.

      (ii) If the Selling Customer has not received payment on or before the Payment Date, after such time has passed, it shall so notify the Seller's Clearing Member, which will in turn notify the Buyer's Clearing Member and the Clearing House in writing.

      (iii) If the Seller's Clearing Member becomes aware or receives notification that payment has not been received, it shall notify the Buyer's Clearing Member and the Clearing House in writing.

      (iv) On the Business Day following the Payment Date, unless the Buyer's Clearing Member or Buying Customer has provided a Seller Delivery Failure Notice to the Clearing House, the Clearing House shall, in accordance with Clearing House Rules, liquidate the Buying Customer's delivery margin and, when liquidation is complete, pay the Seller's Clearing Member, which shall in turn pay the Selling Customer.

(v) The Selling Customer shall notify the Seller's Clearing Member that it has received payment not later than the Business Day following the date of receipt. Where payment has been received, the Seller's Clearing Member shall deliver a notice of payment to the Buyer's Clearing Member and the Clearing House not later than the Business Day following the date payment is made. On receipt of such notice of payment the Clearing House shall, in accordance with Clearing House Rules, release the Buyer's Clearing Member's delivery margin to the Buyer's Clearing Member.

(b) Upon issuing a Buyer Delivery Failure Notice to Buyer, Seller shall immediately provide a copy to the Seller's Clearing Member who in turn shall immediately provide a copy to the Clearing House.

(c) Upon issuing a Seller Deliver Failure Notice to Seller, Buyer shall immediately provide a copy to the Buyer's Clearing Member who in turn shall immediately provide a copy to the Clearing House.

240105. GUARANTEE OF FINANCIAL PERFORMANCE

1. The Rules that apply to Clearing Members, as set forth in Chapter 7 of the Exchange's Rulebook, including Rules 714 and 715, shall apply to Clearing Members to the extent that such requirements are not inconsistent with the requirements specified in the Rules of this Chapter.

2. Prior to the Contract's Last Trading Day, each Clearing Member shall be responsible to the Exchange for ensuring that a Customer's cargo lot positions will be within the Qualifying Lot Range, and for assessing the Buyer's or Seller's ability to make or take delivery, for each account on its books with open positions in the expiring Contract. Absent satisfactory information from the Buyer or Seller, the Clearing Member is responsible to the Exchange for ensuring that the open positions are liquidated in an orderly manner prior to or on the Last Trading Day.

3. Notwithstanding any other right to liquidate a Customer's positions, a Clearing Member shall have the right to, and Customer agrees, acknowledges and understands that its Clearing Member shall have the right to, liquidate Customer positions that are outside the Qualifying Lot Range during the Offset Window.

4. Clearing Members shall obtain notices and documentation from Customers as required under this Chapter or as may be prescribed from time to time by the Exchange or Clearing House. Such notices and documentation shall include the information required by the Exchange and Clearing House and shall be collected and, as applicable, provided to Clearing Members, the Exchange or Clearing House in the form and manner prescribed by the Exchange or Clearing House.

5. Except for its obligations to the Exchange and Clearing House, the sole obligation and liability of the Buyer's Clearing Member under this Chapter to any person in any manner whatsoever in connection with any physical LNG delivery is the payment to the Seller's Clearing Member of an amount equal to the Buyer Failure Payment less the Seller's Net Proceeds upon the Buyer's failure to take delivery from or remit payment to the Seller.

6. Except for its obligations to the Exchange and Clearing House, the sole obligation and liability of the Seller's Clearing Member under this Chapter to any person in any manner whatsoever in connection with any physical LNG delivery is the payment to the Buyer's Clearing Member of an amount equal to the Seller Deficiency Payment upon the Seller's failure to make delivery to the Buyer, provided that (i) the Seller Deficiency Payment shall in no event exceed the product of the Seller Deficiency Quantity and the Final Settlement Price; and (ii) in calculating the Seller Deficiency Quantity, the Quantity Loaded is deemed to be, and shall include, the quantity of On Spec LNG and/or Off Spec LNG actually delivered at the Delivery Point.

7. In the event that a Clearing Member fails to meet its financial obligations to another Clearing Member upon a Buyer's failure to take delivery from or remit payment to Seller, or a Seller's failure to make delivery ("**Defaulting Clearing Member**"), the Exchange's and Clearing House's sole obligation under this Chapter to any person shall be to ensure financial performance to the Clearing Member whose actions or omissions did not cause or contribute to the delivery failure (the "**Affected Clearing Member**"). Financial performance means payment of the amount that a Defaulting Clearing Member is required to pay to an Affected Clearing Member under Rules 240105.5 or 240105.6.

8. The Clearing House, in its sole discretion, may determine that a Clearing Member, whose Customer with open cargo lot positions on or after the Allocation and Notice Day that are not within the Qualifying Lot Range, shall be deemed to have failed to make or take delivery of such positions. The decision of the Clearing House shall be final and binding upon the Parties and Clearing Members.

9. Any delivery failure under Rule 240105.8., a Buyer's failure to accept delivery from or remit full payment to a Seller, a Seller's failure to make delivery to a Buyer, and a Clearing Member's failure to financially perform shall be deemed an act detrimental to the interest and welfare of the Exchange.

10. The Exchange and Clearing House shall take such action or actions as they deem necessary under the circumstances upon determining, pursuant to Rule 240105.7, that a Clearing Member has failed to liquidate a Customer's outstanding position that is outside of the Qualifying Lot Range, and such action or actions shall be final and binding upon the Parties and Clearing Members.

240106. FORCE MAJEURE

1. The Exchange will give effect to a Buyer or Seller declaration of Force Majeure under Section 25 of Appendix A after receiving the requisite notices and information related to a Force Majeure event.

2. Such declaration of Force Majeure shall not prejudice any subsequent dispute resolution process between Buyer and Seller. The Exchange, Clearing House and Clearing Members shall have no liability in any manner whatsoever to the Buyer, Seller or any other Person in connection with a declaration of Force Majeure.

3. Upon any such declaration of Force Majeure, the Clearing House may (but shall have no obligation to) hold the delivery margin provided by the Buyer's Clearing Member and Seller's Clearing Member (whether in whole or in part) until such time as the Clearing House determines in its sole discretion, and release to Buyer's Clearing Member or Seller's Clearing Member, as appropriate.

4. The Exchange shall neither certify a filing for a Contractual Force Majeure with the Commodity Futures Trading Commission, nor publicly announce such Contractual Force Majeure, provided however, that the Exchange in its sole discretion may notify the Commodity Futures Trading Commission of a Contractual Force Majeure upon or after its occurrence.

5. The notice provided in connection with a Force Majeure act, event, or circumstance under Section 25 of Appendix A shall also be provided to the Exchange, and subsequent to such initial notification, the affected Party shall also provide any additional information requested by the Exchange regarding the particulars of the act, event or circumstance giving rise to the Force Majeure claim, in the form and manner and within the time requested by the Exchange.

APPENDIX A: LNG SALE AND PURCHASE AGREEMENT

1. DEFINITIONS AND INTERPRETATION

1. For the purpose of this Agreement, the following terms shall have the following meanings, unless the context otherwise requires:

Adverse Weather Conditions: Weather and/or sea conditions actually experienced at or near the Loading Port that are sufficiently severe: (i) to prevent an LNG vessel from proceeding to berth, loading or departing from the berth (as the case may be) in accordance with one or more of the following: (a) regulations published by a Governmental Authority; (b) an Approval; or (c) an order of a Pilot as bodies capable of preventing an LNG Tanker from proceeding to berth; or (ii) to cause a determination by the master of an LNG vessel, acting as a Reasonable and Prudent Operator, that it is unsafe for such LNG vessel to berth, load or depart from berth.

Affected Clearing Member: As defined in Rule 240105.7.

Affiliate: In relation to either Party, any entity that (directly or indirectly) controls, is controlled by, or is under common control with such Party. For the purposes of this definition, “control” means the right to cast fifty per cent (50%) or more of the votes exercisable at an annual general meeting (or its equivalent) of the entity concerned or, if there are no such rights, ownership of fifty per cent (50%) or more of the equity share capital of or other ownership interests in such entity, or the right to direct the policies or operations of such entity.

Agreement: As defined in Section 2.1.

Allocation and Notice Day: The day on which Delivery Notices are allocated and provided to Clearing Members in accordance with Rule 240103.C.

Allowed Laytime: As defined in Appendix B (Loading Ports).

Approval: In relation to Adverse Weather Conditions, any and all permits (including work permits), authorizations, approvals, grants, licenses, waivers, exemptions, consents, permissions, registrations, decrees, privileges, variances, validations, confirmations or orders granted by or filed with any Governmental Authority, including the export authorizations.

B/L Details: As defined in Rule 240104.2.

Btu: A British thermal unit, being the amount of heat equal to one thousand and fifty-five decimal zero six (1,055.06) joules.

Business Day: In a given commodity, any day on which a settlement price is determined.

Buyer’s Clearing Member: In relation to a Contract, the Clearing Member for a Customer with a long position.

Buyer or Buying Customer: The customer of a Buyer’s Clearing Member or the buyer of the physical LNG, as applicable.

Buyer Deficiency Quantity: As defined in Section 5.1(b).

Buyer Delivery Failure Notice: As defined in Section 5.1.

Buyer Failure Payment: As defined in Section 5.2(d).

Clearing House: The clearing division of the Chicago Mercantile Exchange Inc., a derivatives clearing organization regulated by the Commodity Futures Trading Commission.

Clearing Member: A Buyer's Clearing Member or a Seller's Clearing Member as applicable.

Completion of Loading: The time at which (i) the flange couplings of the loading lines of the Seller's Facilities are disconnected from the flange couplings of the receiving lines (including the vapor return line) of the LNG Ship following loading of the LNG Ship, (ii) the cargo documents are on board of the LNG Ship and (iii) the LNG Ship is cleared for departure and able to depart.

Contract: A contract bought or sold for the future delivery of LNG at the Loading Port in accordance with the Rules of this Chapter.

Contractual Force Majeure: Force Majeure that the Exchange determines, at its sole discretion, does not impact settlement prices and is specific to the delivery obligations of a single Buyer or Seller.

Customer: A Buying Customer or Selling Customer.

Daily Demurrage Rate: As defined in Appendix B (Loading Ports).

Defaulting Clearing Member: As defined in Rule 240105.7.

Delivery Notice: As defined in Rule 240104.2(a).

Delivery Point: The point at Seller's Facilities where the outboard faces of the flange coupling of the loading lines of the Seller's Facilities connect with the inlet faces of the flange coupling of the receiving lines of the LNG Ship.

Effective Date: As defined in Section 2.2.

Estimated Loaded Quantity: The quantity of LNG in MMBtu expected to be loaded onto the LNG Ship.

Exchange: The New York Mercantile Exchange, Inc., a designated contract market regulated by the Commodity Futures Trading Commission.

ETA: The LNG Ship's estimated time of arrival at the PBS.

Expert: An independent expert appointed to resolve a dispute of a technical nature between the Parties under Section 13.12.

Final Invoice: As defined in Section 14.1.

Final Settlement Price: The final settlement price of the expiring Contract on the Last Trading Day as determined and published by the Exchange.

Force Majeure: As defined in Section 25.2.

Full Cargo Lot: A cargo lot that is within the Qualifying Lot Range.

Governmental Authority: In respect of any country: (i) any supra national, national, regional, state, municipal, local or other government; (ii) any subdivision, agency, commission or authority thereof, including any port authority; or (iii) any quasi-governmental organization, in each case acting within its legal authority.

Gross Heating Value (Mass Based): The quantity of heat produced by the complete combustion of one (1) kilogram of dry ideal gas in dry air, and the condensation of all the water formed, as calculated or determined pursuant to Exhibit A-1.

Gross Heating Value (Volume Based): When expressed in Btu/SCF, the quantity of heat (in Btu) produced by the complete combustion of one (1) SCF of dry ideal gas in dry air, and the condensation of all the water formed, as calculated or determined pursuant to Exhibit A-1. Where expressed in units other than Btu/SCF, the relevant quantity of heat produced by the complete combustion of the relevant volume of dry ideal gas in dry air, in accordance with the foregoing procedures.

ICC: International Chamber of Commerce.

ICC Rules: As defined in Section 19.

IMO: International Maritime Organization.

In-Transit First Notice: As defined in Appendix B (Loading Ports).

In-Transit Second Notice: As defined in Appendix B (Loading Ports).

In-Transit Third Notice: As defined in Appendix B (Loading Ports).

In-Transit Final Notice: As defined in Appendix B (Loading Ports).

International Standards: The international standards and practices applicable to the ownership, design, equipment, operation or maintenance of LNG vessels (in Buyer's case) and of LNG terminals (in Seller's case) established by:

(a) A Governmental Authority, IMO, OCIMF, SIGTTO (or any successor body of the same), the International Navigation Association (PIANC), and the International Association of Classification Societies; and/or

(b) any other internationally recognized agency or organization with whose standards and practices it is customary for Reasonable and Prudent Operators of such LNG vessels or terminals similar to those applicable to this Agreement.

Last Trading Day: As defined in Rule 240102.E.

LNG: Natural Gas which, after processing, has been liquefied for storage and transportation, for delivery FOB at the Loading Port.

LNG Ship or LNG Tanker: An LNG vessel that satisfies all requirements set out in this Agreement.

Loading Date: The assigned loading date determined by the Terminal Operator.

Loading Port: The delivery port specified by the Seller, which in all cases shall be one of the ports listed in Appendix B (Loading Ports) where the LNG is loaded.

Loading Port Standard Setting Document: A Loading Port's Marine Operations Manual (or similar document, including Liquefaction Tolling Agreements), which (i) sets forth delivery, measurement, and testing terms and conditions or standards that are routinely applied to LNG sales at the Loading Port, (ii) is generated by or on behalf of the Loading Port, and (iii) is made readily available to LNG buyers and sellers by the Loading Port or toller upon LNG buyer or seller request.

Marine Operations Manual: The marine operations manual developed for the Loading Port which governs activities at the Loading Port, consistent with International Standards, and which applies to each LNG Ship and other LNG vessels berthing at the Loading Port.

Measurement Dispute: As defined in Section 13.12(a).

MJ: One million (1,000,000) joules.

MMBtu: One million (1,000,000) Btu.

Natural Gas: A gaseous mixture of hydrocarbons, consisting mainly of methane.

Net Proceeds: As defined in Section 5.2(f).

NOR: A notice of readiness sent by the LNG Ship's master or its agent to Seller or Seller's agent by email or other mutually agreed means of communication indicating that the LNG Ship is ready to berth and load LNG.

Notice of Intention to Accept: As defined in Rule 240103.B.

Notice of Intention to Deliver: As defined in Rule 240103.A.

OCIMF: Oil Companies International Marine Forum.

Off Spec LNG: LNG that does not comply with the Specifications applicable to deliveries at the Loading Port as set forth in Appendix B (Loading Ports).

Off Spec LNG Value: As defined in Section 4.4(b)(ii).

Off Spec Notice: As defined in Section 4.2.

Offset Window: The period of time between the beginning of the fourth Business Day prior to the Last Trading Day and the beginning of the Last Trading Day.

On Spec LNG: LNG that does comply with the Specifications.

Party: Shall mean each of Buyer or Seller or, collectively, the Parties, and excludes the Exchange, Clearing House and each Clearing Member.

Payment Date: As defined in Section 14.5.

PBS: The customary pilot boarding station or the customary alternative waiting area as determined by the port authorities at the Loading Port.

Person: Shall mean any individual, corporation, partnership, trust, unincorporated organization or other legal entity, including any Governmental Authority.

P&I Club: An independent mutual insurance association that is a member of the International Group of P&I Clubs and that provides liability protection to ship-owners and charterers against third-party liabilities encountered in their commercial operations.

Port Charges: Any charges of whatsoever nature (including rates, tolls dues, fees, and imposts of every description) in respect of an LNG Ship entering, using or leaving a port, including but not limited to harbor dues, charges made in respect of marking and lighting the port and charges in respect of which work is performed, services are rendered or facilities are provided, and fees or charges of a Governmental Authority, properly constituted port authority or of the provider of such work, services or facilities.

Port Liability Agreement: An agreement for use of the port and marine facilities located at the Loading Port.

Provisional Invoice: As defined in Section 14.2.

Qualifying Lot Range: The cargo lot range specified and published by the Exchange from time to time within which a cargo lot must be in order to qualify for physical settlement pursuant to a Transaction.

Quantity Loaded: The quantity of LNG in MMBtu in any cargo loaded at Seller's Facilities, determined in accordance with Section 13 and Exhibit A-1 (Measurement).

Reasonable and Prudent Operator: A person seeking in good faith to perform its contractual obligations and comply with applicable laws and regulations, and in so doing, and in the general conduct of its undertaking, exercising that degree of skill, diligence, prudence and foresight which would reasonably and ordinarily be expected from a skilled and experienced operator engaged in the same type of undertaking under the same or similar circumstances and conditions.

Rules of this Chapter: The Exchange Rules set forth in Chapter 240, which include Section 1 of Appendix A (LNG Sale and Purchase Agreement) of this Chapter, and exclude the other Sections of Appendix A and Exhibit A-1 (Measurement) of this Chapter, which are not Exchange Rules.

SCF: A standard cubic foot, meaning, in relation to Natural Gas, the quantity of anhydrous ideal gas at a temperature of sixty (60) degrees Fahrenheit and a pressure of fourteen decimal six nine six (14.696) pounds per square inch absolute contained in a volume of one (1) cubic foot.

Section or Sections: Physical delivery and related obligations under this Agreement that are the bilateral contractual obligations of Buyer or Seller.

Scheduled Arrival Window: The 24-hour window beginning at 6 AM CT assigned to the Buyer, within which the LNG Ship is scheduled to arrive and issue its NOR.

Seller's Clearing Member: In relation to a Contract, the Clearing Member for a Customer with a short position.

Seller Deficiency Payment: As defined in Section 6.2(c).

Seller Deficiency Quantity: As defined in Section 6.1(b).

Seller Delivery Failure Notice: As defined in Section 6.1.

Seller or Selling Customer: The customer of a Seller's Clearing Member or the seller of the physical LNG, as applicable.

Seller's Facilities: The facilities that are used by Seller for the fulfilment of its obligations, which include: (i) the Loading Port; (ii) the Natural Gas inlet, compression, treatment, processing and liquefaction facilities; (iii) the LNG storage and loading or reloading facilities; (iv) the facilities for berthing of LNG vessels; and (v) all ancillary equipment and utilities, whether or not owned by Seller and whether operated directly by Seller or by a Third Party, situated at or proximate to the Loading Port.

SIGTTO: The Society of International Gas Tanker and Terminal Operators.

SOFR: The interest rate per annum equal to the Secured Overnight Financing Rate ("SOFR") administered by the Federal Reserve Bank of New York ("FRBNY") (or any other person or entity who may succeed FRBNY as administrator of SOFR). As administered by FRBNY, the SOFR value for any US government securities market business day shall be as shown at approximately 8:00am New York time on the next following US government securities market business day at: https://www.newyorkfed.org/markets/treasury-repo-reference-rates. For the purpose of this definition, the SOFR value applicable to the day on which a payment is due and is not paid ("due date") shall be the SOFR value published on the US government securities market business day next following such due date. For any day that is not a US government securities market business day, the SOFR value that applies to such day shall be the SOFR value applicable to the immediately preceding US government securities market business day. If FRBNY ceases to administer and publish SOFR as aforesaid, then the Exchange shall reference another reasonably comparable interest rate or publication which the Parties shall agree to use in accordance with this Agreement.

Specifications: As defined in Section 4.1.

Standardized Terms and Conditions: The Rules of this Chapter, including price and quantity, that specify the form, manner, and timing of the physical delivery of LNG and specifically apply to an expired Contract in connection therewith.

Taxes: Any tax, levy, rate, duty, fee or other charge (other than any Port Charges) imposed directly or indirectly on a Party, its assets, income, dividends or profits (without regard to the manner of collection or assessment, whether by withholding or otherwise) by any government, Governmental Authority or other body duly authorized to impose such tax, levy, rate, duty, fee or other charge.

Terminal Operator: Operator of a facility listed in Appendix B (Loading Ports).

Third Party: Any party not a Party to a Contract or Transaction, as applicable.

Transaction: As defined in Section 2.2.

Transporter: The owner and/or operator of the LNG Ship.

Tribunal: As defined in Section 19.

Tug Services Agreement: As defined in Section 10.5.

Used Laytime: As defined in Section 12.3.

2. SALE AND PURCHASE

1. This LNG Sale and Purchase Agreement ("**Agreement**") contains additional terms and conditions applicable to the physical sale and purchase of LNG pursuant to an expired Contract, such Contract and Agreement setting forth separate and independent obligations of the Parties.

2. The Standardized Terms and Conditions, together with the terms of this Agreement, collectively shall constitute, a single separate and independent contract for the physical delivery of LNG (a "**Transaction**"). A Buyer and Seller shall be deemed to have entered into this Agreement and a Transaction when such Parties' expired open Contract positions are matched for delivery in accordance with Rule 240103 (such date, the "**Effective Date**"). Each Transaction is a valid and legally binding obligation of, and shall be enforceable against, the matched Parties.

3. Upon entering into a Transaction, Seller shall sell and deliver, and Buyer shall purchase, receive and pay Seller for, one or more matched Full Cargo Lots at the Delivery Point, in each case, in accordance with the terms of the Transaction.

3. QUANTITY

Seller agrees to sell and deliver to Buyer, and Buyer agrees to purchase, receive and pay for the quantity of LNG matched and assigned to such Buyer and Seller in accordance with Rule 240103.

4. QUALITY

1. LNG delivered pursuant to a Transaction shall, when converted into a gaseous state, comply with the specifications ("**Specifications**") set forth in Appendix B (Loading Ports) for deliveries at a Loading Port.

Promptly following the Completion of Loading, Seller shall send or cause to be sent to Buyer a notice setting out the quality of the LNG loaded.

2. If Seller becomes aware prior to the commencement of loading that the LNG to be loaded is or is expected to be Off Spec LNG, Seller shall promptly but no later than the commencement of loading issue a notice to Buyer ("**Off Spec Notice**"). Such Off Spec Notice shall include at a minimum, a description of the extent of the expected variance in quality. On receipt by Buyer of an Off Spec Notice:

(a) Buyer shall use commercially reasonable efforts to accept the Off Spec LNG; and

(b) as soon as practicable after receipt of the Off Spec Notice but no later than seventy-two (72) hours thereafter, Buyer shall notify Seller that:

(i) Buyer rejects the Off Spec LNG, in which case Section 4.6 shall apply; or

(ii) Buyer is prepared to accept the Off Spec LNG, in which case Buyer's notice shall include a good faith estimate of the costs that Buyer will incur as a result of accepting the Off Spec LNG and Section 4.3 shall apply.

3. If Buyer is prepared to accept the Off Spec LNG under Section 4.2(b)(ii), Seller shall as soon as practicable after receiving Buyer's notice, notify Buyer whether or not it accepts Buyer's cost estimate. If Seller accepts Buyer's cost estimate, then Buyer shall accept the Off Spec LNG and Seller shall reimburse Buyer for the reasonable documented direct costs incurred by Buyer as a result of Buyer's receipt and treatment of the Off Spec LNG, provided that Seller's liability to reimburse Buyer shall not exceed 120% of the cost estimate notified by Buyer to Seller under Section 4.2(b)(ii) above. If Seller does not accept Buyer's estimate, then Buyer shall be deemed to have rejected the Off Spec LNG and Section 4.6 shall apply.

4. Where, after the commencement of loading of the cargo, either Party becomes aware that Off Spec LNG has been loaded on board such LNG Ship, then that Party shall promptly notify the other and either Party may then suspend further loading of such Off Spec LNG. Upon such notice:

   (a) Buyer shall use commercially reasonable efforts to accept the Off Spec LNG; and

   (b) as soon as practicable after receipt of the such notice but no later than seventy-two (72) hours thereafter, Buyer shall notify Seller that:

      (i) Buyer rejects the Off Spec LNG, in which case Section 4.6 shall apply and Seller shall reimburse Buyer for the reasonable documented direct costs incurred by Buyer or Transporter as a result of Buyer's receipt, treatment and disposal of the Off Spec LNG; or

      (ii) Buyer is prepared to accept the Off Spec LNG already loaded (and work towards the Completion of Loading if not already achieved), in which case Seller shall reimburse Buyer for the reasonable documented direct costs incurred by Buyer, Transporter or any Third Party in transporting and treating such Off Spec LNG received to meet the Specifications (or to otherwise make such LNG marketable), provided that Seller's liability to reimburse Buyer shall not exceed an amount equal to the product of the Quantity Loaded and the Final Settlement Price ("**Off Spec LNG Value**").

5. The amounts to be reimbursed by Seller to Buyer under this Section 4 shall include those costs incurred by Buyer in respect of services provided by Third Parties to Buyer in relation to the receipt, treatment or disposal (as applicable) of such Off Spec LNG, but shall not include any amount for which Buyer may be liable in respect of loss of or damage to any person to whom Natural Gas (resulting from the regasification of LNG (including Off Spec LNG) supplied by Seller) is sold, supplied or delivered.

6. If Buyer rejects or is deemed to have rejected Off Spec LNG, then Seller shall be deemed to have failed to deliver the quantity of Off Spec LNG rejected by Buyer. Seller shall therefore be liable to Buyer for such failure to deliver in accordance with the terms of Section 6 but, for the avoidance of doubt, may deliver such rejected Off Spec LNG to any Third Party without restriction.

7. The provisions of this Section 4 set out Buyer's sole and exclusive remedies in damages or otherwise in respect of Off Spec LNG, and Seller shall have no other liability other than as set out in this Section 4.

5. BUYER'S FAILURE TO TAKE DELIVERY

1. If the Buyer fails to take delivery of all or any part of the LNG scheduled for delivery to Buyer (provided that the failure is caused by any reason other than Force Majeure, the fault of Seller, or where Buyer has rejected all or part of a cargo in accordance with Section 4), then Seller may issue a notice to Buyer ("**Buyer Delivery Failure Notice**") stating:

   (a) that Buyer has failed to take all or any part of such LNG under the Transaction; and

   (b) the quantity of LNG (in MMBtu) that Buyer failed to take ("**Buyer Deficiency Quantity**"), being the Estimated Loaded Quantity less any Quantity Loaded; and Section 5.4 shall apply.

2. If Seller issues a Buyer Delivery Failure Notice to Buyer in accordance with Section 5, then:

   (a) Seller shall cease to be obliged to deliver to Buyer the quantity of LNG equal to the Buyer Deficiency Quantity;

   (b) Seller shall (where applicable) require the LNG Ship to depart the berth and depart Seller's Facilities;

   (c) Seller shall not be liable to Buyer for demurrage under Section 12.6 in respect of any period after the earliest time, following the issue of the Buyer Delivery Failure Notice, at which the Buyer could reasonably have caused the LNG Ship to depart the berth;

   (d) Buyer shall pay Seller an amount equal to the product of the Buyer Deficiency Quantity and the Final Settlement Price ("**Buyer Failure Payment**");

   (e) Seller acting as a Reasonable and Prudent Operator (and taking into account Seller's commercial and operational constraints) shall use commercially reasonable efforts to dispose of the Buyer Deficiency Quantity so as to maximize the Net Proceeds (if any) from such sale; and

   (f) if Seller sells all or part of the Buyer Deficiency Quantity, then Seller shall pay Buyer the total proceeds received by Seller from such sale less any actual documented costs properly incurred by Seller in relation to the sale of such quantities of LNG in excess of those costs which would have reasonably been incurred in a sale to Buyer at Seller's Facilities (**"Net Proceeds"**) provided, however, that:

      (i) Seller shall not be required to pay Buyer any part of the Net Proceeds which is in excess of the Buyer Failure Payment made by Buyer; and

      (ii) the Net Proceeds as calculated by Seller shall be final and binding upon the Parties, save in the case of fraud or manifest error.

3. For the purposes of Section 5.4, Buyer shall have the right to appoint an independent auditor to verify the absence of fraud or manifest error in Seller's calculation of Net Proceeds, and Seller shall make available to the auditor on a confidential basis such documentation relating to the calculation of Net Proceeds, as is appropriate to enable the

auditor's verification. The independent auditor shall be a major international accountancy firm, and Buyer shall cause the auditor to execute a confidentiality agreement acceptable to Seller.

4. Buyer's payment of the Buyer's Failure Payment shall be Seller's sole and exclusive remedy in damages or otherwise for Buyer's failure to take delivery of the Buyer Deficiency Quantity, Seller shall not be obliged to sell or deliver any replacement quantities of LNG to Buyer on account of Buyer's failure to take delivery of the Buyer Deficiency Quantity.

6. SELLER'S FAILURE TO MAKE DELIVERY

1. If Seller is unable to or fails to deliver all or any part of the LNG scheduled for delivery to Buyer (provided that the failure is caused by any reason other than Force Majeure or the fault of Buyer) under the Transaction, then Buyer may issue a notice to Seller **("Seller Delivery Failure Notice")** stating:

   (a) that Seller has failed to deliver all or any part of such LNG under the Transaction; and

   (b) the quantity of LNG (in MMBtu) that Seller has failed to deliver ("**Seller Deficiency Quantity**"), being the Estimated Loaded Quantity less any Quantity Loaded;

   and Section 6.4 shall apply.

2. If Buyer issues a Seller Delivery Failure Notice to Seller in accordance with Section 6.1, then:

   (a) Buyer shall cease to be obliged to take from Seller the quantity of LNG equal to the Seller Deficiency Quantity;

   (b) Buyer shall (where applicable) cause the LNG Ship to depart the berth and depart Seller's Facilities;

   (c) Seller shall pay Buyer an amount equal to Buyer's actual documented costs properly incurred as a result of Seller's non-delivery of the Seller Deficiency Quantity (**"Seller Deficiency Payment**"), such costs being limited to either:

      (i) (where Buyer has terminated its resale arrangements in respect of the Seller Deficiency Quantity) Buyer's costs properly incurred as a result of such termination; or

      (ii) (where Buyer has not terminated its resale arrangements in respect of the Seller Deficiency Quantity or has no such resale arrangements to terminate) Buyer's costs of purchasing an equivalent quantity of Natural Gas, LNG or other fuel from a Third Party on market-based arm's length terms, less an amount equal to the product of the Seller Deficiency Quantity and the Final Settlement Price; and

   (d) Buyer acting as a Reasonable and Prudent Operator (and taking into account Buyer's commercial and operational constraints) shall use commercially reasonable efforts to mitigate its costs and thereby minimize the Seller Deficiency Payment provided that:

(i) the Seller Deficiency Payment shall in no event exceed the product of the Seller Deficiency Quantity and the Final Settlement Price; and

(ii) the Seller Deficiency Payment amount calculated by Buyer shall be final and binding upon the Parties, save in the case of fraud or manifest error.

3. For the purposes of Section 6.4, if Buyer purchased an equivalent quantity of replacement Natural Gas, LNG or other fuel, Seller shall have the right to appoint an independent auditor to verify that the price paid is market based and purchased on arm's length commercial terms, and Buyer shall make available to the auditor on a confidential basis such documentation relating to the purchase of such replacement Natural Gas, LNG or other fuel as is appropriate to enable the auditor's verification.

4. Seller's payment of the Seller Deficiency Payment and any demurrage, if applicable, shall be Buyer's sole and exclusive remedy in damages or otherwise for Seller's failure to deliver the Seller Deficiency Quantity. Buyer shall not be obliged to purchase or take delivery of replacement quantities of LNG from Seller on account of Seller's failure to deliver the Seller Deficiency Quantity.

7. VESSEL NOMINATION

As early as reasonably practicable, but no later than twenty (20) days, prior to the scheduled Loading Date, or if that date is not a Business Day the preceding Business Day, the Buyer shall nominate the delivery vessel in compliance with the requirements of the Terminal Operator.

Upon receipt of the vessel nomination, the Seller shall approve or reject the nomination in accordance with the Marine Operations Manual.

The Buyer and the Seller upon mutual agreement, may amend the vessel nomination subject to complying at all times with the requirements of the Terminal Operator.

Seller and Buyer shall contract with the Terminal Operator or one of its subsidiaries or affiliates, or a Third Party, as may be required by the Loading Port, for services necessary to complete delivery, provided that the terms of such contracts and agreements shall not prevent Buyer from obtaining, on commercially reasonable terms, liability protection from a P&I Club.

8. MAKING AND TAKING DELIVERY, RISK, AND TITLE

1. Seller shall deliver, and Buyer shall take delivery of, LNG at the Delivery Point. Risk in LNG, including the risk of loss or contamination of the LNG, shall always pass from Seller to Buyer at the Delivery Point.

2. Seller shall transfer title in the LNG sold and purchased pursuant to a Transaction to Buyer at Delivery Point.

3. Seller warrants to Buyer that it will have good title to all LNG delivered to Buyer pursuant to a Transaction and that all such LNG will be free and clear of liens, security interests, charges, assessments, adverse claims and other encumbrances of any kind.

9. TRANSPORTATION

1. Buyer shall be responsible for the transportation from the Delivery Point of all LNG sold and purchased pursuant to a Transaction. Accordingly, Buyer shall, at its own expense, provide, or cause to be provided, an LNG Ship to transport such LNG.

2. Buyer shall procure that each LNG Ship shall be constructed, operated and maintained in compliance with all relevant laws and regulations and in accordance with International Standards, and that each LNG Ship shall at all times be (i) in compliance with the requirements of and acceptable to the Terminal Operator (including those set forth in the Marine Operations Manual), and (ii) in compliance with, compatible with, and acceptable to, the Loading Port and Seller's Facilities.

3. Notwithstanding any prior acceptance of an LNG Ship, if Seller subsequently reasonably believes, based on evidence that has come to light since the initial nomination and acceptance of the vessel, that it may no longer comply with the requirements of this Agreement, Seller may, by notice in writing to Buyer, reject the vessel. Seller shall not be liable for any costs and expenses incurred as a result of such rejection of the vessel, which shall be solely for Buyer's account. For the avoidance of doubt, Seller's rejection of a vessel in accordance with this Section 9 shall not relieve Buyer of its obligations under the Transaction, and Seller may maintain its rejection until such time as it has been demonstrated to Seller's satisfaction (not to be unreasonably withheld, delayed or conditioned) that the vessel complies with the requirements of this Agreement.

4. Buyer may substitute, upon notice to the Seller, the LNG Ship with an alternative LNG vessel provided that such alternative LNG vessel meets the requirements of Section 9.2 and is approved by Seller, such approval not to be unreasonably withheld, delayed or conditioned. In the event of such substitution, the alternative LNG vessel shall become the LNG Ship for the purposes of the Transaction.

5. Buyer shall pay or cause to be paid (a) all Port Charges directly to the appropriate Person (including reimbursing Seller for any Port Charges paid by Seller or its subsidiaries or Affiliates, or a Third Party, on Buyer's behalf); and (b) all charges payable by reason of the LNG Ship having to shift from berth at the Loading Port as a result of the action or inaction of Buyer.

10. LOADING PORT FACILITIES

1. Seller shall provide or cause to be provided Seller's Facilities at the Loading Port of appropriate design and sufficient capacity to enable Seller to perform its obligations to deliver, and Buyer to perform its obligations to take delivery of, all LNG sold and purchased pursuant to a Transaction. Seller shall procure that Seller's Facilities shall be operated and maintained in compliance with all relevant laws and regulations and in accordance with International Standards and shall at all times include the following:

   (a) berthing facilities capable of berthing an LNG Ship with berthing facility requirements as set forth in Appendix B hereto for the applicable Loading Port.

   (b) a vapor return line system of sufficient capacity to allow for transfer of Natural Gas necessary for safe cargo operations at the required rates, pressures and temperatures;

   (c) emergency shutdown systems;

(d) appropriate systems for communication with the LNG Ship; and

(e) qualified and competent personnel, who can communicate in clear and understandable written and spoken English, to coordinate with the LNG Ship during berthing, un-berthing, handling and loading operations.

2. Seller shall not be obliged to provide facilities for repair of the LNG Ship. Seller shall not be obliged to supply bunker fuel oil or to provide facilities for the supply of liquefied or gaseous nitrogen, diesel oil, water or utilities required by the LNG Ship at the Loading Port. If such facilities and/or products are available at Seller's Facilities and are used by Buyer, all associated costs and expenses shall be for Buyer's account.

3. Buyer shall procure that the LNG Ship shall utilize the Loading Port and Seller's Facilities subject to the observance of all relevant rules and regulations (including port regulations) in force at the Loading Port and Seller's Facilities.

4. Buyer shall, at no cost to Seller, be responsible for obtaining all port approvals, marine permits, and other technical and operational authorizations necessary for the LNG Ship to enter, leave and use the Loading Port and Seller's Facilities. Seller shall cooperate and provide reasonable assistance to Buyer in obtaining such approvals.

5. Buyer shall cause Transporter to enter into an agreement (the "**Tug Services Agreement**"), as provided by Seller, at least fifteen (15) days prior to such LNG Ship's arrival at the Loading Port to obtain the services of such number and types of tugs, fireboats and escort vessels as are required by Governmental Authorities to attend the LNG Ship so as to permit safe and efficient movement of the LNG Ship within the maritime safety areas located in the approaches to and from the Seller's Facilities. Seller shall not be required to provide tugs, fireboats and escort vessels to attend any LNG Ship and shall not be liable to Buyer in connection with Transporter's failure to enter into such arrangements.

6. Buyer shall cause Transporter or the master of each LNG Ship (acting on behalf of the ship-owner and charterer) making use of the port or marine facilities at the Seller's Facilities or the Loading Port thereof on behalf of Buyer, to execute the Port Liability Agreement at least fifteen (15) days prior to such LNG Ship's arrival at the Loading Port.

7. Buyer shall, and shall cause the Transporter to, comply at all times with the Marine Operations Manual and the Loading Port Standard Setting Document while operating at the Loading Port and the Seller's Facilities. A copy of the Marine Operations Manual shall be provided by Seller to Buyer or Transporter in advance of the LNG Ship's arrival at the Loading Port.

11. ETA NOTICES AND BERTHING ASSIGNMENTS

1. ETA notices and berthing assignments shall be given and assigned pursuant to the "ETA Notices and Berthing Assignments" section for the applicable Loading Port in Appendix B hereto.

2. Buyer and Seller shall undertake commercially reasonable efforts to cause the berthing of the LNG Ship and for Seller to give such notice for a period of seventy-two (72) hours after the end of the Scheduled Arrival Window. If the Buyer and Seller are unable to cause the berthing of the LNG Ship at or within 72 hours after the end of the Scheduled Arrival

Window, Buyer shall be deemed to have failed to take delivery and the provisions of Section 5 shall apply unless the Parties mutually agree to effect delivery at a different time within fifteen (15) calendar days after the Loading Date. Seller shall berth an LNG Ship which has tendered a valid NOR before or during its Scheduled Arrival Window promptly, but in no event later than the end of the Scheduled Arrival Window allocated to such LNG Ship; provided, however, that if Seller does not berth such LNG Ship by the end of the Scheduled Arrival Window, but berths such LNG Ship within seventy-two (72) hours after the end of its Scheduled Arrival Window, Buyer's sole recourse and remedy for Seller's failure to berth the LNG Ship by the end of the Scheduled Arrival Window is demurrage pursuant to such Transaction and payment for excess boil-off equal to the Final Settlement Price multiplied by a quantity (in MMBtu) equal to zero decimal zero zero five seven three percent (0.00573%) of the cargo containment capacity of such LNG Ship; provided that in no event shall the quantity of MMBtu used in the calculation exceed the quantity of LNG on board the LNG Ship at the time it issued its valid NOR.

3. If, as of the seventy-second (72nd) hour after the end of the Scheduled Arrival Window, Seller has not berthed the LNG Ship that has tendered a valid NOR before or during the Scheduled Arrival Window, and such delay is not attributable to a reason that would result in an extension of Allowed Laytime, Seller shall be deemed to have failed to have made delivery and the provisions of Section 6 shall apply unless the Parties mutually agree to effect delivery at a different time within fifteen (15) calendar days after the Loading Date.

4. The Parties shall use commercially reasonable efforts to avoid any conflict with other LNG vessels in berthing the LNG Ship at the Loading Port. Berthing and loading priority shall be determined in accordance with the rules and procedures applicable to the Loading Port and/or Seller's Facilities.

12. LOADING

1. Loading shall be conducted in the manner specified in the "Loading" section for the applicable Loading Port in Appendix B hereto.

13. MEASUREMENT AND ANALYSIS

1. LNG Measurement and Tests. LNG delivered to Buyer, and Natural Gas to be used as fuel by Buyer, pursuant to a Transaction shall be measured and tested in accordance with Exhibit A-1 (Measurement).

2. Parties to Supply Devices.

   (a) Buyer shall supply, operate and maintain, or cause to be supplied, operated and maintained, suitable gauging devices for the LNG tanks of the LNG Ship, as well as pressure and temperature measuring devices, in accordance with Section 13.3 and Exhibit A-1, and any other measurement, gauging or testing devices which are incorporated in the structure of such LNG Ship or customarily maintained on shipboard.

   (b) Seller shall supply, operate and maintain, or cause to be supplied, operated and maintained, devices required for collecting samples and for determining quality and composition of the delivered LNG, in accordance with Section 13.3 and Exhibit A-

1, and any other measurement, gauging or testing devices which are necessary to perform the measurement and testing required hereunder at the Loading Port.

3. Selection of Devices. Each device provided for in this Section 13 shall be selected and verified in accordance with Exhibit A-1. Any devices that are provided for in this Section 13 not previously used in an existing LNG trade shall be chosen by written agreement of the Parties and shall be such as are, at the time of selection, accurate and reliable in their practical application. The required degree of accuracy of such devices shall be agreed in writing by Buyer and Seller in advance of their use, and such degree of accuracy shall be verified by an independent surveyor who is agreed by Buyer and Seller.

4. Tank Gauge Tables of LNG Tanker. Buyer shall furnish to Seller, or cause Seller to be furnished, a certified copy of tank gauge tables as described in Exhibit A-1 for each LNG tank of the LNG Ship and of tank gauge tables revised as a result of any recalibration of an LNG tank of an LNG Ship.

5. Gauging and Measuring LNG Volumes Loaded. Volumes of LNG delivered under a Transaction will be determined by gauging the LNG in the LNG tanks of the LNG Ship immediately before and after loading in accordance with the terms of Exhibit A-1.

6. Samples for Quality Analysis. Representative samples of the delivered LNG shall be obtained by Seller as provided in Exhibit A-1.

7. Quality Analysis. The samples referred to in Section 13.6 shall be analyzed, or caused to be analyzed, by Seller in accordance with the terms of Exhibit A-1, in order to determine the molar fractions of the hydrocarbons and components in the sample.

8. Operating Procedures.

   (a) Prior to carrying out measurements, gauging and analyses hereunder, the Party responsible for such operations shall notify the designated representative(s) of the other Party, allowing such representative(s) a reasonable opportunity to be present for all operations and computations; provided, however, that the absence of such representative(s) after notification and reasonable opportunity to attend shall not affect the validity of any operation or computation thereupon performed.

   (b) At the request of either Party, any measurements, gauging and/or analyses provided for in Section 13.5, Section 13.6, Section 13.7 and Section 13.10(a) shall be witnessed and verified by an independent surveyor agreed upon in writing by Buyer and Seller. The results of verifications and records of measurement shall be maintained in accordance with the terms of Exhibit A-1.

9. MMBtu Quantity Delivered. The number of MMBtus sold and delivered shall be calculated at the Delivery Point by Seller and witnessed and verified by a mutually appointed independent surveyor agreed upon in writing by the Parties following the procedures set forth in Exhibit A-1.

10. Verification of Accuracy and Correction for Error.

   (a) Each Party shall test and verify, or cause the testing and verification of, the accuracy of its devices at intervals to be agreed between the Parties. In the case

of gauging devices of the LNG Ship, such tests and verifications shall take place during each scheduled dry-docking, provided that the interval between such dry dockings shall not exceed five (5) years. Indications from any redundant determining devices should be reported to the Parties for verification purposes. Each Party shall have the right to inspect and if a Party reasonably questions the accuracy of any device, to require the testing or verification of the accuracy of such device in accordance with the terms of Exhibit A-1.

(b) Permissible tolerances of the measurement, gauging and testing devices shall be as described in Exhibit A-1.

11. Costs and Expenses.

(a) Except as provided in this Section 13.11, all costs and expenses for testing and verifying measurement, gauging or testing devices shall be borne by the Party whose devices are being tested and verified; provided, however, that representatives of the Parties attending such tests and verifications shall do so at the cost and risk of the Party they represent.

(b) In the event that a Party inspects or requests the testing/verification of any of the other Party's devices on an exceptional basis in each case as provided in Section 13.10(a), the Party requesting the testing/verification shall bear all costs thereof.

(c) The costs of the independent surveyor:

(i) requested by a Party in accordance with Section 13.8.(b) shall be borne by the requesting Party; and

(ii) referred to in Section 13.9 shall be borne equally by Buyer and Seller.

12. Expert Determination.

(a) In the event of any disagreement between the Parties regarding a measurement under Exhibit A-1 hereto, or any other dispute which the Parties agree to submit to an Expert (in either case, a "**Measurement Dispute**"), the Parties hereby agree that such Measurement Dispute shall be resolved by an Expert selected as provided in this Section 13.12. The Expert is not an arbitrator of the Measurement Dispute and shall not be deemed to be acting in an arbitral capacity. The Party desiring an expert determination shall give the other Party to the Measurement Dispute notice of the request for such determination. If the Parties to the Measurement Dispute are unable to agree upon an Expert within ten (10) Business days after receipt of the notice of request for an expert determination, then, upon the request of any of the Parties to the Measurement Dispute, the International Centre for Expertise of the ICC shall appoint such Expert and shall administer such expert determination through the ICC Rules for Expertise.

(b) The Expert shall be and remain at all times wholly impartial, and, once appointed, the Expert shall have no ex parte communications with any of the Parties to the Measurement Dispute concerning the expert determination or the underlying Measurement Dispute. The Parties to the Measurement Dispute shall cooperate fully in the expeditious conduct of such expert determination and provide the

Expert with access to all facilities, books, records, documents, information and personnel necessary to make a fully informed decision in an expeditious manner. Before issuing a final decision, the Expert shall issue a draft report and allow the Parties to the Measurement Dispute to comment on it. The Expert shall endeavor to resolve the Measurement Dispute within thirty (30) days (but no later than sixty (60) days) after his appointment, taking into account the circumstances requiring an expeditious resolution of the matter in dispute.

(c) The Expert's decision shall be final and binding on the Parties to the Measurement Dispute unless challenged in an arbitration pursuant to Section 19 within thirty (30) days of the date the Expert's decision. If challenged, (i) the decision shall remain binding and be implemented unless and until finally replaced by an award of the arbitrators; (ii) the decision shall be entitled to a rebuttable presumption of correctness; and (iii) the Expert shall not be appointed in the arbitration as an arbitrator or as advisor to either Party without the written consent of both Parties.

(d) In the event that a Party requests expert determination for a Measurement Dispute which raises issues that require determination of other matters in addition to correct measurement under Exhibit A-1 hereto, then either Party may elect to refer the entire Measurement Dispute for arbitration under Section 19. In such case, the arbitrators shall be competent to make any measurement determination that is part of a dispute. An expert determination not referred to arbitration shall proceed and shall not be stayed during the pendency of an arbitration.

14. INVOICING AND PAYMENT

1. An invoice for LNG delivered by Seller and taken by Buyer, together with relevant supporting documents including certificates of quality and quantity of LNG loaded and any others as may reasonably be requested by Buyer for the purpose of customs clearance in the unloading country, shall be prepared and delivered by Seller to Buyer promptly following the Completion of Loading and receipt of the final inspection certificate applicable to the loading of such cargo. The invoice that Seller provides to Buyer shall include the following denominated in U.S. Dollars:

(a) the Final Settlement Price;

(b) the Quantity Loaded; and

(c) the amount owed by Buyer to Seller (being an amount equal to the product of Sections 14.1(a) and 14.1(b) above);

(the "**Final Invoice**") and such Final Invoice shall be payable on the due payment date.

2. If there is insufficient information to provide a Final Invoice, Seller may provide to Buyer a provisional invoice with the following denominated in US Dollars:

(a) the Final Settlement Price;

(b) the Estimated Loaded Quantity; and

(c) the amount owed by Buyer to Seller (being an amount equal to the product of Sections 14.2(a) and 14.2(b) above);

(the "**Provisional Invoice**"), and such Provisional Invoice shall be payable on the due date specified in Section 14.5. After Seller has issued the Final Invoice, if the amount paid under the Provisional Invoice was greater than the amount due under the Final Invoice, Buyer shall send an invoice to Seller stating the amount of the difference and Seller shall pay to Buyer such amount on the due date determined in accordance with Section 14.5. If the amount paid under the Provisional Invoice was less than the amount due under the Final Invoice, Seller shall send an invoice to Buyer stating the amount of the difference and Buyer shall pay to Seller the amount of difference as stated in the Final invoice on the due date determined in accordance with Section 14.5.

3. If Buyer is liable to pay to Seller:

   (a) a Buyer Failure Payment pursuant to Section 5.2(d), Seller shall provide to Buyer an invoice in respect of such Buyer Failure Payment promptly after Buyer's liability arises under Section 5; and

   (b) for any reason under a Transaction other than pursuant to Section 5, Section 14.1 or Section 14.2, Seller shall provide to Buyer an invoice in respect of such amount promptly after Buyer's liability arises.

4. If Seller is liable to pay to Buyer:

   (a) a Seller Deficiency Payment pursuant to Section 6, Buyer shall provide to Seller an invoice in respect of such Seller Deficiency Payment promptly after Seller's liability arises under Section 6;

   (b) Net Proceeds, pursuant to Section 5.2(f), Seller shall make payment to Buyer no later than eight (8) days after Seller receives full payment from its sales of all or part of the Buyer Deficiency Quantity under Section 5; and

   (c) for any other reason under a Transaction, Buyer shall provide to Seller an invoice in respect of such amount promptly after Seller's liability arises.

5. Each Final Invoice and Provisional Invoice shall become due and payable on the day (the "**Payment Date**") which is ten (10) days after Completion of Loading; provided, however, if Seller does not deliver the invoice to Buyer at least five (5) days prior to such date, the invoice shall become due and payable seven (7) days following Buyer's receipt of the invoice. An invoice in relation to an amount payable under a Transaction other than a payment of a Final Invoice or a Provisional Invoice shall become due and payable eight (8) days after receipt of such invoice. In all cases, if any payment falls due on a Saturday, Sunday or a bank holiday in New York, such payment shall be due and payable on the first New York banking day following such day.

6. If either Party fails to pay the other Party any amount due by the due date, then the Party failing to pay shall pay interest on such amount to the other Party for the period that commences on, and includes, such due date and terminates on, and does not include, the date on which payment of such amount due is made in fact ("period"). Such interest shall be calculated at a rate per annum equal to the lesser of (i) the sum of (a) the arithmetic average of daily SOFR during such period, in accordance with the definition of SOFR set forth in Section 1.1, plus (b) four percent (4%) per annum or (ii) the maximum interest rate as permitted under applicable law or regulation. Such interest shall be calculated on the

basis of a three hundred and sixty (360) day year and shall be paid, in addition to such amount due, on the date on such amount due is paid.

7. If either Party disagrees with any invoice, it shall nevertheless make provisional payment of the total amount specified in the invoice and shall immediately notify the other Party of the reasons for such disagreement, except that in the case of obvious error in computation the Party receiving the invoice shall pay the correct amount after disregarding such error. Except with respect to Section 14.8, an invoice may only be contested by the Party that received it, or modified by the Party that sent it, by written notice delivered to the other Party within a period of thirteen (13) months after such receipt or sending, as the case may be. If no such notice is served, the invoice shall be deemed correct and accepted by both Parties. Promptly but no later than three (3) days after resolution of any dispute as to an invoice, the amount of any over-payment or under-payment shall be paid by the relevant Party to the other Party, together with interest on such over-payment or under-payment, such interest being calculated at the rate specified in Section 14.6 from the date payment was due to the actual date of payment.

8. Any errors found in an invoice which are caused by the inaccuracy of any measuring or analysing equipment or device shall be corrected in accordance with the applicable Loading Port section in Exhibit A-1 (Measurement) hereto, as applicable, and shall be settled in the same manner as is set out above in this Section 14.

15. TAXES AND CHARGES

1. Seller shall indemnify and hold Buyer and its Affiliates harmless from all Taxes levied and imposed:

   (a) solely on account of the corporate existence of the Seller or its Affiliates;

   (b) in respect of the property, revenue, income, or profits of Seller or its Affiliates (other than Taxes required to be deducted or withheld by Buyer from or in respect of any payments under this Agreement);

   (c) Subject to Section 15.4, by any U.S. (including for the avoidance of doubt its subdivisions) Governmental Authority in respect of the sale, use or purchase of LNG up to and at the point where title to the LNG is transferred to Buyer under a Transaction;

   (d) by any U.S. (including for the avoidance of doubt its subdivisions) Governmental Authority upon the export, loading, storage, processing, transfer, transport, ownership of title, or delivery of LNG up to and at the point where title to the LNG is transferred to Buyer under a Transaction; and

   (e) payable by Buyer by reason of a failure by Seller to properly deduct, withhold, or pay any Taxes described in Section 15.3.

2. Buyer shall indemnify and hold Seller and its Affiliates harmless from all Taxes levied and imposed:

   (a) solely on account of the corporate existence of the Buyer or its Affiliates;

(b) in respect of the property, revenue, income, or profits of Buyer or its Affiliates (other than Taxes required to be deducted or withheld by Seller from or in respect of any payments under this Agreement);

(c) by any Governmental Authority in respect of the sale, use, purchase, import, unloading, export, loading, storage, processing, transfer, transport, ownership of title, receipt, or delivery of LNG under a Transaction arising after the point where title to the LNG is transferred to Buyer; and

(d) payable by Seller by reason of a failure by Buyer to properly deduct, withhold, or pay any Taxes described in Section 15.3.

3. If Seller or Buyer (in either case, the "Payor" for purposes of this Section 15.3), is required to deduct or withhold taxes from or in respect of any payments to the other Party, then: (i) the Payor shall make such deductions and withholdings; (ii) the Payor shall pay the full amount deducted or withheld to the appropriate Governmental Authority; (iii) the Payor shall promptly furnish to the other Party the original or a certified copy of a receipt evidencing such payment; and (iv) the sum payable by the Payor to the other Party shall be increased by such additional sums as necessary so that after making all required deductions and withholdings of taxes (including deductions and withholdings of taxes applicable to additional sums payable under this Section 15.3), the other Party receives an amount equal to the sum it would have received had no such deductions or withholdings of taxes been made.

4. The Parties acknowledge and agree that payments contemplated under a Transaction are exclusive of any sales, use, goods, services, value added, excise, and similar transactional taxes, which shall be charged where required on any transfer of LNG made by Seller hereunder and shall be paid by Buyer upon receipt of a valid invoice from Seller. If Buyer claims an exemption from any such transactional taxes imposed by a Governmental Authority with respect to the transfer of LNG pursuant to this Agreement, Buyer shall provide to Seller all documentation required under applicable laws to establish its entitlement to such exemption.

5. Each Party shall use commercially reasonable efforts to assist the receiving Party to minimize taxes for which the other Party is liable under this Section 15, including providing applicable sales and use tax resale or exemption certificates, provided that the other Party shall pay such Party's reasonable costs and expenses in relation thereto.

6. If a Party has made an indemnification payment to the other Party pursuant to this Section 15 with respect to any amount owed or paid by the indemnified Party and the indemnified Party thereafter receives a refund or credit of any such amount, such indemnified Party shall pay to the indemnifying Party the amount of such refund or credit promptly following the receipt thereof. The indemnified Party shall provide such assistance as the indemnifying Party may reasonably request to obtain such a refund or credit.

16. APPLICABLE LAW

This Transaction shall be governed by and construed in accordance with the laws of New York, excluding conflict of law rules and choice of law principles that would deem otherwise. The United Nations Convention on the International Sale of Goods will not apply to this Transaction. Both Seller and Buyer retain all rights and remedies, both under this

Transaction and at law, which either may have against the other. TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, THE PARTIES HEREBY WAIVE THEIR RESPECTIVE RIGHTS TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION BASED UPON OR ARISING OUT OF THIS TRANSACTION.

17. LIABILITIES AS BETWEEN SELLER AND BUYER

1. Subject to Section 17.2, a Party (the "**Defaulting Party**") shall be liable to the other Party for loss or damage which has been suffered as a direct result of the breach of any of such Defaulting Party's obligations hereunder.

2. EXCEPT AS EXPRESSLY PROVIDED IN THIS TRANSACTION, A PARTY SHALL NOT BE LIABLE TO THE OTHER PARTY UNDER THIS TRANSACTION WHETHER AS A RESULT OF ANY ACT OR OMISSION MADE IN THE COURSE OF OR IN CONNECTION WITH THE PERFORMANCE OF THIS TRANSACTION AND WHETHER IN TORT (INCLUDING NEGLIGENCE), CONTRACT, STATUTE OR OTHERWISE, FOR OR IN RESPECT OF:

   (a) ANY INDIRECT, INCIDENTAL, CONSEQUENTIAL OR EXEMPLARY LOSSES OR DAMAGES;

   (b) ANY LOSS OF INCOME, PROFITS, BARGAIN, PRODUCTION OR REVENUE;

   (c) ANY BUSINESS INTERRUPTION;

   (d) ANY CLAIM, DEMAND OR ACTION MADE OR BROUGHT AGAINST THAT OTHER PARTY BY A THIRD PARTY (EXCLUDING THE EXCHANGE OR ITS AFFILIATES); AND/OR

   (e) ANY FAILURE OF PERFORMANCE OR DELAY IN PERFORMANCE WHICH IS RELIEVED BY THE APPLICATION OF THE FORCE MAJEURE PROVISIONS IN SECTION 25.

3. THE PARTIES RECOGNIZE AND ACKNOWLEDGE THAT, WITH RESPECT TO ANY BREACH OF THIS TRANSACTION (AND THE ACTS OR OMISSIONS WHICH CONSTITUTE SUCH BREACH) THEIR RELATIONSHIP WITH EACH OTHER IS CONTRACTUAL AND THAT NEITHER PARTY SHALL HAVE ANY CLAIM AGAINST THE OTHER IN TORT WITH RESPECT TO SUCH BREACH (AND ACTS OR OMISSIONS).

18. LIMITATION OF LIABILITY

Terminal Operator, its affiliates, and the officers and directors of each of the foregoing (each an "**Operator Indemnified Person**"), shall not have responsibility for, or bear any liability in connection with, any Transaction. Seller, Buyer and the Clearing Members each hereby waive all claims, demands, legal proceedings, and actions of any kind or nature whatsoever that may exist, arise, or be threatened currently or in the future, whether or not of a type contemplated by such person, and whether arising pursuant to contract, tort, statute, regulation or otherwise, against each Operator Indemnified Person with respect to any such liability arising out of or in any way related to any Transaction, and shall release and hold harmless each Operator Indemnified Person in respect thereof. For clarity, nothing in this Transaction decreases, increases or otherwise alters the rights, obligations

and liabilities of any Terminal Operator listed in Appendix B (Loading Ports) under its agreements with other persons.

With the exception of obligations under Rule 240105, Buyer and Seller acknowledge and agree that all responsibility or liability for any reason in connection with any LNG delivery under any Transaction shall remain solely with Buyer and Seller. The obligation of the Exchange, Clearing House or Clearing Members for ensuring financial performance in accordance with Rule 240105 is limited to the delivery of LNG. All other payments and liabilities arising from physical deliveries under any Transaction, including but not limited to payments and liabilities arising from the delivery of Off Spec LNG, demurrage or trade law compliance, involve bilateral obligations and liabilities solely involving and between Buyer and Seller. The Exchange, Clearing House and Clearing Members, their affiliates, and the officers and directors of each of the foregoing (each an "**Exchange Indemnified Person**"), shall not have responsibility for, or bear any liability in connection with, any obligation to deliver LNG under any Transaction. Seller and Buyer each hereby waives all claims, demands, legal proceedings, and actions of any kind or nature whatsoever that may exist, arise, or be threatened currently or in the future, whether or not of a type contemplated by such person, and whether arising pursuant to contract, tort, statute, regulation or otherwise, against each Exchange Indemnified Person with respect to any liability arising out of or in any way related to any Transaction, and shall release and hold harmless each Exchange Indemnified Person in respect thereof.

The Exchange Indemnified Persons and Operator Indemnified Persons are each intended third party beneficiaries of this Section 18 and is entitled to enforce these terms against Seller and/or Buyer.

19. SETTLEMENT OF DISPUTES

Any dispute to which the Exchange, its Affiliate or a Clearing Member is a party arising under or in connection with the requirements of any Transaction shall be exclusively and finally resolved pursuant to and in accordance with Chapter 6 of the Exchange's Rules. Such disputes (other than a dispute submitted to an Expert) to which the aforementioned are not a party shall be exclusively and finally resolved either pursuant to Chapter 6 of the Exchange's Rules (and if permissible under such Chapter, upon the mutual consent of parties) or by arbitration under the arbitration rules of the International Chamber of Commerce (the "**ICC Rules**"), which ICC Rules are deemed to be incorporated by reference into this Transaction, provided that:

1. the arbitral tribunal (the "**Tribunal**") shall consist of three arbitrators to be appointed in accordance with such ICC Rules;

2. the seat of the arbitration shall be New York City;

3. the language of the arbitration shall be English;

4. any award rendered by the Tribunal shall be made in writing and shall be final and binding on the parties. The parties undertake to carry out the award without delay;

5. all aspects of the arbitration shall be confidential. Save to the extent required by law or pursuant to any proceedings to enforce or challenge an award, no aspect of the proceedings, documentation, or any (partial or final) award or order or any

other matter connected with the arbitration shall be disclosed to any other Person by either party or its counsel, agents, corporate parents, Affiliates or subsidiaries without the prior written consent of the other party;

6. nothing in this Section 19 shall be construed as preventing any party from seeking conservatory or similar interim relief from any court of competent jurisdiction;

7. in respect of any dispute, each party expressly waives any right to claim or recover from the other party, and the Tribunal is not empowered to award, punitive, exemplary, moral, multiple or similar non-compensatory damages;

8. Articles 3 and 9 of the International Bar Association (IBA) Rules on the Taking of Evidence in International Arbitration shall apply to the arbitration;

9. each party hereby waives, to the fullest extent permitted by law: (i) any right under the laws of any jurisdiction to apply to any court or other judicial authority to determine any preliminary point of law, and/or (ii) any right it may otherwise have under the laws of any jurisdiction to appeal or otherwise challenge the award, other than on the same grounds on which recognition and enforcement of an award may be refused under Article V of the United Nations Convention on the Recognition and Enforcement of Foreign Arbitral Awards of 1958; and

10. judgment upon any award and/or order may be entered in any court having jurisdiction thereof.

Should Chapter 6 of the Exchange's Rules become inoperative or inapplicable to disputes arising under or in connection with the requirements of any Transaction, such disputes shall be exclusively and finally resolved by arbitration under ICC Rules.

20. APPROVALS AND PERMISSIONS

1. Each Party shall obtain or cause to be obtained all necessary permissions, authorizations, approvals and other requirements from the Governmental Authorities in its country of domicile, or any other duly constituted authority having jurisdiction over it or its activities, which are necessary to enable it to perform its obligations under a Transaction.

2. Seller shall obtain or cause to be obtained all necessary permissions, authorizations, approvals and other requirements from all relevant (including for the avoidance of doubt its subdivisions) Governmental Authorities or any duly constituted authority having jurisdiction over it or its activities, which are necessary to enable Seller to perform its obligations pursuant to a Transaction.

21. CONFIDENTIALITY

1. Neither Party shall communicate to any Third Party (excluding the Exchange and its Affiliates), and each Party shall keep confidential and prevent disclosure of, the contents of a Transaction or other confidential information or documents that may come into the possession of such Party in connection with the performance of delivery under a Transaction or any expert determination or arbitration proceedings conducted under or in relation to a Transaction unless directed to do so by the Exchange. This restriction shall not, however, apply to the contents of a Transaction or information or documents which:

(a) have entered into the public domain and have become generally available to the public otherwise than through the act or failure to act of the Party receiving them hereunder;

(b) the non-disclosing Party has provided written notice to the disclosing Party permitting disclosure of such information; or

(c) are communicated to:

(i) the Exchange or any Affiliate of either Party or the Exchange as may be required by the Exchange; or

(ii) persons participating in the implementation of the arrangements contemplated by a Transaction, including legal counsel, accountants, other professional, business or technical consultants and advisers, underwriters or lenders, or the Transporter, provided the receiving persons are made aware of the obligation to maintain confidentiality; or

(iii) any Governmental Authority having jurisdiction over either Party (or any Affiliate of either Party), provided that such agency has authority to require such disclosure and that such disclosure is made in accordance with that authority; or

(iv) any Expert, arbitrator or court to which any dispute between the Parties has been referred.

2. In respect of each Transaction and this Transaction, this Section 21 shall survive, and shall remain in force for a period of three (3) years following, termination of such purchase or sale and this Transaction, respectively.

22. TRADE LAW COMPLIANCE

1. Buyer acknowledges and agrees that it will resell or transfer LNG purchased hereunder and loaded at Seller's Facilities for delivery only to (i) countries authorized under the export authorizations applicable to the export of LNG from Seller's Facilities; and/or (ii) purchasers that have agreed in writing to limit their direct or indirect resale or transfer of such LNG to such countries. Buyer further commits to cause a report to be provided to Seller (and any other Seller Affiliate as may be identified from time to time by Seller) that identifies the country of destination, upon delivery, into which the exported LNG was actually delivered, and to include in any resale contract for such LNG the necessary conditions to ensure that Seller (and any other Seller Affiliate as may be identified from time to time by Seller) is made aware of all such actual destination countries. Each Party agrees to comply with the export authorization(s) applicable to the export of LNG from such LNG facility. If any Export Authorization requires conditions to be included in this Agreement then, within fifteen (15) days following the issuance of the Export Authorization (or the amendment or other modification to an existing Export Authorization) imposing such condition, the Parties shall discuss the appropriate changes to be made to this Agreement to comply with such Export Authorization and shall amend this Agreement accordingly.

2. Buyer represents and warrants that the final delivery of LNG received pursuant to the terms of this Agreement are permitted and lawful under United States of America laws and

policies, including the rules, regulations, orders, policies, and other determinations of the U.S. Department of Energy, the Office of Foreign Assets Control of the United States Department of the Treasury and the Federal Energy Regulatory Commission, and Buyer shall not take any action which would cause any export authorization applicable to the export of LNG from such LNG facility to be withdrawn, revoked, suspended or not renewed. Buyer shall promptly provide to Seller all information required by Seller and its Affiliates to comply with the export authorization applicable to the export of LNG from such LNG facility and shall provide the delivery destination reports (as described in Section 22.3) for all LNG sold hereunder, to Seller (and any other Seller Affiliate as may be identified from time to time by Seller), not later than the fifteenth (15th) day of the month following the month in which any relevant LNG is delivered to the country of destination. In addition to the information required pursuant to Section 22, such delivery destination reports shall contain any other information required by the export authorization applicable to the export of LNG from such LNG facility.

3. Buyer and Seller each agrees and undertakes to the other that, in connection with this Transaction, it will comply with all applicable laws, rules, regulations, decrees and/or official government orders of the United States of America or any other relevant jurisdiction relating to any jurisdiction relevant to the physical delivery of LNG under this Transaction.

Buyer represents and warrants that the final delivery of LNG received pursuant to the terms of this Transaction are permitted and lawful under United States of America laws and including the rules, regulations, orders, policies, and other determinations of the United States Department of Energy, the Office of Foreign Assets Control of the United States Department of the Treasury and the Federal Energy Regulatory Commission, and Buyer shall not take any action which would cause any Export Authorization to be withdrawn, revoked or not renewed. Buyer shall promptly provide to Seller all information required by Seller to comply with the Orders described in this Section 22 and shall provide the delivery destination report (as described in this Section 22) for all LNG sold hereunder to Seller not later than the fifteenth (15th) day of the month following the Month in which any relevant LNG is delivered to the country of destination.

23. ANTI-BRIBERY AND ANTI-MONEY LAUNDERING

1. Each Party agrees and undertakes to the other that, in connection with obligations under the terms of a Transaction, it is knowledgeable about and will comply with all laws, regulations, rules, and requirements relating to anti-bribery or anti-money laundering as may be applicable to the performance of a Transaction.

2. In particular, each Party represents and warrants to the other that it has not made and will not make any payments or give anything of value to officials, officers or employees of any Governmental Authority, or to any other person, in connection with the sale and purchase of LNG which would be inconsistent with or contravene any of the above-referenced laws, regulations, rules, and requirements.

3. Each Party shall maintain for a period of seven (7) years after the termination or completion of a Transaction all business records related to the Transaction, which shall include at a minimum all invoices for payment submitted in relation to the Transaction along with supporting documentation to assure compliance with the anti-bribery laws, regulations, rules and requirements.

4. Each Party shall have the right to audit at its sole cost the records of the other Party for the limited purpose of ensuring compliance with the anti-bribery laws at any time after being matched for delivery under a Transaction and within seven (7) years after the termination or completion of a Transaction. Following this process, if not already terminated or completed, either Party may terminate a Transaction by providing thirty (30) days written notice to the other, if in its reasonable judgment supported by credible evidence, the other Party is in breach of any of the provisions of Section 23.

24. SAFETY

1. The Parties recognize the importance of securing and maintaining safety in all matters related to the performance of each Transaction, including the operation of Seller's Facilities and the transportation of LNG, and shall secure and maintain high standards of safety in accordance with the generally accepted standards prevailing in the LNG industry from time to time.

2. The Parties shall use their best efforts to ensure that their respective employees, agents, operators, Transporter, contractors and suppliers shall have due regard to safety and abide by the relevant regulations while they are performing work and services in connection with the performance of a Transaction and any purchase or sale hereunder including such work and services performed within and around the area of the loading berth at Seller's Facilities and on board the LNG Ship.

25. FORCE MAJEURE

1. A Party is not liable for any failure to perform, or delay in performing, an obligation under a Transaction, other than an obligation to pay money when due, and is relieved from the performance of the affected obligation and will not be in breach of a Transaction as a consequence of that failure of performance, to the extent and for as long as performance is prevented, impeded or delayed for reasons of Force Majeure.

2. "**Force Majeure**" means any act, event or circumstance or combination of acts, events or circumstances which is beyond the reasonable control of the Party affected, and the effects of which could not have been prevented or mitigated by the exercise by the Party affected of the standards of a Reasonable and Prudent Operator, including but subject always to having satisfied the requirements of the foregoing:

   (a) lightning, storm, typhoon, hurricane, cyclone, tornado, earthquake, fire, flood, atmospheric disturbance, landslide, soil erosion, subsidence, washout, epidemic, perils of the sea, explosions, or other forces of nature or natural disasters; and/or

   (b) acts of the public enemy, wars (whether declared or not), terrorism, sabotage, the serious threat of or an act of terrorism or sabotage, piracy, civil and military disturbance, blockade, insurrection, riot epidemic and quarantine restrictions; and/or

   (c) strikes, boycotts, lockouts or other industrial disturbances; and/or

   (d) acts of governments, or compliance with such acts that directly affect a Party, except to the extent that they constitute remedies or sanctions lawfully exercised

by a Governmental Authority as a result of any breach by the affected Party of any directive or any law in effect on the Allocation and Notice Day; and/or

(e) loss of, serious accidental damage to or inoperability of Seller's Facilities or inaccessibility or incapacity to load LNG at Seller's Facilities or the Loading Port; and/or

(f) loss of the LNG Ship, serious accidental damage to the LNG Ship requiring its removal from service, or inoperability of the LNG Ship; and/or

(g) actual reported, threatened or perceived risk of exposure to radiation.

For the avoidance of doubt, neither Party may claim as Force Majeure any lack of funds due to any commercial, economic, social or political reason.

3. For the purposes of Section 25.2, an event shall not be considered to be beyond the reasonable control of a Party to a Transaction unless:

(a) in the case of Seller, it is beyond the reasonable control of Seller, the operator of any of Seller's Facilities, and any servant or agent of any of such persons; and

(b) in the case of Buyer, it is beyond the reasonable control of Buyer, the Transporter and any servant or agent of any of such persons.

4. In the event of any failure or delay of a Party's performance due to the occurrence of a Force Majeure event, the Party affected shall use commercially reasonable efforts (acting as a Reasonable and Prudent Operator) to resume full performance of its obligations under a Transaction, provided that:

(a) the settlement of strikes, boycotts, lockouts or other industrial disturbances shall be entirely within the discretion of the Party concerned;

(b) the Party so affected shall not be obliged to make good the delivery of or receipt of LNG lost as a result of the Force Majeure event, as applicable, either during the Force Majeure event or after the Force Majeure event has ceased; and

(c) The Parties shall continue to perform their obligations under a Transaction to the extent not prevented by such event of Force Majeure.

5. A Party seeking relief under this Section 25 shall notify the other Party as soon as reasonably practicable and shall state in such notice:

(a) the particulars of the act, event or circumstance giving rise to the Force Majeure claim, in as much detail as is then reasonably available;

(b) the obligations which have been actually prevented, impeded or delayed in performance and the estimated period during which such performance may be prevented, impeded or delayed, including (to the extent known or ascertainable) the estimated extent of such prevention, impediment or delay in performance; and

(c) the particulars of the program to be implemented, if any, to ensure full resumption of normal performance hereunder.

6. The notification provided as aforesaid shall be updated on a timely and regular basis. Performance is excused under this Section 25 from the occurrence of the Force Majeure event, not upon notification thereof by the Party seeking relief.

7. If the Force Majeure event lasts for a period such that the Party affected shall be prevented, delayed or interfered in performing its obligations hereunder for a period of seven (7) consecutive days or more, the other Party shall, upon notice to and approval by the Exchange, in the Exchange's sole discretion which will be final and binding upon the Parties, have the right to cancel the delivery or receipt, as the case may be, of the LNG affected by the Force Majeure event without incurring any liability by giving written notice to the affected Party.

26. TERM AND TERMINATION

This Agreement shall come into full force and effect on the Effective Date and terminate fifteen (15) months thereafter. Either Party may terminate this Agreement at any time upon thirty (30) days' prior written notice, provided, however, that Sections 16, 17, 18, 19, 21, 22, 23 and 26 as well as any rights, commitments or obligations that have accrued prior to such termination, together with any provisions necessary to enforce such rights, commitments or obligations, shall remain in effect and shall survive such termination. Notwithstanding any such termination, the Parties shall remain subject to the all applicable Rules of the Exchange as well as the Rules of this Chapter.

EXHIBIT A-1: MEASUREMENT

A. Sabine Pass Facility: The following shall apply to all measurements for LNG delivered at the Sabine Pass Facility:

1. Parties to Supply Devices

a) General. Unless otherwise agreed, Buyer and Seller shall supply equipment and conform to procedures that are in accordance with the latest version of the standards referred to in this Exhibit A-1.

b) Buyer Devices. Buyer or Buyer's agent shall supply, operate and maintain, or cause to be supplied, operated and maintained, suitable gauging devices for the liquid level in LNG tanks of the LNG Tankers, pressure and temperature measuring devices, and any other measurement or testing devices which are incorporated in the structure of LNG vessels or customarily maintained on board ship.

c) Seller Devices. Seller shall supply, operate and maintain, or cause to be supplied, operated and maintained, devices required for collecting samples and for determining quality and composition of the LNG and any other measurement or testing devices which are necessary to perform the measurement and testing required hereunder at the Loading Port.

d) Dispute. Any Dispute arising under this Exhibit A-1 shall be submitted to an Expert under Section 13.12 of this Agreement.

2. Selection of Devices

All devices provided for in this Exhibit A-1 shall be approved by Seller, acting as a Reasonable and Prudent Operator. The required degree of accuracy (which shall in any case be within the permissible tolerances defined herein and in the applicable standards referenced herein) of such devices selected shall be mutually agreed upon by Buyer and Seller. In advance of the use of any device, the Party providing such device shall cause tests to be carried out to verify that such device has the required degree of accuracy.

3. Verification of Accuracy and Correction for Error

a) Accuracy. Accuracy of devices used shall be tested and verified at the request of either Party, including the request by a Party to verify accuracy of its own devices. Each Party shall have the right to inspect at any time the measurement devices installed by the other Party, provided that the other Party is notified in advance. Testing shall be performed only when both Parties are represented, or have received adequate advance notice thereof, using methods recommended by the manufacturer or any other method agreed to by Seller and Buyer. At the request of any Party hereto, any test shall be witnessed and verified by an independent surveyor mutually agreed upon by Buyer and Seller. Permissible tolerances shall be as defined herein or as defined in the applicable standards referenced herein.

b) Inaccuracy. Inaccuracy of a device exceeding the permissible tolerances shall require correction of previous recordings, and computations made on the basis of those recordings, to zero error with respect to any period which is definitely known or agreed upon by the Parties as well as adjustment of the device. All invoices issued during such period shall be amended accordingly to reflect such correction, and an adjustment in payment shall be made between Buyer and Seller. If the period of error is neither known nor agreed upon, and there is no evidence as to the duration of such period of error, corrections shall be made, and invoices amended for each delivery of LNG made during the last half of the period since the date of the most recent calibration of the inaccurate device. However, the provisions of this Section 3 of Exhibit A-1 shall not be applied to require the modification of any invoice that has become final pursuant to Section 14.7 of this Agreement.

c) Costs and Expenses of Test Verification. All costs and expenses for testing and verifying Seller's measurement devices shall be borne by Seller, and all costs and expenses for testing and verifying Buyer's measurement devices shall be borne by Buyer. The fees and charges of independent surveyors for

measurements and calculations shall be borne by the Parties in accordance with Section 13.11 of this Agreement.

4. Tank Gauge Tables of LNG Tankers

a) Initial Calibration. Buyer shall arrange or caused to be arranged, for each tank of each LNG Tanker, a calibration of volume against tank level. Buyer shall provide Seller or its designee, or cause Seller or its designee to be provided, with a certified copy of tank gauge tables for each tank of each LNG Tanker verified by a competent impartial authority or authorities mutually agreed upon by the Parties. Such tables shall include correction tables for list, trim, tank contraction and any other items requiring such tables for accuracy of gauging.

Tank gauge tables prepared pursuant to the above shall indicate volumes in cubic meters expressed to the nearest thousandth (1/1000), with LNG tank depths expressed in meters to the nearest hundredth (1/100).

b) Presence of Representatives. Seller and Buyer shall each have the right to have representatives present at the time each LNG tank on each LNG Tanker is volumetrically calibrated.

c) Recalibration. If the LNG tanks of any LNG Tanker suffer distortion of such nature as to create a reasonable doubt regarding the validity of the tank gauge tables described herein (or any subsequent calibration provided for herein), Buyer or Buyer's agent shall recalibrate the damaged tanks, and the vessel shall not be employed as an LNG Tanker hereunder until appropriate corrections are made. If mutually agreed between Buyer and Seller representatives, recalibration of damaged tanks can be deferred until the next time when such damaged tanks are warmed for any reason, and any corrections to the prior tank gauge tables will be made from the time the distortion occurred. If the time of the distortion cannot be ascertained, the Parties shall mutually agree on the time period for retrospective adjustments.

5. Units of Measurement and Calibration

The Parties shall cooperate in the design, selection and acquisition of devices to be used for measurements and tests in order that all measurements and tests may be conducted in the SI system of units, except for the quantity delivered which is expressed in MMBtu, the Gross Heating Value (volume based) which is expressed in Btu/SCF and the pressure which is expressed in millibar and temperature in Celsius. In the event that it becomes necessary to make measurements and tests using a new system of units of measurements, the Parties shall establish agreed upon conversion tables.

6. Accuracy of Measurement

All measuring equipment must be maintained, calibrated and tested in accordance with the manufacturer's recommendations. In the absence of a manufacturer's recommendation, the minimum frequency of calibration shall be one hundred eighty (180) days, unless otherwise mutually agreed between the Parties. Documentation of all tests and calibrations will be made available by the Party performing the same to the other Party. Acceptable accuracy and performance tolerances shall be:

a) Liquid Level Gauging Devices. Each LNG tank of the LNG Tanker shall be equipped with primary and secondary liquid level gauging devices as per Section 7(b) of this Exhibit A-1.

The measurement accuracy of the primary gauging devices shall be plus or minus seven point five (± 7.5) millimeters and the secondary liquid level gauging devices shall be plus or minus ten (± 10) millimeters.

The liquid level in each LNG tank shall be logged or printed.

b) Temperature Gauging Devices. The temperature of the LNG and of the vapor space in each LNG tank shall be measured by means of a number of properly located temperature measuring devices sufficient to permit the determination of average temperature.

The measurement accuracy of the temperature gauging devices shall be as follows:

(i) in the temperature range of minus one hundred sixty-five to minus one hundred forty degree Celsius (-165C to -140°C), the accuracy shall be plus or minus zero point two degree Celsius (± 0.2 °C);

(ii) in the temperature range of minus one hundred forty to plus forty degree Celsius (-140C to +40 °C), the accuracy shall be plus or minus one point five degree Celsius (± 1.5 °C).

The temperature in each LNG tank shall be logged or printed.

c) Pressure Gauging Devices. Each LNG tank of the LNG Tanker shall have one (1) absolute pressure gauging device.

The measurement accuracy of the pressure gauging device shall be plus or minus one percent (± 1%) of the measuring range.

The pressure in each LNG tank shall be logged or printed.

d) List and Trim Gauging Devices.

A list gauging device and a trim gauging device shall be installed. These shall be interfaced with the custody transfer system.

The measurement accuracy of the list and the trim gauging devices shall be better than plus or minus zero point zero five (±0.05) degrees for list and plus or minus zero point zero one (± 0.01) degrees for trim.

7. Gauging and Measuring LNG Volumes Delivered

a) Gauge Tables. Upon Seller's representative and the independent surveyor, if present, arriving on board the LNG Tanker prior to the commencement of or during loading, Buyer or Buyer's representative shall make available to them a certified copy of tank gauge tables for each tank of the LNG Tanker.

b) Gauges. Volumes of LNG delivered pursuant to a Transaction shall be determined by gauging the LNG in the tanks of the LNG Tankers before and after loading. Each LNG Tanker's tank shall be equipped with a minimum of two (2) independent sets of level gauges, each set utilizing preferably a different measurement principle. Comparison of the two (2) systems, designated as Primary and Secondary Measurement Systems, shall be performed from time to time to ensure compliance with the acceptable performance tolerances stated herein.

c) Gauging Process. Gauging the liquid in the tanks of the LNG Tankers and measuring of liquid temperature, vapor temperature and vapor pressure in each LNG tank, trim and list of the LNG Tankers, and atmospheric pressure shall be performed, or caused to be performed, by Buyer before and after loading. Seller's representative shall have the right to be present while all measurements are performed and shall verify the accuracy and acceptability of all such measurements. The first gauging and measurements shall be made immediately before the commencement of loading. The second gauging and measurements shall take place immediately after the completion of loading.

d) Records. Copies of gauging and measurement records shall be furnished to Seller immediately upon completion of loading.

e) Gauging Liquid Level of LNG. The level of the LNG in each LNG tank of the LNG Tanker shall be gauged by means of the primary gauging device installed in the LNG Tanker for that purpose. The level of the LNG in each tank shall be logged or printed.

Measurement of the liquid level in each LNG tank of the LNG Tanker shall be made to the nearest millimeter by using the primary liquid level gauging devices. Should the primary devices fail, the secondary device shall be used.

Five (5) readings shall be made following manufacturer's recommendations on reading interval. The arithmetic average of the readings rounded to the nearest millimeter using one (1) decimal place shall be deemed the liquid level.

f) Determination of Temperature. The temperature of the LNG and of the vapor space in each LNG tank shall be measured by means of a sufficient number of properly located temperature measuring devices to permit the determination of average temperature. Temperatures shall be measured at the same time as the liquid level measurements and shall be logged or printed.

In order to determine the temperature of liquid and vapor respectively in the LNG Tanker one (1) reading shall be taken at each temperature gauging device in each LNG tank. An arithmetic average of such readings rounded to the nearest zero-point one degree Celsius (0.1 °C) using two (2) decimal places with respect to vapor and liquid in all LNG tanks shall be deemed the final temperature of the vapor and liquid respectively.

Buyer shall cause each cargo tank in the LNG Tanker to be provided with a minimum of five (5) temperature measuring devices. One such measuring device shall be located in the vapor space at the top of each cargo tank, one near the bottom of each cargo tank and the remainder distributed at appropriate intervals from the top to the bottom of the cargo tank. These devices shall be used to determine the average temperatures of the liquid cargo and the vapor in the cargo tank.

The average temperature of the vapor in an LNG Tanker shall be determined immediately before loading by means of the temperature measuring devices specified above at the same time as when the liquid level is measured. The temperature measuring devices shall be fully surrounded by the vapor. This determination shall be made by taking the temperature readings of the temperature measuring devices in question to the nearest zero point zero one degrees Celsius (0.01°C), and if more than one of the devices are fully surrounded by the vapor, by averaging those readings, and rounding to one (1) decimal place.

The average temperature of the liquid in an LNG Tanker shall be determined immediately after loading by means of the temperature measuring devices specified above.

g) Determination of Pressure. The pressure of the vapor in each LNG tank shall be determined by means of pressure measuring devices installed in each LNG tank of the LNG Tankers. The atmospheric pressure shall be determined by readings from the standard barometer installed in the LNG Tankers. Pressures shall be measured at the same time as the liquid level measurements and shall be logged or printed.

Buyer shall cause the LNG Tanker to be provided with pressure measuring equipment capable of determining the absolute pressure of the vapor in each cargo tank with an accuracy equal to or better than plus or minus one percent (± 1%) of the measuring range.

The pressure of the vapor in an LNG Tanker shall be determined immediately before loading at the same time as when the liquid level is measured.

Such determination shall be made by taking the pressure readings of the pressure measuring devices to the nearest millibar, then averaging these readings and rounding to a whole millibar.

h) Determination of Density. The LNG density shall be calculated using the revised Klosek-McKinley method. Should any improved data, method of calculation or direct measurement device become available which is acceptable to both Buyer and Seller, such improved data, method or device shall then be used.

8. Samples for Quality Analysis

a) General. Representative liquid samples shall be collected from an appropriate point located as close as practical to the loading line starting one (1) hour after full loading rate is reached and ending one (1) hour before ramping down from the full loading rate.

Sampling conducted by Seller will conform with the procedure specified in (i), (ii) or (iii) as follows:

(i) Online chromatograph: A sample shall be taken and analyzed at least once every twenty (20) minutes by an on-line chromatograph during the sampling period referenced in the opening paragraph of Section 8(a) of this Exhibit A-1. These intermittent samples will be passed through a vaporizer, and samples of the vaporized liquid will be analyzed. The arithmetically averaged analysis, representative of the delivered LNG cargo shall be used for all appropriate calculations. Samples taken when biphasic or where overheated LNG is suspected to be in the main transfer line will be disregarded.

In instances where the on-line chromatograph system being utilized were to fail during loading operations manual samples (composite or spot sample) collected shall be analyzed.

(ii) Composite sample: One (1) representative sample of the loading shall be collected by continuous sampling of the delivered LNG. The sampling system shall have the capability for suspension/restart of sampling without loss of collected sample, when required, during disruption of loading operations. If applicable the sample analysis shall be conducted and applied to the appropriate calculations associated with the delivered LNG cargo.

(iii) Spot samples: One (1) spot sample shall be collected from the vaporizer at each point in time corresponding to approximately twenty-five percent (25%), fifty percent (50%) and seventy-five percent (75%) of loading is completed. If applicable the analysis of spot samples shall be conducted, averaged, and applied to the appropriate calculations associated with the delivered LNG cargo.

b) Manual Samples. It is recognized that for every loading manual samples should be retained for use by Buyer and Seller.

(i) Where sampling analysis is conducted using spot samples per Section 8(a)iii of this Exhibit A-1, two (2) sets of samples shall be collected from the vaporizer at each point in time corresponding to approximately twenty-five percent (25%), fifty percent (50%) and seventy-five percent (75%) of loading is completed and retained.

(ii) Where sampling analysis is conducted using a composite sample per Section 8(a)ii of this Exhibit A-1, two (2) samples shall be collected from the collection devices at the end of loading and retained.

The samples collected shall be properly labeled and sealed by the independent surveyor in attendance. Seller shall retain all samples for a period of thirty (30) days, unless the analysis is in dispute prior to the end of such thirty (30) day period. If the analysis is in dispute prior to the end of such thirty (30) day period, the samples will be retained until the dispute is resolved.

Notwithstanding the above, it is recognized from time to time that Buyer may require one (1) of the retained samples to accompany the LNG cargo delivery, provided sufficient notice.

Where Buyer requests a set of samples, Buyer shall return the set of sample cylinders provided or an identical set within sixty (60) days. If the set of sample cylinders provided are not returned or replaced within the sixty (60) day period, Seller will procure replacement cylinders and Buyer will be invoiced for the cost of replacement cylinders inclusive of preparations cost.

Sampling and analysis methods and procedures that differ from the above may be employed with the mutual agreement of the Parties.

9. Quality Analysis

a) Certification and Deviation. Chromatograph calibration gasses shall be provided, and their composition certified by an independent third party. From time to time, deviation checks shall be performed to verify the accuracy of the gas composition mole percentages and resulting calculated physical properties. Analyses of a sample of test gas of known composition resulting when procedures that are in accordance with the above-mentioned standards have been applied will be considered as acceptable if the resulting calculated gross heating value is within plus or minus zero point three percent (± 0.3%) of the known gross heating value of the test gas sample. If the deviation exceeds the tolerance stated, the gross real heating value, relative density and compressibility previously calculated will be corrected immediately. Previous analyses will be corrected to the point where the error occurred, if this can be positively identified to the satisfaction of both Parties. Otherwise it shall be assumed that the drift has been linear since the last recalibration and correction shall be based on this assumption.

b) GPA Standard 2261. All samples shall be analyzed by Seller to determine the molar fraction of the hydrocarbon and other components in the sample by gas chromatography using a mutually agreed method in accordance with GPA Standard 2261 - Method of Analysis for Gas and Similar Gaseous Mixtures by Gas Chromatography, current as of January 1st, 1990 and as periodically updated or as otherwise mutually agreed by the Parties. If better standards for analysis are subsequently adopted by GPA or other recognized competent impartial authority, upon mutual agreement of Buyer and Seller, they shall be substituted for the standard then in use, but such substitution shall not take place retroactively. A calibration of the chromatograph or other analytical instrument used shall be performed by Seller immediately prior to the analysis of the sample of LNG delivered. Seller shall give advance notice to Buyer of the time Seller intends to conduct a calibration thereof, and Buyer shall have the right to have a representative present at each such calibration; *provided, however,* Seller will not be obligated to defer or reschedule any calibration in order to permit the representative of Buyer to be present.

c) GPA Standard 2377. Seller shall determine the presence of Hydrogen Sulfide (H2S) by use of GPA Standard 2377 – Test of Hydrogen Sulfide and Carbon Dioxide in Gas Using Length of Stain Tubes. Total sulfur will be determined as the summation of sulfur compounds (i.e. mercaptans) following ASTM D1988-06 (Standard Test Method for Mercaptans in Natural Gas using Length-of-Stain Detector Tubes). If the

presence of Hydrogen Sulfide or sulfur compounds is detected, an additional test shall be performed to confirm the respective concentration(s) following either: (i) ASTM D6228 (Determination of Sulfur Compounds in Natural Gas and Gaseous Fuels by Gas Chromatography and Flame Photometric Detection), (ii) ASTM D5504 (Determination of Sulfur Compounds in Natural Gas and Gaseous Fuels by Gas Chromatography and Chemiluminescence), (iii) ASTM D6667 (Determination of Total Volatile Sulfur in Gaseous Hydrocarbons and Liquefied Petroleum Gases by Ultraviolet Fluorescence), or (iv) any other testing method mutually agreed by the Parties.

10. Operating Procedures

a) Notice. Prior to conducting operations for measurement, gauging, sampling and analysis provided in this Exhibit A-1, the Party responsible for such operations shall notify the appropriate representatives of the other Party, allowing such representatives reasonable opportunity to be present for all operations and computations; provided that the absence of the other Party's representative after notification and opportunity to attend shall not prevent any operations and computations from being performed.

b) Independent Surveyor. At the request of either Party any measurement, gauging, sampling and analysis shall be witnessed and verified by an independent surveyor mutually agreed upon by Buyer and Seller. The results of such surveyor's verifications shall be made available promptly to each Party.

c) Preservation of Records. All records of measurement and the computed results shall be preserved by the Party responsible for taking the same, or causing the same to be taken, and made available to the other Party for a period of not less than three (3) years after such measurement and computation.

11. Quantities Delivered

a) Calculation of MMBtu Quantities. The quantity of MMBtu delivered shall be calculated by Seller and verified by Buyer. Either Party may, at its own expense, require the measurements and calculations and/or their verification by an independent surveyor, mutually agreed upon by the Parties. Consent to an independent surveyor proposed by a Party shall not be unreasonably withheld by the other Party.

b) Determination of Gross Heating Value. All component values shall be in accordance with the latest revision of GPA Standard 2145 SI (2009) - Physical Constants for Hydrocarbons & Other Compounds of Interest to the Natural Gas Industry and the latest revision of the reference standards therein. Standard reference conditions for Hi component should be 15°C & 101.325 kPa.

c) Determination of Volume of LNG Loaded.

(i) The LNG volume in the tanks of the LNG Tanker before and after loading (valves have to be closed) shall be determined by gauging on the basis of the tank gauge tables provided for in Section 6 of this Exhibit A-1. During the period when measurement is occurring, no LNG cargo, ballast, boil-off gas, fuel oil or other cargo transfer activity will be carried out on the LNG Tanker. Measurements shall first be made immediately before loading commences. Accordingly, after connection of the loading arms, but prior to their cool down, and immediately before opening the manifold ESD valves of the LNG Tanker, the initial gauging shall be conducted upon the confirmation of stoppage of all spray pumps and compressors and shut-off of the gas master valve to the LNG Tanker's boilers or any other gas consuming unit. The gas master valve to the LNG Tanker's boilers or any other gas consuming unit shall remain closed until after the second gauging, unless a regulatory change requires the consumption of gas during the vessel loading operations and/or upon mutual agreement between all parties upon which event the procedure for the

measurement of gas consumed during loading shall be calculated in accordance with Section 12.4 of this Exhibit A-1. A second gauging shall be made immediately after loading is completed. Accordingly, the second gauging shall be conducted upon the confirmation of shut-off of the manifold ESD valves, with transfer pumps off and allowing sufficient time for the liquid level to stabilize. Measurements prior to loading and after loading will be carried out based on the condition of the LNG Tanker's lines upon arrival at berth. Since significant volumes of LNG may remain in the LNG Tanker's manifold and crossover, gauging will be performed with these lines in the same condition prior to loading and after loading. If the LNG Tanker's manifold and crossover lines are empty (warm) when measurement is taken before loading commences, they will be emptied prior to measurement following the completion of loading. If the crossover lines are liquid filled (cold) when measurement is taken before loading commences, they will remain full (cold) until measurement is taken following the completion of loading. The volume of LNG remaining in the tanks immediately before loading of the LNG Tanker shall be subtracted from the volume immediately after loading and the resulting volume shall be taken as the volume of the LNG delivered from the terminal to the LNG Tanker.

The volume of LNG stated in cubic meters to the nearest zero point zero zero one (0.001) cubic meter, shall be determined by using the tank gauge tables and by applying the volume corrections set forth therein.

(ii) Gas returned to the terminal and gas consumed by the LNG Tanker during loading shall be taken into account to determine the volume loaded for Buyer's account in accordance with the formula in Section 12.4 of this Exhibit A-1 – MMBtu Calculation of the quantity of LNG loaded.

(iii) If failure of the primary gauging and measuring devices of an LNG Tanker should make it impossible to determine the LNG volume, the volume of LNG loaded shall be determined by gauging the liquid level using the secondary gauging and measurement devices. If an LNG Tanker is not so equipped, the volume of LNG loaded shall be determined by gauging the liquid level in Seller's onshore LNG storage tanks immediately before and after loading the LNG Tanker, in line with the terminal procedures, and such volume shall have subtracted from it an estimated LNG volume, agreed upon by the Parties, for boil-off from such tanks during the loading of such LNG Tanker. Seller shall provide Buyer, or cause Buyer to be provided with, a certified copy of tank gauge tables for each onshore LNG tank which is to be used for this purpose, such tables to be verified by a competent impartial authority.

12. Calculations

The calculation procedures contained in this Section 12 of Exhibit A-1 are generally in accordance with the Institute of Petroleum Measurement Manual, Part XII, the Static Measurement of Refrigerated Hydrocarbon Liquids, Section 1, IP 251/76.

d = density of LNG loaded at the prevailing composition and temperature Tl in kg/m3, rounded to two (2) decimal places, calculated according to the method specified in Section 12.1 of this Exhibit A-1.

H_i = gross heating value (mass based) of component "i" in MJ/kg, in accordance with Section 12.6(a) of this Exhibit A-1.

H_m = gross heating value (mass based) of the LNG loaded in MJ/kg, calculated in accordance with the method specified in Section 12.3 of this Exhibit A-1, rounded to four (4) decimal places.

H_v = gross heating value (volume based) of the LNG loaded in Btu/SCF, calculated in accordance with the method specified in Section 12.5 of this Exhibit A-1.

K1 = volume correction in m3/kmol, at temperature Tl, obtained by linear interpolation from Section 12.6(c) of this Exhibit A-1, rounded to six (6) decimal places.

K2 = volume correction in m3/kmol, at temperature Tl obtained by linear interpolation from Section 12.6(d) of this Exhibit A-1, rounded to six (6) decimal places.

M_i = molecular mass of component "i" in kg/kmol, in accordance with Section 12.6(a) of this Exhibit A-1.

P = average absolute pressure of vapor in an LNG Tanker immediately before loading, in millibars, rounded to a whole millibar.

Q = number of MMBtu contained in the LNG delivered, rounded to the nearest ten (10) MMBtu.

T_l = average temperature of the liquid cargo in the LNG Tanker immediately after loading, in degrees Celsius, rounded to one (1) decimal place.

T_v = average temperature of the vapor in an LNG Tanker immediately before loading, in degrees Celsius, rounded to one (1) decimal place.

V = the volume of the liquid cargo loaded, in cubic meters, rounded to three (3) decimal places.

V_h = the volume of the liquid cargo in an LNG Tanker immediately before loading, in cubic meters, rounded to three (3) decimal places.

V_b = the volume of the liquid cargo in an LNG Tanker immediately after loading, in cubic meters, rounded to three (3) decimal places.

V_i = molar volume of component "i" at temperature Tl, in m3/kmol, obtained by linear interpolation from Section 12.6(b) of this Exhibit A-1, rounded to six (6) decimal places.

X_i = molar fraction of component "i" of the LNG samples taken from the loading line, rounded to four (4) decimal places, determined by gas chromatographic analysis.

X_m = the value of Xi for methane.

X_n = the value of Xi for nitrogen.

12.1 Density Calculation Formula

The density of the LNG loaded which is used in the MMBtu calculation in Section 12.4 of this Exhibit A-1 shall be calculated from the following formula derived from the revised Klosek-McKinley method:

$$d = \frac{\sum (X_i \times M_i)}{\sum (X_i \times V_i) - \left[K1 + \frac{(K2 - K1) \times X_n}{0.0425} \right] \times X_m}$$

In the application of the above formula, no intermediate rounding shall be made if the accuracy of "d" is thereby affected.

12.2 Calculation of Volume Delivered

The volume, in cubic meters, of each LNG cargo loaded shall be calculated by using the following formula:

$$V = V_b - V_h$$

12.3 Calculation of Gross Heating Value (Mass Based)

The gross heating value (mass based), in MJ/kg, of each LNG cargo loaded shall be calculated by using the following formula:

$$H_m = \frac{\sum(X_i \times M_i \times H_i)}{\sum(X_i \times M_i)}$$

12.4 MMBtu Calculation of the Quantity of LNG Loaded

The number of MMBtu contained in the LNG loaded shall be calculated using the following formula:

$$Q = \frac{1}{1055.12} \times \left\{ (V \times d \times H_m) - \left(V \times \frac{288.15}{273.15 + T_v} \times \frac{P}{1013.25} \right) \times 37.7 + QBOG \right\}$$

The derivation of the conversion factor 1/1055.12 in the formula in this Section 12.4 of this Exhibit A-1 for the conversion of MJ into MMBtu is obtained from GPA-2145:1994 and IP-251:1976 as follows:

(a) q(T,P) means the gross heating value (measured at temperature T and pressure P), contained in a given quantity of gas;

(b) q(60°F, 14.696 psia) in MJ = 1/1.00006 x q(15°C, 1013.25 millibar) in MJ;

(c) 1 MMBtu corresponds to 1055.06 MJ;

(d) q(60°F, 14.696 psia) in MMBtu = 1/1055.06 x q(60°F, 14.696 psia) in MJ; and

(e) Combining (b) and (d) above yields:

q(60°F, 14.696 psia) in MMBtu = 1/1055.12 x q(15°C, 1013.25 millibar) in MJ.

Hence the number of MJ derived shall be divided by 1055.12 to obtain the number of MMBtu for invoicing purposes.

QBOG = the quantity of boil off gas in MJ consumed by the LNG tanker during loading, calculated as follows:

QBOG = (V2 x 55.575)

where:

V2 = the quantity of natural gas consumed by the LNG tanker during loading (as calculated pursuant to the below formula), stated in kg and rounded to the nearest kg; and

55.575 = the heating value of the vapor (assumed to be 100% of methane) stated in MJ/kg at standard reference conditions (15˚C, 1.01325 bar) for both combustion & metering references (tables below).

Quantity of Natural Gas Consumed by LNG Tanker (V2)

The quantity of natural gas consumed by the LNG tanker during loading shall be computed by taking the initial and the final reading of Natural Gas Consumption Meter on board the tanker (i.e. final reading of Natural Gas Consumption Meter after completion of loading minus initial reading of Natural Gas Consumption Meter before the start of loading) and is calculated by using the following formula:

V2 = Vf – Vi

where:

V2 = the quantity of natural gas consumed by the LNG tanker during loading, stated in kg;

Vf = the reading of Natural Gas Consumption Meter on board the tanker after the completion of loading, stated in kg; and

Vi = the reading of Natural Gas Consumption Meter on board the tanker before the start of loading, stated in kg.

12.5 Calculation of Gross Heating Value (Volume Based)

The calculation of the Gross Heating Value (volume based) in Btu/SCF shall be derived from the same compositional analysis as is used for the purposes of calculating the Gross Heating Value (mass based) Hm and the following formula shall apply:

$$H_v = 1.13285 \times \sum \left(X_i \times M_i \times H_i \right)$$

The derivation of the conversion factor 1.13285 for the conversion of MJ/kmol into Btu/SCF is obtained as follows:

(a) molar gross heating value = □ (Xi x Mi x Hi) MJ/kmol;

(b) 1 kmol = 2.20462 lbmol;

(c) 1 lbmol = 379.482 SCF;

(d) hence 1 kmol = 836.614 SCF; and

(e) Hv = 1,000,000/ (1055.12 x 836.614) x □ (Xi x Mi x Hi) Btu/SCF

12.6 Data

(a) Values of Hi and Mi

Component	Hi (in MJ/kg)	Mi (in kg/kmol)
Methane	55.575	16.0425
Ethane	51.951	30.0690
Propane	50.369	44.0956
Iso-Butane	49.388	58.1222
N-Butane	49.546	58.1222
Iso-Pentane	48.950	72.1488
N-Pentane	49.045	72.1488
N-Hexane	48.715	86.1754
Nitrogen	0	28.0134
Carbon Dioxide	0	44.0095
Oxygen	0	31.9988

Source: GPA Publication 2145 Sl-2009: “Table of Physical Properties for Hydrocarbons and Other Compounds of Interest to the Natural Gas Industry”.

(b) Values of Vi (cubic meter/kmol)

Temperature	-150°C	-154°C	-158°C	-160°C	-162°C	-166°C	-170°C
Methane	0.039579	0.038983	0.038419	0.038148	0.037884	0.037375	0.036890
Ethane	0.048805	0.048455	0.048111	0.047942	0.047774	0.047442	0.047116
Propane	0.063417	0.063045	0.062678	0.062497	0.062316	0.061957	0.061602
Iso-Butane	0.079374	0.078962	0.078554	0.078352	0.078151	0.077751	0.077356
N-Butane	0.077847	0.077456	0.077068	0.076876	0.076684	0.076303	0.075926
Iso-Pentane	0.092817	0.092377	0.091939	0.091721	0.091504	0.091071	0.090641
N-Pentane	0.092643	0.092217	0.091794	0.091583	0.091373	0.090953	0.090535
N-Hexane	0.106020	0.105570	0.105122	0.104899	0.104677	0.104236	0.103800
Nitrogen	0.055877	0.051921	0.048488	0.046995	0.045702	0.043543	0.041779
Carbon Diox	0.027950	0.027650	0.027300	0.027200	0.027000	0.026700	0.026400
Oxygen	0.03367	0.03275	0.03191	0.03151	0.03115	0.03045	0.02980

Source: National Bureau of Standards Interagency Report 77-867, Institute of Petroleum IP251/76 for Oxygen.

Note: For intermediate values of temperature and molecular mass a linear interpolation shall be applied

(c) Values of Volume Correction Factor, K1 (cubic meter/kmol)

Molecular Mass of Mixture	-150°C	-154°C	-158°C	-160°C	-162°C	-166°C	-170°C
16.0	-0.000012	-0.000010	-0.000009	-0.000009	-0.000008	-0.000007	-0.000007
16.5	0.000135	0.000118	0.000106	0.000100	0.000094	0.000086	0.000078
17.0	0.000282	0.000245	0.000221	0.000209	0.000197	0.000179	0.000163
17.2	0.000337	0.000293	0.000261	0.000248	0.000235	0.000214	0.000195
17.4	0.000392	0.000342	0.000301	0.000287	0.000274	0.000250	0.000228
17.6	0.000447	0.000390	0.000342	0.000327	0.000312	0.000286	0.000260
17.8	0.000502	0.000438	0.000382	0.000366	0.000351	0.000321	0.000293
18.0	0.000557	0.000486	0.000422	0.000405	0.000389	0.000357	0.000325
18.2	0.000597	0.000526	0.000460	0.000441	0.000423	0.000385	0.000349
18.4	0.000637	0.000566	0.000499	0.000477	0.000456	0.000412	0.000373
18.6	0.000677	0.000605	0.000537	0.000513	0.000489	0.000440	0.000397
18.8	0.000717	0.000645	0.000575	0.000548	0.000523	0.000467	0.000421
19.0	0.000757	0.000685	0.000613	0.000584	0.000556	0.000494	0.000445
19.2	0.000800	0.000724	0.000649	0.000619	0.000589	0.000526	0.000474
19.4	0.000844	0.000763	0.000685	0.000653	0.000622	0.000558	0.000503
19.6	0.000888	0.000803	0.000721	0.000688	0.000655	0.000590	0.000532
19.8	0.000932	0.000842	0.000757	0.000722	0.000688	0.000622	0.000561
20.0	0.000976	0.000881	0.000793	0.000757	0.000721	0.000654	0.000590
25.0	0.001782	0.001619	0.001475	0.001407	0.001339	0.001220	0.001116
30.0	0.002238	0.002043	0.001867	0.001790	0.001714	0.001567	0.001435

Source: National Bureau of Standards Interagency Report 77-867.

Note 1: Molecular mass of mixture equals □ (Xi x Mi).

Note 2: For intermediate values of temperature and molecular mass a linear interpolation shall be applied.

(d) Values of Volume Correction Factor, K2 (cubic meter/kmol)

Molecular Mass of Mixture	-150°C	-154°C	-158°C	-160°C	-162°C	-166°C	-170°C
16.0	-0.000039	-0.000031	-0.000024	-0.000021	-0.000017	-0.000012	-0.000009
16.5	0.000315	0.000269	0.000196	0.000178	0.000162	0.000131	0.000101
17.0	0.000669	0.000568	0.000416	0.000377	0.000341	0.000274	0.000210
17.2	0.000745	0.000630	0.000478	0.000436	0.000397	0.000318	0.000246
17.4	0.000821	0.000692	0.000540	0.000495	0.000452	0.000362	0.000282
17.6	0.000897	0.000754	0.000602	0.000554	0.000508	0.000406	0.000318
17.8	0.000973	0.000816	0.000664	0.000613	0.000564	0.000449	0.000354
18.0	0.001049	0.000878	0.000726	0.000672	0.000620	0.000493	0.000390
18.2	0.001116	0.000939	0.000772	0.000714	0.000658	0.000530	0.000425
18.4	0.001184	0.001000	0.000819	0.000756	0.000696	0.000567	0.000460
18.6	0.001252	0.001061	0.000865	0.000799	0.000735	0.000605	0.000496
18.8	0.001320	0.001121	0.000912	0.000841	0.000773	0.000642	0.000531
19.0	0.001388	0.001182	0.000958	0.000883	0.000811	0.000679	0.000566
19.2	0.001434	0.001222	0.000998	0.000920	0.000844	0.000708	0.000594
19.4	0.001480	0.001262	0.001038	0.000956	0.000876	0.000737	0.000623
19.6	0.001526	0.001302	0.001078	0.000992	0.000908	0.000765	0.000652
19.8	0.001573	0.001342	0.001118	0.001029	0.000941	0.000794	0.000681
20.0	0.001619	0.001382	0.001158	0.001065	0.000973	0.000823	0.000709
25.0	0.002734	0.002374	0.002014	0.001893	0.001777	0.001562	0.001383
30.0	0.003723	0.003230	0.002806	0.002631	0.002459	0.002172	0.001934

Source: National Bureau of Standards Interagency Report 77-867.

Note 1: Molecular mass of mixture equals $\sum$ (Xi x Mi).

Note 2: For intermediate values of temperature and molecular mass a linear interpolation shall be applied.

B. Freeport LNG Facility: The measurement, sampling, and testing terms as set forth in the Freeport LNG Facility Standard Setting Document shall apply to all LNG delivered at the Freeport LNG Facility.

C. Cameron LNG Facility: The following shall apply to all measurements for LNG delivered at the Cameron LNG Facility:

1. Measurement of Quantity of LNG Loaded.

a) This Exhibit A shall apply to the measurement of an LNG Cargo loaded at the Seller's Facilities.

(b) Measurement and Gauging of Liquid to Measure the Loading of LNG. The volume of cubic meters of LNG delivered from the Seller's Facilities to an LNG Ship shall be measured, by means of the main liquid level gauging device installed in the LNG tanks of the LNG Ship for that purpose, in metric units, by gauging of the liquid in the tanks of such LNG Ship after allowing sufficient time for the liquid level to stabilize. The LNG volume in each LNG tank of an LNG Ship before and after loading (valves must be closed) shall be determined by gauging on the basis of the tank gauge levels provided for in this Section 1. During the period when measurement is occurring, no cargo, ballast, boil-off, fuel oil or other cargo loading activity shall be carried out on the LNG Ship. The list and trim of the LNG Ship shall be measured at the same time that the liquid level, pressure and temperature readings of the tanks of the LNG Ship are secured.

(i) Because significant volumes of LNG may remain in the LNG Ship's cargo/deck piping, each gauging shall be performed with these lines in as near as reasonably practical under the same condition for each of the initial gauging and the final gauging. If the LNG Ship's cargo/deck piping is empty when measurement is taken for the initial gauging, then these lines shall be as near as reasonably practical emptied prior to measurement for the final gauging. If the LNG Ship's cargo/deck piping is liquid filled when measurement is taken for the initial gauging, then these lines shall remain as near as reasonably practical full until after measurement is taken for the final gauging.

(ii) Buyer shall cause the initial gauging to be made after the Master of the LNG Ship has given notice of ready to load prior to the commencement of loading. Such notice shall be issued after confirmation that (A) gas burning has ceased and reliquefaction is placed in stand-by mode (if applicable), (B) the emergency shut-down valves are closed, (C) the stoppage of all spray, main cargo and fuel gas pumps and compressors, and (D) the gas master valve to the LNG Ship's engines, generators, boilers and/or gas combustion unit is in the shut-off position.

(iii) During the LNG loading operations, the gas master valve to the LNG Ship's engines, generators, boilers and/or gas combustion unit may be opened provided the Operator's agreement was given during the pre-cargo loading meeting. The Terminal Operator's agreement for opening these valves will not be unreasonably withheld. The quantity of LNG consumed by the LNG Ship during such LNG loading operations shall be based on the LNG Ship's flow meters and considered one hundred (100) percent methane.

(iv) Buyer shall cause the final gauging to take place immediately after the Master of the LNG Ship has given notice of Completion of Loading. Such notice shall be issued after confirmation that (A) the LNG Ship's cargo/deck piping has been restored as near as reasonably practical to the state prior to Commencement of Loading, (B) the LNG marine loading arms have been drained, (C) the emergency shut-down valves are closed, and (D) the gas master valve to the LNG Ship's engines, generators, boilers and/or gas combustion unit is in the shut-off position.

(v) The volume of LNG in each of the LNG tanks of an LNG Ship immediately before loading shall be subtracted from the volume immediately after loading and the absolute value of the difference shall be taken as the volume of the LNG delivered from Seller's Facilities to the LNG Ship.

(vi) Representatives of Buyer, Seller and Terminal Operator shall have the right to be present on the LNG Ship to witness each of the initial gauging and final gauging. Terminal Operator has the right to verify

the LNG Ship's custody transfer measurement system settings and methodology of any automated measurement system onboard the LNG Ship used to determine the volume of LNG delivered from Seller's Facilities to the LNG Ship.

(vii) Copies of all gauging and measurement records shall be furnished to Seller and Terminal Operator immediately upon Completion of Loading.

(viii) Handwritten corrections to any gauging and measurement records shall not be permitted without Buyer's prior written consent.

(c) Evidence of Calibration of LNG Tanks. Buyer shall furnish to Seller and Operator evidence of calibration of the LNG tanks of each LNG Ship for volume against level by a qualified independent surveyor, calibration authority or contractor.

(d) Gauge Tables. Buyer shall ensure that certified copies of tank gauge tables for each LNG tank of each LNG Ship are available onboard such LNG Ship. Such tank gauge tables shall include sounding tables, correction tables for list and trim, volume corrections to tank service temperature, density correction and other corrections (if necessary) and shall indicate volumes in cubic meters expressed to the nearest hundredth (1/100th), with tank levels expressed in meters to the nearest hundredth (1/100th), or in any case, more precisely if the applicable LNG Ship is so equipped and capable.

(e) Auditing. Seller and Terminal Operator may audit Buyer's records and tables that are relevant to the determination of the measurements and calculations referred to in this Exhibit A upon notice at commercially reasonable times.

(f) Recalibration. If the LNG tanks of any LNG Ship suffer changes due to distortion or modification of such nature as to create a reasonable doubt regarding the validity of the tank gauge tables described herein (or any subsequent calibration provided for herein), Buyer shall recalibrate or cause the LNG Ship to recalibrate the distorted and/or modified tanks, and the LNG Ship shall not be employed hereunder until appropriate corrections have been completed. Seller, Buyer, and Terminal Operator shall each have the right to have a representative present at the time of any such recalibration. If mutually agreed among Buyer and Seller and Terminal Operator, recalibration of damaged tanks can be deferred until the next time when such damaged tanks are warmed for any reason, and any corrections to the prior tank gauge tables will be made from the time the distortion occurred. If the time of the distortion cannot be ascertained, Buyer, Seller and Terminal Operator shall mutually agree on the time period for retrospective adjustments.

2. Selection of Gauging Devices for LNG Ships.

(a) General. All devices provided for in this Exhibit A shall be approved by Seller and Terminal Operator during the LNG Ship vetting procedure. The required degree of accuracy (which shall in any case be within the permissible tolerances defined herein and in the applicable standards referenced herein) of such devices selected shall be mutually agreed upon by Buyer, Seller and Terminal Operator. Buyer, Seller and Terminal Operator shall cooperate in the design, selection and acquisition of any new or replacement devices to be used for gauging, measurements and tests in order that all measurements and tests may be conducted in the metric system. Prior to the use of any device, the Party providing such device shall cause tests to be carried out to verify that such device has the required degree of accuracy.

(b) Liquid Level Gauging Devices. Each LNG tank of each LNG Ship shall be equipped with a main and an auxiliary liquid level-gauging device. The measurement accuracy of the main liquid level gauging devices shall be + 7.5 millimeters and the auxiliary liquid level gauging devices shall be + 10.0 millimeters, or in any case, more precisely if the applicable LNG Ship is so equipped and capable. The level from the main and auxiliary gauging devices in each such LNG tank shall be logged or printed.

(c) List and Trim Gauging Devices. Each LNG Ship shall be equipped with a list gauging device and a trim gauging device both of which shall be interfaced with the custody transfer system. List and trim

measurements shall be made using devices whose accuracy is at least + 1% of the measuring range but in any case, no less than + 0.05 degrees for list and + 0.1 meters for trim, or in any case, more precisely if the applicable LNG Ship is so equipped and capable.

(d) Temperature Gauging Devices. Each LNG tank of each LNG Ship shall be equipped with a minimum of two (2) independent temperature measuring devices each consisting of five (5) temperature measuring probes located on or near the vertical axis of each such LNG tank. One device shall be designated as the main temperature measurement device and second device shall be designated as the auxiliary temperature measurement device, and both devices shall be located in such a way as to not be affected by the spray of LNG when spray pumps are in use. The measurement probes on each independent measuring device shall be located such that one probe is located in the vapor space at the top of each LNG tank, one probe is located near the bottom of each LNG tank, and the remaining probes are distributed at appropriate intervals from the top to the bottom of each LNG tank. If the main temperature measurement device or any probe fails, then the auxiliary temperature measurement device shall be used. In the temperature range of -165° C to -145° C, the accuracy shall be + 0.2° C. In the temperature range of -145° C to + 40° C, the accuracy shall be + 1.5° C. The temperatures in each LNG tank shall be logged or printed.

(e) Pressure Gauging Devices. Each LNG tank of each LNG Ship shall have one (1) absolute pressure-gauging device. The measurement accuracy of the pressure gauging device shall be + 1% of full-scale and in no case greater than + 6 millibars. The pressure in each LNG tank shall be logged or printed.

(f) Verification of Accuracy of Gauging Devices. Gauging devices shall be verified for accuracy in accordance with the terms of this Section 2(f) and any inaccuracy of a device exceeding the permissible tolerance shall require correction of recordings and computations in accordance with this Exhibit A. Buyer shall verify the accuracy of gauging devices by providing sufficient documentation thereof to Seller and Terminal Operator, including in the following circumstances: (i) if Seller or Terminal Operator requests such verification due to changes in the accuracy of custody transfer measurements related to an LNG Ship in question; or (ii) during each LNG Ship dry docking.

(g) Measurement Equipment Maintenance. All measurement devices referenced in this Exhibit A shall be maintained in accordance with manufacturer's recommendations. All maintenance shall be documented and made available to Seller, Operator and/or independent surveyor upon reasonable prior notice.

3. Measurement Procedures for LNG Ships.

(a) Liquid Level. Liquid levels in each LNG tank of each LNG Ship shall be determined in accordance with the most recent adopted and published version of ISO 10976. Measurement of the liquid level in each LNG tank of each LNG Ship shall be made to the nearest millimeter by using the main liquid level-gauging device referred to in Section 2(b) hereof. Should the main level gauging device fail, the auxiliary device shall be used. At least five (5) readings shall be made in close succession within a span of seconds. The arithmetic average of the readings shall be deemed the liquid level. Such arithmetic average shall be rounded to the nearest millimeter. The main device and the auxiliary device readings shall be read and recorded consecutively and without interruption.

(b) Temperature. At the same time the liquid level is measured, the temperature in each LNG tank shall be measured to the nearest 0.1° C by using the temperature gauging devices referred to in Section 3(d) hereof. In order to determine the temperature of liquid and vapor in each LNG tank of an LNG Ship, one (1) reading shall be taken at each temperature-gauging device in each LNG tank. An arithmetic average of all such readings in all LNG tanks with respect to vapor, for those readings taken of vapor, and liquid, for those readings taken of liquid, shall be deemed the final temperature of vapor and liquid, respectively, for such LNG tank. Such arithmetic average shall be rounded to the nearest 0.1° C.

(c) Pressure. At the same time the liquid level is measured, the absolute pressure in each LNG tank shall be measured to the nearest one (1) millibar by using the pressure-gauging device referred to in Section 2(e) hereof. The determination of the absolute pressure in each LNG tank of each LNG Ship shall be made

by taking one (1) reading of the pressure-gauging device in each LNG tank, and then taking an arithmetic average of all such readings. Such arithmetic average shall be rounded to the nearest 1 millibar.

(d) List and Trim. At the same time the liquid level is measured, the list and trim of the LNG Ship shall be measured by taking one (1) reading from the list and trim devices referred to in Section 2(c). The measurement of the list and of the trim shall be conducted to the nearest 0.01 degree for list and the nearest 0.01 meter for trim, or, in each case, more precisely if the applicable LNG Ship is so equipped and capable.

(e) Procedures in Case of Gauging Device Failure. Should the measurements referred to in this Section 3 hereof become impossible to perform due to a failure of gauging devices, alternative gauging procedures shall be determined by mutual agreement between Seller, Buyer and Terminal Operator in consultation with the independent surveyor. The alternative gauging procedure shall be documented and recorded.

(f) Determination of Volume of Loaded LNG. The volume of LNG loaded, stated in cubic meters to the nearest 0.001 cubic meter, shall be determined by (A) using the tank gauge tables referred to in Section 1(d) hereof; (B) applying all volume corrections set forth in such Section 1(d); and (C) calculating the absolute value of the difference between the total volume of LNG in all tanks used in the LNG loading immediately after Completion of Loading (or emptying of cargo/deck piping where required under Section 1(b) hereof) and the total volume in all tanks used in the LNG loading immediately before commencement of loading. This volume of LNG loaded shall then be rounded to the nearest 0.1 cubic meter.

(g) Selection and Cost of Independent Surveyors. Terminal Operator shall select the independent surveyors. Buyer and Seller shall be equally responsible for the payment of such fees and charges for measurements and calculations of the quantity of LNG loaded at the Delivery Point pursuant to this Agreement.

4. Determination of Composition of Loaded LNG to LNG Ships.

(a) Sampling Procedures. The composition of the LNG loaded to LNG Ships shall be determined in accordance with recognized LNG industry standards, which standards shall at a minimum meet the most recent adopted and published version of ISO 8943 with respect to LNG sample collection and conditioning and the applicable sections of the most recent adopted and published version of GPA Standard 2261 with respect to chromatographic analysis of the Vaporized LNG sample. Seller shall procure the collection of samples from the main LNG transfer line during loading and procure the analysis of the LNG using an on-line gas chromatograph. The on-line gas chromatograph calibration must be validated with a standard referential gas and witnessed by an independent surveyor both (i) prior to LNG loading; and (ii) after LNG loading. Samples shall be collected and analyzed at a frequency of at least every four (4) minutes. Samples taken when biphasic or overheated LNG is suspected to be in the main LNG transfer line will be disregarded. These incremental samples will be passed through a vaporizer, and samples of the vaporized liquid will be analyzed. The resulting analyses, which are generally proportional to time, will be arithmetically averaged (except for outlier or erroneous data) to yield an analysis that is representative of the loaded cargo. This arithmetically averaged analysis shall be used for all appropriate calculations associated with the loaded cargo. Additional samples shall be collected as specified in this Section 4. Seller shall also procure the separate collection of three (3) sets of sample bottles (in accordance with procedures that at a minimum meet the most recent adopted and published version of GPA Standard 2166) at each of the following intervals during the loading: (i) one (1) hour after full loading rate is achieved; (ii) when loading is twenty-five percent (25%) complete; (iii) when loading is fifty percent (50%) complete; (iv) when loading is seventy-five percent (75%) complete; and (v) one (1) hour prior to the estimated time of first pump shutdown. The independent surveyor who witnessed such sampling shall seal and properly label such sample bottles, which sample bottles shall be retained at Seller's facilities in accordance with Section 4 4(b) hereof. In the event of any dispute resulting pursuant to this Section 4(a), each Party shall have a right to one (1) set of samples. Disputes shall be resolved pursuant to the procedures set forth in Section 13.12 of this Agreement.

(b) Retention of Samples. The gaseous samples taken during loading shall be retained as follows:

(i) First sample set: retained by Operator for five (5) days in the event of failure of the on-line gas chromatograph at the Seller's Facilities.

(ii) Second sample set: retained by Operator for thirty (30) days for analysis by Buyer in the event of a Dispute.

(iii) Third sample set: retained by Operator for thirty (30) days for analysis by Seller in the event of a Dispute.

In the event any Dispute as to the accuracy of any analysis is raised, the samples shall be further retained until Seller, Terminal Operator and Buyer agree to retain them no longer.

(c) Analysis Procedures.

(i) Hydrocarbons, Carbon Dioxide and Nitrogen – Samples shall be analyzed pursuant to Section 4(a) hereof by on-line gas chromatography to determine the mol fraction of hydrocarbons, carbon dioxide and nitrogen in the sample. The method used shall be the method described in the applicable sections of the most recent adopted and published version of the GPA Standard 2261 or any other method agreed upon by Buyer, Seller and Terminal Operator. If the additional samples in Section 44(a) are analyzed, duplicate runs shall be made on each sample to determine that the repeatability of peak heights or peak areas are within acceptable limits. The calculated results of such duplicate runs shall be averaged.

(ii) Other Impurities – Seller and Terminal Operator may utilize either online instruments or gas sampling and analysis for the purpose of determining if LNG loaded is in compliance with the LNG Specifications. Any calibration of instruments and gas sampling will be conducted in compliance with applicable industry standards.

(iii) Analysis of LNG samples for sulfur and mercury content will be subject to the following standards unless Buyer, Seller and Terminal Operator mutually agree that some other method should be used:

(A) Hydrogen Sulfide – The most recent adopted and published version of ASTM D4084 (Standard Test Method for Analysis of Hydrogen Sulfide in Gaseous Fuels (Lead Acetate Reaction Rate Method)).

(B) Total Sulfur – The most recent adopted and published version of ASTM D5504 (Standard Test Method for Determination of Sulfur Compounds in Natural Gas and Gaseous Fuels by Gas Chromatography and Chemiluminescence) procedure shall be used to determine the total sulfur content of samples.

(C) Mercury – The most recent adopted and published version of ASTM D5954 (Standard Test Method for Mercury Sampling and Measurement in Natural Gas by Atomic Absorption Spectroscopy).

5. Determination of Quantity of Loaded LNG.

(a) Calculation of Density. The density of LNG shall be calculated by using the revised Klosek and McKinley method and using the formula:

$$D = \frac{\sum(Xi \times Mi)}{\sum(Xi \times Vi) - Xm \times C} \quad \text{and} \quad C = K1 + \frac{(K2 - K1) \times Xn}{0.0425}$$

Where:

D = density to four (4) significant figures of the LNG loaded, stated in kilograms per cubic meter at temperature TL, where “TL” is the temperature of LNG determined pursuant to Section 3(b) above after Loading;

Xi = mol fraction, to the nearest fourth (4th) decimal place, of component i from the composition obtained in accordance with Section 4 hereof;

Mi = molecular weight of component i as set forth in Table 1 attached hereto and updated from time to time;

Vi = molar volume, to the nearest sixth (6th) decimal place, of component i, stated in cubic meters per kilomol at temperature TL and obtained by linear interpolation of the data set forth in Table 2 and Table 3 attached hereto and updated from time to time;

Xm = mol fraction, to the nearest fourth (4th) decimal place, of methane from the composition obtained in accordance with Section 4 hereof;

Xn = mol fraction, to the nearest fourth (4th) decimal place, of nitrogen from the composition obtained in accordance with Section 4 hereof;

K1 = volume correction factor derived from the values set forth in Table 4 attached hereto and updated from time to time; and

K2 = volume correction factor derived from the values set forth in Table 5 attached hereto and updated from time to time.

Should any improved data, method of calculation or direct measurement device become available which is acceptable to Buyer, Seller and Terminal Operator, such improved data, method or device shall then be used.

(b) Calculation of Heating Value. The “Heating Value (mass based)” of LNG, stated in Btu per lbm, shall be calculated by use of the formula:

$$Hm = \frac{\sum (Hi \times Xi \times Mi)}{\sum (Xi \times Mi)}$$

Where:

Hm = Heating Value (mass based) of LNG, stated in Btu per lbm;

Hi = Heating Value (mass based) of component i, stated in Btu per lbm (fuel as ideal gas) as set forth in Table 1 attached hereto and updated from time to time;

Xi = mol fraction, to the nearest fourth (4th) decimal place, of component i from the composition obtained pursuant to Section 4 hereof; and

Mi = molecular weight of component i as set forth in Table 1 attached hereto and updated from time to time.

The “Heating Value (volume based)” shall be calculated by use of the formula:

$$Hv = \sum (Xi \times Hvi)$$

Z

Where:

Hv = Heating Value (volume based), stated in Btu per cubic foot at Standard Conditions for LNG;

Xi = mol fraction, to the nearest fourth (4th) decimal place, of component i from the composition obtained pursuant to Section 4 hereof;

Hvi = gross heating value, fuel as ideal gas of component i, stated in Btu per cubic foot, as set forth in Table 1 attached hereto and updated from time to time; and

Z = compressibility factor of the gas mixture determined in accordance with the most recent adopted and published version of GPA-2172.

(c) Calculation of Energy Quantity Loaded. The quantity of energy loaded shall be computed using the following formula and rounded to the nearest Btu:

QL = V × D × Hm × 2.2046 – QR + QBOG

Where:

QL = quantity of LNG loaded, stated in Btu;

V = volume of the LNG loaded, stated in cubic meters, obtained pursuant to Section 3 hereof;

D = density of the LNG, stated in kilograms per cubic meter, as calculated in accordance with Section 5 hereof; and

Hm = Heating Value (mass based) of the LNG, stated in Btu per lbm, as calculated in accordance with Section 5 hereof.

QR = quantity of the vapor, stated in Btu, displaced by the volume of the LNG loaded. QR shall be computed by use of the following formula:

$$QR = V \times \frac{288.8}{273.2 + Tv} \times \frac{Pa}{1013.25} \times HVvapor \times 35.31467$$

Where:

TV = temperature of the vapor in the tanks of the LNG Ship immediately before Loading, stated in degrees Centigrade to the nearest tenth degree (0.1°) C;

Pa = absolute pressure of the vapor in the tanks of the LNG Ship immediately before Loading, stated in milibar; and

HVvapor = Heating Value (volume based) of the vapor (which shall be assumed to be methane), stated in Btu per cubic foot at Standard Conditions for LNG (60º F, 14.696 psia and equivalent to 15.60º C and 1,013.25 milibar) in accordance with Table 1 attached hereto and updated from time to time (for reference purposes, the current value of HVvapor is equal to 1,010.0).

QBOG = quantity of the boil off gas, stated in Btu, consumed by the LNG Ship during loading operations. QBOG shall be computed by use of the following formula:

QBOG = V2 × HVvapor2 × 2.2046

Where:

HVvapor2 = Heating Value (mass based) of the vapor (which shall be considered one hundred (100) percent methane in accordance with Paragraph 1(b)(iii)), stated in Btu per lbm at Standard Conditions for LNG (60º F, 14.696 psia and equivalent to 15.60º C and 1,013.25 milibar) in accordance with Table 1 attached hereto and updated from time to time (for reference purposes, the current value of HVvapor2 is equal to 23,892); and

V2 = the quantity of natural gas consumed by the LNG Ship during loading operations stated in kg and rounded to the nearest kg, computed by taking initial and the final readings of the natural gas flow meter for the gas master valve to the LNG Ship's engines, generators, boilers and/or gas combustion unit on board the LNG Ship and is calculated by using the following formula:

V2 = Vf – Vi

Where:

Vf = the reading of the natural gas flow meter on board the LNG Ship after Completion of Loading, stated in kg; and

Vi = the reading of the natural gas flow meter on board the LNG Ship before Commencement of Loading, stated in kg.

(f) Conversion Factors. The following conversions shall be used:

2.2046 lbm = 1 kg

35.31467 cubic feet = 1 cubic meter

6. Verification of Accuracy for LNG Measurement Devices.

(a) Verification Procedure. Accuracy of devices used to measure the quantity or composition of LNG loaded at the Delivery Point shall be tested and verified at the request of either Party, including the request by a Party to verify accuracy of its own devices. Buyer, Seller and Terminal Operator shall have the right to inspect at any time the measurement devices installed by the other Party; provided, that the other Party is notified in advance and Parties shall use commercially reasonable efforts to accommodate the other Party's operational requirements. Buyer shall notify Seller and Terminal Operator of tests of LNG Ships' measurement devices requested by LNG suppliers and/or LNG buyers and/or LNG sellers. Seller shall notify Buyer of tests of the measurement devices requested by other users of the Seller's Facilities, and Seller may consent to Terminal Operator notify other users of the Seller's Facilities of such tests requested by Buyer. Testing shall be performed only when Terminal Operator and any other Person requesting the test are represented, or have received adequate advance notice thereof, using methods recommended by the manufacturer or any other recognized method agreed to by Terminal Operator and any Person requesting the test. At the request of any Party, any test shall be witnessed and verified by an independent surveyor mutually agreed upon by Terminal Operator and any Person requesting the test. If Buyer requests such testing it shall do so by making a request to Seller, and Buyer shall make all representations regarding the methods or testing, and requests to witness the test to Seller. If, after notice, Terminal Operator or any Person requesting the test fails to have a representative present, the results of the test shall nevertheless be considered accurate until the next test. Permissible tolerances shall be as defined herein or as defined in the applicable standards referenced herein.

(b) Measurement Errors. If, at the time of verification, a measuring instrument used for measuring the quality or quantity of LNG being loaded at the Delivery Point is found to result in errors of one-half percent (0.5%) or less of the energy being measured, such equipment's previous measurements shall be considered accurate and such equipment shall be adjusted forthwith as necessary. If, at the time of verification, a measuring instrument is found to result in errors of more than one-half percent (0.5%) of the energy being measured, such equipment's previous measurements shall be brought to a zero (0) difference by comparison with calibration results for any period known definitively or agreed to have been affected by

such error, and the calculation made during said period shall be corrected accordingly. If the period during which such error occurred is not definitively known or agreed upon, corrections shall be made for the energy transferred during the last half of the period since the date of the last calibration.

(c) Failure of Main and Back-up Sampling Systems. In the event that no LNG composition data is available, the Parties will agree to a mutually acceptable alternative.

(d) Costs and Expenses of Test Verification. All costs and expenses for testing and verifying Terminal Operator's measurement devices and all costs and expenses for testing and verifying the LNG Ship's measurement devices shall be borne by Buyer.

TABLE 1 - Physical Constants of Selected Hydrocarbons

Standard: GPA-2145-16

Effective Date:

Components	Molecular Mass	Btu/lbm fuel as ideal gas	Btu/scf fuel as ideal gas	Specific Gravity of Gas (air = 1.0)	Summation Factor
Methane	16.0425	23,892	1,010.0	0.5539	0.0116
Ethane	30.0690	22,334	1,769.7	1.0382	0.0238
Propane	44.0956	21,654	2,516.1	1.5225	0.0347
i-Butane	58.1222	21,232	3,251.9	2.0068	0.0441
n-Butane	58.1222	21,300	3,262.3	2.0068	0.0470
i-Pentane	72.1488	21,044	4,000.9	2.4911	0.0576
n-Pentane	72.1488	21,085	4,008.7	2.4911	0.0606
n-Hexane	86.1754	20,943	4,755.9	2.9754	0.0776
Nitrogen	28.0134	0.00	0.00	0.9672	0.00442
Oxygen	31.9988	0.00	0.00	1.1048	0.0072
Carbon Dioxide	44.0095	0.00	0.00	1.5195	0.0195

The above data taken from GPA Publication 2145-16, used for all density and heating value calculations is provided for reference only. The values contained in the most recent adopted and published version of GPA Publications 2145 shall be used for these calculations.

TABLE 2 - MOLAR VOLUMES OF INDIVIDUAL COMPONENTS

Molar Volumes in Liters/mole at Various Temperatures (°K)

Temp, °K	Methane	Ethane	Propane	n-Butane	i-Butane	n-Pentane	i-Pentane	Nitrogen
102	0.036755	0.047023	0.061501	0.075818	0.077243	0.090416	0.090518	0.041327
104	0.036992	0.047185	0.061677	0.076006	0.077440	0.090624	0.090733	0.042128
106	0.037234	0.047348	0.061855	0.076194	0.077637	0.090833	0.090948	0.043002
108	0.037481	0.047512	0.062033	0.076384	0.077836	0.091042	0.091163	0.043963
110	0.037735	0.047678	0.062212	0.076574	0.078035	0.091252	0.091379	0.045031
112	0.037995	0.047845	0.062392	0.076765	0.078236	0.091462	0.091596	0.046231
114	0.038262	0.048014	0.062574	0.076957	0.078438	0.091673	0.091814	0.047602
116	0.038536	0.048184	0.062756	0.077150	0.078640	0.091884	0.092032	0.049179
118	0.038817	0.048356	0.062939	0.077344	0.078844	0.092095	0.092251	0.050885
120	0.039106	0.048529	0.063124	0.077539	0.079049	0.092307	0.092470	0.052714
122	0.039404	0.048704	0.063309	0.077734	0.079255	0.092520	0.092690	0.054679
124	0.039710	0.048881	0.063496	0.077931	0.079462	0.092733	0.092911	0.056797

The above data taken from National Bureau of Standards 77-867 Table 1, used for density calculations is provided for reference only. The values contained in the most recent adopted and published version of NBS 77-867 shall be used for these calculations.

TABLE 3 - MOLAR VOLUMES OF n-HEXANE

Molar Volumes in (m^3/kmol) at Various Temperatures (^oC)

Temp, ^oC	n-Hexane
-140	0.10716
-145	0.10659
-150	0.10602
-155	0.10545
-160	0.10489
-165	0.10434
-170	0.10380
-175	0.10326
-180	0.10273

The above data taken from ISO-6578:1991 (E) shall be used for density calculations.

TABLE 4 – VOLUME CORRECTION FACTOR (K1 x 10^3)

	Temperature, (°K)					
Molar Weight	**100**	**105**	**110**	**115**	**120**	**125**
16	-0.007	-0.007	-0.008	-0.009	-0.010	-0.013
17	0.15	0.17	0.19	0.22	0.25	0.30
18	0.30	0.34	0.38	0.42	0.50	0.59
19	0.42	0.46	0.54	0.61	0.70	0.79
20	0.54	0.62	0.70	0.79	0.90	1.02
21	0.65	0.73	0.82	0.93	1.04	1.18
22	0.75	0.84	0.93	1.06	1.23	1.38
23	0.86	0.96	1.06	1.20	1.40	1.60
24	0.96	1.08	1.21	1.36	1.54	1.73
25	1.04	1.16	1.30	1.47	1.65	1.86
26	1.11	1.24	1.39	1.56	1.75	1.97
27	1.17	1.31	1.47	1.65	1.85	2.08
28	1.23	1.37	1.53	1.71	1.92	2.15
29	1.28	1.43	1.60	1.79	2.00	2.24
30	1.34	1.49	1.67	1.86	2.08	2.33

The above data taken from National Bureau of Standards 77-867 Table 2, used for density calculations is provided for reference only. The values contained in the most recent adopted and published version of NBS 77-867 shall be used for these calculations.

TABLE 5 – VOLUME CORRECTION FACTOR (K2 x 10^3)

Molar Weight	Temperature, (°K) 100	105	110	115	120	125
16	-0.007	-0.010	-0.015	-0.024	-0.032	-0.043
17	0.16	0.24	0.32	0.55	0.75	1.00
18	0.34	0.42	0.59	0.72	0.91	1.13
19	0.49	0.61	0.77	0.95	1.23	1.48
20	0.64	0.75	0.92	1.15	1.43	1.73
21	0.79	0.91	1.07	1.22	1.63	1.98
22	0.94	1.05	1.22	1.30	1.85	2.23
23	1.08	1.19	1.37	1.45	2.08	2.48
24	1.17	1.33	1.52	1.65	2.30	2.75
25	1.27	1.45	1.71	2.00	2.45	2.90
26	1.37	1.58	1.83	2.17	2.60	3.10
27	1.47	1.69	1.97	2.32	2.77	3.30
28	1.57	1.81	2.10	2.47	2.95	3.52
29	1.67	1.92	2.23	2.63	3.13	3.74
30	1.77	2.03	2.36	2.79	3.32	3.96

The above data taken from National Bureau of Standards 77-867 Table 3, used for density calculations is provided for reference only. The values contained in the most recent adopted and published version of NBS 77-867 shall be used for these calculations.

APPENDIX B: LOADING PORTS

A. Sabine Pass Facility.

The LNG terminal and appurtenant facilities jointly owned by Sabine Pass Liquefaction, LLC and Sabine Pass LNG, L.P. in Cameron Parish, Louisiana, constructed and operated pursuant to authorizations issued by the Federal Energy Regulatory Commission pursuant to Section 3 of the Natural Gas Act.

Specifications: LNG delivered at Sabine Pass Facility shall, when converted into a gaseous state, comply with the following specifications:

Minimum Gross Heat Content (dry)	1000 BTU/SCF
Maximum Gross Heat Content (dry)	1150 BTU/SCF
Minimum methane (C1)	84.0 MOL%
Maximum H2S	0.25 grains per 100 SCF
Maximum Sulfur	1.35 grains per 100 SCF
Maximum N2	1.5 MOL%
Maximum Ethane (C2)	11 MOL%
Maximum Propane (C3)	3.5 MOL%
Maximum Butane (C4) and heavier	2 MOL%

LNG shall contain no water, active bacteria or bacterial agents (including sulfate-reducing bacteria or acid producing bacteria) or other contaminants or extraneous material.

Berthing Facility Requirements: capable of berthing an LNG Ship having a displacement of no more than 166,000 tons, an overall length of no more than 1,140 feet (approximately 347 meters), a beam of no more than 175 feet (approximately 53 meters) and a draft of no more than 40 feet (approximately 12 meters), which the LNG Ship can safely reach, lie safely berthed and load safely afloat at all times, and safely depart, fully laden;

ETA Notices and Berthing Assignments:

1. As soon as practicable after the LNG Ship's departure from the point of departure en route to the Loading Port, Buyer shall notify, or cause the master of the LNG Ship to notify, Seller of the information specified below ("In-Transit First Notice"):

(a) name of the LNG Ship and, in reasonable detail, the dimensions, specifications, tank temperatures, volume of LNG onboard, operator, and owner of such LNG Ship;

(b) any operational deficiencies in the LNG Ship that may affect its performance at the Loading Port or berth; and

(c) the ETA.

2. With respect to each LNG Ship scheduled to call at the Loading Port, Buyer shall give, or cause the master of the LNG Ship to give, to Seller the following notices:

(a) a second notice ("In-Transit Second Notice"), which shall be sent ninety-six (96) hours prior to the ETA set forth in the In-Transit First Notice or as soon as practicable prior to such ETA if the sea time between the point of departure of the LNG Ship and the Loading Port is less than ninety six (96) hours, stating the LNG Ship's then ETA. If, thereafter, such ETA changes by more than six (6) hours, Buyer shall give promptly, or cause the master of the LNG Ship to give promptly, to Seller notice of the corrected ETA;

(b) a third notice ("In-Transit Third Notice"), which shall be sent twenty-four (24) hours prior to the ETA set forth in the In-Transit Second Notice (as corrected), confirming or amending such ETA. If, thereafter, such ETA changes by more than three (3) hours, Buyer shall give promptly, or cause the master of the LNG Ship to give promptly, to Seller notice of the corrected ETA;

(c) a fourth notice ("In-Transit Final Notice"), which shall be sent twelve (12) hours prior to the ETA set forth in the In-Transit Third Notice (as corrected), confirming or amending such ETA. If, thereafter, such ETA changes by more than one (1) hour, Buyer shall give promptly, or cause the master of the LNG Ship to give promptly, to Seller notice of the corrected ETA; and

(d) Any other notice required by the Marine Operations Manual, with such other notice(s) being provided by the deadline set forth in the Marine Operations Manual.

3. Buyer shall procure that a NOR is tendered when the LNG Ship has arrived at the PBS; provided, that such LNG Ship has all required approvals from the relevant Governmental Authorities, and is ready, willing and able, to proceed to berth and load LNG.

4. A valid NOR given under such Transaction shall become effective as follows:

(a) for an LNG Ship arriving at the PBS at any time prior to the Scheduled Arrival Window allocated to such LNG Ship, an NOR shall be deemed effective at the earlier of (i) the time at which the LNG Ship is all fast at the berth; and (ii) the later of (a) 6:00 AM CT on such Scheduled Arrival Window, and (b) six (6) hours after the time of its issuance;

(b) for an LNG Ship arriving at the PBS at any time during the Scheduled Arrival Window allocated to such LNG Ship, an NOR shall become effective six (6) hours after the time of its issuance; or

(c) for an LNG Ship arriving at the PBS at any time after the expiration of the Scheduled Arrival Window, an NOR shall become effective upon Seller's notice to the LNG Ship that it is ready to receive the LNG Ship at berth.

Loading:

1. Buyer shall cause the LNG Ship to be berthed safely and expeditiously at the berth and Seller shall cooperate (and procure that the operator of the Seller's Facilities cooperates) in the

LNG Ship being safely and expeditiously berthed. The Parties shall cooperate to commence and complete loading of the LNG Ship safely and as expeditiously as reasonably possible.

2. The laytime allowed to Seller for the loading of the LNG Ship ("Allowed Laytime") shall be (i) for an LNG Ship with an LNG cargo containment capacity of one hundred forty thousand (140,000) cubic meters or less, thirty-six (36) hours and (ii) for an LNG Ship with an LNG cargo containment capacity of greater than one hundred forty thousand (140,000) cubic meters, according to the following formula: 36 + x = Allowed Laytime (in hours) (where x = y/12,000 cubic meters and y = the LNG cargo containment capacity of the LNG Ship in excess of one hundred forty thousand (140,000) cubic meters). Allowed Laytime shall be extended if there is any delay in loading of the LNG Ship after the start of Used Laytime as a result of:

(a) reasons attributable to Buyer, a Governmental Authority, Transporter, the LNG Tanker or its master, crew, owner or operator or any Third Party outside of the reasonable control of Seller;

(b) Force Majeure or Adverse Weather Conditions;

(c) unscheduled curtailment or temporary discontinuation of operations at the Seller's Facilities necessary for reasons of safety, except to the extent such unscheduled curtailment or temporary discontinuation of operations is due to Seller's failure to operate and maintain its facilities as a Reasonable and Prudent Operator; and

(d) nighttime transit restrictions.

3. Laytime used in loading the LNG Ship ("Used Laytime") shall begin to count when the NOR is effective.

4. Buyer shall ensure that the LNG Ship arrives at the Loading Port cold and ready for loading. For the avoidance of doubt, an NOR shall not be valid or effective if the LNG Ship does not arrive at the Loading Port cold and/or ready for loading.

5. Used Laytime shall be deemed to be completed and time shall cease to count upon Completion of Loading, provided, however, that where the LNG Ship is shifted away from the berth for Seller's purpose or at the request of Seller (and the shift is not as a result of the occurrence of a Force Majeure event), Seller shall pay for any expense relating to such shifting and any time lost in loading due to such shifting of the LNG Ship shall not extend Allowed Laytime. After Completion of Loading, Buyer shall cause the LNG Ship to depart safely and expeditiously from the berth and Seller shall cooperate (and procure that the operator of the Seller's Facilities cooperates) to ensure the LNG Ship's safe departure from the berth.

6. If Used Laytime exceeds Allowed Laytime, then Seller shall pay demurrage to Buyer at a daily market rate (the "Daily Demurrage Rate") agreed upon by the Parties in respect of the period by which Used Laytime exceeds Allowed Laytime, prorated for every hour of such delay, rounded to the nearest full hour. If the Parties are unable to agree on a Daily Demurrage Rate, then the Daily Demurrage Rate shall be the arithmetic average of the weekly market rate published by each of: Affinity, Clarksons, Fearnleys and Poten & Partners for the week immediately preceding the beginning of the Scheduled Arrival Window.

If the LNG Ship delays in vacating the berth after the end of the Used Laytime for reasons attributable to Buyer, Transporter or the LNG Ship or the ship's master or crew, and as a result another LNG vessel (which would have commenced loading had this delay not occurred) is prevented from or delayed in berthing or loading, then (i) Buyer shall reimburse to Seller all actual reasonable documented costs properly incurred by Seller as a direct result of such delay, up to but not exceeding a daily amount equal to the Daily Demurrage Rate and (ii) Seller or the operator of Seller's Facilities may direct the LNG Ship to safely and expeditiously vacate the berth and proceed to sea. In the event the LNG Ship fails to vacate the berth pursuant to this Section 12 and Buyer is not taking actions to cause it to vacate the berth, Seller or the operator of Seller's Facilities may effect such removal at the expense of Buyer.

B. Freeport LNG Facility.

The natural gas liquefaction and export terminal facilities jointly owned by Freeport LNG Development, LP, FLNG Liquefaction, LLC, FLNG Liquefaction 2, LLC, and FLNG Liquefaction 3, LLC, located on Quintana Island, near Freeport, in Brazoria County, Texas, and constructed pursuant to authorizations issued by the Federal Energy Regulatory Commission under Section 3 of the Natural Gas Act.

Specifications: LNG delivered at Freeport LNG Facility shall, when converted into a gaseous state, comply with the following specifications:

Minimum Gross Heat Content (dry)		1000 BTU/SCF
Maximum Gross Heat Content (dry)	1	150 BTU/SCF
Minimum methane (C1)		85.0 MOL%
Maximum H2S		0.25 grains per 100 SCF
Maximum Sulfur		1.3 grains per 100 SCF
Maximum N2		1.0 MOL% [[1.5]]
Maximum Ethane (C2)		11 MOL%
Maximum Propane (C3)		3.5 MOL%
Maximum Butane (C4) and heavier		2 MOL%
Maximum Pentane (C5) and heavier		0.15 MOL%

Berthing Facility Requirements: The Berthing Facility Requirements terms as set forth in the Freeport LNG Facility Loading Port Standard Setting Document shall apply to all LNG delivered at the Freeport LNG Facility.

ETA Notices and Berthing Assignments: The ETA Notices and Berthing Assignments terms as set forth in the Freeport LNG Facility Loading Port Standard Setting Document shall apply to all LNG delivered at the Freeport LNG Facility.

Loading: The Loading terms as set forth in the Freeport LNG Facility Loading Port Standard Setting Document shall apply to all LNG delivered at the Freeport LNG Facility.

C. Cameron LNG Facility.

The natural gas liquefaction and export terminal facilities owned by CAMERON LNG, LLC, located near Cameron Parish, Louisiana, and constructed pursuant to authorizations issued by the Federal Energy Regulatory Commission under Section 3 of the Natural Gas Act.

Specifications: LNG delivered at Cameron LNG Facility shall, when converted into a gaseous state, comply with the following specifications (measured at Standard Conditions for LNG):

Minimum Gross Heat Content (dry)	1000 BTU/SCF
Maximum Gross Heat Content (dry)	1165 BTU/SCF
Minimum methane (C1)	88.0 MOL%
Maximum H2S	1 mg per standard M3
Maximum Sulfur	5 mg per standard M3
Maximum N2	1.0 MOL%
Maximum Ethane (C2)	8.0 MOL%
Maximum Propane (C3)	3.0 MOL%
Maximum Butane (C4)	2.0 MOL%
Maximum Pentane (C5) and heavier	0.1 MOL%
Maximum Carbon Dioxide (CO2)	95 ppm (volume)

LNG Loaded at the LNG Transfer Point by Operator shall not contain particulates or other solid matter, other contaminants, or extraneous material which might interfere with its merchantability.

“Standard Conditions for LNG” mean a pressure base of fourteen point six nine six (14.696) psia, a base temperature of sixty degrees (60°) Fahrenheit and real gas conditions.

Cameron Facility shall include two berths capable of berthing an LNG Ship having a displacement of no more than 174,000 tons, an overall length of no more than 1,050 feet (approximately 320 meters), a beam of no more than 164 feet (approximately 50 meters) and a freshwater arrival draft of no more than 40 feet (approximately 12 meters), which the LNG Ship can safely reach, lie safely berthed and load safely afloat at all times, and safely depart, fully laden; facilities capable of transferring LNG at a rate of no less than eleven thousand four hundred (11,400) Cubic Meters per hour at the Delivery Point. With three (3) LNG transfer arms each having a reasonable operating envelope to allow for ship movement and manifold strainers of sixty (60) mesh.

All marine activities (including loading operations) will be governed by the Cameron Marine Terminal Manual. Buyer shall comply with,and shall use Reasonable Efforts to ensure any LNG ship, tug service provider and marine services shall comply with, the terms of the Marine Terminal.

ETA Notices and Berthing Assignments:

1. ETA Notices shall be issued in accordance with Section 3.6 of the Marine Terminal Manual.

2. NOR Effectiveness:

(a) NOR Tendered Before Scheduled Arrival Window / Early Arrival. If the LNG Ship tendered a valid NOR prior to the Scheduled Arrival Window, the LNG Ship's Nor shall become effective at the earlier to occur of (i) the start of the relevant Scheduled Arrival Window; and (ii) the LNG Ship becoming all fast;

(b) NOR Tendered During Scheduled Arrival Window / On-Time Arrival. If the LNG Ship tendered a valid NOR within the Scheduled Arrival Window, the LNG Ship's NOR shall become effective at the time such LNG Ship tendered such NOR; or

(c) NOR Tendered After Scheduled Arrival Window / Late Arrival. If (i) the LNG Ship tendered a valid NOR after the Scheduled Arrival Window or otherwise achieved a late arrival, the LNG Tanker's Notice of Readiness shall become effective at such time the LNG Tanker is all fast.

3. Berthing Assignment:

(a) Buyer shall cause the LNG Ship to be berthed safely and expeditiously at the berth, and the Seller shall cooperate (and procure that the Terminal Operator cooperates) such berthing.

(b) Safety. Notwithstanding the foregoing provisions, operator of Seller's Facilities may refuse to allow the LNG Tanker to berth, if such operator reasonably determines that the berthing of the LNG Tanker would affect the safe operations of all or any portion of Seller's Facilities.

Loading:

1. The Parties shall cooperate to commence and complete loading of the LNG Ship safely and as expeditiously as reasonably possible.

2. The laytime allowed to Seller for the loading of the LNG Ship ("Allowed Laytime") shall be:

Allowed Laytime, in hours: = 36 + (x/10,000)

Where x is the excess, if any, of the gross cargo containment capacity of each particular LNG Ship (expressed in Cubic Meters) over 150,000 m3.

3. Allowed Laytime shall be extended if there is any delay in loading of the LNG Ship after the start of Used Laytime as a result of:

(a) reasons attributable to Buyer, Transporter, the LNG Ship or its master, crew, or any third party outside of the reasonable control of Seller or for which the LNG Ship or Buyer is responsible;

(b) Pilot or a Governmental Authority (including any US Coast Guard activities related to, or mandated repairs to, an LNG Ship required to be completed before such LNG Ship's departure from the Berth);

(c) Adverse Weather Conditions;

(d) events of Force Majeure

(e) vessel traffic at the Calcasieu Ship Channel; and

(f) nighttime transit restrictions in the Calcasieu Ship Channel

(g) occupancy of the Berth by a prior (1) LNG Ship; or (2) LNG ship of any other user of the Seller's Facilities (but only to the extent such LNG ship for such other user of the Seller's Facilities tendered a valid NOR prior to or within its loading window and was scheduled by the Pilot to commence transit from the PBA to the Berth during its scheduled loading window, and is within the Allowed Laytime);

(h) unscheduled curtailment or temporary discontinuation of operations at the Seller's Facilities necessary for reasons of safety, except to the extent such unscheduled curtailment or temporary discontinuation of operations is due to Seller's failure to operate and maintain its facilities as a Reasonable and Prudent Operator.

4. Buyer shall ensure that the LNG Ship arrives at the Loading Port cold and ready for loading. For the avoidance of doubt, an NOR shall not be valid or effective if the LNG Ship does not arrive at the Loading Port cold and/or ready for loading.

5. Laytime used in loading the LNG Ship ("Used Laytime") shall mean the period of time (in hours) used by Seller to load an LNG Tanker and which shall begin to count when the NOR is effective and shall end when the be loading of LNG is deemed to be completed and all LNG loading and vapor lines have been disconnected from the LNG Ship and the LNG Ship has departed the berth.

6. If Used Laytime exceeds Allowed Laytime, then Seller shall pay demurrage to Buyer at the Daily Demurrage Rate in respect of the period by which Used Laytime exceeds Allowed Laytime, prorated for every hour of such delay, rounded to the nearest full hour.

7. After Completion of Loading, Buyer shall cause the LNG Ship to depart safely and expeditiously from the berth and Seller shall cooperate (and procure that the operator of the Seller's Facilities cooperates) to ensure the LNG Ship's safe departure from the berth.

8. If the LNG Ship delays in vacating the berth after the end of the Used Laytime for reasons attributable to Buyer, Transporter or the LNG Ship or the ship's master or crew, and as a result another LNG vessel (which would have commenced loading had this delay not occurred) is prevented from or delayed in berthing or loading, then (i) Buyer shall

reimburse to Seller all actual reasonable documented costs properly incurred by Seller as a direct result of such delay, up to but not exceeding a daily amount equal to the Daily Demurrage Rate and (ii) Seller or the operator of Seller's Facilities may direct the LNG Ship to safely and expeditiously vacate the berth and proceed to sea. In the event the LNG Ship fails to vacate the berth pursuant to this Section 8 and Buyer is not taking actions to cause it to vacate the berth, Seller or the operator of Seller's Facilities may effect such removal at the expense of Buyer.

APPENDIX C: GROSS-UP/GROSS-DOWN POSITION MATCHING

Gross-Up/Gross-Down shall mean the process by which the Exchange may at its sole discretion on the Allocation and Notice Day use to adjust the Buyer's physical position to match the Seller's position.

The Exchange shall allocate Notices of Intention to Deliver to Notices of Intention to Accept by matching size of positions, Loading Ports, and loading dates to the extent possible. Any excess or shortfall in the Buyer's physical position shall be within a threshold determined and published by the Exchange. Such excess or shortfall shall be subject to a cash adjustment based on an average of daily settlement prices during the month in which the Contract expires up to the Last Trading Day. The Buyer shall have the obligation to take delivery only of the physical quantity as adjusted after any excess or shortfall.