EXHIBIT

ENTERPRISE PRODUCTS EXPORT NATURAL GAS LIQUIDS MEASUREMENT PROCEDURES For PROPANE, PROPYLENE, AND BUTANES

ARTICLE I DEFINITIONS

Acronyms and capitalized terms used in this Exhibit, but not otherwise defined in the Agreement, have the following meanings:

- "Agreement" means the agreement to which this Exhibit is attached.
- "API" means the American Petroleum Institute.
- "ASTM" means ASTM International.
- "Barrel" means 42 Gallons.
- "Base-Line Meter Factor" means the meter proving factor established after meter installation or maintenance that meets API guidelines for uncertainty and is the reference prove from which subsequent meter proves are compared.
- "Customer" means Enterprise's counterparty in the Agreement.
- "Daily" means an action that occurs on a Day-by-Day basis at a specific time.
- "Day" means a period commencing at a local time on one calendar day agreed on by all Parties involved and ending at the same time on the next calendar day.
- "DCF" means the dimensionless number obtained by dividing the density as determined by the use of the Pycnometer (or such similar device) by the density as measured by the densitometer.
- "EVP" means the equilibrium vapor pressure.
- "Flowing Day" means a Day during which the stream to be measured actually flows.
- "Gallon" means a United States Gallon of 231 cubic inches of liquid at 60 degrees Fahrenheit and at the EVP of the liquid.
- "g/cc" means grams per cubic centimeter.
- "GPA" means GPA Midstream.
- "Inferred Mass Combined Factor Shift" means the absolute value of the sum of the Meter Factor shift and the DCF factor shift when used in inferred mass systems.
- "Meter Factor" means a dimensionless term obtained by dividing the gross standard volume or mass of liquid passed through the meter (as measured by a prover during proving) by the corresponding meter indicated volume at standard conditions. For subsequent metering operations,

the throughput or gross measured volume or mass is determined by multiplying the indicated volume or mass registered by the meter times the Meter Factor.

- "Month" means a calendar month.
- "MPMS" means the Manual of Petroleum Measurement Standards as published by the API.
- "psig" means pounds per square inch gauge.
- "Pycnometer" means a double-walled, high-pressure vessel used to prove a densitometer.
- "Requesting Party" means the Party requesting the applicable data.
- "Sending Party" means the Party providing the applicable data.

ARTICLE II DESIGN AND INSTALLATION

Section 2.1 General

- A. Enterprise's methods, standards, and Measurement Policy shall at a minimum meet relevant industry standards.
- B. Enterprise's intent is to design, operate, and maintain its custody transfer measurement facilities in a manner to meet or exceed the criteria set out in the MPMS and the Enterprise Measurement Policy and Procedures, to comply with the Enterprise Measurement Engineering Standards, and to meet or exceed all pertinent governmental regulations.
- C. Natural gas liquids, including non-refrigerated ethane, demethanized mix (y-grade), propane, ethane-propane mixes, propylene, butanes, isomers of butene, and natural gasoline, delivered to or received by Enterprise shall be measured by either volumetric or mass measurement procedures, as determined solely by Enterprise, using a flow meter described in MPMS Chapter 5.
- D. The measuring facility shall be operated at a pressure greater than the EVP of the fluid at flowing conditions to ensure the stream is in a liquid state and contains no vapor, as determined by the appropriate chapter of the MPMS and the Enterprise Measurement Engineering Standards.
- E. All equipment employed in metering and sampling, and all equipment upstream and downstream of the measurement station, which might affect quantity and quality determinations, must be approved by Enterprise as to the type, materials of construction, method of installation, and maintenance. Due consideration shall be given to the operating pressure, temperature, and characteristics of the product being measured.
- F. References to any API, GPA, ASTM, or similar publications encompass the latest edition, revision, or amendment thereof. From time to time, these chapters and sections are subject to change by their respective publishers, and such changes will supersede the specific references contained herein.

Section 2.2 Measurement Equipment and Systems

A. Flow Meters. Flow meters shall be installed in accordance with MPMS Chapter 5.

- B. Densitometers and Density Determination.
 - 1. Enterprise does not allow the use of digital density meters.
 - 2. Densitometers shall be calibrated at the same frequency as flow meters.
 - 3. Where required, densitometers, including Coriolis meters used for determining flowing density, shall be installed and calibrated in accordance with MPMS, Chapter 9.4. The output shall be connected directly into a flow computer capable of internally converting the densitometer's output signal to corrected flowing density in g/cc. Proving is to be by entrapping a sample of the flowing stream at system conditions in a Pycnometer. The connections for the Pycnometer shall be installed in such manner as to ensure the same representative sample introduced to the densitometer is captured by the Pycnometer. The accuracy of the densitometer shall be verified at the time of the meter proving or when accuracy is in question. The accuracy of the densitometer must be within +/- 0.001 g/cc over the required range and repeatable to +/- 0.0005 g/cc.
 - 4. Thermowells shall be installed to allow monitoring of the inlet and outlet temperature of the Pycnometer during calibration.
 - 5. During a densitometer calibration, the difference between all outlet temperatures and pressures must be within ± -0.2 °F and ± -5.0 psi of each other during the proof test.
 - 6. For polymer grade propylene measurement, a density calculated using MPMS Chapter 11.3.3.2 may be used for density determination.
 - 7. For chemical grade propylene measurement, a density calculated using MPMS Chapter 11.3.3.2 may be used for density determination. When this calculated density is used, the Meter Factor shall be adjusted by a factor of 0.9987¹ to account for the composition changes.
 - 8. For High Purity Isobutylene measured by a mass meter producing a mass pulse output, and mass proved, the meter does not need a densitometer.
 - 9. Under no circumstances will a density measurement be utilized for transaction calculations without a proving or verification of the function during the ticket period.
 - 10. Verification and calibration data will be supplied to Customer.
 - 11. The proving intervals, tolerances, repairs, and methods of correction are the same as those provided elsewhere in this Exhibit, and the average of three successive Pycnometer provings will establish product flowing density, provided: (1) the three successive provings agree within 0.0005, and (2) the average of the three tests is within 0.0015 of the previously accepted calibration factor.
- C. Temperature Transmitters. Temperature transmitters shall be verified at the time of the meter proving using a certified thermometer or precision electronic temperature device. Temperature transmitters must exhibit a discrimination of at most 0.1° F, or better, and a

3

¹ Based on the work of J.E. Gallagher, Shell Pipeline Corporation, "Chemical-Grade Propylene Density Measurement," July, 1983.

variation from a certified electronic or mercury liquid-in-glass thermometer no greater than 0.5° F.

- D. Pressure Transmitters. Pressure transmitters shall be verified at the time of meter proving using a reference gauge to ensure current readings exhibit pressure discrimination of not more than 1.0 psig, and the variation from a certified test gauge does not exceed 3.0 psig.
- E. Flow Computers. Flow computers shall be capable of accepting pulses from the flow meter transmitter and signals from the pressure, temperature, and density transmitters. The flow computer shall convert, as required, and totalize these signals into flowing density, corrected flowing density, indicated volume, gross volume, mass, specific gravity at 60° F, and net volume. The flow computer and its operation shall comply with MPMS Chapter 21. For net volume determinations (for most products), the flow computer shall utilize the latest ASTM, API, and GPA standards for temperature and pressure corrections that are applicable to the product being measured. The weight of water shall be as provided in the latest version of GPA 2145.
- F. Composite Sampling Systems. Composite sampling is required for products transacted on a component Barrel basis and for quality verification of any product. If composite sampling is required, then the composite sampling system shall be installed and operated in accordance with GPA Standard 2174. The composite sampler shall be operated to collect flow-proportional samples, based on indicated volume. These samples shall be accumulated in and removed from floating-piston cylinders with mixing capability.

ARTICLE III ACCOUNTING

- Section 3.1 Custody Transfer Tickets for Volume Products. For products measured on a volume basis, Seller shall furnish to customer custody transfer tickets identifying the product and stating the net volume in barrels of product measured, and all factors associated with its production.
- Section 3.2 Custody Transfer Tickets for Mass-Basis. For products measured on a mass basis, Seller shall furnish to customer custody transfer tickets identifying the product, stating the total mass measured in pounds, showing product analysis, and showing equivalent volume in Barrels of liquid components computed at standard conditions (if required). The liquid volume will be based on the analysis of product removed from the composite sampler for the same time period in which the mass was totalized.

ARTICLE IV MAINTENANCE AND OPERATIONS

Section 4.1 Measurement Basis

A. Mass Measurement

1. Inferred Mass: Inferred mass measurement is accomplished utilizing a flow-proportional composite sampler (if required), volumetric flow meter, densitometer, and flow computer to convert gross volumetrically measured Barrels using density in g/cc at flowing conditions, and corrected for instrument error, to total pounds mass according to the following formula:

Total Pounds = Indicated Barrels x Meter Factor x Flowing Density (g/cc) x 350.5069 x DCF

Where:

350.5069 is a conversion factor for converting g/cc to pounds/Barrel.

- 2. Direct Mass: Coriolis measurement is accomplished by utilizing a Coriolis meter and a flow computer to accumulate mass pulses from the flow meter transmitter and report in pounds. Measured pounds mass is calculated according to MPMS Chapter 5.6.
- B. Volumetric Measurement. Volumetric measurement may be accomplished utilizing a flow computer, a flow meter outputting volume pulses, and temperature and pressure transmitters. Where applicable, a densitometer shall be installed. In the case of purity products, Enterprise reserves the right to use a fixed specific gravity at 60° F and 14.696 psia in lieu of a densitometer for flow calculations. The proper API, ASTM, and GPA standards shall be used to calculate and totalize net Barrels.

Section 4.2 Provings and Tolerances

A. General

- 1. Meter provings, calibration of instruments, and maintenance of measurement equipment will normally be performed by Enterprise personnel, but these functions may be delegated to responsible third-party contractors under the direction of an Enterprise representative.
- 2. All provings shall be by the applicable MPMS standard.
- 3. For meters outputting a mass pulse:
 - i. The prover shall be equipped with a densitometer installed and proved in accordance with MPMS Chapter 9.4. However, for polymer and chemical grade propylene, MPMS Chapter 11.3.3.2 may be used to determine flowing density.
 - ii. The Coriolis meter shall be proved as an inferred mass proving in accordance with MPMS Chapter 5.6.
- 4. For meters outputting a volume pulse:
 - i. A live flowing density signal or fixed specific gravity at 60° F shall be used in the proving calculations.
 - ii. The density measurement, if present, shall be verified using standard practices as outlined in MPMS Chapters 9.4.
- 5. Unless otherwise impractical, no work shall be performed on the measuring element of a meter without first proving the meter.

B. Proving Intervals

1. Each meter shall be proven when initially placed into service and immediately prior to and after maintenance.

- 2. Subsequent provings shall be made at least every 31 Flowing Days, not to exceed 45 Flowing Days. However, if operational issues, weather, or unavailability of a prover or prover contractor prevent the proving within 31 Flowing Days, then the proving interval may be extended to 45 Flowing Days.
- 3. If the consistency of the Meter Factor allows, and both Parties agree, the proving interval between provings may be extended to up to six months.
- 4. If a Party requests an unscheduled prove, then such Party shall pay for all costs of the unscheduled prove unless the prove determines the instrumentation is outside of the applicable tolerances. Each Party shall allow the other Party to witness all provings made to measurement facilities. Proving will be conducted monthly or more frequently as the Parties may elect.

C. Meter Factor

- 1. When a meter is proved after initially being placed in service, a Base-Line Meter Factor shall be established.
- 2. If any maintenance is performed on a meter or a meter is replaced, a new Base-Line Meter Factor shall be established.
- 3. The new Meter Factor shall be used after each successful proving if it meets the proving criteria herein.
- D. Ticket Corrections. If the new Meter Factor deviates from the previous Meter Factor under like operating conditions by more than plus or minus 0.0025, then 1/2 of the volume measured since the previous proving shall be corrected using the new Meter Factor. If the time of malfunction can be determined by historical data, then the volume measured since that point in time shall be corrected using the new Meter Factor. The new Meter Factor may not be used to correct volumes measured more than 31 Flowing Days prior to the new proving, unless the Flowing Days between proves exceeds 31 Flowing Days, in which case the correction shall be for the Flowing Days between proves. If a correction is required, then a correction ticket shall be issued for the quantity corrected.
- E. Inferred Mass Combined Factor Shift: The mass measurement objective for inferred mass meters is 0.25% accuracy. In the inferred mass equation, both the Meter Factor and DCF are weighted equally. Therefore, a corrected meter ticket will only be written when the absolute value of the sum of the Meter Factor shift and DCF shift is greater than 0.0025. The following are examples:
 - 1. Example 1: A meter exhibiting a shift in Meter Factor of 0.0024 combined with a densitometer exhibiting a DCF shift of -0.0018, would not require a meter ticket correction, as the sum of these two shifts results in a total factor shift of 0.0006.
 - 2. Example 2: A meter exhibiting a shift in Meter Factor of -0.0024 combined with a densitometer exhibiting a DCF shift of -0.0018, would require a meter ticket correction, as the sum of these two shifts results in a total shift of 0.0042.

F. Corrective Actions

- 1. If, as a result of a meter proof, a new Meter Factor deviates more than 0.0025 from the previous Meter Factor but less than 0.0050 from the Base-Line Meter Factor, then Enterprise's field representative shall determine the corrective action, if any, to be taken.
- 2. If, as a result of a meter proof, the new Meter Factor deviates 0.0050 or more from the Base-Line Meter Factor, then the Enterprise field representative shall determine the corrective action, if any, to be taken, including removal, inspection, cleaning of the internals, repairing, zero verification, and replacing. If there is build-up on the internals, then the element or meter shall be cleaned and the meter re-proved. If physical repairs are made (e.g., replacement of a turbine rotor), then the meter shall be re-proved to establish a new Base-Line Meter Factor.
- 3. For mechanical flow meters requiring a wear-in period, after a 24-hour wear-in period, the meter shall be re-proved and if the Meter Factor changes more than plus or minus 0.0025 from the new Base-Line Meter Factor, then 1/2 of the volume measured shall be corrected using the latest Meter Factor.
- 4. For Coriolis meters, if the zero changes or the meter is cleaned, repaired, or replaced, then the meter shall be re-proved to establish a new Base-Line Meter Factor. The meter shall be zero verified and, if necessary, re-proved. If the Meter Factor changes more than plus or minus 0.0025 from the new Base-Line Meter Factor, then 1/2 of the volume measured shall be corrected using the latest Meter Factor.
- G. Enterprise or its designee shall record all required corrections to measured volumes and shall describe the findings, method of repair, and calculations used in making the correction on the meter proving report. A correction to the ticketed amount shall be issued.
- H. If Customer's representative is not present during the proving, then Enterprise shall, if requested by Customer, within two business Days: (i) notify Customer of the findings; (ii) provide Customer with a meter proving report stating the findings, method of repair, and calculations used in making the correction; and (iii) provide Customer with a correction ticket for the amount corrected.

Section 4.3 Custody Measurement Station Failure

- A. If a failure occurs on a custody measurement station or the station is out of service while product is being delivered, then the volume shall be determined or estimated (as mutually agreed to by the Parties) by one of the following methods in the order stated:
 - 1. by using data recorded by any accurately registering check measuring equipment;
 - 2. by correcting the error if the percentage error can be ascertained by calibrations, tests, or mathematical calculations; or
 - 3. by using such other method as the Parties agree upon.

Section 4.4 Sampling Procedures

- A. Flow proportional composite samples shall be removed from the composite sampler at the same time the meter is read and a custody ticket issued.
- B. Samples shall be analyzed pursuant to the appropriate test method specified by the applicable product specifications or contract.
- C. Three samples should normally be taken from the composite sampler, with one sample for Enterprise, one for the Customer (if requested), and one for retention as a referee for possible dispute resolution. (The Customer should return Enterprise sample containers, cylinders, etc.) If Enterprise has taken custody, then its sample shall be analyzed and the analysis used to account for transfer. If Customer has taken custody, then its sample shall be analyzed using the Enterprise-specified test method and the analysis used to account for transfer.
- D. If requested, the referee samples shall be held for a period as agreed upon by the connecting Party or a minimum of 30 Days from the date of sampling.
- E. If a malfunction of the sampling occurs resulting in no sample being taken or in an unrepresentative sample being obtained, then the following procedure shall be utilized in the order stated:
 - 1. the sample collected by any on-stream, back-up sampling device that has extracted a sample in proportion to the volume delivered shall be used;
 - 2. an average of the composite samples taken over a mutually agreed time frame, not to exceed the last three months of properly sampled deliveries shall be used;
 - 3. Daily grab samples shall to be used for the time in question; or
 - 4. such other method as the Parties may agree upon shall be used.
- F. Quality Testing. Where multiple sampling methods are allowed, Enterprise, in its sole discretion, will determine the preferred method.
- G. Cost of Referee Sample Analysis. If, as a result of the third-party laboratory analyzing the referee sample, the Enterprise analysis is used, then Customer is responsible for the applicable third-party laboratory costs. If, as a result of the third-party laboratory analyzing the referee sample, Customer analysis is used, then Enterprise is responsible for the applicable third-party laboratory costs.

ARTICLE V MEASUREMENT DISPUTE RESOLUTION

Section 5.1 Mass and Volume Metering. If both the Enterprise metering facility and the Customer metering facility are installed, operated, and maintained according to their respective measurement standards, both of which shall meet or exceed API standards, and the difference in measurement of mass or volume is less than or equal to 0.25%, then Enterprise's measurement of mass or volume, whichever the case may be, will be deemed correct. If the difference is more than 0.25%, then Enterprise and Customer shall resolve the dispute by working together, using the best available information.

Section 5.2 Analytical. Analytical disputes must be based upon laboratory analysis, using the Enterprise-specified test method, of both the Enterprise sample and the Customer sample from the custody sampler (as described above). After analyzing their respective samples according to the Enterprise-specified test method, if Customer and Enterprise are in disagreement, then they shall each send the other a copy of their respective sample results, and if the sample results differ by more than the GPA 2186/2177 reproducibility limits for one or more components, then the referee sample shall be taken to a mutually agreed upon third-party laboratory, which shall analyze the sample in accordance with the Enterprise-specified test method. If the third-party laboratory and Enterprise analyses disagree by more than the GPA 2186/2177 reproducibility limits for one or more components, then the third-party lab results shall be accepted by Customer and Enterprise as final and conclusive for the composition of the stream, and Enterprise shall be responsible for the cost of the third-party laboratory performing the analysis. If the third-party laboratory and Enterprise analyses agree within the reproducibility limits of GPA 2186/2177, then the Enterprise analysis shall be accepted by Customer and Enterprise as final and conclusive for the composition of the stream, and the Customer shall be responsible for the cost of the third-party laboratory performing the analysis.

Section 5.3 All other measurement disputes. Enterprise and Customer shall work together, using the best available information, to resolve the dispute.

ARTICLE VI WITNESSING

Section 6.1 Provings. Enterprise and Customer are each be responsible for proving its respective measurement facilities. Each Party shall allow the other Party to witness all provings. For scheduled measurement facilities provings, a Party shall give the other Party at least 72 hours' advance written notice of the date and time of the scheduled prove.

Section 6.2 Use of out-of-tolerance equipment. A Customer's witness signature does not constitute the approval of the use of out-of-tolerance equipment, but said signature does attest to the validity of the proving report.

Section 6.3 Sampling. Each Party may witness the other Party's sampling. The Party performing such sampling shall provide the other Party at least 72 hours' advance notice of any such sampling.

ARTICLE VII AUDIT RIGHTS

Each Party and its duly authorized representatives shall have access to the accounting records and other documents maintained by the other Party which relate to the measurement, composition or handling of the product being delivered under this Agreement. Each Party may audit such records once a year at any reasonable time or times within 24 months of the rendition of any statement or invoice forming the basis of such claim, and neither Party shall make claim on the other for any adjustment after said 24 month period. The Party requesting the audit must give the other Party at least 30 days' written notice.

ARTICLE VIII DATA ACCESS

Section 8.1 Data Access. Requesting Party may access Sending Party's electronic measurement equipment to acquire certain data as further described below. Requesting Party will only have access to such electronic measurement data in a format established by Sending Party, which will not interfere with the operation of Sending Party's facilities. Requesting Party recognizes that the data acquired from any electronic equipment is "raw" data, subject to further refinement, correction, and/or interpretation. Sending Party has no obligation to provide data to Requesting Party during times of maintenance, repair, or other activities by Enterprise that interrupt operations and/or due to events of Force Majeure. Sending Party has no obligation to advise Requesting Party of any such interruptions, or otherwise to verify the integrity of such data at any time. Sending Party shall make necessary connections to its electronic measurement equipment to provide Requesting Party with the following categories of data:

- A. pressure;
- B. temperature;
- C. instantaneous flow;
- D. total flow today; and
- E. such other data as the Parties may agree to in writing.

Section 8.2 Data Transfer. Data transfer will occur via a serial data link between Enterprise and Customer. Customer is responsible for the data and communications beyond this connection.

Section 8.3 SCADA. Flow and metering data gathered and sent via SCADA monitoring equipment will not be used to determine Product quality and quantity for custody transfer calculations.

ARTICLE IX REFERENCES

ARTICLE IX RIGHT TO CHANGE

Enterprise reserves the right, from time to time, to make: (1) non-substantive changes to this Exhibit; and (2) changes to this Exhibit driven by industry practice, governmental regulations, or Enterprise's reasonable operational requirements. Such changes will be made on a non-discriminatory basis to similarly situated Customers.