

MEASUREMENT RULES

PART I: MEASUREMENTS AND TESTS FOR GAS AT THE DELIVERY POINT

1. **Applicability**

The measurement procedures in Part I of this Schedule 2 shall apply to the measurement of quantities (volume, energy) of Gas delivered by Regas Co for Customer's account at the Delivery Point.

2. **Unit of Measurement**

All Gas delivered at the Delivery Point shall be measured in MMBtus and KJoules. For reference purposes, such measured amounts may be converted to 9300 Kcal/Sm³ using a conversion factor of 1 calorie equals 4.1885 Joules at 15 degrees Celsius.

3. **Metering**

(a) Metering Equipment. Regas Co shall supply, operate and maintain (or cause to be supplied, operated and maintained at or near the Delivery Point) the following:

- (i) meters with redundancy and other equipment as is necessary to accurately measure the volume of Gas delivered at the Delivery Point hereunder;
- (ii) device for collecting samples and for determining the quality and composition of Gas delivered at the Delivery Point hereunder; and
- (iii) and any other measurement or testing devices which are necessary to perform the measurement and testing required hereunder at the Delivery Point

(collectively, the "Downstream Metering Equipment"). The Downstream Metering Equipment shall be designed and installed in accordance with and comply with the American Gas Association, Report No. 9 and any subsequent modification and amendment thereof.

(b) Check Measurement Equipment and Access. Customer may, at Customer's expense, install and operate, at or near the Downstream Metering Equipment, independent measuring equipment similar to the Downstream Metering Equipment ("**Check Metering Equipment**") to monitor the accuracy of the measurements made by the Downstream Metering Equipment. Check Metering Equipment will be installed and

operated by Customer so that it does not interfere with the operation of the Downstream Metering Equipment.

- (c) General. A pressure transmitter shall be installed on each meter tube to measure the static pressure. The temperature of the flowing Gas shall be measured on each meter tube by a platinum resistance thermometer installed in a thermowell, in accordance with the instructions of the American Gas Association, Report No. 9, so that the probe tip is in the center one-third of the pipe. Each meter run shall be provided with a dedicated microprocessor-based flow computer system powered by an appropriate back-up power supply.
- (d) Measuring and Density Standards. Gas shall be measured by Regas Co using ultrasonic meters. Ultrasonic meters shall be constructed and operated, Gas shall be measured, and properties shall be determined in accordance with American Gas Association, Report No. 9 and any subsequent modification and amendment thereof. The compressibility and density shall be calculated in accordance with the latest revision of the American Gas Association, Report No. 8. Metering equipment shall include the use of flow conditioners, straightening vanes, and pulsation dampening devices where necessary. Meter tubes shall be of a design incorporating suitable access for periodic internal inspection, including access for internal inspection of the upstream side of the flow conditioner. Electronic gas measurement with a continuous readout of pressure, temperature, and Gas flow rate shall be used. All computations shall be made as prescribed in the above cited standard.

4. Determination of Gross Heating Value

- (a) Gas Composition. The heating value of the Gas delivered by Regas Co at the Delivery Point shall be determined by gas chromatograph, in accordance with the instructions of the American Gas Association, Report No. 5. The composition of the Gas shall be continuously measured by on-line chromatographs. The Gross Heating Value of the Gas shall be calculated using results from the on-line chromatograph. The chromatographs will analyze all hydrocarbon components, up to and including at least the hexanes+ group, and inerts having a concentration of greater than 0.002 mol percent. The determination of Gas composition shall be in accordance with the NCh 2380 Standard. All physical properties used in quality and quantity calculations shall be based on these compositional analyses, or the latest revision thereof. Water vapor content shall be included in the component analyses. The sample analysis cycle time shall be less than six (6) minutes. The maximum sample transport time from sample probe to analyzer shall be four (4) minutes. In the event of failure of the on-line Gas chromatographs, chromatograph analysis of

samples collected proportional to the flow through the meters shall be used. Auto-calibration of the Gas chromatograph shall be conducted on a weekly basis or as otherwise mutually agreed by the Parties.

- (b) Deviation Checks. Monthly gas chromatograph deviation checks shall be made on Gas composition mole percentages and resulting Gross Heating Value. 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 five (5) BTU per Standard Cubic Foot of the known Gross Heating Value. If the deviation exceeds the tolerance stated, Gross 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 the point that the error occurred cannot be determined, previous analyses will be corrected for one-half the period since the last verification test, not to exceed a correction period of six Months.
- (c) Corrections for Water Content. The heating value on a dry basis for Gas containing water shall be corrected in accordance with standards followed by the American Gas Association. Moisture content of flowing Gas shall be determined as often as found necessary in real practice by use of a mutually acceptable calculation or test instrument.

5. Operating Procedures

- (a) Notice. Prior to conducting operations for measurement, calibration, sampling and analysis provided in this Schedule 2, 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, calibration, sampling and analysis shall be witnessed and verified by an independent surveyor mutually agreed upon by Customer and Regas Co. 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 two (2) years after such measurement and computation.

6. Verification

At least once each Month, and in addition, from time to time upon at least two (2) weeks prior written notice by either Party to the other, Regas Co shall verify or cause to be verified consistent with the requirements of the manufacture's specifications for the applicable piece of equipment the accuracy of the Downstream Metering Equipment. When as a result of such test any of the Downstream Metering Equipment is found to be calibrated within the accuracy provided by the manufacturer in the specification for such equipment, no adjustment shall be made to the Downstream Metering Equipment or the prior readings recorded from such equipment. If the testing of the Downstream Metering Equipment demonstrates that any meter is out of calibration by more than the accuracy provided by the manufacturer in the specifications for such equipment, the applicable Downstream Metering Equipment readings for the actual period during which out of calibration measurements were recorded shall be estimated as follows, in descending order of priority:

- (a) by using the registration of any Check Metering Equipment if installed and accurately registering;
- (b) by correcting the error if the percentage of error is ascertainable by calibration, test, or mathematical calculation; or
- (c) by estimating the quantity of delivery by measuring deliveries during prior periods under similar conditions when any meter was registering accurately.

If the actual period that such equipment has been out of calibration cannot be determined to the mutual satisfaction of Regas Co and Customer, the adjustment to the recorded readings shall be for a period equal to one-half of the time elapsed since the most recent test.

7. Costs

The cost of the Monthly testing and calibration of the Downstream Metering Equipment shall be borne by Regas Co. The cost of any testing and calibration of the Downstream Metering Equipment beyond the Monthly testing and calibration permitted above shall also be paid by Regas Co, unless the request to test any of the Downstream Metering Equipment is made by Customer and the results of such test requested by Customer demonstrate that the Downstream Metering Equipment is within the accuracy provided by the manufacturer in the specification for such equipment, in which case the cost of such testing and calibration shall be borne by Customer. Each Party shall comply with any reasonable request of the other Party concerning the sealing of the Downstream Metering Equipment, the presence of a representative of Customer when the seals

are broken and tests are conducted, and other matters affecting the accuracy, testing and calibration of the Downstream Metering Equipment.

PART II MEASUREMENTS FOR EXPORT LNG AT THE TLF DELIVERY POINT

1. Applicability

The measurement procedures in this Part II of this Schedule 2 shall apply to the measurement of quantities (weight, energy) of Export LNG delivered by Regas Co. for Customer's account at the TLF Delivery Point.

2. Unit Of Measurement

All Export LNG delivered at the TLF Delivery Point shall be measured in Metric Tons and converted to MMBTUs using the information provided by the TLF chromatograph.

3. Metering

(a) Metering Equipment. Regas Co. shall supply, operate and maintain (or cause to be supplied, operated and maintained at or near the TLF Delivery Point) the following:

- (i) truck scales and other equipment for accurately measuring the mass of Export LNG delivered at the TLF Delivery Point; and
- (ii) any other measurement or testing devices which are necessary to perform the measurement and testing required at the TLF Delivery Point

(Collectively the "TLF metering equipment"). The TLF metering equipment shall be designed and installed in accordance with and comply with the International Society of Weighing & Measurement Standards or the International Organization of Legal Metrology (OIML).

(b) Check Measurement Equipment and Access. Customer may, at Customer's expense, install and operate, at or near the TLF Metering Equipment, independent measuring equipment similar to the TLF Metering Equipment ("**TLF Check Metering Equipment**") to monitor the accuracy of the measurements made by the TLF Metering Equipment. Check Metering Equipment will be installed and operated by Customer so that it does not interfere with the operation of the TLF Metering Equipment.

4. Determination of Gross Heating Value

- (a) Export LNG Composition. The heating value of the Export LNG delivered by Regas Co at the TLF Delivery Point shall be determined by a chromatograph, in accordance with the instructions of the American Gas Association Report N° 5. The composition of the Export LNG shall be continuously measured by on line chromatograph. The Gross Heating value of the Export LNG shall be calculated using results from the on line chromatographs. The chromatographs will analyze all hydrocarbon components, up to and including at least the hexanes group, and inerts having a concentration of greater than 0.002 mol percent. The determination of composition shall be in accordance with the Nch 2380 Standard. All physical properties used in quality and quantity calculations shall be based on these compositional analyses, or the latest revision thereof. The sample analysis cycle time shall be less than six (6) minutes. The maximum sample transport time from sample probe to analyzer shall be four (4) minutes. In the event of failure of the on line chromatograph, representative chromatograph analysis of the LNG being exported will be used. Auto calibration of the gas chromatograph shall be conducted on a weekly basis or as otherwise mutually agreed by the parties.
- (b) Deviation Checks. Monthly chromatograph deviation checks shall be made on composition mole percentages and resulting gross heating value. Analyses of 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 resulting calculated Gross Heating Value is within plus or minus five (5) BTU per Standard Cubic Foot of the known Gross Heating Value. If the deviation exceeds the tolerance stated, Gross 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 the point that the error occurred cannot be determined, previous analyses will be corrected for one-half the period since the last verification test, not to exceed a correction period of six months.

5. Weight Determination

- (a) Weighing. The payload value of the Export LNG delivered by Regas Co at the TLF Delivery Point shall be determined by truck scale, in accordance with the instructions of the International Society of Weighing & Measurement or the International Organization of Legal Metrology (OIML). The Export LNG net payload fed to the tanker will be given by the difference between initial weight and the final weight of the truck.

- (b) Deviation Checks. Annual truck scale deviation checks shall be made. Weighing precision, when procedures are in accordance with the above mentioned standards having been applied, will be considered acceptable if the deviation is within plus or minus 30 kg. If the deviation exceeds the tolerance stated, weight previously calculated will be corrected immediately. The linearity, weight concentration and repetitivity of the measurements will be also checked. If possible to be determined, previous measurements will be corrected to the point where the error occurred.

6. Operating Procedures

- (a) Notice. Prior to conducting operations for measurement, calibration, sampling and analysis provided in this Schedule 2, 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; provide 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, Calibration, Sampling and analysis shall be witnessed and verified by an independent surveyor mutually agreed upon by Customer and Regas Co. 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 sample, or causing the same to be taken, and made available to the other party for a period of not less than two (2) years after such measurement and computation.

7. Verification

At least once a year, and in addition, from time to time upon at least two (2) weeks prior written notice by either party to the other, Regas Co shall verify or cause to be verified consistent with the requirement of the manufacture's specifications for the applicable piece of equipment the accuracy of the TLF Metering Equipment. When as results of such test any of the TLF metering Equipment is found to be calibrated within the accuracy provided by manufacturer in the specification for such equipment, no adjustment shall be made to the TLF Metering Equipment or the prior readings recorded from such equipment. If the testing of the TLF Metering Equipment demonstrates that any meters is out of calibration by more than the accuracy provided by the manufacturer in the specifications for such equipment, the applicable TLF Metering Equipment readings for the actual period during which out of

calibration. Measurements were recorded shall be estimated as follows, in descending order of priority

- (a) by using the registration of any Check Metering Equipment if installed and accurately registering;
- (b) by correcting the error if the percentage of error is ascertainable by calibration, test, or mathematical calculation; or
- (c) by estimating the quantity of delivery by measuring deliveries during prior periods under similar conditions when any meter was registering accurately.

If the actual period that such equipment has been out of calibration cannot be determined to the mutual satisfaction of Regas Co and Customer, the adjustment to the recorded readings shall be for a period equal to one-half of the time elapsed since the most recent test.

8. Costs

The cost of the Annual testing and calibration of the TLF Metering Equipment shall be borne by Regas Co. The cost of any testing and calibration of the TLF Metering Equipment beyond the Annual testing and calibration permitted above shall also be paid by Regas Co, unless the request to test any of the TLF Metering Equipment is made by Customer demonstrate that the TLF Metering Equipment is within the accuracy provided by the manufacturer in the specification for such equipment in which case the cost of such testing and calibration shall be borne by Customer. Each Party shall comply with any reasonable request of the other Party concerning the sealing of the TLF Metering Equipment the presence of a representative of Customer when the seals are broken and tests are conducted, and other matters affecting the accuracy, testing and calibration of the TLF Metering Equipment.

9. Disputes

Any Dispute arising under this Schedule 2 shall be submitted to arbitration in accordance with and to be governed by the terms of Section 18 of the Agreement.