



## **ACCESS CODE FOR TRANSMISSION**

### **Attachment D: Metering Procedures**

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## **1. Definitions**

All definitions used in this Attachment without being explicitly listed refer to the definitions listed in Attachment 3 of the Standard Transmission Agreement. The following definitions are not listed in Attachment 3 of the Standard Transmission Agreement, but shall have the following meaning in this Attachment D:

**Metering Facility Operator** shall mean the operator who operates, maintains and calibrates the metering and the quality insurance installations which are used inside the metering installations at a Connection Point.

**Metering Handbook** shall mean the technical documentation of applicable metering practices at a given Interconnection Point, as agreed between adjacent Transmission System Operators. Such documentation can be obtained with the TSO upon request.

## **2. Preamble**

In case the Transmission System Operator is not the Metering Facility Operator for a given Connection Point, measurement and testing shall be according to the metering procedures applicable for such Interconnection Point or Domestic Exit Point, in accordance with the relevant agreement between Transmission System Operator and such Metering Facility Operator. Such applicable procedures can be obtained with Transmission System Operator upon request.

In case the Transmission System Operator is the Metering Facility Operator for a given Connection Point, the following shall apply.

## **3. General**

The measuring equipment at the Connection Point shall be subject to applicable laws and regulations in force and relevant to the measurement and testing of Natural Gas for international gas sales or purchases or transmission.

Grid User shall have the right to be represented by the Grid User's Representative with regard to the Grid User's rights concerning measurement and testing at the Interconnection point.

All relevant details concerning measurement and testing at Domestic Exit Point are laid down in Annex 1 of the Connection Agreement approved by the CREG and published on the website of the TSO. All relevant details concerning measurement and testing at an Interconnection Point are laid down in the relevant Metering Handbook.

The measurement and testing equipment shall be designed, operated and calibrated so that, at any time, known systematic errors can and shall be corrected. Such corrections shall be made on the basis of an agreement between the parties.

## **4. Unit of measurement**

The unit of measurement at the Connection Point shall be normal cubic meter at reference conditions (1,01325 bar and 0°C) and GCV expressed in kWh/m<sup>3</sup>(n) (at 1,01325 bar and 25°C).

The quantity of Natural Gas (expressed in kWh) made available to Transmission System Operator by Grid User at the Interconnection Point and by Transmission System Operator to Grid User at the Domestic Exit Point or Interconnection Point shall be measured and computed by automatic equipment if available.

## **5. Equipment**

Transmission System Operator shall at the Interconnection Point, at its sole cost and expense, provide, maintain and operate or cause to be provided, maintained and operated all measurement and testing equipment which will be subject to applicable laws and regulations in force and relevant to the measurement and testing of Natural Gas for international gas sales or purchases or transmission.

## **6. Determination of Gross Calorific Value**

The GCV shall be measured by means, which are approved under applicable regulations as described, for Domestic Exit Points, in the Annex 1 of the Connection Agreement approved by the CREG and published on the website of the TSO, and for Interconnection Points, in the relevant Metering Handbook.

## **7. Tests and correction of errors**

### **7.1. At Interconnection Points**

The accuracy of the measurement equipment provided or caused to be provided by Transmission System Operator at the Interconnection Point shall be verified by Transmission System Operator at reasonable intervals as set forth in the relevant Metering Handbook, but the Transmission System Operator shall not be required to verify the accuracy of such equipment more frequently than once a Month. Grid User shall have the right to attend such verifications. Except in case of Emergency where Transmission System Operator shall give a shorter notice, Transmission System Operator shall give notice to Grid User ten (10) Business Days before the start of any such test.

All tests of such measurement equipment shall be made at Transmission System Operator's expense.

If any error in measurement equipment is found to exceed the technical tolerance, which shall in any case be lower than one decimal zero (1.0) per cent, then any previous recordings of such equipment shall be corrected to zero (0) error for any period which is known definitely, or agreed upon, but in the case where the period is not known or agreed upon, such corrections shall be for a period extending over one-half of the time elapsed since the date of the last test, or another correction period specified in the relevant Metering Handbook.

Following each test, the measurement equipment shall be adjusted if found to be necessary to record accurately and the said equipment shall be secured against unauthorised manipulations.

If, for any reason, meters are faulty or out of service, so that the quantity of the Natural Gas made available cannot be ascertained or computed from the reading thereof, the Natural Gas made available during the period during which such meters are out of service or faulty shall be determined upon the basis of the best data

available, using only the first feasible method of those listed hereunder in which order they appear below:

- a) by using the registration of any check measurement equipment if installed and accurately measuring;
- b) by adjusting for the error, if the extent of the error is ascertainable by calibration, test or mathematical calculation;
- c) by estimation on the basis of deliveries made during preceding periods under similar conditions when the equipment was registering accurately. For the purpose of said estimation, the Parties may agree upon using data from measurements not being performed by the equipment provided under section 6.

## **7.2. At Domestic Exit Points**

The Natural Gas redelivered at the Domestic Exit Point by Transmission System Operator, or the gas injected at the Domestic Point by the Local Producer, shall be measured and, as applicable, tested in accordance with the procedures described in the Annex 1 of the Connection Agreement approved by the CREG and published on the website of the TSO.

If, for any reason, meters are faulty or out of service, so that the quantity of the Natural Gas made available cannot be ascertained or computed from the reading thereof, the Natural Gas made available during the period during which such meters are out of service or faulty shall be determined upon the basis of the best data available by estimation on the basis of deliveries made during preceding periods under similar conditions when the equipment was registering accurately.