Approved with ERE Decision No. 207, of date 18.12.2017

REGULATION

ON THE QUALITY OF SUPPLY AND NETWORK SECURITY PERFORMANCE IN THE ELECTRICITY TRANSMISSION SYSTEM

PART I

GENERAL PROVISIONS

Article 1

Legal Basis

This Regulation is drafted supporting article 7 and article 19, letter "h" and "j" of Law no. 43/2015 "On Power Sector"; Law no.9902, dated 17.4.2008 "On customer protection", article 40; Electricity Metering Code and the Electricity Transmission Grid Code.

Article 2 Object

- 1. This regulation specifies the indicators for the electricity quality of supply, as well as the performance regarding the network security of the Transmission System Operator (OST), according to Law no. 43/2015 "On Power Sector"
- 2. TSO has the Public Service Obligation to meet the standard criteria of the quality of supply, specified by the Transmission Grid Code and this Regulation.

Article 3

ERE Responsibilities and Authority

- 1. Based on article 19 of Law no. 43/2015 "On Power Sector", Energy Regulator Authority (ERE) has the following responsibility and authority regarding the quality of electricity supply issues:
 - a) Publish the conditions on the quality of services provided by the system
 - b) Promote the improvements in the quality of service on power sector;
- 2. Based on article 25, point 2, letter "dh" of Law No. 43/2015 "On Power Sector", ERE shall include in its Annual Report submitted to the Assembly, within 31 March of the following year, information and data on the quality of supply. Therefore, the Licensee must provide quality of supply information to ERE according to Article 6 and 8 of this Regulation.

Article 4

Performance Indicators Definitions

Performance indicators uses on this Regulation are as follows:

"ERE" or "Energy Regulatory Authority" means the regulatory institution of the power sector, which operates according to Law no. 43/2015 "On Power Sector";

"Transmission System Operator or OST" means the juridical person responsible for operation, maintenance and development of the transmission system, including its interconnections with other cross-border systems, for ensuring the long term ability of the system to meet reasonable demands for the transmission of electricity;

"Supplier" means an electricity company licensed to perform the activity of supply;

"Customer" means a wholesale customer or final customer of electricity;

"End customer" means a customer purchasing electricity only for personal use.

"Non-household customers" means any natural or legal person purchasing electricity, which is not for household use, generators and wholesale customers.

"Public service obligation" means the obligation imposed to a licensee for performing a public service, related to the security and quality of supply, regulated prices in the power sector, energy efficiency, energy from renewable sources, environmental protection which does not distort the competition, except when necessary to ensure the public service in question;

Average Time of Electricity Supply Interruption (MTI) shall mean the metering indicators for the interrupted time of electricity supply in the system (hour per year).

$$AIT = \frac{8760 \times \sum_{i} E_{i}}{E_{t}}$$

Where E_z is the total energy supplied by the transmission system to customers (in MWh) and E_i the non-supplied energy (in MWh) for each incident.

"Energy Not Supplied (ENS)" is a measure of the total amount of energy (in MWh) that would have been supplied to the interrupted customers if there would not have been any interruptions. It is calculated as the sum of non-supplied energy due to each incident of outage.

$$ENS = \sum_{i} E_1$$

Where E_i = is the not supplied energy for each case

"Frequency Quality" (FQ) is a measure of the deviation of system frequency above and below the expected nominal value of the system $\frac{1}{3}$

frequency of 50 Hz, considering:

- 1. Nominal frequency in the power system of the country which operates synchronously with the European transmission network is 50 Hz.
- 2. TSO shall ensure that the permitted levels of frequency in the power system shall be in conformity with frequency quality requirements for the frequency quality according to the definitions of the Transmission Grid Code and ENTSO-e standards.
- 3. OST shall ensure regulation reserves to keep the frequency of the system in conformity with the situation of the system administering and monitoring the frequency in conformity with the procedures for managing the frequency and at any case implementing the plan for securing the power system, as defined on the Transmission Grid Code

"Notice Period for Planned Transmission System Interruptions" means the number of hours and the days in advance to issue the notification for the customers directly connected in the transmission system and Distribution System Operators (OSHEE), regarding the planned interruptions.

"Settling the Complaints regarding the Voltage Quality" means the percent of complaints for voltage deviations outside the limit specified in the Grid Code which are settled within a specified period of time on the "Regulation for Handling the Complaints Submitted by the Customers and Settling the Disputes between the Licensee, in Power and Natural Gas Sector". This indicator is calculated separately for urban and rural areas.

"Response Time to New Connection Requests" means the time needed to TSO to give a written response to the request for new connection. This may be computed especially according to various voltage levels of the connection point. The calculation of time shall take into consideration the respective procedures to handle the request for connection based on the "Regulation of the procedures for new connections and modification of the existing ones in the transmission system"

"System Average Interruption Duration Index (SAIDI)", commonly refers to the average duration of the interruption for the customers which are interrupted for a (year, quarter or six months) period of time. It is computed as the sum report for all the interruption duration for the interrupted customers with the total number of the customers, according to the following form;

$$SAIDI = \frac{\sum_{i=1}^{K} D_i \times N_i}{N_T}$$

Where: Ni = is the number of customers involved in service interruption "i"

N_T= is the total number of customers supplied during that year

Di = is the duration of service interruption "i"

K = total number of service interruptions

"Voltage Quality (VQ)" is a measure of the deviation of voltage above or below the expected nominal value for the network voltage, according to the definitions of the Transmission Grid Code. It is calculated separately for each nominal voltage and for urban and rural areas.

Any definition or other term used in this regulation, shall have the same meaning with the one used on Law no. 43/2015 "On Power Sector".

PART II QUALITY AND PERFORMANCE INDICATORS

Article 5

Indicators for Supply Quality Measures and Grid Security Performance from the Transmission System Operator

- 1. As follows are the Indicators for Supply Quality Measures that must be calculated by TSO and reported at ERE.
 - a. Average Interruption Time (AIT)
 - b. Energy not Supplied (ENS)
 - c. Frequency Quality (FQ)
 - d. Notification Period for the Planned Interruptions in the Transmission System
 - e. Response Time to New Connection Request
 - f. System Average Interruption Duration Index (SAIDI)
 - g. Voltage Quality (VQ)
 - h. Percent of the Complaints for Voltage Quality

Article 6

Reporting the Indicators for Supply Quality Measures and the Grid Security Performance from the Transmission System Operator

- 1. TSO is responsible to obtain all the data needed to calculate the Metering Indicators for the Quality of Supply specified on article 5 of this Regulation and keep information for periodic review by ERE. The data shall be calculated on a quarterly basis and progressively throughout the calendar year and the metering indicators for the quality of service shall be reported to ERE, not later than 30 days after the end of each quarter. For example, within January 30 of each year shall the reported the annual data progressively for the previous year (from January to December).
- 2. In order to have a baseline to access the metering indicators of the supply quality, TSO shall provide the data on the metering indicators for the supply quality and the security performance of the transmission grid, according to Article 5 of this Regulation, for the calendar year 2014 and as follows, no later than 90 days after this regulation enters into force. In the event the data for one or more metering indicators for the supply quality and security performance of the transmission grid, defined on article 5 of this regulation are not available, TSO shall inform ERE for this fact.
 - 3. Quarterly reporting shall be required for each quarter from the entry into force of this Regulation.

Article 7

Performance Standards for the Transmission System Operator

- 1. On table 1 of this Regulation are the performance standards for TSO related to the metering indicators for the quality of supply defined on article 5 of the Regulation. The expected Performance Levels shall be effective from 31 December 2018, by being reassessed in light of the performance exercised during this transitory period and the situation of the power sector.
- 3. TSO shall not be subject of the compensation request by the end-use customers connected in the Transmission Grid, regarding the failure to comply with the metering indicators for the supply quality and the grid performance in the transmission system, prior to 31 December 2018.
- 3. TSO shall propose at ERE the permitted level for the metering indicators of the supply quality and the security performance of the transmission system, not later than 31 September 2018.

4. On 2019, ERE shall review the performance exercised during 2017-2018 period, shall reassess the expected performance levels and approve the permitted level of the standard criteria for the supply quality and the security performance in the transmission system.

Article 8 Monitoring and Surveillance

- 1. ERE, acting according to its competence, shall ensure the monitoring and surveillance for the implementation of this Regulation.
- 2. The licensees, customers and all responsible persons, who by their actions or inactions, shall violate the standard criteria of the supply quality and grid security performance, approved in this Regulation, shall be responsible according to the definitions on "Power Sector Law".

Article 9

End use Customers Compensation

- 1. Beginning from 1 January 2019, the compensation of the end use customers connected on the transmission grid, in case of not respecting the standard criteria for the quality of supply and security performance of the electricity transmission system grid according to the definitions of this Regulation, shall be based on the Transmission Grid Code and the Transmission Service Agreement.
- 2. The Transmission System Operator is excluded from the obligation to compensate the end use customers in cases of system failure for reasons that do not come from TSO as may be major incidents, defined according to the incident classification level in conformity with the Operating Guide of ENTSO-e.

Article 10

Failure to Meet the Obligations

1. When one party fails to meet the obligation according to these rules and parameters, because of an event caused by a force majeure, shall inform ERE and all the affected parties, detailing the reasons for the inability to fulfill the obligations and the expected duration.

- 2. During the force majeure period the obligations of the parties shall be suspended.
- 3. If any party accesses that the declaration of the force majeure is unreasonable, may reflect the issue on ERE for review and ERE decision shall be final
- 4. If ERE determines that the reasons for failure to meet the obligations defined in this regulation, were not because of a force majeure, then the obligations of the claiming party shall be considered as suspended.

PART III

FINAL PROVISIONS

Article 11

Settling the Disputes

The disputes that arise as result of failure to implement these rules and parameters, shall be handled by ERE in conformity with the "Regulation for handling the complaints submitted by the customers and settling the disputes between the licensee on power and natural gas sectors".

Article 12

Review and Amendment of the Rules

This regulation is object of review and amendment with ERE Board Decision.

Article 13

Entry into Force

This regulation enters immediately into force after the publication in the Official Gazette.

<u>Table 1 – Standard Criteria of Performance Indicators for the Transmission System Operator</u>

Indicator	Expected Level of Performance
a. Average Interruption Time (AIT)	
b. Energy Not Supplied (ENS)	
c. Frequency Quality (FQ)	
d. Notice Period for Planned Interruptions in the Transmission System	
e. Response Time to New Connections Request	
f. System Average Interruption Duration Index (SAIDI)	ζ
g. Voltage Quality (VQ)	
h. Percentage of the Complaints for the Quality of Voltage	