# REGULATION ON THE STANDARD CRITERIA OF THE SUPPLY QUALITY SERVICE AND THE SECURITY PERFORMANCE OF THE ELECTRICITY DISTRIBUTION GRID

#### I PART

#### **GENERAL PROVISIONS**

#### Article 1 Legal basis

This Regulation is drafted supported on Article 7, point 1, article 19, letter "h" and "j" of Law No. 43/2015 "On Power Sector"; Law No.9902, of date 17.4.2008 "On customer protection", article 40; the Electricity Distribution Code and the Electricity Metering Code.

### Article 2 Object

- 2.1 This regulation specifies the indicators and the requirements for operation and quality of supply, as well as the performance regarding the network security of the Distribution System Operator (OSSH), according to the requirements of Law no. 43/2015 "On Power Sector".
- 2.2 DSO has the Public Service Obligation to meet the standard criteria of the quality of supply, specified by the Distribution Grid Code and this Regulation.
- 2.3 "Public Service Obligation" means the obligation imposed to a licensee performing a public service, regarding the security and quality of supply, the regulated prices in the power sector, electricity efficiency, electricity from renewable resources, environmental protection, which does not distort the competition, except when it is necessary to ensure the public service in question.

### Article 3 ERE Responsibility and Authority

- 3.1 In accordance with article 19, letter "h" and "j" of Law no. 43/2015 "On Power Sector", the Energy Regulator Authority has the following responsibility and authority regarding the quality of electricity supply issues:
- a) Publish the conditions on the quality of supply provided by the system operators;
- b) Promote the improvements for the quality of service in the power sector;
- 3.2 In accordance with 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 each year, information on the data for the quality of supply. Therefore, the Licensee shall submit information on the quality of supply to ERE according to Article 6 and 8 of this Regulation.

### Article 4 Definitions

The terms used in this regulation have the meaning as follows and any other term provided in this regulation shall have the same meaning with the terms prescribed on Law No.43/2015 "On Power Sector":

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

**Distribution System Operator** or "**DSO**" means a legal person responsible for secure, reliable and efficient operating of the distribution grid, ensuring the maintenance and the development of the distribution system, dispersed at a given area, and if applicable, its connection to other systems in order to provide long-term capabilities to meet the reasonable demands on the distribution of electricity, respecting the environment and electricity efficiency.

"Supplier" means a licensed company to perform electricity supply activity;

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

"Final customer" means a customer purchasing electricity for his own use;

"Household customer" means a customer purchasing electricity only for its own household consumption, excluding the consumption for trade or professional activity.

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

**Energy Not Supplied (ENS)** is a measure of the total amount of energy (in MWh) that would have been supplied to theinterrupted customers if there would not have been any interruptions. It is calculated by adding thenon-supplied energy due to each incident of outage.

$$ENS = \sum_{i} E_{1}$$

Where  $E_i$  = is the energy not supplied due to each incident.

Frequency Quality (FQ) is a measure of the deviation of system frequency above and below the expected nominal value of the system frequency of 50 Hz.

**Percent of Customers with Actual Meter Reads** is defined dividing the number of customers actually equipped with meters (read either remotely or visually) for a defined period of time (month, quarter, year) with the number of customers connected to the system. The percentage of actually not meter customers, refers to the customers which may be with damaged meters or out of technical condition meters at the moment of declaring the data by the Distribution System Operator.

**Resolution of Voltage Quality Complaints** is a measure of the percent of complaints of voltage deviations outside the limit specified in the Network Code that are resolved within a specified period of time. The measure may be determined separately for urban areas and rural areas.

**Response Time to Customer Complaints related to metering** shall mean the time (in days or hours) between the time when it is made the metering complaint (broken meter, missing meter, disagreement with consumption values, etc.) and the time when the DSO provides the customer with a response to the complaint.

**Response Time to New Connection Requests** is a measure of the time that the DSO takes to provide a written response to a request for new connection. This is calculated based on the definitions of the "Regulation for New Connections in the Distribution 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<sub>T</sub>= is the total number of customers supplied during that year

Di = is the duration of service interruption "i" K = total number of service interruptions

**System Average Interruption Frequency Index (SAIFI)** is the average frequency of sustained interruptions per customer over a predefined (year, quarter, six months) time period and gives information for the average frequency of the interruptions per customer in a predefined area. It is calculated as the total number of customer interruptions divided with the total number of customers served:

k

$$SAIFI = \frac{\sum_{i} N_{i}}{N_{T}}$$

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

NT = total number of customers supplied during that year

k = total number of interruptions

Time Required to Restore the Electricity Supply Service Following a Distribution System Outage is the calculation of the time required to restore the supply service after an unplanned outage. It is calculated as the percent of customers who have their service restored within a specified number of hours after an unplanned outage. It is calculated separately for customers connected at medium (35 kV, 10 kV, and 6 kV) and low (0.4 kV). It is also calculated separately for urban and rural areas.

Time to Reconnect Customers to which it is Disconnected Electricity for Not Paid Liabilities is the calculation of the average time taken by the DSO to reconnect the customer following the notification of the Supplier to reconnect the customer.

Time to perform the control of the metering system with the request of the customer is the needed time, measured during the working days, between the date of taking the request from the customer, to control the metering system, by the Distribution System Operator and the date to set into disposal the respective documentation with the results of the verification.

**Voltage Quality (VQ)** is a measure of the deviation of voltage above and below the expected nominal value of the network rated voltage according to the definitions of the Distribution Code. It is measured separately for each nominal voltage and for urban and rural areas.

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

#### II PART QUALITY AND PERFORMANCE INDICATORS

#### Article 5

Indicators for Service Quality Measures of Electricity Distribution from the Distribution System

#### **Operator**

Indicators for Service Quality Measures, which shall be calculated by the Distribution System Operator and be reported at ERE are as follows:

- a. Energy not supplied (ENS)
- b. Notice period for planned interruptions in the Distribution System
- c. Percent of the customers with actual meter reads
- d. Settling the voltage quality complaints
- e. Response time to customer complaints retalted to metering
- f. Response time to New Connection requests
- g. System Average Interruption Duration Index (SAIDI)
- h. System Average Interruption Frequency Index (SAIFI)
- i. Time required to restore the service following a distribution system outage
- j. Time to reconnect customers disconnected for non-payment
- k. Time to perform the control of the metering system with the request of the customer
- 1. Voltage Quality (VQ)

# Article 6 Reporting the Indicators for Service Quality Measures from the Distribution System Operator

- 6.1 Distribution System Operator is responsible to ensure all data needed to calculate the service quality measures, defined on article 5 of this Regulation. The data shall be calculated on a quarterly basis and progressively throughout the calendar year and the distribution quality metering indicators shall be reported to ERE no later than 30 days after the end of each quarter. For example, within January 30 of each year shall be reported the annual data progressively for the previous year (from January to December).
- 6.2 The data compiled for indicators of service quality measures, for the second through four quarter, shall contain even the progressive ones, where are included the data for the current year.
- 6.3 In order to have a data base to access the quality of service metering indicators, DSO shall offer data for the quality of service metering indicators according to article 5, for the calendar years 2011 to 2017, not later than 90 calendar days after the entry into force of this regulation, defined on article 5 of this regulation. In the event the data for one or more quality of service metering indicators defined on article 5 of this regulation failed to be available, DSO shall inform ERE for this fact.
- 6.4 Quarterly reporting shall be required for each quarter from the entry into force of this Regulation.

## Article 7 Performance Standards for Distribution System Operator

- 7.1 Table 1 of this Rule contains the performance standards for DSO related to the indicators identified on Article 5 of the Regulation. The expected performance levels will be in place through 31 December 2018, being reassessed in light of the performance during the transitory period and the situation of the power sector at that time.
- 7.2 DSO shall not be subject of the compensation request by the end-use customers, regarding the failure to comply with the standard criteria for the service quality measures of electricity distribution, prior to 31 December 2018.
- 7.3 DSO shall propose at ERE the permited level for the standard service quality criteria, not later than

30 September 2018.

7.4 In 2019, ERE shall review the performance exercised during 2017-2018 period, shall reaccess the target performance levels and approve the permited level for the standard performance criteria.

### Article 8 Monitoring and Supervision

- 8.1 ERE implementing its competences and responsibilities attributed by Law No.43/2015 "On Power Sector", shall ensure the monitoring and supervision to implement this Regulation.
- 8.2 Licensees, customers and all responsible persons, which by their actions or non-actions, shall violate the standard criteria of performance, approved on this Regulation, shall be responsible according to the definitions of "Power Sector Law".

### Article 9 Compensation of the Supplier

- 9.1 In all cases of interruptions, despite the application of the Supplier rights defined on the "Agreement for Ensuring the Electricity Distribution Service", the Distribution System Operator shall pay to the Supplier automatic fines calculated in conformity with the respective provisions of this Regulation.
- 9.2 DSO is responsible for the damages that may be caused to the Supplier because of the voltage deviations in violation with the norms defined on the effective by-laws, only if these damages are as the result of a direct action or inaction, or because of its fault. The definition of the effective damage caused to the Supplier, it is made with an agreement between the parties or in a legal way.
- 9.3 In all cases of unplanned interruptions, except of the caused interruptions or as the result of a Force Majeure existence, the energy nominated by the Supplier shall not be distributed by DSO because of the interruptions, shall be compensated by DSO as follows:

The Distribution System Operator shall pay to the Supplier the positive difference between the agreement/agreements price (depending on the duration of the interruption that affects each Supply Contract individually) and the positive disbalance price applied by the TSO.

### Article 10 Compensation of the end-use customer

- 10.1 Based on the definitions of the "Agreement for Ensuring the Electricity Distribution Service between the Distribution System Operator and the Supplier", approved by ERE Board, in case of not complying the standard criteria of quality of service according to the definitions of this Regulation, DSO shall compensate the supplier and this last one mentioned, shall be responsible for the compensation of the end-use customers, which have an agreement for electricity supply with the Supplier.
- 10.2 Beginning from 1 January 2019, in case of failure to meet the standard criteria for the quality of service according to the definitions made on table 1 of this Regulation, the Distribution System Operator is obliged to compensate the end-use customer, upon his/her request, based on the definitions of this regulation regarding the compensation amount.
- 10.3 After the submission of the request for compensation by the customer and verification for not meeting the standard criteria of the quality service, according to the deadlines defined on the "Regulation for Handling the Complaints Submitted by the Customer and Settling the Disputes between the Licensee, on Power and Natural Gas Sectors", the Supplier, compensates the customer in the next electricity invoice.
- 10.4 On the invoice send by the Supplier, the compensation value shall be defined under "Customer

compensation for the failure to meet the standard criteria for the service quality approved by ERE". Also, on the electricity invoice shall be defined that "Getting the compensation does not exclude the customer opportunity to require in a legal way the potential compensation for the caused effective damage".

## Article 11 Failure to meet the obligations

- 11.1 Distribution System Operator, in case of its inability to meet the obligations according to these rules, because of an event caused by a force majeure, shall notify ERE and all the affected parties, by giving details for the failure reasons and the expected duration of this inability.
- 11.2 During the period of performing the force majeure, DSO obligations to meet the standard performance criteria shall be suspended.
- 11.3 In case, any of the affected parties for failure to meet the obligations defined in this regulation, accesses that the declaration of the force majeure is unreasonable, may refer the issue at ERE for review and ERE decision shall be final.
- 11.4 If ERE determines that the reasons for failure to complete the obligations defined on these rules, were not because of a force majeure, DSO obligations shall not be considered suspented for the claimed period.

#### PART III FINAL PROVISIONS

#### Article 12 Settling the disputes

The disputes that arise as result of failure to implement these rules, 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 13 Review and amendment of the rules

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

### Article 14 Entry into force

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

Table 1 — Standard Performance Criteria for the Distribution System Operator

Name of the Indicators	Quality Indicator
Energy not supplied (ENS)	51, 246. 00 MWh
Frequency Quality (FQ)	<ul> <li>Normal operation border: 49.8 up to 50.2 Hz.</li> <li>During the system disorders: 48.0 up to 52.0 Hz.</li> </ul>
Voltage Quality (VQ)	Nominal Low I Larte 230 V -10 % +5 % 400 V -10 % +5 % 6 000 V -5 % +5 % 10 000 V -5 % +5 % 20 000 V -5 % +5 % 35 000 V -5 % +5 % 110 000 V -5 % +5 %
Time Required for the New Connections Requirements	<ul> <li>Not more than 20 working days for installed capacity up to 10 kW in LV.</li> <li>Not more than 20 working days for installed capacity 10-20 kW in LV.</li> <li>Not more than 20 working days for installed capacity 21-50 kW in LV.</li> <li>Not more than 60 working days for installed capacity up to 50 - 100 kW in LV.</li> <li>Not more than 60 working days for connections in MV.</li> </ul>
System Average Interruption Duration Index (SAIDI)	SAIDI = 47.17 hours
System Average Interruption Frequency Index (SAIFI)	SAIFI = 25.08.

Time Required to Restore the Electricity Supply Service after a Distribution System Outage	MV + LV 2.78 hours, 35 kV network for urban area 1.73 hour, in Rural Area 1.77 hour. 20 kV network in Urban Area 1.34-hour, Rural Area 1.70 hour, 6 –10 kV network in Urban Area 2.54-hour, Rural Area 2.74 hour, 0.4 kV network in Urban Area 1.07-hour, Rural Area 1.5 hour.
Time required to perform the control at the metering system upon customer's request.	5 working days from the day of submitting the Request.
Time Required to Respond to the Complaints, regarding the metering.	5 working days from submitting the Complaint.
Time Required to Reconnect the Customer's to whom it is disconnected the Electricity.	Within 48 hours, from the execution of the liquidation and on the request of the Customer.
Settlemet of the Complaints for Voltage Quality.	30 working days.
Percentage of Customer's Currenty with Meters.	Percentage of Customers Currently with Meters is 100%, of the number of customers.