



Republika e Kosovës
Republika Kosova - Republic of Kosovo

ZYRA E RREGULLATORIT PËR ENERGJI
REGULATORNI URED ZA ENERGIJU
ENERGY REGULATORY OFFICE



Rule ERO/No. 17/2019

RULE ON ELECTRICITY SERVICE QUALITY STANDARDS

Pristina, June 2019

The Board of Energy Regulatory Office, pursuant to authority granted under Article 26, paragraph 1, sub-paragraph 1.1 of the Law on Energy Regulator No. 05/L-084, and Article 16, paragraph 1, sub-paragraph 1.37, Article 28, paragraph 1, sub-paragraph 1.6 and Article 47, paragraph 2, sub-paragraph 2.4 of the Law on Electricity No. 05/L-085, in the session held on 05.06.2019 approved the:

RULE ON ELECTRICITY SERVICE QUALITY STANDARDS

CHAPTER I GENERAL PROVISIONS

Article 1

Purpose

The purpose of the Rule on Electricity Service Quality Standards is to set the indicators of electricity service quality to customers with regard to provided services, the continuity of supply and the voltage quality.

Article 2

Structure

1. The Rule on Electricity Service Quality Standards consists of the following chapters:
 - 1.1. Glossary,
 - 1.2. Contents and areas of Rule on Electricity Service Quality Standards,
 - 1.3. Service quality indicators,
 - 1.4. Continuity of supply indicators,
 - 1.5. Voltage quality indicators,
 - 1.6. Quality indicator measurement, registering and reporting,
 - 1.7. Force majeure with respect to quality standards,
 - 1.8. Quality of electricity service regulation,
 - 1.9. General and guaranteed quality standards,
 - 1.10. Financial compensation to the customer based on guaranteed quality standards,
 - 1.11. Contents of annual reports on quality of electricity service,
 - 1.12. Quality of electricity service auditing,
 - 1.13. Transitional and final provisions and
 - 1.14. Appendices.

Article 3

Definitions

1. The terms used in this Rule have the following meaning:
 - 1.1. **Average Interruption Time (AIT)**- a general indicator of long interruptions of electricity in the transmission network;
 - 1.2. **Customer Average Interruption Duration Index (CAIDI)** - is the ratio between the total

- duration of power interruptions to customers in a given time interval and the total number of affected customers with at least one interruption for the duration of that time interval;
- 1.3. **Call center** – A telecommunications system or service that allows acceptance of multiple incoming calls to be allocated to call center operators depending on their availability for the purpose of providing information;
 - 1.4. **Distribution System Operator (DSO)** - a natural or legal person licensed for operating, ensuring the maintenance of and, if necessary, developing the distribution system in a given area and, where applicable, its interconnections with other systems and for ensuring the long-term ability of the system to meet reasonable demands for the distribution of electricity;
 - 1.5. **Electronic register on quality of electricity service** - a computer application with a database and a document management and storage system that registers and stores all the data and documents required for the calculation and verification of the electricity quality indicators;
 - 1.6. **Energy not supplied (ENS)** – is the energy that would have been supplied by the system if there had been no interruption of power supply;
 - 1.7. **Financial compensation** – monetary amount that is paid by service provider (TSO, DSO, supplier) to a final -customer at his request when it has been proved that the individual indicator of the quality of electricity supply has not reached the level of the guaranteed quality standard of electricity supply;
 - 1.8. **General indicator of quality of electricity service**- the measured level of quality of electricity supply to a group of customers;
 - 1.9. **General standard** – a set service levels that must be met in most cases as defined by the standard;
 - 1.10. **Guaranteed standard** – a set service levels that must be met in each individual case;
 - 1.11. **High Voltage (HV)** – represents the voltage from 110 kV to higher levels);
 - 1.12. **Individual indicator of quality of electricity service** - the measured level of quality of electricity service to the individual customer;
 - 1.13. **Low Voltage (LV)** – represents the low voltage up to 1 kV;;
 - 1.14. **Minimum quality standard of electricity supply** – the level of quality of electricity supply which is compared to the indicator of the quality of electricity supply;
 - 1.15. **Medium Voltage (MV)** – represents the medium voltage from 35 kV to 1 kV;
 - 1.16. **Planned interruption** – every interruption that has been properly announced in advance by the operator;
 - 1.17. **Primary substation** – represents SS 110/MV, SS 35/MV;
 - 1.18. **System Average Interruption Duration Index (SAIDI)**- represents the cumulative average duration of power supply interruptions in the system;
 - 1.19. **System Average Interruption Frequency Index (SAIFI)** - represents the average frequency of power outages in the system;
 - 1.20. **Service provider** – either transmission system operator (TSO), distribution system operator (DSO) or supplier;

- 1.21. **Short interruption** – interruption that lasts up to 3 minutes;
 - 1.22. **Supplier** - a natural or legal person licensed to perform supply activities.
 - 1.23. **Switchyard** – HV or MV plant equipped with protection functionalities which enable automatic disconnection of the network elements in case of a fault.
 - 1.24. **Transmission System Operator (TSO)** - a natural or legal person licensed for operating, ensuring the maintenance of and, if necessary, developing the transmission system in a given area and, where applicable, its interconnections with other systems, and for ensuring the long-term ability of the system to meet reasonable demands for the transmission of electricity;
 - 1.25. **Unplanned interruption** – every interruption that has not been properly announced in advance by the operator.
2. Other terms used in this Rule have the same meaning as the Law on Energy Regulator, Law on Energy, Law on Electricity and other applicable laws in Kosovo.

CHAPTER II

CONTENTS OF THE RULE ON QUALITY OF ELECTRICITY SERVICE

Article 4

Contents of the Rule on Quality of Electricity Service

1. According to the Law No. 05/L-085 on Electricity, the Energy Regulatory Office shall establish the quality of electricity supply criteria, which shall determine:
 - 1.1. electricity supply quality indicators;
 - 1.2. methods for metering, collection and publication of electricity supply quality indicators;
 - 1.3. extraordinary events, from the perspective of electricity supply quality;
 - 1.4. scaled minimum general standards and guaranteed standards of electricity supply quality;
 - 1.5. manner of regulation of electricity supply quality, depending on the selected tariff regulation method;
 - 1.6. scaled financial compensations for final customers, upon establishment of guaranteed standards on quality of electricity supply,
 - 1.7. manner, dynamics and contents of reporting the data on the quality of electricity supply to the Energy Regulatory Office;
 - 1.8. contents of the annual TSO report on quality of electricity supply;
 - 1.9. contents of the annual DSO report on quality of electricity supply;
 - 1.10. contents of the annual supplier report on the quality of supply services.

Article 5

Areas of regulation on quality of electricity service

1. Electricity supply services include:
 - 1.1 service quality;
 - 1.2 continuity of supply; dhe
 - 1.3 voltage quality.

CHAPTER III SERVICE QUALITY INDICATORS

Article 6 Service quality

1. Service quality indicators are determined regarding their relation to:
 - 1.1. connection to the network;
 - 1.2. customer care;
 - 1.3. technical services.

Article 7 Individual Indicators related to connection to the network

1. Individual indicators related to connection to the network include:
 - 1.1 ***Time needed to issue cost estimate for simple works related to connection to network*** - is the time measured in working days starting with the date when the request for the cost estimate was received by the TSO or the DSO to the date when requested cost estimate was dispatched to the customer.
 - 1.2 ***Time needed to connect new customer to the network*** – is the time measured in working days from the date of receipt of the new customer’s complete written claim for network connection until the date when the new customer is connected to the network if no intervention is required in the network and upon verification that all connection criteria have been fulfilled from the applicant’s side.
 - 1.3 ***Time needed for disconnection upon customers’ request*** - is the time measured in working days from the date of receipt of customer’s complete written request for disconnection (de-activation) from the electricity network until the date of customer’s physical disconnection.

Article 8 General indicators related to connection to the network

1. General indicators related to connection to the network include:
 - 1.1 Share of timely executed cost estimates for simple works related to connection to the network;
 - 1.2 Share of timely connected new customers to the network;
 - 1.3 Share of timely executed disconnections upon customers’ request.

Timely consideration shall be given to any case where the value of individual indicator in **Error! Reference source not found.** is less or equal to the guaranteed/minimal standard set in Table 5.

Article 9 Individual indicators related to customer care

1. Individual indicators related to customer care include:
 - 1.1 ***Time needed to respond to customers’ written complaint*** - is the time measured in working days from the date of registration of the customer’s written complaint or enquiry (the date of receipt of the letter) until the date of dispatch of the written response;

- 1.2 **Time needed to respond to customers' written question in relation to electricity bill** - is the time measured in working days from the date of registration of the customer's written question (the date of receipt of the letter) until the date of dispatch of the written answer to it.
- 1.3 **Time of holding of the call in the call center** - is the holding time of each call of each individual customer (including playback information with music and speech, which follows the voice menu selection with usage of functions such as Interactive Voice Response), if the call center operator answers to it. It shall be counted in seconds from the time moment of the customer's call in the call center until the time moment of the call center operator's answer to the call.
- 1.4 **Time for waiting in case of personal visit at the customer center** - is the waiting time in case of personal visit at the customer center, as long as the customer center operator speaks with the customer. It shall be counted in minutes from the time moment of the customer's arrival at the customer center (for customer contact in person) until the time moment of the customer center operator's speech with the customer.

Article 10

General indicators related to customer care

1. General indicators related to customer care include:
 - 1.1 Share of timely executed responses to customers' written complaint;
 - 1.2 Share of timely executed responses to customers' written question in relation to electricity bill;
 - 1.3 Share of timely answered calls in the call center;
 - 1.4 Share of timely executed personal visits in the customer center.
2. Timely consideration shall be given to any case where the value of individual indicator in **Error! Reference source not found.** is less or equal to the guaranteed/minimal standard set in Table 5.

Article 11

Individual indicators related to technical services

1. Individual indicators related to technical services include:
 - 1.1 **Time needed to notify customers on planned interruptions** - The minimum time for giving information in advance of a planned interruption, is defined as the minimum time which elapses from the date of dispatch of the notification of a planned interruption until the date of beginning of the planned interruption.
 - 1.2 **Time needed to restore supply following disconnection due to non-payment** - is the time which elapses from the date on which all conditions for reconnection of the customer are fulfilled (paid-on debt, including costs of disconnection and reconnection, signed contracts on network access and supply) until the date of actual restoration of supply to the customer following disconnection due to non-payment.
 - 1.3 **Time needed to inspect the meter in case of meter failure** - The time needed to inspect the meter in case of meter failure is counted in days from the date of receipt of the customer's written notice on the meter problem until the date of inspection of the meter.

Article 12

General indicators related to technical services

1. General indicators related to technical services include:
 - 1.1 Share of timely executed notifications on planned interruptions;
 - 1.2 Share of timely restored supply following disconnections due to non-payment;
 - 1.3 Share of timely inspected meters in case of meter failure.
2. Timely consideration shall be given to any case where the value of individual indicator in **Error! Reference source not found.** is less or equal to the guaranteed/minimal standard set in Table 5, except in case of a time needed to notify customers on planned interruptions, where the individual indicator is considered timely in case its value is greater or equal to the guaranteed/minimal standard set in Table 5.

CHAPTER IV

CONTINUITY OF SUPPLY INDICATORS

Article 13

Types of power supply interruptions

1. Interruptions of power supply are registered by system operators (TSO, DSO) which provides access to the information to all interested parties.
2. Interruptions are classified as short and long interruptions. Any interruption of power supply that lasts up to three minutes is classified as short interruption and any interruption longer than 3 minutes is classified as long interruption.
3. These rules apply to long interruptions. Long interruptions are classified as planned and unplanned.
4. Planned interruptions comprise disconnections notified to the customers in appropriate manner, occurring because of planned repairs, reconstructions or new constructions in the distribution or transmission system.
5. The appropriate manner of notification on planned interruptions is:
 - 5.1 Through proper means of public communication, at least 48 hours before the planned interruption takes place;
 - 5.2 Additionally, all generators connected to distribution and transmission network, as well as customers connected to MV and LV shall be notified by email at least 72 hours before the planned interruption takes place.
6. The notification on planned interruption shall include:
 - 6.1 Date of the interruption;
 - 6.2 Name of the asset;
 - 6.3 Location where the works shall take place;
 - 6.4 Reason of the interruption;
 - 6.5 Expected starting and ending time of the interruption;
 - 6.6 Date when the notification is communicated.

Article 14

Origin of interruption

1. Planned and unplanned long interruptions are classified according to the origin by:
 - 1.1 Long planned or unplanned interruptions resulting from the external causes;
 - 1.2 Long planned or unplanned interruptions resulting from the internal causes;
 - 1.3 Long unplanned interruptions resulting from force majeure as defined in **Error! Reference source not found.** of this Rule.
2. External causes of long planned interruptions include: planned network and installation works performed by other system operator or a third party or any other reason why the system operator is planning to disconnect the power supply at the request of another system operator or a third party.
3. Internal causes of long planned interruptions include planned network and installation works performed by system operator installations or other reasons created in the system operator network due to which the operator of the system on its initiative plans to disconnect the power supply.
4. External causes of long unplanned interruptions include failures in the network of another operator of the system, failures in the network caused by animals, construction, vandalism, faults arising in installations of customers etc.
5. Internal causes of long unplanned interruptions are all those that do not fall under the external cause and under a force majeure. Internal causes of long unplanned interruptions include faults in the network due to poor network maintenance, incorrect setting of protection, overload of network units, network unit aging, external contractors under the supervision of network operators' employees etc.

Article 15

Rules for determination of duration and number of long interruptions and grouping of long interruptions

1. Duration of a power supply interruption is a time period, specified in minutes, counted from the moment of interruption of power supply to the establishment of normal power supply for all customers.
2. During a power supply interruption establishment of normal power supply can be conducted in one or more stages, possible including temporary power supply restorations to some or all customers.
3. In relation to registering such multiple power supply interruptions, the following rules apply:
 - 3.1 Two long power supply interruptions of the same origin are regarded (and registered) separately if:
 - 3.1.1 the time interval between the ending of the first interruption and the beginning of the following interruption is more than three minutes, and
 - 3.1.2 during that time all the customers, which experienced the power supply interruption during the first event, had continuous power supply;
 - 3.2 Two long power supply interruptions are regarded (and registered) as one long power supply interruption if:

3.2.1 the time interval between the ending of the first interruption and the beginning of the following interruption is less or equal to three minutes, and

3.2.2 they affect (fully or partly) the same customers.

Article 16

Exceptional rules for special cases of continuity of supply monitoring

1. Exceptional rules shall be applied for the following special cases with regard to the monitoring of continuity of supply:
 - 1.1 Customers belonging to one distribution system operator and supplied from another one, and;
 - 1.2 MV feeders to and from an MV switchyard.
2. The distribution system operator whose customers are supplied from another distribution system operators' network monitors indicators of the continuity of supply on a corresponding feeder by adding in their network configuration data a "virtual" substation and the corresponding "virtual" feeder. The continuity of supply indicators are monitored only for its share of customers, while the distribution system operator which owns the network monitors indicators for the rest of customers.
3. The indicators of the continuity of supply in MV switchyards shall be monitored in the same way as in the primary substations:
 - 3.1 The values of indicators by MV feeders from an MV switchyard shall not count to the values of the indicators for the MV feeder from primary substation, which supplies that MV switchyard (connecting-feeding MV feeder).
 - 3.2 On the connecting-feeding MV feeder from the primary substation to the MV switchyard only indicators of the continuity of supply for those customers who are directly connected to the connecting-feeding MV feeder, before the MV switchyard, shall be monitored.

Article 17

Individual continuity of supply indicators in transmission and distribution network

1. The TSO and the DSO shall register the following individual continuity of supply indicators:
 - 1.1 Duration of an individual long planned interruption for a single customer;
 - 1.2 Duration of an individual long unplanned interruption for a single customer;
 - 1.3 Total number of long interruptions in the reporting period for a single customer.
2. To determine the individual continuity of supply indicators, the TSO and the DSO shall consider all the long power supply interruptions caused by internal causes as defined in 0 for which the customers have submitted request for financial compensation as defined in **Error! Reference source not found.** of this Rule.

Article 18

General continuity of supply indicators in transmission network

1. Based on the reporting period, the TSO shall determine the following general indicators of continuity of supply:
 - 1.1 Unsupplied energy (*ENS* – Energy Not Supplied);
 - 1.2 Average duration of interruptions (*AIT* - Average Interruption Time).

Article 19
Unsupplied energy

1. Unsupplied energy (*ENS* – Energy Not Supplied) is the energy that would have been supplied from the system if there was no interruption of power supply.

ENS is calculated as follows:

$$ENS = \sum_k P_k \cdot D_k \quad [MWh],$$

where P_k is the power, at which the power supply was interrupted, expressed in MW, and D_k time interval, during which the power supply was interrupted, expressed in hours, for the interruption k .

Article 20
Average duration of interruptions

1. Average duration of interruptions (*AIT* - Average Interruption Time) in the transmission network represents the cumulative duration of power supply interruptions per customer.

AIT is calculated as follows:

$$AIT = \frac{60 \cdot \sum_i ENS_i}{P_T} \quad [min \text{ per customer}],$$

where ENS_i is the amount of unsupplied energy in the i -th interruption, in MWh, and P_T the average power of the system, in MW, which is obtained as the electrical energy transmitted in the reporting period, in MWh, divided by the duration of this reporting period, in hours.

Article 21
General continuity of supply indicators in distribution network

1. Based on the reporting period, the DSO shall determine the following general indicators of continuity of supply:
 - 1.1 Average power supply interruption frequency in the system (*SAIFI*);
 - 1.2 Average cumulative duration of power supply interruption in the system (*SAIDI*);
 - 1.3 Average power supply interruption duration per customer (*CAIDI*).

Article 22
Average power supply interruption frequency in the system

1. Average power supply interruption frequency in the system (*SAIFI* - System Average Interruption Frequency Index) is the ratio between the total number of customer supply interruptions in a defined time interval and the total number of customers in the system for the duration of this time interval.

SAIFI is calculated as follows:

$$SAIFI = \frac{\sum_i N_i}{N_C} \quad [number \text{ of interruptions per customer}],$$

where N_i is the number of customers affected by the interruption i and N_C is the total number of customers connected to the distribution network at the end of the reporting period.

Article 23

Average cumulative duration of power supply interruption in the system

1. Average cumulative duration of power supply interruption in the system (*SAIDI* - system average interruption duration index) is the ratio between the total duration of power supply interruptions of individual customers within a specified time interval and the total number of customers in the system for the duration of this time interval.

SAIDI is calculated as follows:

$$SAIDI = \frac{\sum_i N_i \cdot t_i}{N_C} \quad [minutes \text{ per customer}]$$

where N_i is the number of affected customers and t_i the duration of the interruption i , expressed in minutes.

Article 24

Average power supply interruption duration per customer

1. Average power supply interruption duration per customer (*CAIDI* - Customer Average Interruption Duration Index) is the ratio between the total duration of power supply interruptions to customers in a given time interval and the total number of affected customers with at least one interruption for the duration of this time interval.

CAIDI is calculated as follows:

$$CAIDI = \frac{\sum_i N_i \cdot t_i}{\sum_i N_i} \quad [minute \text{ per customer}],$$

where N_i is the number of affected customers and t_i the duration of the interruption i , expressed in minutes.

CHAPTER V VOLTAGE QUALITY INDICATORS

Article 25

Voltage quality indicators

1. Voltage quality requirements are implemented by adoption of EN 50160 in standardization, legislation and regulation. EN 50160 is considered as the basic instrument for voltage quality assessment.
2. The individual voltage quality indicator relates to the compliance of the measured voltage characteristics at the customers' connection point with the values specified in EN 50160.
3. The general voltage quality indicator is the share of the determined individual indicators of voltage quality in line with EN 50160. The supply application shall be submitted from the applicant to the Supplier, with the purpose of bonding the supply agreement.

CHAPTER VI QUALITY INDICATORS MEASUREMENT, REGISTERING AND REPORTING

Article 26

Service Quality measurement and registering

1. The service quality is measured by the time that is calculated from the receipt of the service request to the execution of the submission of the answer to customer's request.
2. The quality of service is higher as the time it takes to provide the service is shorter and the proportion of timely executed services is higher.
3. The supplier shall keep electronic register of all data on service requests including:
 - 3.1 Service request date and time;
 - 3.2 Service completion or response dispatch date and time.

Article 27

Continuity of supply measurement and registering

1. Continuity of supply is measured by the number of long interruptions and duration of long interruptions.
2. The continuity of supply is higher as the number of long interruptions is smaller and duration of long interruptions is shorter.
3. For registering the interruptions and of reporting the data of continuity of supply indicators the customers are classified to the following quality areas:
 - 3.1 Urban areas – Urban settlements;
 - 3.2 Rural areas – Rural settlements.
4. The TSO and the DSO shall keep electronic registers of interruptions, as specified in Appendix 3, containing the following data on the interruptions:
 - 4.1 Name of the asset;
 - 4.2 Location of the faulty network element;
 - 4.3 Voltage level of the faulty network element;
 - 4.4 Type of the interruption (planned/unplanned);
 - 4.5 Origin of interruption;
 - 4.6 Cause of interruption;
 - 4.7 Date and time of start and end of the interruption;
 - 4.8 Active power at start of interruption, and
 - 4.9 For DSO only, number of customers affected by the interruption by quality areas.
5. When registering the date and time of start and end of interruption, the active power at the start of interruption and the number of affected customers, the rules in **Error! Reference source not found.** shall be considered.
6. When registering the data on location and voltage level of the interruption the rules in **Error! Reference source not found.** shall be considered.
7. For interruptions specified in **Error! Reference source not found.**, the TSO and the DSO shall keep separate electronic registers with the following data:
 - 7.1 ID of the customer;
 - 7.2 ID of the interruption from the electronic register of interruptions;

- 7.3 Date of the customers' request for a financial compensation, in line with **Error! Reference source not found.** of this Rule;
- 7.4 Date of the service providers' decision regarding the customers' request for a financial compensation from **Error! Reference source not found.**, and
- 7.5 Decision (positive or negative) regarding the customers' request for a financial compensation, in line with Article 36 of this Rule.

Article 28

Voltage quality measurement and registering

1. Voltage quality is measured in terms of compliance of voltage characteristics at the customers' connection point with the values specified in EN 50160.
2. Customer shall submit written request for receipt of voltage quality report at its connection point to the TSO or the DSO network. Guaranteed/minimal voltage quality indicator for the customer is determined based the voltage quality report compliance with EN 50160.
3. The TSO and the DSO shall keep electronic registers of all requests containing the results of each voltage quality report.
4. General voltage quality indicators are calculated by reporting periods based on the data in the electronic registers.

Article 29

Reporting

1. Service provider shall report data on electricity service quality to the Energy Regulatory Office, in a format defined in Appendix 1, no later than one month after the end of the reporting period.
2. The reporting period shall be carried out in monthly basis.
3. Interruptions, which start in one month and end in one of the following months, shall be counted to indicator of the continuity of supply for the month of the end of the interruption.
4. Service providers will report the annual summary of the data on electricity service quality to the Energy Regulatory Office, in a format defined in Appendix 1, no later than January 31st for the previous year.

CHAPTER VII

FORCE MAJEURE WITH RESPECT TO QUALITY STANDARDS

Article 30

Force majeure, definition and causes

1. Force majeure is defined as the events, which the system operator was unable to control or prevent, with environmental parameters outside the latest boundaries determined by taking into consideration the design conditions of network elements, or the state of emergency declared by the governmental decision.
2. Force majeure as a cause of unplanned long interruption can be:
 - 2.1 earthquakes;
 - 2.2 cyclones;
 - 2.3 lightning;

- 2.4 floods;
 - 2.5 volcanic eruptions;
 - 2.6 fires;
 - 2.7 wars;
 - 2.8 armed conflicts;
 - 2.9 rebellion;
 - 2.10 terrorism; and
 - 2.11 military acts etc.
3. In order for interruptions to be classified as interruptions caused by force majeure, the TSO and the DSO shall keep for at least ten years documentation to prove that:
- 3.1 conditions were not foreseen by the network element design conditions or latest technology;
 - 3.2 the state of emergency has been declared by the governmental decision;
 - 3.3 the interruption was the result of another event that has the characteristics of a force majeure.

CHAPTER VIII QUALITY OF ELECTRICITY SERVICE REGULATION

Article 31

Quality of electricity service regulation

1. Quality of electricity service regulation is introduced with the aim of gradually reducing the number and duration of long-term interruptions of electricity supply, completion of commercial service and share of customers' connection points in the network where the voltage characteristics do not comply with EN 50160.
2. To regulate the quality of electricity service, information on the indicators of the quality of electricity supply and objections to the quality of electricity supply and the general and guaranteed/minimal quality standards of electricity supply are used.

CHAPTER IX GENERAL AND GUARANTEED QUALITY STANDARDS

Article 32

General standards

General standards for the service quality and the continuity of supply are respectively set in Appendix 2- Electricity service quality standards and Table 6.

Article 33

Guaranteed standards

1. Guaranteed/minimal standards for the service quality and the continuity of supply are respectively set in Table 5 and Table 7 - **Guaranteed/minimal standards for Continuity of Supply indicators**
2. .

3. Distinct levels of guaranteed/minimal standards of continuity of supply in distribution network are applied depending on the type of quality area.
4. Guaranteed/minimal standards in transmission network are applied only in parts of network where (N-1) criteria is fulfilled.

CHAPTER X

FINANCIAL COMPENSATION TO THE CUSTOMER BASED ON GUARANTEED QUALITY STANDARDS

Article 34

Entitlement to financial compensation

1. The customer shall be entitled to a financial compensation from the service provider if the individual indicator from its jurisdiction does not reach the level of the guaranteed quality standard.
2. For registration of individual indicators of uninterrupted supply, the TSO or the DSO shall use a metering device at customers' connection point which enables load profile registration (15-minute or hourly intervals). No later than one month after the installation of such a metering device the TSO or the DSO shall notify the customer on his right to submit the request for a financial compensation. Once provided, this right shall be irrevocable.
3. The levels of the guaranteed quality standards and the amounts of the financial compensation are specified in Table 5 and Table 7 - **Guaranteed/minimal standards for Continuity of Supply indicators**
4. .

Article 35

Request for financial compensation

1. Customers that are entitled to a financial compensation shall submit a request in a written template form as shown in Appendix 4 to a service provider in whose jurisdiction is the service indicator for which the guaranteed standard is not fulfilled, no later than June 30th of the following year.
2. The submitted request for a financial compensation shall be counted to the corresponding indicator for the month of the date of the request.

Article 36

Decision on customers' request for financial compensation

1. Service provider shall issue a decision regarding the customers' request for financial compensation within 30 calendar days from the day the request was received.
2. The issued decision regarding the customers' request for a financial compensation shall be counted to the corresponding indicator for the month of the date of the decision.
3. For the issued positive decisions on customers' requests, financial compensation shall be paid to the customer within 30 days of the date of decision.
4. In case of a negative decision on the request for financial compensation, the customer has the right to appeal to the service provider and to the Energy Regulatory Office, in accordance with the corresponding provisions of the Law / Regulation.

CHAPTER XI

CONTENTS OF ANNUAL REPORTS ON QUALITY OF ELECTRICITY SERVICE

Article 37

Contents of TSO annual report on quality of electricity service

1. Once a year (no later than March 31th), the TSO shall publish the report on Quality of Electricity Service for the preceding calendar year regarding continuity of supply, including:
 - 1.1. General levels of ENS and AIT for:
 - 1.1.1. type of long interruptions (planned and unplanned)
 - 1.1.2. origin of interruption
 - 1.2. The number of submitted requests for financial compensations defined in **Error! Reference source not found.** of this Rule, regarding:
 - 1.2.1. Duration of an individual long planned interruption for a single customer;
 - 1.2.2. Duration of an individual long unplanned interruption for a single customer;
 - 1.2.3. Total number of long interruptions in the reporting periods for a single customer.
 - 1.3. Number of issued decisions as defined in **Error! Reference source not found.** of this Rule, regarding:
 - 1.3.1. Duration of an individual long planned interruption for a single customer;
 - 1.3.2. Duration of an individual long unplanned interruption for a single customer;
 - 1.3.3. Total number of long interruptions in the reporting period for a single customer.
2. The TSO shall publish this information on its website.
3. The data in the TSO annual report on Quality of Electricity Service shall be consistent with the annual summary data reported to the Energy Regulatory Office, as specified in **Error! Reference source not found.** of this Rule.

Article 38

Contents of DSO annual report on quality of electricity service

1. Once a year (no later than March 31th), the DSO shall publish the report on Quality of Service for the preceding calendar year, regarding:
 - 1.1 Service quality;
 - 1.1.1. General service quality indicators:
 - 1.1.1.1 Share of timely executed cost estimates for simple works related to connection to network;
 - 1.1.1.2 Share of timely connected new customers to the network;
 - 1.1.1.3 Share of timely executed disconnections upon customers' request;
 - 1.1.1.4 Share of timely executed responses to customers' written complaint;
 - 1.1.1.5 Share of timely executed notifications on planned interruptions;
 - 1.1.1.6 Share of timely restored supply following disconnections due to non-payment;
 - 1.1.1.7 Share of timely inspected meters in case of meter failure.

- 1.1.2 Number of submitted requests for financial compensations defined in **Error! Reference source not found.** of this Rule, regarding:
 - 1.1.2.1 Time needed to issue cost estimate for simple works related to connection to network;
 - 1.1.2.2 Time needed to connect new customer to the network;
 - 1.1.2.3 Time needed for disconnection upon customers' request;
 - 1.1.2.4 Time needed to respond to customers' written complaint;
 - 1.1.2.5 Time needed to notify customers on planned interruptions;
 - 1.1.2.6 Time needed to restore supply following disconnection due to non-payment;
 - 1.1.2.7 Time needed to inspect the meter in case of meter failure.
- 1.1.3 Number of issued decisions, as defined in **Error! Reference source not found.** of this Rule, regarding:
 - 1.1.3.1 Time needed to issue cost estimate for simple works related to connection to network;
 - 1.1.3.2 Time needed to connect new customer to the network;
 - 1.1.3.3 Time needed for disconnection upon customers' request;
 - 1.1.3.4 Time needed to respond to customers' written complaint;
 - 1.1.3.5 Time needed to notify customers on planned interruptions;
 - 1.1.3.6 Time needed to restore supply following disconnection due to non-payment;
 - 1.1.3.7 Time needed to inspect the meter in case of meter failure.
- 1.2 Uninterrupted supply:
 - 1.2.1 General continuity of supply indicators of SAIFI and SAIDI on the distribution system level and on the level of each distribution area by:
 - 1.2.1.1 type of long-term interruptions (planned/unplanned);
 - 1.2.1.2 quality area (urban/rural);
 - 1.2.1.3 origin of interruption; and
 - 1.2.1.4 Voltage level of interruption.
 - 1.2.2 Number of submitted requests for financial compensations defined in **Error! Reference source not found.** of this Rule, regarding:
 - 1.2.2.1 Duration of an individual long planned interruption for a single customer;
 - 1.2.2.2 Duration of an individual long unplanned interruption for a single customer;;
 - 1.2.2.3 Total number of long unplanned interruptions in the reporting period for a single customer.

- 1.2.3 Number of issued decisions, as defined in **Error! Reference source not found.** of this Rule, regarding:
 - 1.2.3.1. Duration of an individual long planned interruption for a single customer;
 - 1.2.3.2. Duration of an individual long unplanned interruption for a single customer;
 - 1.2.3.3. Total number of long unplanned interruptions in the reporting period for a single customer.
- 1.3 Voltage quality
 - 1.3.1 General indicator on voltage quality on the distribution system level;
 - 1.3.2 Individual indicators on voltage quality.
- 2. The DSO shall publish this information on its website.
- 3. The data in the DSO annual report on Quality of Electricity Service shall be consistent with the annual summary data reported to the Energy Regulatory Office, as specified in **Error! Reference source not found.** of this Rule.

Article 39

Contents of suppliers' annual report on quality of electricity service

- 1. Once a year (no later than March 31th), the supplier shall publish the report on Quality of Service for the preceding calendar year, regarding:
 - 1.1 General service quality indicators:
 - 1.1.1 Share of timely executed responses to customers' written question in relation to electricity bill;
 - 1.1.2 Share of timely answered calls in the call center;
 - 1.1.3 Share of timely executed personal visits in the costumer center.
 - 1.2 Number of submitted requests for financial compensations defined in **Error! Reference source not found.** of this Rule, regarding:
 - 1.2.1 Time needed to respond to customers' written question in relation to electricity bill;
 - 1.2.2 Time of holding of the call in the call center;
 - 1.2.3 Time for waiting in case of personal visit at the customer center.
 - 1.3 Number of issued positive decisions defined in **Error! Reference source not found.**, regarding:
 - 1.3.1 Time needed to respond to customers' written question in relation to electricity bill;
 - 1.3.2 Time of holding of the call in the call center;
 - 1.3.3 Time for waiting in case of personal visit at the customer center.
- 2. The supplier shall publish this information on its website.

3. The data in the suppliers' annual report on Quality of Electricity Service shall be consistent with the annual summary data reported to the Energy Regulatory Office, as specified in **Error! Reference source not found.** of this Rule, and they shall submit them to the Regulator.

CHAPTER XII

AUDITING THE PROCESS OF QUALITY OF ELECTRICITY SERVICE MONITORING

Article 40

Responsibilities for auditing the process of quality of electricity service monitoring

1. The processes of quality of electricity service monitoring, including measurement, data registering and reporting on the indicators, is audited by the Energy Regulatory Office.
2. The service providers shall develop verifiable data collecting, registering and reporting procedures according to guidelines provided in **Error! Reference source not found.** of this Rule and submit them to the Regulator for approval.

Article 41

Data collecting procedures

1. The service provider shall recognize the types of data and the sources and locations of the data for their collecting and reporting purposes according to provisions of this rule.
2. The data collecting, registering and reporting procedures shall be provided to all relevant staff, together with record forms and any other material they may need. The content and format of data to be recorded shall be clearly defined, ideally in a handbook or manual.
3. The data collection and registering can be performed by use of service providers' automatic or remote control systems, call centers or other appropriate instruments for the recording the events, or manually, in which case the registration may be done later, depending on the moment of occurring and type of the event, but within the prescribed deadline.
4. Document control principles shall apply to computer systems, software and computer-based records. These shall normally include the use of backups and passwords and other arrangements to ensure the integrity and availability of computerized records and documents.
5. The responsible person for the reporting shall have overall responsibility for identifying the records needed for the operation of the monitoring system and the periods for which they shall be retained. System records shall be maintained, either in a documentary form or on computer, to demonstrate accurate recording of data and the effective operation of the monitoring system. System records shall be stored and maintained in such a way as to provide for ready access and retrieval, ensure minimal deterioration or damage and prevent loss.
6. All documentation necessary for the verification of correctness of performed recording shall be held for defined minimum periods. After the minimum retention period these records shall be reviewed against stated criteria before disposal, archiving or further retention.
7. Computer systems used to support the collecting and collating of data shall be identified in the data collecting procedures. The computer systems shall be reviewed by suitably qualified personnel before they are brought into use and whenever changes are made, to ensure their systems provide the correct results. These shall be made both initially and after any changes to the systems.
8. If any of the computer systems is found to produce erroneous results, the validity of previous data shall be considered. Appropriate action must be taken to correct the error – the action

shall be recorded and the national regulatory authority shall be advised of the nature of the error and its effects. Test and control software and hardware shall be subject to appropriate backups and access controls.

Article 42

Auditing the registers and reports on quality of electricity service

1. The Energy Regulatory Office may conduct an assessment of monitoring of the quality in the service providers, taking care not to obstruct their business operations and performance of their activities, and not to impose a disproportionate burden in relation to the assessment.
2. Audits shall focus on the compliance with the rules for registration and reporting, by having the following two key objectives:
 - 2.1 to verify that the service providers are correctly applying the instructions and guidance for the collecting and reporting, and
 - 2.2 to verify that the service providers meet specific minimum levels of accuracy while performing these tasks.
3. When designing an audit procedure, the Regulator shall define the following three fundamental elements:
 - 3.1 instructions for the service providers to ensure the traceability of all reported data;
 - 3.2 indicators of accuracy and minimum acceptable levels of these indicators; and
 - 3.3 corrective actions to be taken in case of non-compliance with the minimum levels (and possibly, associated financial penalties).
4. Audit may be carried out as:
 - 4.1 External audit, performed by the Regulator or by an independent consultant engaged by the Regulator, or
 - 4.2 Internal audit, performed by the service provider, according to rules set by the Regulator.
5. The reports for the national regulatory authority shall be audited having in mind primarily data on breaches. Data on breaches shall be recorded in accordance with process routes, responsibilities and methods defined in the collecting and reporting procedures. Breaches shall be recorded in such a way as to allow audits and reviews to be conducted.

CHAPTER XIII

TRANSITIONAL AND FINAL PROVISIONS

Article 43

Entry into force

1. This Rule shall enter into force on the date of approval by the Board of the Regulator and will be published on the official website of the Regulator.
2. General guaranteed/minimal standards, as well as financial compensation in Appendix 2- Electricity Service Quality Standards, Table 4, Table 5, Table 6 and Table 7 shall be timely set, through special decisions by the Regulator.

Article 44

Amendment

1. ERO is entitled to amend or modify any provision of this Rule.

2. The procedures for amendment or modification of this Rule shall be the same as for its approval.

Article 45
Interpretation

In case of uncertainties regarding the provisions of this Rule, the Board shall issue explanatory information.

The Board of Energy Regulatory Office:

Arsim Janova, acting-Chairman

Besim Sejfiqaj, Member

Selman Hoti, Member

Izet Rushiti, Member

APPENDIX 1 – Formats for reporting the data on quality of electricity service to the Regulator

Table 1 - Format for reporting TSO data on quality of electricity service to the Regulator

Total number of customers			
ENS	Planned	External	
		Internal	
	Unplanned	External	
		Internal	
		Force Majeure	
AIT	Planned	Të jashtëm	
		Të brendshëm	
	Unplanned	External	
		Internal	
		Force Majeure	
Numri i kërkesave të dorëzuara për kompensime financiare		Duration of an individual long planned interruption for a single customer	
		Duration of an individual long unplanned interruption for a single customer	
		Total number of long unplanned interruptions for a single customer	
Number of issued positive decisions regarding financial compensations		Duration of an individual long planned interruption for a single customer	
		Duration of an individual long unplanned interruption for a single customer	
		Total number of long unplanned interruptions for a single customer	

Table 2 - Format for reporting DSO data on quality of electricity service to the Regulator

Total number of customers					
SAIDI	Medium Voltage	Urban	Planned	External	
				Internal	
			Unplanned	External	
		Internal			
		Force Majeure			
		Medium Voltage	Rural	Planned	External
	Internal				
	Unplanned			External	
			Internal		
			Force Majeure		
	Low Voltage		Urban	Planned	External
		Internal			
Unplanned		External			
		Internal			
		Force Majeure			
Low Voltage		Rural	Planned	External	
	Internal				
	Unplanned		External		
		Internal			
		Force Majeure			
	SAIFI	Medium Voltage	Urban	Planned	External
Internal					
Unplanned			External		
			Internal		
Medium Voltage		Rural	Planned	External	
				Internal	
		Unplanned	External		
			Internal		
Medium Voltage		Urban	Planned	External	
			Unplanned	External	

	Low Voltage	Rural	Planned	Internal	
				Force Majeure	
			Unplanned	External	
				Internal	
				External	
				Internal	
				Force Majeure	
Share of timely executed cost estimates for simple works related to connection to the network					
Share of timely connected new customers to the network					
Share of timely executed disconnections upon customers' request					
Share of timely executed responses to customers' written complaint					
Share of timely executed notifications on planned interruptions					
Share of timely restored supply following disconnections due to non-payment					
Share of timely inspected meters in case of meter failure					
Number of submitted requests for financial compensations	Duration of an individual long planned interruption for a single customer				
	Duration of an individual long unplanned interruption for a single customer				
	Total number of long unplanned interruptions for a single customer				
	Time needed to issue cost estimate for simple works related to connection to network				
	Time needed to connect new customer to the network				
	Time needed for disconnection upon customers' request				
	Time needed to respond to customers' written complaint				
	Time needed to notify customers on planned interruptions				
	Time needed to restore supply following disconnection due to non-payment				
	Time needed to inspect the meter in case of meter failure				
Number of issued positive decisions regarding financial compensations	Duration of an individual long planned interruption for a single customer				
	Duration of an individual long unplanned interruption for a single customer				
	Total number of long unplanned interruptions for a single customer				

	Time needed to issue cost estimate for simple works related to connection to network	
	Time needed to connect new customer to the network	
	Time needed for disconnection upon customers' request	
	Time needed to respond to customers' written complaint	
	Time needed to notify customers on planned interruptions	
	Time needed to restore supply following disconnection due to non-payment	
	Time needed to inspect the meter in case of meter failure	

Table 3- Format for reporting supplier data on quality of electricity service to the Regulator

Share of timely executed responses to customers' written question in relation to electricity bill		
Share of timely answered calls in the call center		
Share of timely executed personal visits in the costumer center		
Number of issued positive decisions regarding financial compensations	Time needed to respond to customers' written question in relation to electricity bill	
	Time of holding of the call in the call center	
	Time for waiting in case of personal visit at the customer center	

APPENDIX 2 –Electricity service quality standards

Table 4- General standards for Quality of Service indicators

Group	Service quality indicator	General standard for service quality indicator
Connection to the network	Share of timely executed cost estimates for simple works related to connection to network	
	Share of timely connected new customers to the network	
	Share of timely executed disconnections upon customers' request	
Customer care	Share of timely executed responses to customers' written complaint	
	Share of timely executed responses to customers' written question in relation to electricity bill	
	Share of timely answered calls in the call center	
	Share of timely executed personal visits in the customer center	
Technical services	Share of timely executed notifications on planned interruptions	
	Share of timely restored supply following disconnections due to non-payment	
	Share of timely inspected meters in case of meter failure	

Table 5 - Guaranteed/minimal standards for Quality of Service indicators

Group	Service quality indicator	Guaranteed/minimal standard for service quality indicator	Financial compensation
Connection to the network	Time needed to issue cost estimate for simple works related to connection to network		
	Time needed to connect new customer to the network		
	Time needed for disconnection upon customers' request		
Customer care	Time needed to respond to customers' written complaint		
	Time needed to respond to customers' written question in relation to electricity bill		
	Time of holding of the call in the call center		
	Time for waiting in case of personal visit at the customer center		
Technical services	Time needed to notify customers on planned interruptions	Technical services	Time needed to notify customers on planned interruptions
	Time needed to restore supply following disconnection due to non-payment		Time needed to restore supply following disconnection due to non-payment
	Time needed to inspect the meter in case of meter failure		Time needed to inspect the meter in case of

Group	Service quality indicator	Guaranteed/minimal standard for service quality indicator	Financial compensation
			meter failure

Table 6 - General standards for Continuity of Supply indicators

System level	Continuity of supply indicator	General standard for continuity of supply indicator	
Transmission system	ENS		
	AIT		
Distribution system			Quality area
			Urban area
			Urban area
	SAIFI		
	SAIDI		
CAIDI			

Table 7 - Guaranteed/minimal standards for Continuity of Supply indicators

System level	Continuity of supply indicator	Guaranteed/minimal standard for continuity of supply indicator		Financial compensation	
Transmission system	Duration of an individual long planned interruption for a single customer				
	Duration of an individual long unplanned interruption for a single customer				
	Total number of long unplanned interruptions in the reporting period for a single customer				
Distribution system			Quality area		X
			Urban area	Rural area	
		Duration of an individual long planned interruption of a single customer			
		Duration of an individual long unplanned interruption for a single customer			
	Total number of long unplanned interruptions in the reporting period for a single customer				

APPENDIX 3 – Electricity Service Quality Standards

Table 8- Format for registering individual interruptions in distribution network

Date	Interruption No. 1	Interruption No. 2	...
ID			
CODE			
DISTRICT			
SUBDISTRICT			
SS 110/MV kV NAME			
SS 35/MV kV NAME			
SS MV/LV kV CODE			
SS MV/LV kV NAME			
FEEDER / LINE CODE			
FEEDER / LINE NAME			
VOLTAGE LEVEL			
INTERRUPTION STARTING DATE			
INTERRUPTION STARTING TIME			
INTERRUPTION ENDING DATE			
INTERRUPTION ENDING TIME			
INTERRUPTION DURATION (MINUTES)			
INTERRUPTION TYPE (PLANNED / UNPLANNED)			
INTERRUPTION CAUSE ORIGIN (INTERNAL / EXTERNAL / FORCE MAJEURE)			
INTERRUPTION CAUSE (see			

Date	Interruption No. 1	Interruption No. 2	...
Table 10 - Causes of long interruption -Causes of long interruptions)			
NUMBER OF CUSTOMERS IN RURAL AREAS			
NUMBER OF CUSTOMERS IN URBAN AREAS			
ACTIVE POWER AT START OF INTERRUPTION P_k (MW)			
NOTES AND EXPLANATIONS			

Table 9 - Format for registering individual interruptions in transmission network

Date	Interruption No. 1	Interruption No. 2	...
ID			
CODE			
SUBSTATION			
LINE			
VOLTAGE LEVEL			
INTERRUPTION STARTING DATE			
INTERRUPTION STARTING TIME			
INTERRUPTION ENDING DATE			
INTERRUPTION ENDING TIME			
INTERRUPTION DURATION MINUTES			
INTERRUPTION TYPE (PLANNED / UNPLANNED)			
INTERRUPTION CAUSE ORIGIN (INTERNAL / EXTERNAL / FORCE MAJEURE)			
INTERRUPTION CAUSE (see			

Date	Interruption No. 1	Interruption No. 2	...
Table 10 - Causes of long interruption - Causes of Long Interruptions))			
ACTIVE POWER AT START OF INTERRUPTION P_k (MW)			
NOTES AND EXPLANATIONS			

Table 10 - Causes of long interruption

ID	Cause
1	DSO
2	TSO
3	Animals
4	Construction

5	Vandalism
6	Customers
7	Third party
8	Earthquake
9	Cyclone
10	Lighting
11	Floods
12	Volcanic eruption
13	Fires
14	War
15	Armed conflict
16	Rebellion
17	Terrorism
18	Military act
19	Other

APPENDIX 4 – Templates for written requests for financial compensation

Transmission System Operator

Dear Sir/Madam,

I am writing you in relation to the provided level of electricity service quality.

Indicator(s) which does not meet guaranteed/minimal level as defined in Rule on Electricity Service Quality Standards are as follows (*note: tick the appropriate box*):

- Duration of an individual long planned interruption for a single customer
- Duration of an individual long unplanned interruption for a single customer
- Total number of long unplanned interruptions in the reporting period for a single customer
- Voltage quality

Attached I am submitting the documentation supporting my request .

Distribution System Operator

Dear Sir/Madam,

I am writing you in relation to the provided level of electricity service quality.

Indicator(s) which does not meet guaranteed/minimal level as defined in the Rule on Electricity Service Quality Standards are as follows (*note: tick the appropriate box*):

- Time needed to issue cost estimate for simple works related to connection to network
- Time needed to connect new customer to the network
- Time needed for disconnection upon customers' request
- Time needed to respond to customers' written complaint
- Time needed to notify customers on planned interruptions
- Time needed to restore supply following disconnection due to non-payment
- Time needed to inspect the meter in case of meter failure
- Duration of an individual long planned interruption of a single customer – urban area
- Duration of an individual long planned interruption of a single customer – rural area
- Total number of long unplanned interruptions in the reporting period for a single customer – urban area
- Total number of long unplanned interruptions in the reporting period for a single customer– rural area
- Voltage quality

Attached I am submitting the documentation supporting my request.

Electricity Supplier

Dear Sir/Madam,

I am writing you in relation to the provided level of electricity service quality.

Indicator(s) which does not meet guaranteed/minimal level as defined in the Rule on Electricity Service Quality Standards are as follows (*note: tick the appropriate box*):

- Time needed to respond to customers' written question in relation to electricity bill
- Time of holding of the call in the call center
- Time for waiting in case of personal visit at the customer center

Attached I am submitting the documentation supporting my request.