REPUBLIC OF ARMENIA ELECTRICITY MARKET DISTRIBUTION NETWORK CODE

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REPUBLIC OF ARMENIA ELECTRICITY MARKET DISTRIBUTION NETWORK CODE

SECTION I. GENERAL PROVISIONS AND MAIN DEFINITIONS

CHAPTER I. GENERAL PROVISIONS AND MAIN **DEFINITIONS**

- The Republic of Armenia (RoA) Electricity Market Distribution Ι. Network Code (hereinafter, EDN Code) shall regulate the processes of distribution network development planning, distribution network operative management, short-term planning and dispatching of the electricity system, the relationship in the context of connection (change of connection) of consumption systems and new capacities to the distribution network, the requirements for electricity commercial metering systems in the distribution networks, and the procedures to improve the efficiency of distribution network operation.
- The main definitions used in the EDN Code: 2.
 - I) Fixed Emergency **Capacity**

The active capacity stipulated in the Contract with the Customer, which is subject to uninterrupted provision by the Distributor in the emergency states within the period defined in the Contract to guarantee the operation of electrical equipment responsible for the safety and security of human life and the environment.

Capacity

2) Fixed Technological The active capacity stipulated in the Contract with the Customer, which is subject to uninterrupted provision by the Distributor within the period defined in the Contract in order to bring to an end the treatment of raw material during the production process, or to withdraw the raw material from the production process without any waste or damage to the production equipment.

3) Commercial Metering Device

A metering device for commercial measurement of electricity specified in the Contract with the Customer or in the Registration Card.

4) Generator

An entity that is eligible for electricity (capacity) generation and actually performs generation activity, except for a plant being in the stage of testing and commissioning, and in case of connecting the Generator to the network, the entity that applied for such a connection as well.

5) Generator Connection Fee

An amount charged in compliance with the EDN Code for connection of the Generator, except for the APP.

6) Generator Connection Connection to or change of connection of Generator's power plant (capacities) to the Distribution Network.

7) Distribution Network

A unified system of electricity distribution lines, substations, and other facilities under the control and operation of the Distributor.

8) Distributor

An entity holding a license for provision of electricity distribution services.

9) Applicant

An entity, including a Customer, applying for connection. In case of connection of a newly constructed multi-appartement building or a district under construction, the Developer is considered to be an Applicant.

10) ETN Code

The Republic of Armenia Electricity Market Transmission Network Code approved by the Commission.

II) Autonomous Power Producer (APP)

A consumer that produces electricity for own needs using renewable energy sources who has signed the power flow contract with the Universal Supplier and not deemed to be a generation licensee in relation to the given autonomous power production facility. For this Provision, own needs is the electricity consumption of autonomous power producer or in case of the autonomous group of all members of the group, regardless of the purpose of its use (household, industrial, etc.).

12) Autonomous Power Producer Connection Connection or change of connection of the APP's power plant (capacities) to the Distribution Network

13) Large Customer

A customer of 5 MW and more capacity connected to the Distribution Network.

14) Dispatch

A set of processes and actions required for technological management of the power system aimed at declaration and planning of electricity generation, import, export, transit opportunities, and consumption forecast and aimed to cover the entire electricity demand in real-time mode, ensuring provision of electricity supply of the defined quality and maintaining reliability and security indicators of the electricity system.

15) Transmitter

An entity holding a license for electricity (capacity) transmission.

16) Electricity System Operator (ESO)

An entity holding a license for provision of Electricity System Operator services.

17) Commission

The Public Services Regulatory Commission of the Republic of Armenia.

18) Metering Point

A Boundary point or a point of the electric network close to the Boundary point where the Commercial metering device or Control metering device is installed.

19) Registration Card

Individual registration card of the Customer opened by the Distributor pursuant to the Retail Electricity Market (REM) Rules, containing Customer identification data and information as defined in the REM Rules and EDN Code.

20) Metering device

A set of combined devices envisaged for measurement and settlement of electricity (capacity), including an electricity meter or a set of measuring current and voltage transformers and electricity meters calibrated by a metrological body, and, if available, impulse sensors, modems, adders, connection wires, and uninterruptible electricity feeding devices ensuring autonomous reliable feeding for at least 1.5 hours.

21) Supplier

An entity holding the license for electricity supply.

22) Connection Point

A physical point of the Distribution Network to which a power plant of a Generator and/ or a consumption system of an Applicant is connected.

23) Market Participants

Generator, Distributor, Transmitter, Electricity System Operator, Electricity Market Operator, and Customers.

24) Electricity Market Operator (EMO)

An entity holding a license for provision of electricity market operation services.

25) Contract

A contract developed in the model form approved by the Commission on connection of the consumption system to the electric network, distribution of electricity, and universal supply of electricity, and/or a contract on connection of a consumption system of a multi-apartment building under construction or a developing district to the electricity network.

26) Qualified Customer

A customer having been recognized by the Electricity Market Operator as Qualified based on compliance with the criteria defined in the RoA Wholesale Electricity Market Trading Rules approved by the Commission.

27) Boundary Point

Balance ownership border of the electric facilities.

28) Consumption System

A group of electric facilities of the Customer.

29) Connection of the Consumption System (Connection) New connection or change of the existing connection of the Customer's Consumption System to the Distribution Network.

30) Customer

An entity demanding electricity, who has signed or is in the process of signing an electricity supply contract with the Electricity Supply Licensee (including Universal Supplier).

31) Customer Connection Fee (Connection fee) An amount charged to the Applicant for connection of a Consumption System.

31.1) Renewable		
Energy Source		

Non-fossil renewable energy sources (wind, solar, hydro, geo-thermal, biomass, biogas and other) suitable for generation of electricity and (or) thermal energy.

32) Control Metering device

A meter specified in the Contract or in the Registration Card to control the measurement of electricity.

33) Technical Conditions

Specifications for connection to the Distribution Network at least cost, which are necessary to ensure the connection of electric facilities at technical parameters specified in the connection application and metering of electricity.

34) Reference

A document on the feasibility of connecting to the Distribution Network provided to the entity intending to obtain a license for electricity (capacity) generation.

35) Distribution-Scale Plant

A power plant with up to 10 MW installed capacity, connected to the Distribution Network, except for APP plant.

36) Simplified Network Connection

Connection of a new or reconstructed Consumption System of the Customer or New Customer to a 0.22 kV and 0.4 kV Distribution Network with a capacity of up to 30 kVA when a standard connection fee is defined for such connection and no land works are required.

3. The main definitions used in the EDN Code shall have the meanings defined by the Energy Law of the Republic of Armenia (hereinafter, the Law), ETN Code, and REM Rules, unless otherwise specifically provided for by the EDN Code.

CHAPTER 2. OBJECTIVES OF THE EDN CODE

- 4. The objectives of the EDN Code are as follows:
 - Regulate the development planning and normal operation of the Distribution Network;
 - 2) Regulate the technical nature of relations between Market

- Participants operating in the Electricity System and define their rights and responsibilities;
- 3) Ensure open, transparent, and non-discriminatory access to and use of the Distribution Network.

CHAPTER 3. INFORMATION SUBMISSION AND NOTIFICATION

- 5. The exchange of information among the Market Participants and submission of documents shall be performed in a proper way.
- 6. The exchange of information and submission of documents shall be deemed appropriately performed if they have been delivered personally with a mail delivery confirmation, or through the document sharing platform (if such is available for the recipient of that correspondence), or by a registered letter (including with a notice of delivery), by email (including the email address specified by the Customer), or other means securing the integrity of the message (including sending a message to a phone number specified by the Customer), which allow confirmation of receipt of the correspondence or, in certain cases defined in the Law, confirmation of the fact of being properly notified, unless other methods of notification or document submission are specifically mentioned in the EDN Code.
- 7. The Customer shall be required to immediately inform the Distributor about any change of data regarding its address, email, or other means of communication. If such a notice is not sent, the information and the documents shall be provided to the recipient's last known address and the recipient shall bear all the risks associated with the adverse consequences of not providing the information.
- 8. If the recipient refuses to receive the correspondence or to sign the mail delivery confirmation, if sent via postal delivery, or

for some reason the documentation sent by a registered letter is returned, the documentation shall be deemed appropriately delivered to the recipient by the sender on the 3rd day starting the next day that the documentation is available on the Distributor's official website and on http://www.azdarar.am and the latest announcement on the opportunity for the recipient to become aware of the content thereof is published.

- 9. The Distributor shall provide a written answer to the written application of the Customer or Applicant and a verbal answer to the verbal application, or shall respond via email, if the application has been submitted via email, within 10 business days after the receipt of the application (except for verbal applications). The answer to a verbal inquiry shall be provided verbally immediately after the inquiry is received or in the shortest possible time.
- 10. The Market Participant shall be liable for the accuracy of information provided.
- II. Where inaccuracies are revealed in the information provided by a Market Participant, those should be corrected within 3 business days after the inaccuracies are revealed and the parties notify each other, unless another term is specified in the EDN Code.
- 12. Information (documents) shared among Market Participants, as well as those submitted to the Commission, shall be in the public domain if not deemed confidential in accordance with the Law.
- 13. Data (documents) specified in Provision 12 of the EDN Code may be published in procedures defined by the Law. The party that published such information or documents shall bear responsibility for violating legislative requirements regarding the confidentiality of such information (documents).
- 14. Any data or document provided in the context of the EDN Code shall be preserved for at least a 5-year period, unless a longer term is specified in the EDN Code for storage of such type of documentation.

15. It is prohibited to request that the Applicant make payments or compensation or provide information and documents; it is also prohibited to overburden the latter with obligations that are not covered by the EDN Code, Contract, and other normative legal acts.

CHAPTER 4. MARKET PARTICIPANTS RESPONSIBILITIES, DISPUTE (DISAGREEMENT) RESOLUTION

- 16. For non-compliance or inadequate compliance with Provisions of the EDN Code, Market Participants shall bear responsibility in procedures defined by the Law and EDN Code.
- Market Participants shall not be responsible for violations defined in the EDN Code, if they happened due to force majeure circumstances.
- 18. In terms of the EDN Code, any circumstance or event (or after-effect of that event) that led (or is leading) to non-fulfillment or inadequate fulfillment of obligations defined by the EDN Code and at the same time is characterized by features stated below, is considered a force majeure situation:
 - I) Is out of the control of the party affected by a force majeure situation:
 - 2) The affected party undertook all possible actions and efforts (including precautional, alternative, legally defined) to prevent, weaken, eliminate, or avoid the influence of those circumstances (after-effects).
- 19. In terms of the EDN Code, the following situations in particular are considered force majeure cases:
 - Natural and man-made calamities; epidemics; acts of God (including floods, earthquakes, hurricanes, tornados, thunderstorms, heavy rains with lightning, snowstorms and landslides); nuclear, chemical, or biological contamination; strikes; and public disorders;

- Rebellions, terroristic acts, wars, invasions, armed conflict, actions of foreign enemies, and blockades that take place on or involve the territory of the RoA and could not reasonably be predicted.
- 3) An act, activity, or inactivity of a state, municipal agency, or other authorized body, due to which no permission or right was issued or extended to facilitate fulfillment of obligations, or due to which fulfillment of such obligations was hindered, on condition that the affected party acted in compliance with the RoA legislation.
- 20. If a force majeure situation occurs, the affected party shall notify the other party about such circumstances within 10 days after being informed or after being impacted by those circumstances. The party that failed to notify the other party shall bear the risks associated with negative impacts of non-notification.
- 21. Provision 19 of the EDN Code shall not restrict the Market Participant's right to apply to the Commission if extraordinary and unavoidable circumstances other than those described above occur, requesting that the Commission recognize them as force majeure circumstances as well, on condition that they satisfy the requirements of this Chapter.
- 22. Where a dispute (disagreement) arises between WEM Participants, the parties shall resolve them through negotiations.
- 23. If a dispute (disagreement) is not settled by the parties, any party may apply to the Commission requesting that it resolve the dispute within its jurisdiction, as well as may file a suit at a competent court, unless the parties have agreed to submit their dispute to arbitration.

SECTION 2. DISTRIBUTION NETWORK DEVELOPMENT PLANNING

CHAPTER 5. GENERAL PROVISIONS

- 24. The purpose of Distribution Network development planning (hereinafter, Development planning) is to enable the development of the Distribution Network at the economically justified lowest cost on the condition that the reliability and security of electricity system operation are secured.
- 25. Development planning shall be based on the Law, this Section, the requirements of the ETN Code, and technical regulations.
- 26. Development planning shall aim to solve one or several of the following issues in the Distribution Network:
 - Generation capacity increase based on the forecasted increase in volumes of Applicants' consumption system connections and increase in consumption demand;
 - 2) Improvement of Customers' service quality indicators;
 - 3) Ensuring electricity quality indicators;
 - 4) Reduction of losses or consumption of electricity for own needs:
 - 5) Replacement of obsolete assets or assets subject to write-off with new ones;
 - 6) Improvement in the level of reliability and security;
 - 7) Implementation of environmental protection measures;
 - 8) Implementation of energy-saving measures;
 - 9) Introduction of efficient modern technologies;
 - 10) Integration of facilities that use renewable energy resources;
 - Compliance with Energy Sector development strategies as well as requirements of legal acts of the Commission and other competent authorities;
 - 12) Compliance with the requirements of the TYNDP approved by the ESO;

- 13) Implementation of all actions pertaining to the given licensee for a corresponding period under a General Long-Term Electricity System Development Plan approved by the ESO;
- 14) Implementation of other necessary actions for improving the efficiency of licensed activities.
- 27. The Development planning process shall be carried out in the following stages:
 - 1) Collecting and processing of information;
 - 2) Performing necessary studies;
 - 3) Modeling;
 - 4) Drafting and approval of the Development plan.
- 28. Every other year, the Distributor shall prepare the Development plan, considering therein the development of the Distribution Network for the next 10-year period.
- 29. Actions indicated in the Development plan shall be included in the Distributor's investment plans.
- 30. The Distributor may engage independent experts or firms for the drafting of the Development plan.
- 31. For the activities indicated in the Development Plan, the timeframes for construction and reconstruction works on facilities shall be estimated, including those for project planning, design, and state and municipal government, as well as for receiving authorizations from regulatory bodies and for construction.

CHAPTER 6. DEVELOPMENT PLANNING CRITERIA

- 32. The development planning process shall consider the expected changes in electricity consumption, production volumes and structure of Distribution-Scale Plants and scenarios thereof, opportunities for the use of new technologies, and other possible developments.
- 33. The planning process shall include estimates of Distribution

- Network operating regimes by season (winter, spring, summer, and autumn).
- 34. Potential risks of disruption to the normal operation of the Distribution Network shall be assessed during the planning process and recommendations on reducing the negative consequences of their impacts shall be developed.
- 35. The Development planning shall be done in such a manner that:
 - All performance indicators of electrical equipment and facilities under the operational control of the Distributor under normal conditions of the power system are within the range defined for such equipment by the manufacturers, and the quality of power supplied by the distribution network complies with the requirements of technical regulations;
 - The level and duration of overloading of electrical equipment and facilities under the operational control of the Distributor comply with the indicators defined by their manufacturers and existing technical requirements, considering external factors;
 - 3) The power factor ($\cos \varphi$) at the Customer's Boundary point (excluding residential Customers) is within the range of 0.9–1.0 for 95 percent of the time;
 - 4) Disconnection of one power unit (transformer, switch, etc.) at substations with two 35–110 kV transformers does not lead to 30 percent or higher loss of the substation load;
 - 5) Cases for voltage deviations are maintained at the target levels set by the Commission;
 - 6) Electricity supply interruption indices (System Average Interruption Duration Index (SAIDI) and System Average Interruption Frequency Index (SAIFI)) are maintained at target levels set by the Commission.

CHAPTER 7. INFORMATION COLLECTION AND PROCESSING

- 36. The Distributor shall collect, process, and summarize the information and data necessary for planning purposes.
- 37. The Distributor shall develop the data submission forms to be provided by Distribution-Scale Plants and Large Customers for planning purposes.
- 38. For the planning process the Distributor may request data and information from Large Customers and Distribution-Scale Plants to be submitted within 20 business days after receiving the request.
- 39. In case of intention to take installations that are elements of the Distribution Network out of operation, the Large Customers and Distribution-Scale Plants shall inform the Distributor at least I year before the planned decommissioning.
- 40. The Distributor may request that Distribution-Scale Plants and Large Customers submit additional information to check the accuracy of the planning information, to be provided within 10 days after receiving the request.
- 41. If the Distribution-Scale Plants and Large Customers reveal inaccuracies in the information they provided in the development plan, they shall inform the Distributor in writing within 3 business days after the inaccuracy is revealed.

CHAPTER 8. STUDIES REQUIRED FOR PLANNING AND MODELING

- 42. Distribution Network Development planning shall be implemented based on the following studies:
 - I) Assessment of electricity demand for active and reactive power;
 - 2) Assessment of operating regimes of the Distribution Network;
 - 3) Assessment of the impact on the Distribution Network of

- connecting new consumption systems or Distribution-Scale Plants to the Distribution Network:
- Assessment of projected changes to electricity and capacity demand and impacts, the time when new installations are ready for operation, and actions necessary for correcting deficiencies in existing installations;
- 5) Load flow, short circuit, Distribution Network stability and voltage level studies at checkpoints, as well as voltage level studies at the Boundary points with the Customers;
- 6) Assessment of Distribution Network behavior under Normal and Emergency regimes;
- 7) Study of possible congestion in the Distribution Network elements:
- 8) Assessment of the behavior of the Distribution Network during deviations or mutual disconnections;
- 9) Any other study or assessment that may be required to guarantee the reliable and secure operation of the Distribution Network at the economically justified lowest cost in the future.
- 43. Development planning of the Distribution Network within the framework of the Development Plan shall be performed through modeling. The impact of real objects, processes, and phenomena shall be modeled.
- 44. The following key assumptions shall be considered while modeling Distribution Network development:
 - Electricity and capacity demand shall be represented at peak, off-peak, and minimum load conditions;
 - 2) Electricity and capacity demand shall be modeled for the forecasted regimes of the Customers;
 - Scheduled removal of distribution network facilities from service for repair, as well as other restrictions needed for regime adjustments, shall be taken into account;
 - 4) Distribution Network facilities shall be modeled to consider

- their scheduled removal from service stipulated by technical maintenance and construction, as well as long-term forced outages;
- 5) Inter-system flows shall be modeled to examine their impact on the power system;
- 6) Relay Protection and Automation parameters shall be modeled for necessary adjustments.
- 45. The development shall be modeled for the main and alternative scenarios, both optimistic and pessimistic scenarios.
- 46. Distribution Network profiles during modeling shall meet the power sector reliability and security indicators.
- 47. The modeling software used for development planning shall guarantee reproduction of real-time processes.

CHAPTER 9. DEVELOPMENT AND APPROVAL OF THE DEVELOPMENT PLAN

- 48. The development plan shall be developed and approved by the Distributor in cooperation with Distribution-Scale Plants, Large Customers, and the ESO.
- 49. The development plan shall present the results of all studies pursuant to the requirements of the EDN Code and summarize the measures envisaged to ensure the further reliable and secure operation of the Distribution Network at the economically justified least cost for each of the 10 years of the planning period, according to the following sections:
 - Forecast of electricity and capacity demand in the distribution network:
 - Forecasts of electricity generation at plants connected to the distribution network as well as descriptions of and preferable connection nodes for new generation capacities planned;
 - 3) Information on infrastructure to be built in the distribution network over the next 10 years;

- Information on new or reconstructed facilities to be connected to the distribution network (on connection applications and other information received by the Distributor);
- 5) Information on consumption systems;
- 6) Information on the capacity of each node of the Distribution Network and on the need to strengthen the given node for integration of new loads and facilities into the Distribution Network:
- 7) Information on existing problems and appropriate plans to address problems related to service quality and compensation of reactive power and electricity losses;
- 8) Description of Distribution Network development measures;
- 9) Efficiency analysis for expenses (including technical and economic indicators).
- 50. Once it finishes collecting, processing, and summarizing data and information as prescribed by Chapter 8 of the EDN Code, the Distributor shall publish the draft development plan on its official website and notify the ESO, Distribution-Scale Plants, and Large Customers by October 15.
- 51. Upon receipt of the notification mentioned in Provision 50 of the EDN Code, the ESO, Distribution-Scale Plants, and Large Customers shall provide to the Distributor their recommendations and opinions on the draft development plan within 20 business days.
- 52. Within 20 business days after the receipt of recommendations and opinions on the draft development plan, the Distributor shall summarize them and notify the Commission thereon.
- 53. After 40 business days from the receipt of the Distributor's notification, the Commission shall provide its opinion and recommendations on the revised draft development plan to the Distributor, as provided for in Provision 52 of the EDN Code.

- 54. Within 20 business days after the receipt of recommendations and opinions of the Commission on the draft development plan, the Distributor shall summarize them and approve the Development Plan.
- 55. Within 5 business days, the Distributor shall submit the approved Development Plan to the Commission and publish it on its official website.

SECTION 3. SHORT-TERM PLANNING

CHAPTER 10. GENERAL PROVISIONS

- 56. The purpose of the short-term planning of the Distribution Network is to schedule the reliable and secure operation of the Distribution Network on a yearly basis, ensuring compliance with the requirements of the ESO for planning of the reliable and secure operation of the electricity system.
- 57. The following actions shall be considered during short-term planning:
 - I) Annual schedule of planned outages at the Distribution Network (DN EPOS);
 - 2) Annual forecasted electricity demand of Customers connected to the Distribution Network (DN EDEM);
 - Annual generation structure forecast for the Distribution-Scale Plants (DN EGEN);
 - 4) Annual forecast of Distribution Network losses and own needs (DN LOS).
- 58. The data and information necessary for short-term planning shall be collected, processed, and summarized by the Distributor. For short-term planning, the Distributor shall establish the list and submission forms of data and information to be submitted by the relevant Market Participants in accordance with the requirements of this Chapter.
- 59. The Distributor may request additional information or clarifications from Market Participants during the short-term planning. Market Participants shall provide additional clarifications to the Distributor in accordance with the procedures and in terms set forth in Chapter 3 of the EDN Rules, unless another, longer term is defined by the parties.

CHAPTER 11. PLANNING FOR OUTAGES OF EQUIPMENT AND DEVICES

- 60. The Distributor shall develop the DN EPOS based on the information on planned outages received from Distribution-Scale Plants and Large Customers (hereinafter, Distribution Outage Plan Participants – DOP Participants).
- 61. The Distributor shall compile the DN EPOS on an annual basis and shall adjust it for monthly and daily periods in accordance with the procedure defined by this Chapter.
- 62. The DOP Participants shall provide the information on annual outages of their facilities for the following year to the Distributor by May 15 of the given year, whereas the monthly and daily adjustments for annual information shall be provided as follows:
 - 1) By the 7th of every month for the following month;
 - 2) Each business day by 09:30 for the following second business day, and if the following days are non-business days, for those days and for the next business day as well.
- 63. The DOP Participants information on annual, monthly, and daily planned outages of their electric facilities submitted to the Distributor shall include at least the following:
 - I) Description of the electric facility subject to the planned outage;
 - 2) Duration of the planned outage;
 - 3) Planned outages start and end dates;
 - 4) Justification for the planned outage.
- 64. The Distributor shall compile and adjust the DN EPOS based on the information submitted by the DOP Participants as prescribed in Provision 63 of the EDN Code.
- 65. The Distributor, while compiling the DN EPOS, shall maintain the schedules for planned outages suggested by the DOP Participants, unless those negatively affect the reliability and security indicators of the Distribution Network.

- 66. The Distributor shall submit the DN EPOS each year by June 1 to the DOP Participants for review.
- 67. Upon receipt of the DN EPOS, the DOP Participants shall provide their suggestions and comments to the Distributor by June 10.
- 68. The Distributor shall summarize the suggestions and comments received from the DOP Participants, and by June 15 of the current year, shall submit to the ESO its own data for the development of EPOS in procedures defined by the ETN Code, while in parallel, notifying the DOP Participants regarding the submission.
- 69. After the ESO publishes the annual schedule of planned outages of the electricity system (EPOS) in procedures defined by the ETN Code, the Distributor shall send the final version of the DN EPOS to the DOP Participants by September 5. The monthly and daily adjustments to the DN EPOS shall be provided to the DOP Participants by the Distributor in the following timeframes:
 - 1) By the 27th of every month for the following month;
 - 2) Each business day by 13:00 for the following second day, and if the following days are non-business days, for those days and for the next business day as well.

CHAPTER 12. DEMAND FORECAST

- 70. The Distributor shall compile the DN EDEM based on the demand forecast data provided by Large Customers and the results of its own electricity demand analysis.
- 71. The Distributor shall compile the DN EDEM on an annual basis and adjust it for monthly and daily periods in accordance with the procedure defined by this Chapter.
- 72. The Large Customers shall submit their demand forecasts for the next year to the Distributor each year for the following year by September I and the adjusted monthly and daily forecasts of the annual demand within the periods defined in sub-Provisions I and 2 of Provision 62 of the EDN Code, respectively.

- 73. Annual demand forecast submitted by Large Customers to the Distributor shall include:
 - I) The annual demand forecast of electricity by month (MWh);
 - 2) The minimum and maximum active capacity demand by month (MW);
 - The minimum and maximum reactive capacity demand by month (MVAr);
 - 4) The hourly load schedules for:
 - a) Business days;
 - b) Saturdays and Sundays;
 - c) Public holidays and commemoration days.
 - 5) Demand-side management measures, if envisaged.
- 74. The monthly demand forecast submitted by Large Customers to the Distributor shall include:
 - The monthly demand forecast of electricity by day (MWh);
 - 2) The minimum and maximum active capacity demand by day of the given month (MW);
 - 3) The minimum and maximum reactive capacity demand by day of the given month (MVAr);
 - 4) The adjusted hourly load schedules for the given month in the format provided in Provision 73, sub-Provision 4 above;
 - 5) The adjustments to demand-side management measures for the given month, if envisaged.
- 75. The daily demand forecast submitted by Large Customers to the Distributor shall include:
 - 1) The hourly distribution of daily electricity demand (MWh);
 - 2) The hourly distribution of daily reactive capacity demand (MVAr).
- 76. The annual, monthly, and daily demand forecasts shall be submitted by Large Customers to the Distributor for all Distribution Network connection points and shall take into account any anticipated changes during the planning period.
- 77. The Distributor shall compile the annual DN EDEM based on

data provided by Large Customers according to Provision 73 and according to Provisions 74 and 75 of the EDN Code for the monthly and daily adjustments, respectively; it shall also consider the following:

- 1) Expected GDP growth in the country;
- 2) Potential impact of energy efficiency projects;
- 3) Historical demand data;
- 4) Forecast of Distribution Network losses;
- 5) Possible impact of weather forecasts;
- 6) Other information and factors that may have an impact on the distribution demand forecast.
- 78. The Distributor shall compile the DN EDEM for the next year by October 1 of the given year, and the adjusted monthly and daily forecasts within the periods defined in Provision 62, sub-Provisions 1 and 2 of the EDN Code, respectively.
- 79. The Distributor, based on the DN EDEM and DN LOS, shall submit to the ESO its own data for the development of the EDEM according to procedures defined in the ETN Code.

CHAPTER 13. GENERATION STRUCTURE FORECAST

- 80. The DN EGEN shall be compiled by the Distributor based on the data provided by the Distribution-Scale Plants and the results of the Distributor analysis.
- 81. The Distributor shall compile the DN EGEN on an annual basis and adjust it for monthly and daily periods in accordance with the procedure defined by this Chapter.
- 82. The Distribution-Scale Plants shall provide to the Distributor the hourly generation schedules forecasted for the following year for each generating unit by September I of each year, as well as:
 - Each generating unit's maximum available capacity on a weekly basis;

- 2) Delivery of electricity at each Connection point with the Distribution Network.
- 83. The Distribution-Scale Plants shall adjust and submit to the Distributor the information provided in Provision 82 of the EDN Code, within the periods specified in Provision 62, sub-Provisions I and 2 of the EDN Code, respectively.
- 84. The Distributor shall compile the DN EGEN based on the data submitted by Distribution-Scale Plants in accordance with Provision 82 of the EDN Code, while considering the following as well:
 - I) The need for efficient use of the installed capacities of these generators and historical data of generation volumes;
 - 2) Power purchase guarantees given to these generators;
 - 3) Entry of new generation capacities into the Distribution Network and retirement of current generation capacities;
 - 4) Possible impact of weather forecasts;
 - 5) Possible impact of energy efficiency projects;
 - 6) Other information and factors that may have an impact on the DN EGEN.
- 85. The Distributor shall compile the DN EGEN for the next year by October I of the given year, and the adjusted monthly and daily forecasts within the periods defined in Provision 62, sub-Provisions I and 2 of the EDN Code, respectively.
- 86. The Distributor, based on the DN EGEN shall submit to the ESO its own data for the development of the EGEN in procedures defined by the ETN Code.

CHAPTER 14. DISTRIBUTION NETWORK LOSS FORECAST

- 87. The Distributor shall calculate the DN LOS as the total sum of losses of Distribution Network facilities.
- 88. The Distributor shall develop the DN LOS forecast on an annual basis and adjust it for monthly and daily periods in accordance

- with the procedure defined by this Chapter.
- 89. The Distributor shall calculate the DN LOS forecast based on the following:
 - I) DN EPOS;
 - 2) DN EGEN;
 - 3) Weather conditions;
 - 4) Distribution Network topology.
- The Distributor shall present in the DN LOS the losses and own needs of the Distribution Network for the next year on an hourly basis.
- 91. The Distributor shall develop the DN LOS for the next year by October I of the given year, and the adjusted monthly and daily forecasts within the periods defined in Provision 62, sub-Provisions I and 2 of the EDN Code, respectively.

SECTION 4. OPERATIVE MANAGEMENT OF THE DISTRIBUTION NETWORK

CHAPTER 15. GENERAL PROVISIONS

- 92. This section shall regulate the activities between the Distributor and entities specified in this Chapter in order to ensure the reliable and secure operation of the Distribution Network.
- 93. The Distributor and the following entities shall participate in the operative management (hereinafter, the DOM Participants):
 - Transmitter;
 - 2) Generators:
 - 3) Customers that are required to have operative personnel (responsible for electric facilities) as prescribed by the technical regulation approved by the RoA Government (hereinafter, the DOM Customers).

CHAPTER 16. OPERATIVE SUBORDINATION

- 94. In terms of operative subordination, equipment and RPA devices of the DOM Participants may be placed:
 - I) Under the proceeding of the ESO's Dispatcher and the management of the Distributor's Dispatcher;
 - 2) Under the operative management and proceeding of the Distributor's Dispatcher;
 - Under the operative proceeding of the Distributor's Dispatcher and the operative management of the DOM Participants.
- 95. The list of equipment and RPA devices of the DOM Participants to be handed over to the operative subordination of the Distributor shall be defined by the Distributor, and the formalities in this regard shall be completed by December 1 of the given year based on the written consent of the DOM Participant provided to the

Distributor. If no changes occur in the agreed list of equipment and RPA devices for the previous year, then the list shall remain effective for the next year as well. Further changes in the equipment and RPA devices shall be done as necessary, based on data provided by the DOM Participant or initiated by the Distributor.

- 96. The list shall include those equipment and RPA devices of the DOM Participant that were not included in the list defined by the ESO, and the dispatch whereof by the Distributor is essential to fulfill the functions stipulated by its operational license;
- 97. The operative personnel of the DOM Participant shall carry out operations with equipment and RPA devices under the operative management of the Distributor's Dispatcher following the orders of the Distributor's Dispatcher. The latter shall give a separate order for each operation.
- 98. Operations with equipment and RPA devices under the operative proceeding of the Distributor's Dispatcher and at the same time under the operative management of the DOM Participant shall be carried out by the operative personnel of the latter upon the permission of the Distributor's Dispatcher.
- 99. The operative personnel of the DOM Participant shall be required to immediately inform the Distributor's Dispatcher about all failures and impermissible deviations from the regime parameters of the equipment and devices that are under operative subordination of the latter.
- 100. The operative personnel of the DOM Participant that report to the Distributor's Dispatcher shall be obliged to report to the Distributor after accepting the shift, as well as at the latter's request to report at any time on the current scheme, the state of the equipment and devices under the operative subordination of the Distributor's Dispatcher, the regime parameters, the existing defects, the planned repairs, and replacements.

CHAPTER 17. CONDUCTING OPERATIVE COMMUNICATIONS

- 101. Each year before December I, the Distributor and the DOM Participants shall be obliged to present to each other the following documents approved by their authorized persons:
 - I) The list of employees entitled to conduct operative communications:
 - 2) The list of operative personnel entitled to conduct operative communications and switches.
- 102. Operative communications shall include:
 - Orders from the Distributor's Dispatcher to the DOM Participants operative personnel and reporting on their execution by the latter;
 - 2) Messages from the DOM Participants operative personnel on equipment status changes, violations, and regime parameters.

CHAPTER 18. DISPATCH ORDERS

- 103. The Distributor's Dispatcher shall be entitled to issue the following orders regarding the equipment and RPA devices under its operative subordination:
 - 1) Disconnect, connect, or energize the electric facilities;
 - 2) Organize unscheduled visits to the overhead line sites;
 - 3) Purchase equipment and devices.
- 104. The Dispatch order shall define the activity to be carried out and the period for its implementation. The Dispatch orders shall be made clear to avoid miscommunication and error probability to the greatest extent possible.
- 105. Once an order from the Distributor's Dispatcher is received, the DOM Participant officer on duty shall repeat it and obtain confirmation. Each order from the Distributor's Dispatcher and a corresponding record of the DOM Participant officer on duty

- regarding its execution shall be made in the operative logs of the Dispatcher and the given DOM Participant. A Dispatch order shall be executed unconditionally starting at the moment of its approval by the ESO's Dispatcher.
- 106. Where the DOM Participants officer on duty considers that the issued Dispatch order does not comply with the EDN Code requirements, it should immediately inform the Distributor's Dispatcher about this and provide its arguments. If the Dispatch order issued by the Distributor's Dispatcher receives approval, the DOM Participant officer on duty shall unconditionally execute the order, making a corresponding record in the operative log. Where the implementation of the Distributor's Dispatch order issued by the Distributor is impossible, the DOM Participant shall immediately inform the Distributor.
- 107. If the operative duty of the DOM Participant is carried out by one officer, then that officer must obtain permission from the Distributor's Dispatcher to leave his/her workplace.
- 108. The Distributor shall ensure the automatic recording and electronic archiving of all dispatch (operative) conversations between the DOM Participant and him or herself. Orders sent to the archive shall be kept for at least 3 years. The information may be provided to the DOM Participants upon a written request by the latter within 7 days after receiving the request.
- 109. In case of loss of communication and impossibility of issuing (or receiving) Dispatch orders:
 - I) The Distributor and DOM Participants shall take necessary actions to restore communication;
 - 2) The Distributor and DOM Participants shall organize new communication channels and inform each other.

CHAPTER 19. DISPATCHING OF RELAY PROTECTION AND AUTOMATION DEVICES

- 110. Each year by November I, each DOM Participants shall submit for the approval of the Distributor a notification of the next year schedule of planned inspections and settings of the RPA devices under the latter's operative subordination.
- III. Each year by December I, the Distributor shall submit to the DOM Participants:
 - 1) The settings of the RPA devices agreed by the Distributor;
 - Tasks regarding the changes of settings or new settings of RPA devices and the deadlines for implementation thereof;
 - 3) Agreed schedules of planned inspections of RPA devices.
- 112. The Distributor shall calculate the settings of RPA devices, recommend such to the DOM Participants, and monitor the implementation thereof.
- 113. If they receive an instruction from the Distributor to change the setting of the RPA devices, the DOM Participants shall be required to execute the instructions within the set time and immediately inform the Distributor upon execution.
- 114. In case of emergency disconnections, the DOM Participants shall be required to do the following upon request of the Distributor:
 - Within 2 days, provide information about the place and the type of the short circuit that occurred in their area, as well as information received from the accident recording devices;
 - In the case of a malfunction of the RPA devices, perform post-emergency inspections and share the findings with the Distributor in written form.
- 115. The DOM Participants shall be obliged to:
 - Eliminate any malfunctions of the RPA devices as soon as possible and duly inform the Distributor;
 - Carry out an unscheduled inspection of the RPA devices at the Distributor's justified request;

3) Inform the Distributor about the results immediately after carrying out scheduled and unscheduled inspections.

CHAPTER 20. WITHDRAWAL OF EQUIPMENT AND RPA DEVICES FROM OPERATION

- 116. Planned repairs of equipment and RPA devices operating under the operative subordination of the Distributor's Dispatcher shall be performed in accordance with the applications submitted by DOM Participants. The applications shall indicate the dispatch name of the equipment or RPA device, the content and duration of works, and the dates of taking the equipment or RPA device out of service for repair and putting it back into operation, if necessary.
- 117. Applications for planned repairs shall be submitted to the Distributor's operator 2 days prior to the day of repair within the period from 11:00 to 14:00.
- 118. Applications to extend the term of repair shall be reported 1 day before their deadline expires. The reason for the extension and deadline shall be indicated in the Application.
- 119. The Distributor's Dispatcher shall respond to Applications shortly before the scheduled repair.
- 120. Before starting works required by the Application, the DOM Participants operative personnel shall be required to obtain a permit from the Distributor's Dispatcher to put the equipment into repair.
- 121. In case of failure to perform the work authorized by the Application, the Distributor's Dispatcher shall indicate the reason for its failure, making a relevant record about it in the operative log.

CHAPTER 21. INTERRUPTION AND RESTORATION OF ELECTRICITY SUPPLY FROM DISTRIBUTION-SCALE PLANTS

- 122. The Distributor may interrupt the electricity supply from Distribution-Scale Plants to the Distribution Network due to planned and unplanned outages in the Distribution Network.
- 123. The Distributor shall be required to inform the Distribution-Scale Plants of the dates of planned interruptions and restorations of electricity supply at least 2 business days prior.
- 124. The Distributor shall carry out a planned interruption of electricity supply from a Distribution-Scale Plant to the Distribution Network for a maximum duration of 32 hours in each case.
- 125. Planned outages without interruption of electricity supply from a Distribution-Scale Plant shall be performed if the latter is connected to the network through two or more autonomous overhead (cables) lines of 6 kV and higher voltage.
- 126. The Distributor shall be obliged to restore the electricity supply from Distribution-Scale Plants to the Distribution Network after the unplanned interruption in no more than 48 hours.
- 127. The cumulative duration of planned and unplanned interruptions of electricity supply from Distribution-Scale Plants per year shall not exceed 87.6 hours.
- 128. The Distributor shall be required to take all possible measures to restore the electricity supply from Distribution-Scale Plants to the Distribution Network as soon as possible.

CHAPTER 22. ELECTRICITY SUPPLY INTERRUPTION AND RESTORATION REQUIREMENTS

- 129. The Distributor may interrupt the electricity supply of Customers due to the planned and unplanned outages.
- 130. The Distributor shall be required to post initial information on hours of planned electricity supply interruptions and restoration

- dates on its website at least 7 days prior. The Distributor shall inform Customers of the planned electricity supply interruptions and restoration hours at least 2 days prior to the intended day of interruption through at least one nationwide TV Company two times per day: the first time in the period from 18:00 to 20:00 and the second time in the period from 20:00 to 23:00.
- 131. The Distributor shall provide information on electricity supply interruption and restoration hours via around-the-clock phone service, upon the Customer's call.
- 132. The Distributor shall perform planned interruptions on business days in the period from 9:00 to 17:00, but not more than for 6 hours.
- 133. Planned interruption of electricity supply shall be performed without interrupting the electricity supply of those Customers who are connected to the network through two or more autonomously fed overhead lines (cables) of 6 kV and higher, or are fed from two stationary systems or sections of the plant (substation).
- 134. The Customer (except for residential Customers) and the Distributor, in mutually agreed procedures, shall have the right to set forth different timelines (days or hours) for planned interruptions, other than those defined in Provision 132 of the EDN Code, unless it leads to interruption or limitation of other Customers' electricity supply.
- 135. In case of an unplanned interruption of a Customer's electricity supply, the Distributor shall be obliged to restore it no later than:
 - Within 2 hours for those Customers whose electricity supply is implemented with two or more autonomously fed overhead lines (cables) of 6 kV and higher, or from two stationary systems or sections of the plant (substation);
 - Within 4 hours for Customers of residential settlements in administrative areas of urban municipalities, except for cases provided for in sub-Provision I of this Provision;

- 3) Within 8 hours for Customers of residential settlements in administrative areas of rural municipalities, except for cases provided for in sub-Provision 1 of this Provision;
- 4) Within 12 hours for Customers outside the administrative areas of residential settlements in urban and rural municipalities, except for cases provided for in sub-Provision I of this Provision.
- 136. The cumulative duration of planned and unplanned interruptions per year shall not exceed:
 - 10 hours for those costumers whose electricity supply is implemented with two or more autonomous overhead lines (cables) of 6 kV and higher voltage, or from 2 stationary systems or sections of the plant (substation);
 - 2) 24 hours for other Customers within the residential settlements in the administrative areas of urban municipalities;
 - 3) 72 hours for Customers in residential settlements in the administrative areas of rural municipalities;
 - 4) 87.6 hours for all other Customers.
- 137. In all cases of planned and unplanned interruptions, the Distributor shall be required to take all possible measures to restore the electricity supply as soon as possible.
- 138. The Distributor shall be obliged to register the reasons for, hours of, and duration of electricity supply interruptions and restorations (including cumulatively per year) and to reflect this information in the Customer's Registration Card.

CHAPTER 23. REQUIREMENTS ON TERMINATION AND RESTORATION OF CUSTOMER'S ELECTRICITY SUPPLY

- 139. The Distributor shall be obliged to terminate the Customer's electricity supply:
 - I) Upon a written request from the Customer specifying the proposed duration of termination;

- 2) Upon a written request from the entity with a title to the area of electricity supply (building, structure) specifying a proposed duration of termination if the Customer does not have a document certifying its title to the area requested by the EDN Code, by preliminarily notifying the Customer, except for the case specified in Provision 140 of the EDN Code;
- 3) In case of termination of the Contract;
- 4) In cases specified by the Law and other normative legal acts.
- 140. If there is a dispute regarding the title to the area of electricity supply (building, structure), the issue of terminating the electricity supply according to Provision 139 sub-Provision (2) of the EDN Code shall be decided, once the dispute is solved in procedures defined by the legislation. Where the dispute arose or the Distributor became aware of the dispute after the termination of supply according to Provision 139 sub-Provision (2) of the EDN Code, the Distributor shall restore the electricity supply of the consumption system within one business day after being notified about the dispute.
- 141. The Distributor shall have the right to terminate the Customer's electricity supply:
 - I) In case of a failure to make payments for consumed electricity according to the REM Rules;
 - 2) If the Customer did not provide the Distributor access to its premises, as is required by the EDN Code and REM Rules;
 - By terminating the Contract, if the period specified in Provision
 sub-Provision (I) of the EDN Code is expired;
 - 3.1 If electricity is being consumed by the Customer bypassing its consumption system;
 - 3.2 If the installed capacity of the APP generating facilities exceeds the maximum permissible capacity of each of its distribution network connection points stated in the Contract sighed with the Universal Supplier as a consumer.

- 4) In cases covered by the Law and other normative legal acts.
- 142. In cases when the Customer violates the time allowed for payment for electricity supplied and the Supplier's Customer violates the payment period for distribution services as specified in the REM Rules, except for cases defined in Provision 143 of the EDN Code, the Distributor shall have the right to suspend the Customer's supply by notifying the Customer at least 3 days in advance via television, official website, or any proper notification means specified in the EDN Code or by other available means such as placing announcements at entrances (construction sites) or postal divisions. Notification through TV shall be spread through at least one RoA public TV channel at least twice a day from 18:00 to 20:00 and from 20:00 to 23:00. If, according to the REM Rules, the Consumer has requested to receive its bill in writing or electronically, then the latter shall be notified in writing or via email. If, following the request of the Customer, the notification is delivered via the post office, then the associated charges should be covered by the Customer, and if it is sent via email, the service should be free of charge.
- 143. In instances specified in Provision 141 sub-Provisions 1, 2, 3.1 and 3.2 of the EDN Code the Distributor shall have the right to restrict the Customer's electricity supply to the fixed emergency or technological capacity stated in the Contract by properly notifying the Customer at least 3 business days in advance, then after the expiration of the period when, according to the Contract, the emergency and/or technological capacity supply is guaranteed, terminate the Customer's electricity supply by properly notifying the latter 3 days prior to the termination date.
- 144. Where the Customer violates the payment period defined in the Supply Contract, the Supplier shall duly apply to the Distributor at least 3 days prior to the intended termination date by sending a notification to the Customer as well.

- 145. Where the Supplier's application to the Distributor requesting to terminate the Consumer's electricity supply remains unchanged within the period defined in the REM Rules, the Distributor shall terminate electricity supply of the given Customer, and if it refers to Customers with emergency and/or technological capacity fixed in the Contract, the Distributor shall comply with procedures defined in the REM Rules.
- 146. Where the Distributor terminated the Customer's electricity supply according to Provision 141 sub-Provision (I) of the EDN Code, the Distributor shall be obliged to restore the supply not later than:
 - The same day before 18:00, if the Customer submitted to the Distributor a document verifying payment of its debt before 14:00 on a business day, or if the Distributor became aware from other reliable sources of debt payment by the Customer within the same period;
 - 2) The next day before 13:00, if the Customer submitted a document verifying payment of its debt after 14:00 on a business day, or if the Distributor became aware of debt repayment from other reliable sources in the same period;
 - 3) Within the shortest period possible but not later than 24 hours after being notified about the payment of the debt if the Customer submitted the payment confirmation document on non-business days or if the Distributor became aware of debt repayment from other reliable sources within the same period.
- 146.1. In case of termination of the Customer's electricity supply as defined in Provision 141 sub-Provisions 3.1 and 3.2 of the EDN Code, it should be restored not later than in 24 hours after the violation is eliminated by the Customer.
- 147. Where the debt is still not settled, the Distributor shall not terminate the Customer's supply if the latter presented payment guarantees acceptable for the Distributor or drafted a debt

payment timetable with the latter. This provision does not restrict the Distributor's right to terminate the Customer's service in case of breach of the debt payment timetable, provided that the Supplier completed all the procedures described in this Chapter that precede the termination of electricity supply.

CHAPTER 24. AUTOMATED AND DISPATCH LOAD SHEDDING PROGRAMS

- 148. Unavoidable limitations of electricity supply of Customers shall be implemented by using Automated load shedding and/or Dispatch load shedding programs to be compiled and carried out in compliance with the EDN Code.
- 149. The decision on the application of electricity supply limitation programs for Customers connected to the Distribution Network shall be made by the Distributor's operator by providing information about volumes of such limitations to the ESO, as prescribed by the EDN Code, and to the Customers affected by these limitations, as prescribed by the REM Rules.
- 150. Electricity supply to the Customers shall be restored by the Distributor once agreed with the ESO.
- 151. Each year before December I, the ESO and the Distributor shall revise the Automated and Dispatch Load Shedding programs to reflect the changes available. If the Automated and Dispatch Load Shedding programs have not been revised, then the previous year's programs shall remain effective for the next year.

SECTION 5. CONNECTION OF NEW CONSUMPTION SYSTEM AND CONNECTION OF GENERATOR AND AUTONOMOUS POWER PRODUCER TO DISTRIBUTION NETWORK

CHAPTER 25. GENERAL PROVISIONS

- 152. This section defines the procedures and terms of connection of consumption systems of Customers, Generators, and plant (capacity) of APP to the Distribution Network, as well as of reconstruction of the Distribution Network resulting from reconstruction of the existing consumption systems of Customers or plants (capacities) of Generators and APPs.
- 153. To perform connection works, the Applicant shall submit a written application, either on paper or electronically, to the Distributor under procedures defined in the Annex I of the EDN Code
- 154. The Distributor shall be required to place the connection conditions in visible places in all its service centers and on its official website.
- 155. All contracts specified in this section shall be concluded in writing or electronically, free of charge. Electronic contracts shall be signed with an electronic signature using a specific tool installed on the official website of the Distributor.
- 156. To balance the interests of the Applicant and Distributor, the Commission may make individual decisions on the connection to the network or on setting the connection fee based on the Distributor's or Applicant's application (supported with arguments), if agreed upon by the latter. The individual decision may not contain a discriminatory approach, if compared with similar cases.

CHAPTER 26. CONNECTING A CONSUMPTION SYSTEM OF THE CUSTOMER TO THE DISTRIBUTION NETWORK BY CONTRACT

- 157. Consumption system connection shall be carried out based on the Contract, except for cases provided for by Provision 160 and Chapter 27 of the EDN Code.
- 158. In case of connection by Contract, the consumption system connection works (as well as preliminary design and estimate; acquisition and placing of electric installations or commercial metering devices, including mounting the cells in other entity's electric installations; construction; testing; and commissioning thereof), as well as the actual connection costs of such works (hereinafter, the connection service), shall be implemented by the Distributor as follows:
 - For an Applicant located in private houses and separate buildings who applied for connection to a 0.22 or 0.4 kV network - up to the entrance stand of the private house in case of overhead line access, or up to the entrance panel installed by the Customer on the external building wall in case of cable line access;
 - 2) For an Applicant who applied for connection to a 6(10) kV network up to the entrance commutation device clamps of the Applicant's feeding substation in case of a cable line, and up to the isolators of the last in case of an overhead feeding line:
 - 3) For a multi-apartment building up to the outlets of single-phase and three-phase metering devices.
- 159. The Applicant applying for the Contract shall submit an application (hereinafter, the Application), which should contain the following documentation and information:
 - For a physical entity name, surname, place of residence, copy of a document verifying identity, phone number, and address of the connection of the Consumption system; for a legal

- entity name, location, phone number, address of the connection; for a legal entity and sole proprietor the taxpayer identification number; and in case of electronic submission the email address of the applicant shall also be specified;
- 2) For a physical entity copies of documents certifying (verifying) the Applicant's title or acquisition of title to the consumption system location area (building, structure, plot), and for a legal entity - copies of documents certifying (verifying) the Applicant's title to the consumption system location area (building, structure, plot), except for areas of general use of multi-apartment buildings, including elevators;
- To implement a Connection without a Connection Fee, a document verifying membership in a socially vulnerable family according to the GoA decision No.1122N dated November 3, 2016;
- 4) The required active and reactive capacity (rated and used), voltage level, type of connection (single-phase, three-phase), consumption type (household, non-household), technical specifications of the system for non-residential consumption, as well as an indication about the Applicant's wish to have a back-up electricity supply ensured;
- 5) In case of connection to 0.4 kV or higher voltage level, a sketch of the Consumption system or the area layout, indicating the point or points of connection, while multi-apartment buildings must also include the internal consumption scheme, indicating the electricity metering points, number of stories in the building, number of apartments, other customers' rated capacity, and places of installation of electric panels and metering devices in the building;
- 6) For the Developer who has received an architectural planning permit - the Technical Conditions provided by the Distributor attached to the permit, and where a detailed connection

- design has been prepared based on the Technical Conditions, also that design;
- 7) For APP plants information on the capacity of the plant.
- 160. In case the right of the Applicant (including ownership, use) to the area of installation of the Consumption System (including building, structure, plot) is not formalized in the manner prescribed by law, but there is a reference document issued by a competent body certifying the fact of residence of the Applicant in the area of location of the Consumption system, and in case of a garage, the fact of occupying the area, the Distributor assessing the feasibility of connecting the Consumption system to the electricity network and associated risks shall be entitled to conclude a Connection Agreement.
- 161. In case of non-compliance of the application with the EDN Code, and in case of APPs also when the installed capacity of the Applicant's generating facilities exceeds the maximum permissible capacity for each of its distribution network connection points to be stated in the Contract to be sighed with the Universal Supplier as a consumer, not exceeding 150 kW, as well as in cases when the Applicant's Connection contradicts the requirements of the normative legal acts, the Distributor shall reject it within the period specified in Provision 162 of the EDN Code, providing with relevant written justifications.
- 162. If no grounds are available for rejection of the Application according to Provision 161 of the EDN Code, the Distributor, upon receipt of the Application:
 - Where the application is delivered in person immediately, and where the application is submitted by postal service within I business day of receipt, except for cases provided for in sub-Provision 2 of this Provision, shall issue an offer to the Applicant to conclude a Contract, along with 2 copies signed thereby;
 - 2) Where an Application is submitted to connect a consumption

system of 0.22 kV and 0.4 kV voltage or 6 kV and higher voltage to the network outside the residential area of the municipal administrative territory, or a Consumption system of the multi-apartment building under construction or that of a developing district, or if the submitted Application relates to the provision of a back-up electricity supply (hereinafter, the complex connection), shall within 5 business days develop the Technical Conditions and/or the electricity supply line direction and submit an offer to the Applicant for conclusion of the Contract along with 2 copies of the signed Contract. If the Distributor applies to the competent body due to the need to clarify the location of the Consumption system in the residential settlement, the Distributor shall notify the Applicant and the period specified in this sub-provision shall be terminated from the moment of application until the receipt of an answer from the competent body, by notifying the Applicant thereon.

- 163. Within 3 days of receiving the Contract referred to in Provision 162 of the EDN Code, if the Applicant agrees with it, he/she shall submit 1 signed copy of the Contract to the Distributor and from this moment forward the Contract shall be deemed signed. If, within 10 days of the Applicant having received the Contract, the copy of the Contract signed by the Applicant is not actually received by the Distributor, this shall be considered as a refusal of the Applicant toward the Application.
- 164. The Applicant shall pay to the Distributor the Connection fee for provision of the Connection Service defined by Chapter 31 of the EDN Code, except for the socially vulnerable residential Applicants defined by GoA Decision N1122-N of November 3, 2016 whose Consumption Systems are located within the community administrative areas where a single-phase connection is provided.
- 165. In cases when, after the conclusion of the Contract in accordance

with Provision 162(1) of the EDN Code, the Distributor discovers a case specified in sub-Provision 2 of the same Provision, the latter shall no later than within 5 business days of Contract conclusion provide a written proposal to the Applicant to make amendments to the Contract by sending him/her 2 copies of the agreement on amending the Contract (hereinafter, the Agreement), signed by the Distributor, which shall include the adjusted amount of the connection fee.

- 166. Within 3 days of receiving the proposal referred to in Provision 165 of the EDN Code, and if the Applicant agrees with it, he/she shall submit 1 copy of the signed Agreement to the Distributor. If within 10 days of the Applicant having received the proposal, the copy of the Agreement signed by the Applicant is not actually received by the Distributor, the latter shall terminate the Contract, notifying the Applicant thereof, and if the fee for connection to the Distribution Network has been already paid, it should be returned within 5 business days after the Contract is considered terminated.
- 167. The Contract shall be considered amended in accordance with Provision 166 of the EDN Code from the moment 1 copy of the Agreement signed by the Applicant is received by the Distributor.
- 168. In case of amendment of the Contract in accordance with Provision 166 of the EDN Code, the Distribution Network Connection period shall be calculated from the business day following the date when the calculated advance fee is paid in accordance with the connection fee adjusted in the Agreement, but not earlier than the date of the Contract amendment.
- 169. Within the timeframes specified in Provision 170 of the EDN Code, the Distributor shall:
 - Develop the required design and estimate documentation, and in case of simplified connection, the technical description of connection, except for cases when the Applicant in the design stage of the developing object has also implemented the

- operational design of the Distribution Network connection based on the Technical Conditions provided by the Distributor;
- 2) Carry out all the necessary agreements with state agencies, local self-government authorities, and any other party;
- Carry out construction works to connect the consumption system to the distribution network, install a metering device, which, in case of an APP, should contain a reversible multitariff meter, and notify the Applicant;
- 4) Receive, if needed, the decision (permit) for the operation of electric installations issued by the authorized body implementing the state technical supervision.
- 170. Based on the Contract mentioned in Provision 162 of the EDN Code, and in cases specified in Provision 166 of the EDN Code, the maximum period to ensure actual supply of electricity to the Applicant from the date of the advance payment (in the case of a Developer, the connection fee) set out by the Agreement, except for the cases referred to in Provision 164 of the EDN Code, shall not exceed:
 - I5 business days in the case of a simplified connection to a 0.22 kV distribution network and 50 business days in all other cases of connection to a 0.22 kV network;
 - 2) 15 working days in the case of a simplified connection to a 0.4 kV distribution network, and 55 days in all other cases of connection to a 0.4 kV network:
 - 3) 90 days for a connection to a 6(10) kV network;
 - 290 days for connection to a 35 kV network or connection of multi-apartment buildings under construction or developing districts.
- 171. In case of implementing a Connection without connection fees defined by the EDN Code or by the individual decision of the Commission, the periods referred to in Provision 170 of the EDN Code shall be counted from the moment of executing the Contract.

- 172. Within the Connection period defined in the Contract, the Customer shall be obliged:
 - To ensure the receipt of electricity and, in case of failure to do that, to inform the Distributor about its readiness to receive electricity;
 - In the case of connection to a 6(10) kV network, to provide to the Distributor the decision (permit) for the commissioning of the electric installations issued by the State Technical Supervisory Authority;
 - 3) Present to the Distributor the persons in charge of the electric facility and the single-line scheme, in the case that such a requirement is defined by technical regulations.
- 173. In case of non-fulfillment of obligations provided for in Provision 172 of the EDN Code, the Distributor shall implement the actual connection of the Consumption system to the Distribution Network within 3 working days after the Customer is notified to be prepared to receive electricity and upon submission by the latter of the document referred to in sub-Provision 2 of the same Provision.
- 174. In the case that the deadlines specified in Provision 170 of the EDN Code are breached, within 3 business days from the occurrence of reasons for the breach, the Distributor shall notify the Applicant in writing about the reasons and the expected dates (or the possibility) to ensure electricity supply.
- 175. In the case that the connection of the consumption system to the Distribution Network requires an electricity supply line of higher voltage than the Applicant has requested or construction of a substation, the maximum period to ensure electricity supply (or its possibility) shall be accepted to be the period required for connecting the consumption system to the higher voltage network, as prescribed by Provision 170 of the EDN Code.
- 176. The main assets (property) created by the Distributor as a result of the connection are owned by the Distributor.

- 177. In the case that the Consumption system of the Applicant that separated from the consumption system of a Customer connected to the Distribution Network at 0.4 kV and higher voltage level is to be connected to the electric network without changing the capacity and the external feeding scheme, the Applicant shall submit to the Distributor the documents and information specified in Provision 159 of the EDN Code by making a note in the Application about being separated from the consumption system of the other Customer.
- 178. Upon receipt of the Application referred to in Provision 177 of the EDN Code, if there are no grounds for rejection of the Application mentioned in Provision 161 of the EDN Code, within 5 business days, the Distributor shall install the Commercial metering devices for the Applicant, the Customer and the Distributor shall make amendments to the Contract by proportionally reducing the contractual capacity of the Customer's consumption system connected to the Distribution Network, and the Distributor shall inform the Applicant of the opportunity to sign a contract on the provision of electricity distribution services and on universal supply of electricity, as prescribed by the REM Rules.

CHAPTER 27. CONNECTION OF THE CONSUMPTION SYSTEM OF A CUSTOMER TO THE DISTRIBUTION NETWORK WITH TECHNICAL CONDITIONS

- 179. The Customer's Consumption system shall be connected to the Distribution Network by obtaining Technical Conditions from the Distributor through the Applicant's own means in the following cases:
 - The Applicant's Consumption system shall be connected to the Distribution Network on a temporary basis (for construction works within the period specified in the Construction permit; for temporary trading purposes for a maximum of 6 months;

- for other purposes upon written consent of the Commission for a maximum of I year);
- 2) The Customer's consumption system is planned to be connected to 6 or 10 kV (outside the residential area of the community administrative territory) or to 35 kV electric network, and the Applicant, at its sole discretion, has expressed a wish to connect the consumption system to the electric network by obtaining Technical Conditions;
- A new or reconstructed consumption system of 110 kV and higher voltage is to be connected to the Distribution Network;
- A new or reconstructed consumption system of an entity holding a license for a public electronic communications network is to be connected to the Distribution Network;
- 5) A new consumption system with up to 0.5 kW rated capacity and 0.22 kV nominal voltage is to be connected to the Distribution Network, and the Applicant, at its sole discretion, has expressed a wish to connect the new consumption system to the network by obtaining Technical Conditions from the Distributor without installation of a metering device.
- 180. In cases specified in sub-Provisions 2-4 of Provision 179 of the EDN Code, the Applicant shall submit to the Distributor the Application specified in Provision 159 of the EDN Code, and also authorization for the construction, in case of obtaining Technical Conditions for temporary connection required for the implementation of construction works, if obtaining such is required by legislation, by making appropriate notes in the application for provision of Technical Conditions. In cases specified in sub-Provisions I and 5 of Provision 179, instead of documents mentioned in sub-Provision (2) of Provision 159 of the EDN Code, the Applicant may submit a document or a contract verifying that the Applicant is performing activities in the area of location of the Consumption system.
- 181. Within 10 business days after the submission of the Application

- specified in Provision 180 of the EDN Code, the Distributor shall provide Technical Conditions or shall reject the Application in writing, presenting appropriate arguments thereon, if the documents and information submitted do not correspond to Provision 180 of the EDN Code or if providing Technical Conditions will contradict the requirements of normative legal acts.
- 182. A second independent supply shall be provided under the Technical Conditions if it is required by the Applicant's new consumption system design.
- 183. Upon completion of network connection works under the Technical Conditions, the Applicant shall ensure the receipt of electricity and shall submit to the Distributor documents referred to in Provision 172 of the EDN Code, and within 3 business days after the documents are submitted, the Distributor shall implement actual connection.

CHAPTER 28. ISSUANCE OF REFERENCE

- 184. To obtain a reference, the Applicant shall apply to the Distributor and provide information on the type, name, planned capacity, and location area of the plant and a document verifying payment of a relevant fee to the Distributor for provision of the Reference.
- 185. The Reference shall be developed and issued based on the requirements of the technical regulations of the RoA, the reliability indicators submitted by the Applicant, as well as the requirement to carry out connection or reconstruction of electrical installations at the lowest cost.
- 186. The Distributor shall issue the Reference within 10 working days after the submission by the Applicant of the complete information (documents) mentioned in Provision 184. In a case where it is necessary to obtain the consent of the Transmitter, the ESO, or the EMO, the mentioned period may be extended for another 10 working days, while the Distributor shall duly inform the Applicant.

- 187. The issuance of the Reference shall be rejected within 10 working days from the moment of receiving the application mentioned in Provision 184 if the Applicant has not submitted the complete information (documents) mentioned in the same Provision.
- 188. For issuance of the Reference, the Distributor shall charge the Applicant a service fee in the amount of 250,000 AMD (including VAT), which is refundable within 5 working days only if the application is rejected as described in Provision 187.
- 189. The Reference shall include at least the following information:
 - 1) Name of the applicant (name, surname);
 - 2) Name, type, capacity of the plant, location area (region, community, settlement);
 - 3) The connection point with the network, the required voltage level, and the length of the planned power transmission line:
 - 4) Reasonable measures for strengthening the existing electric network to satisfy the conditions of the new connection (increase in the cross-sectional area of the wires, replacement of power transformers, installation of additional cells, etc.);
 - 5) Validity period of the Reference.
- 190. Proposals for the reconstruction of electric installations (including relay protection and automation devices) under the operative subordination of the ESO shall be developed by the ESO based on the requirements of the Network Codes.
- 191. Consent of the Transmitter, ESO, and EMO required for issuance of the Reference shall be obtained by the Distributor.
- 192. The validity of the Reference shall be 6 months starting the day of issuance.
- 193. The validity of the Reference may be extended only once. To do so, the Applicant shall apply to the Distributor for an extension no earlier than 10 working days before the expiration of the Reference validity, paying the amount specified in Provision 188, and the Distributor shall extend the validity of the Reference for

- another 6 months within 3 days after the receipt of the application but not later than the expiration date.
- 194. Throughout the Reference validity period, the capacity specified in the Reference is considered reserved by the Applicant at the connection point, and in case the latter obtains a license for electricity generation, the capacity of the given plant in the Distribution Network at the connection point stated in the Reference shall be considered reserved until the Technical Conditions are provided.
- 195. After the expiration of the Reference, the Applicant shall be eligible to apply to the Distributor again, following the requirements described in this Chapter, to receive a new Reference.
- 196. If the Applicant obtains a license for electricity generation during the validity of the Reference, the Technical Conditions shall be provided to the Applicant in accordance with the Reference unless otherwise decided by mutual agreement of the parties.

CHAPTER 29. CONNECTION OF GENERATORS

- 197. Connection of the Generator shall be implemented based on the Contract and, in a case where the plants have an electricity purchase guarantee, according to model forms defined by the Commission.
- 198. To receive Technical Conditions for the Generator's connection, the Generator shall submit an application to the Distributor, enclosing the data referred to in Annex 2 of the EDN Code, as well as the following:
 - A copy of the operation license issued by the Commission, if it is required by the Energy Law and the Licensing Law for operations carried out by the Generator, and in other cases, information on devices (aggregates) located at the plant, including the model, capacity, manufacturing date thereof and necessary supporting documents.

- Copies of documents confirming (verifying) the title of the Generator to the area where the connected capacity is located.
- 199. Within 15 business days after submission of the Application, if the Application does not comply with Provision 198 of the EDN Code, or if the connection of the Generator contradicts the requirements of legal acts, the Distributor shall reject the Application in writing, presenting corresponding arguments; if there are no such arguments, the Distributor shall do the following within the same period:
 - Develop Technical Conditions in compliance with the requirements of technical regulations, and, if necessary, coordinate them with the Transmitter and ESO;
 - In cases defined by the Commission, calculate the Generator's initial connection fee to be decided based on the aggregated estimation of the Generator's connection fee referred to in Annex 3 of the EDN Code;
 - 3) Submit an offer for conclusion of a contract along with 2 copies signed by the Distributor.
- 200. Construction works between the Generator's plant and the Connection point shall be implemented by the Generator pursuant to the design (connection scheme) prepared in accordance with the Technical Conditions provided by the Distributor.
- 201. In the case of licensed Generators, the Technical Conditions shall be provided by the Distributor for the period of construction of the plant stated in the Generation License, and shall be extended, if the mentioned period is extended, by the same period and on the same terms, and in other cases the Technical Conditions shall be provided for 2 years.
- 202. The Generator shall pay a Generator Connection fee to the Distributor, calculated as sum of expenditures for construction of new capacities and reconstruction of the existing ones (including design) within the Distribution Network necessary

- for the connection of the Plant to the Distribution Network. If, based on the necessity of further development of the Distribution Network, it is planned to extend the network infrastructure, exceeding the parameters required for connection of the Plant to the Distribution Network, then the expenses to be implemented by the Distributor in this regard shall not be considered in the calculation of the Generator's connection fee.
- 203. Technical Conditions shall be developed based on the principle of implementing the necessary works on connection (reconstruction) of the Plant (construction of a new network and reconstruction, upgrade, and extension of the Distribution Network) at the least cost for the parties. If, based on the necessity of further development of the Distribution Network, the Distributor is planning to extend the network infrastructure, then Technical Conditions shall be provided considering the availability of the new infrastructure. The works aimed at the development of the mentioned infrastructure shall be included in the Distributor's investments plan and shall not be considered in the calculation of the Generator's Connection fee.
- 204. The Generator shall ensure the compliance of the plant (capacity) being connected to the Distribution Network with the requirements of the EDN Code and the technical regulations.
- 205. Within 20 days from receipt of the contract in accordance with Provision 199 of the EDN Code, the Generator, if he/she agrees with the contract, shall submit one signed copy of the contract to the Distributor. If the Distributor does not receive a copy of the contract signed by the Generator within 30 days after the Generator received the offer for a contract, it shall be considered a refusal by the Generator regarding the Distribution Network connection application.
- 206. If, under the Commission's resolution, a model contract is developed for the given type of plant, then the following shall be mandatorily specified in the contract:

- The period for submission of the connection design that has been reviewed by experts, for coordination with and obtaining the opinion of the Distributor;
- 2) The initial size of the connection fee and payment periods (schedule), as well as the mechanisms of adjustment of the initial and final amounts of the Connection fee;
- 3) The Generator's Connection timeframes and, in case of violations of these timeframes, the responsibilities of parties.
- 207. The relationship associated with payment of the Connection Fee in the instances defined by the Commission shall be regulated by the contract.
- 208. The reconstructed or newly constructed capacities of the Distribution Network shall be the property of the Distributor, while the installed Metering Complex, as well as the devices and relevant software required for connecting to the automated metering system of the Distribution Network, shall be the property of the Generator.
- 209. During the development (modification) of the construction (reconstruction) design of the plant, in case of changes in the technical parameters, the Generator shall inform the Distributor in advance about the changes in writing to make relevant changes in the Technical Conditions, if necessary. Within 15 days following the receipt of the application, the Distributor shall provide to the Generator the modified Technical Conditions or the conclusion on leaving those unchanged, and where necessary, also the changed amount of the Generator's Connection fee along with relevant justifications. If the Generator agrees, the parties shall make corresponding amendments to the Contract, and in case of disagreement, the Technical Conditions shall be left unchanged, or the Contract shall be terminated. Moreover, in case of a positive difference between the expenses actually incurred by the Distributor and the Advance fee, such difference shall be compensated by the Generator, while in the case of a negative

- Difference, the Distributor shall return it to the Generator within 5 business days after submission of the conclusion referred to herein.
- 210. The Generator, following the Technical Conditions, shall perform the works required to connect the Plant to the Distribution Network (including design and construction), and in order to obtain permission for actual connection (putting under voltage) (hereinafter, the Connection permit), the Generator shall apply to the Distributor at least 70 business days prior to the end of validity of the Technical Conditions by submitting the following:
 - 1) Application for Connection permit,
 - In cases envisaged by the laws, a copy of the conclusion on commissioning of the electric installation issued by the State Technical Supervisory Authority;
 - 3) The connection action plan;
 - 4) Protocol (tripartite act) about mounting or replacing the electricity (capacity) Metering Complexes.
- 211. Within 10 business days of having received the application referred to in Provision 210 of the EDN Code, the Distributor shall verify the compliance of the documents submitted by the Generator with the requirements of the EDN Code.
- 212. For power plants with installed capacity of 10 MW and above, the Distributor shall submit the documents referred to in Provision 210 of the EDN Code to the ESO for approval within the period specified in Provision 211 of the EDN Code.
- 213. Within 5 business days of receiving documents referred to in Provision 210 of the EDN Code from the Distributor, the ESO shall inform the Distributor about his/her consent or the shortcomings revealed.
- 214. Within the timeframe specified in Provision 211 of the EDN Code and in the case mentioned in Provision 212, the Distributor shall, within 5 business days after having received the opinion of the ESO, issue a Connection permit to the Generator (if the conclusion

- is positive) or inform the Generator about the shortcomings revealed (if the conclusion is negative).
- 215. If the Generator fails to correct those shortcomings within a reasonable timeframe after having received the notice about shortcomings revealed, but not later than 20 business days before the deadline under the Technical Conditions, the Connection permit shall not be issued. If the timeframe envisaged in this provision is violated by the Generator, the duration of works to be completed by the Distributor shall be extended as much as the violated period.
- 216. Within 5 business days of having received the Connection permit, the Generator shall submit a written application to the Distributor, and in the case provided for under Provision 212 of the EDN Code, also to the ESO, indicating the preferred dates of actual connection of the Plant to the Distribution Network (putting under voltage).
- 217. If the preferred date of actual connection of the Plant to the Distribution Network (putting under voltage) as specified by the Generator is not acceptable for the ESO from the perspective of ensuring the reliability and security of the power system, the ESO shall, within 3 business days, negotiate with the Generator about moving the date of actual connection (putting under voltage), which cannot exceed 10 business days from the preferred date mentioned by the Generator.
- 218. The actual connection of the Plant to the Distribution Network shall be performed in accordance with the design (connection scheme) prepared based on the Technical Conditions and in accordance with the connection action plan agreed with the Distributor (in cases provided for by the EDN Code, also with the ESO). The technical parameters of the actual connection of the Plant to the Distribution Network shall be fixed in the Contract.
- 219. Changes in the Technical Conditions and technical parameters of the Plant can be performed exclusively upon the consent of

the Parties, except for cases when such changes are essential for complying with the requirements of laws and regulatory legal acts.

CHAPTER 30. CONNECTION OF AUTONOMOUS POWER PRODUCERS

- 220. For connection of an APP, the latter shall submit an Application to the Distributor along with the data required for the replacement of the Commercial meter with a reverse meter:
 - 1) Data on the Registration Card;
 - 2) Data on the Plant's capacity.
- 221. The Distributor shall check the compliance of the provided data with the requirements of the Law and, in case of compliance, within 3 business days shall provide an account number to the APP for payment of a charge defined in sub-Provision (3) of Provision 257 of the EDN Code, and in case of detecting non-compliance, shall reject the Application, providing reasons for the rejection.
- 222. After receiving the payment verification document, the Distributor shall install a reversible meter according to procedures described in Chapter 34 of this Code and notify the APP about that.

CHAPTER 31. CONNECTION FEES

223. Connection fees for the Customer of a 0.4 (0.22) kV voltage consumption system shall be determined by the following formula:

$$CF=F_{st}+F_{add}+F_{res}$$
,

where:

F_{st} is the standard component of the connection fee for connecting the Consumption System to the Distribution Network located within the administrative area of the residential community, regardless of the distance from the network connection point, and

beyond the administrative area of the residential community at a distance of up to 200 meters from the network connection point (including, but not limited to the costs for design and estimation, electrical installations, including purchase and installation of cells, electronic commercial metering devices, automatic switches in other people's electrical installations, as well as construction (including of transmission line), testing, and commissioning costs), according to Annex 4 of the EDN Code.

 F_{add} is the additional component of the connection fee, which shall be accepted as equal to 0 within the administrative area of the residential community. Beyond the administrative area of the residential community, F_{add} shall include:

- The average cost of construction of a power transmission line, at a distance exceeding 200 meters from the network connection point;
- 2) The average cost of construction of infrastructure, if it is necessary to construct a substation and a higher voltage feeder line other than that initially requested by the New Customer or Developer or Customer based on the Feasibility Study of the project on connecting the Consumption System to the Distribution Network (hereinafter, the FS).

 F_{res} is the average cost of constructing a power transmission line providing reserve feeding to the Consumption System.

- 224. The values of the F_{add} and F_{res} components shall be determined by the length of the constructed lines and the average costs of the constructed substation. The average values per units of lines and substations under construction shall be published on the official website of the Distributor and shall enter into force on the date of publication.
- 225. The connection fee for a multi-apartment building shall be determined by the following formula:

$$CF = AC + (F_1n_1 + F_2n_2)C_{cu} + \sum_{k=1}^{n_s} F_3$$

where:

AC is the cost of the area required for mounting the substation, in cases when, for connection of a multi-apartment building to the Distribution Network, it is necessary to construct a substation, and which should be revised within 5 business days after the registration in legally defined procedures of the Distributor's rights towards that area considering the actual purchase price of the area, based on which the Distributor and the Applicant (Developer) shall recalculate the connection fee.

 F_{\parallel} is the connection fee for one Consumption System in a multi-apartment building with 10 kVA single-phase connection (including, but not limited to the meter box, electronic commercial metering device, automatic switches), according to Table 2 of Annex 4 of the EDN Code:

 n_1 is the total number of consumption systems in the multi-apartment building, each of 10 kVA single-phase connection; F_2 is the connection fee for one Consumption System in the multi-apartment building with 14 kVA single-phase connection (including, but not limited to the meter box, electronic commercial metering device, automatic switches) according to Table 2 of Annex 4 of the EDN Code:

 n_2 is the total number of consumption systems in the multi-apartment building, each of 14 kVA single-phase connection; C_{cu} is the coefficient of costs and unutilized capacity, which is accepted equal to "3" in the administrative area of Yerevan City, and equal to "1" in any other territory in the Republic of Armenia; F_3 is the connection fee for apartments in a multi-apartment building or for commercial customers (including electrical equipment for general use) with a three-phase connection (0.4 kV voltage), including but not limited to the meter box, electronic commercial metering device, automatic switches, which is calculated by the formula set out in Provision 2 of the Methodology I of Annex 4 of the EDN Code separately for each commercial connection point,

according to the number of Commercial metering devices; n_3 is the total number of apartments in the multi-apartment building and commercial Customers, for which a three-phase connection (0.4 kV voltage) is intended.

- 226. Distribution Network Connection fees for Consumption systems of new units that have been added as a result of reconstruction to the separate units of a multi-apartment building (apartments, non-residential premises) by the owners thereof after the mentioned separate units became the real estate title registration objects shall be calculated by the following formula:
 - 1) For a 10 kVA single-phase connection:

$$CF_I = F_I * C_{cu}$$

2) For a 14 kVA single-phase connection:

$$CF_2 = F_2 * C_{cu}$$

3) For a 0.4 kVA connection:

$$CF_3 = F_3$$

227. Distribution Network Connection fees (VAT included) for 6(10) kV voltage Consumption Systems of Commercial Customers shall be determined by the following formula:

$$CF=F_{st}+F_{add}+F_{res}$$
,

where:

F_{st} the standard component of the connection fee for connecting the Consumption System located at a distance of 1,200 meters from the network connection point (including, but not limited to the costs for design and estimation; electrical installations, including purchase and installation of cells, switches, and electronic commercial meters (except for current and voltage transformers located at the premises under control of the Customer) in other people's electrical installations; as well as construction (including power transmission line), testing and commissioning costs) according to the Annex 4 of the EDN Code.

 ${\sf F}_{\sf add}$ is the additional component of the Distribution Network connection fee, which shall include:

- The average cost of construction of a feeding transmission line at a distance exceeding 1,200 meters from the network connection point;
- 2) The average cost of construction of infrastructure beyond the administrative area of the residential community, if it is necessary to construct a substation and a higher voltage feeder line than the one required by the Applicant based on the FS.

 ${\sf F}_{\sf res}$ is the average cost of constructing a power transmission line providing reserve feeding to the Consumption System.

- 228. The values of the F_{add} and F_{res} components shall be determined by the length of the constructed lines and the average costs of the constructed substation. The average costs of the units of lines and substations under construction shall be published on the official website of the company and shall enter into force on the date of publication.
- 229. Connection fees for a Consumption System to be connected to 35 kV distribution network shall be determined by the following formula:

$$CF=F_{st}+F_{add}$$
,

where:

 F_{st} is the fee for a standard connection for which construction of a single-chain overhead line with length of up to 12 km is envisaged, according to Table 4 of Annex 4 of the EDN Code.

- 230. For a standard connection, installation of a Metering Complex with an electronic meter shall be envisaged.
- 231. If the capacity requested by the Applicant is less than 3,000 kVA, the standard connection fee shall be accepted as equal to the connection fee defined for 3,000 kVA. If the requested capacity is greater than 15,000 kVA, the standard connection fee shall be accepted as equal to the sum of standard connection fees set for the capacities necessary to ensure the requested capacity.
- 232. If the connection of the Applicant's Consumption System is

carried out within the range of standard connection parameters set out in Provision 229 of the EDN Code and in Table 4 of Annex 4 of the EDN Code, the value F_{add} shall be accepted as equal to 0.

233. If the length of connecting line exceeds the length specified in Provision 229 of the EDN Code, then:

$$F_{add} = \Delta F \times n$$
,

where:

n is the number of 250-meter segments exceeding the specified length for standard connection.

 ΔF is the fee defined for every 250-meter segment exceeding the specified length for the standard connection (Table 4 of Annex 4 of the EDN Code).

- 234. If the Feasibility Study for the Applicant's Consumption System connection design provides for the construction of a higher voltage feeder line and a lower substation than the one required by the Applicant, F_{add} shall be accepted as equal to the difference of the estimated values of the calculated costs for construction of the power distribution line based on the parameters envisaged by the FS and the standard connection specified in Provision 229 and Table 4 of Annex 4 of the EDN Code.
- 235. If the Applicant's Consumption System design provides for a reserve feeding line, F_{add} shall include the full costs of construction of reserve lines.

SECTION 6. PROCEDURES ON INSTALLATION, REPLACEMENT, AND TESTING OF METERING DEVICES OF CUSTOMERS

CHAPTER 32. GENERAL PROVISIONS

- 236. The costs and responsibility for the purchase, installation, replacement, and operation (including service, accuracy testing, checking and verification, renovation and maintenance) of Commercial metering devices (except for 6 kV and over current and voltage transformers that are the property of a Customer) shall be borne by the Distributor regardless of who they belong to, except in instances specified in Provisions 270 and 271 of the EDN Code.
- 237. Commercial metering of electricity in the REM shall be carried out by the Distributor, in cases and procedures defined in the REM Rules.
- 238. Every Metering point should be equipped with a Metering device, except for cases when the rated capacity of the customer's consumption system does not exceed 0.5 kW and the nominal voltage does not exceed 0.22 kV, implementing metering of consumed electricity by the rated capacity of the Customer's consumption system during the working hours of the installed equipment. In the case envisaged in this Provision, the Registration Card shall include the description, capacity, and working hours of the Customer's consumption system.
- 239. Requirements for the metering devices of the Customer (except for the Qualified Customer) shall be specified in the EDN Code and other legal acts regulating the sector.
- 240. Commercial metering of the Generator shall be carried out by the EMO in procedures defined in the WEM Rules and ETN Code and other legal acts regulating the sector.
- 241. The Commercial metering device shall be designed to ensure

- metering of active energy component, and in the case of 0.4 kV and higher voltage networks, the reactive energy component as well.
- 242. Relations pertaining to the metering devices included in the automated electricity (capacity) metering system shall be governed by the ETN Code and the EDN Code.
- 243. The costs of ensuring the integrity and maintenance of metering devices during their operation shall be borne by the Customer, if the latter is not a Customer in a multi-apartment building, the metering device is located within the premises owned by or under control of the Customer, and it is reflected in the Registration Card
- 244. The Customer shall provide to the Distributor access to its premises to perform operations with Metering devices as prescribed in the EDN Code. To access the Customer's premises, the Distributor shall duly notify the Customer at least 24 hours in advance, unless otherwise provided by the REM Rules or the EDN Code. The Distributor shall coordinate the date of these operations with the Customer. To enter the Customer's premises, the Distributor's representative shall present to the Customer a document with a photo certifying his/her authority. The operations with the Metering devices on the Customer's premises shall be performed in the presence of the latter's representative. In the case of repeated unreasonable refusal of access, the Distributor shall be eligible to terminate (restrict) the Customer's electricity supply by notifying the latter in advance as prescribed by the EDN Code.

CHAPTER 33. GENERAL DESCRIPTION OF THE AUTOMATED SYSTEM OF ELECTRICITY METERING AND CONTROL (DAMS)

- 245. The DAMS shall provide for the following:
 - 1) Transfer data in electronic format to the metering database;

- 2) Record data from metering devices and maintain their confidentiality;
- 3) Register and ensure availability of data recorded in the database and related to Customers;
- 4) Register the quantity of electricity at each Metering Point of the REM.
- 246. The electricity Commercial (Control) Metering devices included in the DAMS shall be approved for commercial metering in the RoA and shall comply with the requirements of the ETN Code and EDN Code.
- 247. The Metering database shall include:
 - Records on active and reactive energy passing through the Metering Point and voltage levels, based on aggregate (integral) data received within 30-minute intervals, as well as on the power factor within the same interval;
 - 2) Information on changes in the metering database records and on persons who perform the changes;
 - 3) Information on each electricity Metering device (technical characteristic of the Metering device, schedule of calibrations and testing, manufacturer's serial number, etc.)
- 248. The DAMS shall be managed by the DAMS Chief administrator through the DAMS administrators.
- 249. The DAMS Chief administrator may reprogram the electricity Metering device if, as a result of self- diagnosis, a program error has been revealed.
- 250. The Distributor and the REM Participants shall bear responsibility for keeping the confidentiality of login passwords for the DAMS.
- 251. The DAMS Chief administrator and DAMS administrators shall be required to archive the metering database from servers once every 3 months.

CHAPTER 34. REQUIREMENTS FOR METERING DEVICES OF THE CUSTOMERS; INSTALLATION AND REPLACEMENT CONDITIONS

- 252. The Commercial Metering device of the Customer shall be placed in an individual or shared box in a way to ensure the visibility of readings of the Metering device. Such boxes should be locked by the Distributor. If the Customer's Commercial (Control) metering device is located in an individual box, the Customer shall be entitled to seal it.
- 253. The Customer's Commercial Metering device, including the clipboard of the Commercial Meter, shall be sealed by the Distributor, except for those meters that are included in the DAMS, where the clipboard is sealed electronically. The Customer shall be entitled to additionally seal the Commercial metering device, while the Distributor shall be entitled to seal the Control metering device, including the clipboard of the Control meter.
- 254. The Metering device can be replaced at the initiative of the Customer, as well as the Distributor.
- 255. Replacement of the Metering device at the initiative of the Distributor shall be done at the expense of the latter.
- 256. Replacement of the Metering device or its inclusion in the DAMS at the initiative of the Customer shall be done by the Distributor, based on the written request from the Customer, and upon the payment made as prescribed in Provision 257 of the EDN Code, which should be returned after I year of replacement of the Customer's Metering device, deducting that amount from the cost of services provided.
- 257. Replacement of the Commercial metering devices or their inclusion in the DAMS upon the request of the Customer shall be done upon the payment of the following charges:
 - I) Replacement of a single-phase induction meter by a single-phase electronic meter: 10,000 (ten thousand) AMD;
 - 2) Replacement of a 3-phase induction meter by a three-phase

- electronic meter: 35,000 (thirty-five thousand) AMD;
- 3) Replacement of a single-phase meter by a single-phase multi-tariff reverse meter for implementation of power flow exchange between the APP and Distributor provided for by the Law: 11,000 (eleven thousand) AMD, and in case of replacement of a 3-phase meter by the multi-tariff 3-phase reverse meter: 55,000 (fifty-five thousand) AMD;
- 4) Replacement of a 0.22 kV meter of the Customer with a meter complex (with communication devices, monitoring enabling software) required for connection to the DAMS: 60,000 (sixty thousand) AMD;
- 5) Replacement of a 0.4kV meter of the Customer with a meter complex (with communication devices, monitoring enabling software) required for connection to the DAMS: 80,000 (eighty thousand) AMD.
- 6) Replacement of a 6kV and higher voltage meter of the Customer with a meter complex (with communication devices, monitoring enabling software) required for connection to the DAMS: 300,000 (three hundred thousand) AMD.
- 258. Within 10 business days after receiving the request mentioned in Provision 256 of the EDN Code and the document certifying the payment as per Provision 257 of the EDN Code, the Distributor shall:
 - 1) Replace the Commercial metering device;
 - Make the corresponding amendment to the Registration Card, stating the data of the Commercial metering device replaced.
- 259. To balance the interests of the Customer and Supplier, the Commission may make individual decisions regarding the process of replacing Commercial metering devices in case of applying to the state and municipal administration bodies within the framework of implementation of state, community-scale, or international assistance programs.

CHAPTER 35. PROCEDURE FOR TESTING METERING DEVICES

- 260. The testing of commercial metering devices may be carried out at the initiative of the Customer, as well as the Distributor. The performance accuracy of the commercial metering device shall be certified based on the conclusion of the metrological authority on the results during regular or extraordinary testing of the commercial metering device.
- 261. Regular testing of Commercial (control) meters as well as current and voltage transformers shall be carried out according to the RoA legislation.
- 262. All costs related to performance accuracy checking and calibration of the commercial metering device shall be borne by the Distributor, regardless of who they belong to, except for the cases set out in Provisions 270 and 271 of the EDN Code.
- 263. Not later than 3 business days before dismantling (including installation of a new one), accuracy checking, and testing of the commercial metering devices, the Distributor shall be obliged to appropriately notify the Customer about the dates. The Distributor shall be eligible to dismantle the commercial metering device without prior notification of the Customer if it was detected that the Customer consumes the electric power with an obvious violation of the commercial metering device. In such cases, the Distributor shall properly notify the Customer at the earliest possible opportunity by presenting its substantiations for dismantling the commercial metering device.
- 264. The Customer shall be entitled to require, by way of advance notification, that the Distributor perform any work related to the commercial metering device (dismantling, accuracy checking, or testing) in his/her presence at a mutually pre-agreed time, but no later than 3 business days after being properly notified about it. In the event that the duly notified Customer fails to appear at the specified time, the works shall be performed in his/her absence.

- 265. In case of dismantling of the commercial metering device, the Distributor shall:
 - I) Prepare the protocol (act) on the commercial metering device readings and its integrity or damages, which shall be signed by the Distributor and the Customer. In case of disagreement with any provision of the protocol (act) by the Customer, a relevant note shall be made about it in the protocol (act), describing the reasons for the disagreement. The protocol (act) shall be produced in two copies, one copy for each party. In the case of the Customer's absence, the Distributor shall attach the proof of the Customer's notification to the protocol (act) and make a relevant note in the protocol (act) about the failure of the Customer to appear for the dismantling of the commercial metering device;
 - Install another device at least equivalent to its own commercial metering device, the data of which shall be fixed in the Registration Card;
 - 3) Participate in the Commercial metering device testing and preparation of a conclusion together with the metrological authority, which shall include information about the integrity of or damages to the device, actual readings, and the results of testing.
- 266. In the case of checking and verifying the Commercial metering device, the Distributor, after dismantling the device, shall be required not later than:
 - Within 15 business days, to provide to the Customer a copy of the expert conclusion of the Metrological authority on the results of testing (inspection) and include it in the Customer's Registration Card,
 - Within 35 business days, to provide to the Customer all information required for recalculation, if the violation of the metering device is confirmed;
 - 3) Within 60 business days, to provide to the Customer all

- information required for recalculation, if the average daily consumption considered for recalculation purposes has been determined for the first month of consumption following the restoration of the Commercial metering device.
- 267. The testing shall not be carried out if dismantling the metering device is stipulated by implementation of metering device replacement works according to investment programs of the Distributor approved by the Commission. In this case, the dismantled metering devices shall be preserved by the Distributor for at least 3 months if the Customer was present during the dismantling, and for 6 months if the Customer failed to appear for the dismantling works. Upon the request of the Customer, the Commercial metering device shall be subject to testing within the specified period under procedures defined by the EDN Code.
- 268. In case of replacement of the Commercial meter, the Distributor shall be entitled to suspend the electricity supply of the Customer not more than for I hour to replace the Commercial meter, and not more than 3 hours to replace the current and voltage transformers. If the Customer has fixed contract-based emergency or technological capacity, then the Distributor, in order to restore the Commercial metering device, shall be obliged to agree on the terms for suspension and restoration of electricity supply with the Customer. In this case, the Customer shall be obliged, based on the Distributor's written request, no later than 5 business days from receipt of the request, to enable the latter to replace the commercial metering device.
- 269. The Distributor shall be obliged to dismantle (replace) the Commercial metering device no later than 5 business days from receipt of the Customer's written application on the necessity to test the commercial metering device after properly notifying the Customer about it at least I day in advance.
- 270. If a Customer has filed more than I application over 2 consecutive

years for testing of its Commercial metering devices as well as current and voltage transformers, he/she shall be obliged to make an advance payment of 1,200 AMD (including VAT) to the Distributor. If the fact of violation of the Commercial metering device is confirmed by the expert conclusion provided by the metrological authority, the Distributor shall consider the abovementioned advance payment in the Customer's bill for consumed electricity. If the fact of violation is not confirmed, the advance payment will be considered as a service charge paid to the Distributor for testing the Commercial metering device and shall not be refunded to the Customer.

- 271. The provisions outlined in this Chapter shall not limit the right of the Customer to order at its own expense, testing and inspection of the Commercial metering devices (meters as well as current and voltage transformers) attributed to its electricity consumption system from other companies entitled to carry out testing (inspection) of metering devices. In such a case, the Distributor shall be obliged to ensure the realization of the Customer's right set forth in this Provision according to the following procedure:
 - I) Within 5 business days after the receipt of the written request of the Customer, the Distributor, together with the Customer, shall dismantle, pack, seal, and hand over the Commercial metering device to the Customer, replacing it with another, at least equivalent commercial metering device. In case of the absence of the Customer during the dismantling process, the Distributor shall prepare a protocol on the failure of the Customer to appear. In this case, the dismantling of the commercial metering device shall not be performed:
 - 2) The Customer, no later than in 20 business days following the dismantling, shall return to the Distributor the commercial metering device, calibrated and certified (sealed) by the

- metrological authority, and the written conclusion of the competent agency about the results of testing (inspection) to be verified by the metrological authority. In a case when the conclusion of the testing confirms the violation of the commercial metering device, the Distributor shall be obliged to follow the procedures defined in Chapter 17 of the REM Rules.
- 3) In the case provided for by this Provision, the Distributor shall be entitled to participate in the process of testing (inspection) of the commercial metering device. If the Distributor expressed its willingness to participate in the testing (inspection), the Customer shall notify the Distributor in a proper way defined in the EDN Code about the time and place of testing at least 3 business days beforehand. If the Distributor fails to appear after having been properly notified about the time and the place of the testing (inspection) of the commercial metering device, then this shall not be a basis for not implementing the testing;
- 4) If the Customer fails to return the commercial metering device to the Distributor within 20 business days, then the Distributor shall be entitled to apply a penalty to the Customer in the amount of double the cost of electricity for the month with the highest consumption over the last year. If no electricity was consumed by the Customer, the penalty shall be calculated in the amount of double the cost of electricity for the first month with consumption after the restoration of the Commercial metering device. At the same time, the Distributor shall be entitled to require that the Customer compensate the damage incurred, including the cost of the commercial metering device, costs related to its dismantling, and other costs.
- 272. The Distributor shall be obliged to check and adjust the hours of the electronic Commercial meters at least once per year so

that they accurately meter the quantities of electricity consumed during daytime hours and nighttime hours (in corresponding time intervals).

SECTION 7. PENALTIES APPLIED TO THE DISTRIBUTOR

CHAPTER 36. PENALTIES APPLIED TO THE DISTRIBUTOR FOR VIOLATION OF REQUIREMENTS OF THE EDN CODE

- 273. The Distributor shall pay a penalty to the Customer or Applicant:
 - For each case of violation of procedures or schedules for implementation of planned/unplanned interruptions and restorations of electricity supply defined in Chapter 22 of the EDN Code;
 - For each case of violation of procedures or schedules for termination and restoration of electricity supply defined in Chapter 23 of the EDN Code;
 - For each case of violation of procedures or schedules for installation and replacement of Commercial metering devices defined in Chapter 34 of the EDN Code;
 - 4) For each case of violation of procedures or schedules for testing of Commercial metering devices defined in Chapter 35 of the EDN Code:
 - 5) For each case of violation of procedures or schedules defined in Chapter 30 of the EDN Code;
 - 6) For violation of periods defined in Provisions 170, 173, 174, and 183 of the EDN Code:
 - 7) For violation of periods defined in Provisions 178 of the EDN Code;
 - 8) For each violation of procedures and timeframes for submission of notifications (information) and sharing of documents defined in the EDN Code, unless it is covered by cases of violations described in other sub-Provisions of this Provision.
- 274. The Distributor shall pay the following amounts of penalty in cases referred to in Provision 273 of the EDN Code:
 - 1) In the case of a Customer: 50 percent of the average monthly

- cost of electricity consumed, not exceeding 2,500 AMD;
- 2) In the case of an Applicant: 2,500 AMD, except for Provisions 170 and 173 of the EDN Code, according to which the Distributor shall pay a penalty to the Applicant for each delinquent day equal to 0.5 percent of the Connection fee, not exceeding the total amount of the Connection fee.
- 274.1. The average monthly cost of electricity consumption shall be accepted equal to the quotient of the cost of electricity consumed by the Customer in 12 months preceding the disclosure of the violation mentioned in this Chapter and the number of the months with consumption in the same period, and if no electricity was consumed during the last one year, then it should be equal to the cost of electricity consumed during the last settlement month.
- 275. The Distributor shall consider the calculated penalty as follows:
 - In the case of a Customer: in the bill for electricity consumed by the latter during the current month. The calculated penalty shall be mentioned in a separate line and shall be deducted from the cost of electricity supplied, and in the case of a Supplier's Customer, from the cost of distribution services provided.
 - 2) In the case of an Applicant: within the period defined by the REM Rules for the payment against electricity consumed during the month following the connection of the Consumption system of the latter to the electric network, and if it failed to become a Customer, before the end of the month preceding the violation, in cash.
- 276. The Distributor shall not pay a penalty for the mentioned cases if they were caused by force majeure consequences, as well as in case of non-fulfillment by the Applicant of the requirements referred to in Provision 172 of the EDN Code or if the electricity supply of the Customer's Consumption system was terminated in procedures defined in Chapter 23 of the EDN Code within the periods covered under Provision 273 (1,2) of the EDN Code.

SECTION 8. RULES AND PROCEDURES TO IMPROVE THE PERFORMANCE EFFICIENCY OF THE DISTRIBUTION NETWORK

CHAPTER 37. GENERAL PROVISIONS

- 277. The Distributor shall take continuous measures to improve the performance efficiency of distribution during the operation and planning of the Distribution Network, particularly in the areas of reducing operation and maintenance costs, improving service quality indicators, reducing losses, and introducing modern technologies for management and metering.
- 278. The Distributor shall provide for efficient and reliable operation of the Distribution Network using modern and effective planning tools.
- 279. The Distributor shall be required to apply modern modeling software packages for computer modeling and optimization of the distribution network. The modeling software must meet the distribution network planning requirements and be able to analyze at least the following:
 - 1) Active and reactive power demand;
 - 2) Load flows:
 - 3) Short circuit current;
 - 4) Voltage regulation;
 - 5) Assessment of the electricity system behavior related to Normal and Critical regimes of the distribution network;
 - 6) Consumption (load) forecast;
 - 7) Other voltage-related characteristics.
- 280. The Distributor shall be well informed about the technical specifications of its Distribution Network, including data, service life, and maintenance periods for the equipment owned by other entities and under its operational control.

CHAPTER 38. SERVICE QUALITY INDICATORS

- 281. In case of Customers whose electricity supply is to be implemented with 2 or more 6 kV and higher voltage autonomously fed overhead lines (cables) or from 2 stationary systems or sections of the plant (substation), the Distributor shall be required to restore electricity supply after an unplanned interruption no later than:
 - Within 3 hours starting in 2025 and within 2 hours starting in 2027 for residential settlements of administrative areas of urban municipalities;
 - 2) Within 6 hours starting in 2025 and within 4 hours starting in 2027 for residential settlements of administrative areas of rural municipalities.
- 282. Starting in the year 2025, the annual electricity supply interruption indicators (SAIDI and SAIFI) shall not exceed 75 percent of the 2021 indicators, and starting in 2028, they shall not exceed 55 percent of the 2025 indicators.
- 283. Starting in the year 2025, the overall number of deviations from permissible voltage ranges on an annual basis shall not exceed 50 percent of the 2021 indicators, and starting in 2028, such cases should be completely excluded.
- 284. Metering devices should be installed in such a way as to minimize the possibility of their mechanical damage or unacceptable impact on the environment and of interference by unauthorized persons into the connection scheme of the Metering device and its operation.
- 285. In case of branching of I kV and higher voltage lines of the Distribution Network, automatic switching equipment shall be installed.

CHAPTER 39. AUTOMATED METERING SYSTEMS

286. The Distributor shall be required to introduce an Automated metering system by the end of 2027 as per the program agreed

with the Commission, enabling automatic metering of electricity consumed by all Customers of the Distribution Network.

CHAPTER 40. ELECTRONIC MAPS

- 287. The Distributor shall be required to prepare appropriate electronic maps in the format of a geographic information map.
- 288. All changes to the Distribution Network shall be incorporated into applicable maps by the Distributor.

CHAPTER 41. LOSS REDUCTION MEASURES

- 289. The Distributor shall regularly improve the technologies and operating procedures used while designing and constructing the network upgrades.
- 290. The Distributor shall be required to take measures to reduce losses in the Distribution Network, namely:
 - Select the diameter and length of electric transmission lines in the low voltage network in such a manner that the voltage drop does not exceed 5 percent along the entire line;
 - 2) Where new transformers are to be installed, choose transformers capable of voltage regulation;
 - Build the Distribution Network in such a manner as to minimize the length of the low-voltage transmission line coming out from the transformer point and reaching the load point;
 - 4) Select technically and economically approved transformers of high nominal voltage levels (within reasonable ranges);
 - Compensate for reactive power, increasing the Distributor's ability to meet the power factor requirements as established by the EDN Code;
 - 6) Build low-voltage lines with insulated wires;
 - 7) Design transformer stations in a site close to Customer

- groups (centralized near the load) so that the Customers fed from it are an equal distance away from the transformer (if practically possible);
- 8) Through specific computer programs, provide for the implementation of loss analysis and their structural division;
- 9) Take other adequate measures. In the future, with the use of a deep penetration mechanism, the operation of low-voltage networks exceeding 600 meters within its service area will be eliminated:
- 10) Reduce the number of 35 110 kV substations operated by one transformer.

SECTION 9. TRANSITIONAL PROVISIONS

CHAPTER 42. LOSS REDUCTION MEASURES

- 291. In terms of reactive energy, sub-Provisions (3) of Provisions 73 and 74, Provisions 241, 247, 279, and 290 of the EDN Code shall come into effect starting January 1, 2025.
- 292. Chapter 40 and Provision 283 of the EDN Code shall come to effect starting January 1, 2028.

PROCEDURE FOR ELECTRONIC SUBMISSION OF DOCUMENTS REQUIRED FOR CONNECTION OF A RECONSTRUCTED CONSUMPTION FACILITY OF A NEW CUSTOMER OR A CUSTOMER TO THE DISTRIBUTION NETWORK

- I. This procedure defines the requirements for electronic submission of documents to the Distributor, at the discretion of the Applicant, defined in Provision 159 of the EDN Code for connection of a reconstructed consumption system of the New Customer or the Customer to the Distribution Network (hereinafter, the Connection Application).
- 2. Connection Applications in an electronic format shall be submitted to the Distributor via the official website of the latter.
- 3. In addition to filling out the Connection Application on the website specified in Provision 2 of this Procedure, the Applicant shall also send to the Distributor the scanned copies of the documents prescribed by Provision 159 of the EDN Code in any of the following file formats: DOC, DOCX, PDF, or IPEG.
- 4. The Connection Application shall be considered submitted on the day it was registered on the Distributor's official website. The fact that the Connection Application has been registered on the Distributor's website shall be confirmed by the notification received immediately after registration of the Application in the electronic system, which contains an x-digit code.
- 5. Within I business day after receiving the Connection Application, the Distributor shall examine it and inform the Applicant of its acceptance or rejection (if the information and materials (documents) are incomplete) via the email address and telephone number indicated in the Application form. In addition, the results of the application examination shall be also displayed in the

- Distributor's electronic system.
- In the case of receiving a warning about missing documents, the Applicant may send scanned copies of the missing documents or corrected documents.
- 7. The Applicant shall provide the required new documents or materials as prescribed by Provision 6 of this Procedure in addition to the Application submitted by accessing the system with the already provided x-digit code.
- 8. The Applicant may access the electronic system with the provided x-digit code, where the following information is displayed:
 - 1) Connection Application number;
 - 2) Date of acceptance of the Connection Application in the electronic system of the Distributor;
 - 3) Applicant's name, surname, place of residence (in case of a legal entity: name, location);
 - 4) Required capacity and voltage level;
 - 5) Connection type (single-phase, 3-phase);
 - 6) Date of submitting a proposal for a contract;
 - 7) Date of providing actual electricity supply (possibility of electricity supply);
 - 8) Deadline for payment of the connection fee, including the advance payment deadline;
 - 9) Other conditions (if applicable).
- 9. The Distributor shall send a reminder to the Applicant the day before the deadline for the payment of the connection fee (including the advance payment deadline) to the email address specified in the Connection Application.
- 10. Starting the date of notification of acceptance of the Connection Application, the Distributor shall proceed with the Connection Application received through the electronic system in accordance with the procedure set forth in the EDN Code.
- 11. After the Connection Application has been received in the Distributor's electronic system and the respective actions have

been finalized in the manner and terms specified in the EDN Code, the Distributor, through the email address and phone number specified in the Application, shall send to the Applicant a proposal on concluding a contract by uploading a unilaterally signed Contract into the Distributor's electronic system.

- 12. The original Contract shall be signed when the authentic copies of the electronically attached documents, which, according to the requirements of the EDN Code, should be submitted to the Distributor in their original form, have been provided.
- 13. The Distributor shall immediately compare the original documents specified in Provision 12 of this Procedure with the scanned copies of the documents attached to the Application in order to ensure that they are reliable, after which the original documents shall be returned to the Applicant. No Connection Application shall be signed unless the original documents are provided.

APPLICATION FOR GENERATOR CONNECTION

Ι.	APPLICANT'S DATA					
I)	Name					
		Generator				
2)	Туре					
		Customer				
3)	Name of electric facility					
4)	Address of electric facility					
5)	Cadastral surface of the facility locat	tion site (inclu	ding p	ositio	nal im	age)
		Connection of a new facility			lity	
	Purpose of connection	Capacity increase by Generator				
6)						
		Modernization of the existing facility				
7)	Planned capacity of connection or planned capacity increase (MW)					
8)	Planned voltage level of the Connection point (kV)					
9)	Implementation by stage (yes/no)					
	Scheduled deadlines for construction/upgrade (by stage)	Stage	I	II	III	IV
10)		Year/month				
		MW				
11)	Applicant's address					
12)	Applicant's phone number					
13)	Applicant's fax number					
14)		Name,				
	Responsible person	surname				
		Address Email				
		Phone				

To be filled in by Generators

2.	DATA ON GENERATION FACILITY				
1)			Run-of-river HPP		
			HPP with reservoir		
	Power plant	Pumped SPS			
		ANPP			
		TPP			
		Combined cycle			
		Wind			
		Other (specify)			
	Fuel	Coal			
		Gas			
2)		Mazut			
		Nuclear			
		Other (specify)			
3)	Energy data by stage	I	II	III	IV
a.	Number of units (items)				
b.	Active power production (MW)				
c.	aximum capacity to be delivered (MW)				
d.	Annual output forecast (MWh)				
4)	Reactive power regulation availability (yes/no)				

Company's representative	
	name, surname /signature/

AGGREGATE ESTIMATION OF CONNECTION FEES

DISTRIBUTOR	GENERATOR
(position, signature, name, surname)	(position, signature, name, surname)
20	20
AGREED WITH ELECTRICITY SYSTEM OPERATOR	
(position, signature, name, surname)	
20	

CONNECTION FEES

Table N I
Methodology I. Standard connection fees for the connection
of private houses or commercial customers with 0.4 (0.22)
kV voltage

 Standard connection fees for private houses or commercial customers with 0.22 kV Consumption Systems shall be determined according to the following table:

CONNECTION TYPE	MAXIMUM CONNECTION CAPACITY	STANDARD CONNECTION FEE THOUSANDS OF AMD (VALUE ADDED TAX INCLUDED)		
		IN THE TERRITORY OF YEREVAN CITY	IN THE TERRITORY OF THE REPUBLIC OF ARMENIA (EXCEPT YEREVAN CITY)	
Single-phase	I0 kVA	65	53	
(0.22 kV)	I4 kVA	91	62	
Amplification of the connection	From I0 kVA to I4kVA	26	9	

2. The standard connection fees (VAT included) for private houses or commercial customers with 0.4 kV Consumption Systems shall be determined by the following formula:

$$F_{st} = F_c + F_v \times R_c \times C_c,$$

where:

 $\rm F_c$ is the value of fixed costs, accepted as equal to 203,000 (two hundred three thousand) AMD

 $\rm F_{_{v}}$ value of variable costs, equal to 7,500 (seven thousand five hundred) AMD per kVA

R_c the required capacity by the Applicant (kVA).

C_c the coefficient of costs, accepted to be equal to 1.4 within the administrative territory of Yerevan City, and equal to 1 within the other territories of the RoA.

Table N 2
Single-phase connection fees for apartments in multiapartment buildings and for Commercial customers

Thousands of AMD (VAT included)

NUMBER OF	SINGLE-PHASE CONNECTION FEE FOR ONE APARTMENT OR ONE COMMERCIAL CUSTOMER			
APARTMENTS AND COMMERCIAL	10 KVA CAPACITY 14 KVA CAPACITY			APACITY
CUSTOMERS WITH SINGLE-PHASE CONNECTION	IST ZONE	2ND ZONE	IST ZONE	2ND ZONE
	59	48	83	50

- 1. Ist zone: Territory of Yerevan City.
- 2. 2nd zone: Territory of the Republic of Armenia, excluding the territory of Yerevan City.

Table N 3 Methodology 2. Standard connection fees for commercial customers with 6(10) kV Consumption Systems

 Standard connection fees (VAT included) for customers with 6(10) kV Consumption Systems shall be determined by the following formula:

$$F_{st} = F_c + F_v \times R_c \times C_c$$

where:

Fc is the value of fixed costs, which is accepted as equal to 846,000 (eight hundred forty-six thousand) AMD,

Fv is the rate of variable costs, which is accepted as equal to 2,150 (two thousand one hundred fifty) AMD, per kVA.

Rc is the required capacity by the Applicant (kVA).

Cc is the coefficient of costs, which is accepted as equal to 1.4 for the administrative area of Yerevan City and equal to 1 for other territories of the RoA.

Table N 4
Standard and Additional Connection Fees for Commercial
Customers to be Connected to the 35 kV Voltage Network

Millions of AMD (VAT included)

CAPACITY TO BE CONNECTED	STANDARD CONNECTION FEE FOR UP TO 12 KM OF THE CONNECTING LINE	ADDITIONAL FEE FOR EVERY 250 M EXCEEDING 12 KM
<3,000 kVA	21.70	1.28
3,001-4,000	26.19	1.70
4,001–5,000	30.67	2.13
5,001-6,000	35.15	2.55
6,001–7,000	39.63	3.00
7,001–8,000	44.11	3.40
8,001–9,000	48.59	3.83
9,001-10,000	53.08	4.25
10,001-11,000	57.56	4.68
11,001-12,000	62.04	5.10
12,001-13,000	66.52	5.53
13,001–14,000	71.00	5.95
14,001-15,000	75.48	6.38

ACRONYMS

ı.	ANPP	Armenian Nuclear Power Plant
2.	APP	Autonomous Power Producer
3.	DAMS	Automated System of Electricity Metering And Control
4.	DN LOS	Distribution Network Losses and Own Needs
5.	DN EDEM	Annual forecasted electricity demand of Customers connected to the Distribution Network
6.	DOM Participants	Transmitter, Generators, Customers that are required to have operative personnel (responsible for electric facilities) as prescribed by the technical regulation approved by the RoA Government
7.	DOP Participants	Distribution-Scale Plants and Large Customers
8.	EDEM	Annual forecast of electricity demand, including its adjustments on a monthly and daily basis
9.	EDN Code	Republic of Armenia Electricity Market Distribution Network Code approved by the Commission
10.	EGEN	Annual forecast of electricity generation mix, including its adjustments on a monthly and daily basis
11.	EMO	Electricity Market Operator
12.	ESO	Electricity System Operator
13.	ETN Code	Republic of Armenia Electricity Market Transmission Network Code approved by the Commission
14.	REM Rules	Republic of Armenia Retail Electricity Market Trading Rules approved by the Commission
15.	SAIDI	System Average Interruption Duration Index

16. SAIFI System Average Interruption Frequency Index

Generator, Universal Supplier, Supplier, Trader,

Participants Qualified Customer, Transmitter, Distributor, ESO,

and EMO

18. WEM Rules Wholesale Electricity Market Trading Rules of the

Republic of Armenia.

REPUBLIC OF ARMENIA ELECTRICITY MARKET DISTRIBUTION NETWORK CODE

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