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**CHAPTER I – PREAMBLE****I.1 Introduction**

- I.1.1 The power sector restructuring process and the electricity market liberalization require electricity supply, transactions (purchase-sale) and exchanges among the Market participants.
- I.1.2 The electricity supply, transactions and exchanges should be metered and monitored in boundaries of Market participants and accompanied with financial transactions based on respective agreements.
- I.1.3 All agreements signed on electricity supply, transactions and exchange among parties shall be based on terms and Market Rules.
- I.1.4 **The Metering Code** establishes minimal technical requirements for the construction and operation of the electricity metering system for metering, data collection and registering, and implementation of respective procedures according to Market Rules and Parties Agreements.
- I.1.5 **Metering equipment should be provided by all Market participants and legal or physical subjects required by the Legislation in force and should be registered in the Meter Registering System (MRS) according to Metering Code terms and Law No. 8996, date 30.01.2003 “On metering units and control of metering equipment (metrology)”.**
- I.1.6 The Metering Code is divided into four main parts:
- i. Explanations
  - ii. General Requirements
  - iii. Technical Requirements
  - iv. Technical Requirements for Final Customers
  - v. Attachments – Terms and Definitions

**I.2 Explanations**

- I.2.1 Following are some of the main Metering Code explanations:
- i. Except when otherwise required, the term “inspector” shall mean any person or subject nominated as such by the Legislation in force.
  - ii. Any reference to the Legislation in force, regulations, directives, guidelines and codes, shall also include all their amendments, appendixes, modifications and replacements.
  - iii. References to the term “in written” include any form of writing and editing the words in a legal way.

**CHAPTER II – GENERAL REQUIREMENTS****II.1 Scope**

- II.1.1 Metering Code includes the minimal obligatory norms of metering and registering of electricity metered values for trade in the territory of the Republic of Albania.
- II.1.2 According to signed agreements of export-import, the Electricity (MWh and MVarh) exported and imported in any metering point should be metered and registered by meters installed and maintained according to Metering Code terms.
- II.1.3 Metering Code shall be implemented by all Market Participants such as:
  - i. All Generators
  - ii. OST
  - iii. DSO(s)
  - iv. Suppliers
  - v. Local or foreign Qualified Suppliers
  - vi. Eligible Customers
  - vii. Tariff Customers (only for this Code).

**II.2 Object**

- II.2.1 Metering Code defines the practices and terms that shall be applied in metering and registration of the electricity metered values according to Market Rules.
- II.2.2 The code defines and specifies the following main terms for the metering system:
  - i. Technical criteria and standards of construction and operation of the metering system
  - ii. Accuracy and calibration
  - iii. Verification of the certification and testing existence
  - iv. Reading, registering and elaboration of metering data, etc.

**II.3 General Requirements of the Metering Equipment****II.3.1 Standards**

- II.3.1.1 Metering systems and their composing parts should comply with norms defined by Metering Code and Law No. 8996 “On the metering unit and control of metering equipment (metrology)”.
- II.3.1.2 The Metering Code Commission shall examine and discuss any new proposed norm according to international standards regarding the metering system and submit them to ERE for approval.

II.3.1.3 If the existing meters do not comply with international standards and accuracy requirements described by Metering Code paragraphs, the respective parties shall replace them.

II.3.1.4 A communication protocol defined and specified according to Market Rules, agreements of the Parties and this Code shall be used for the metering system.

### **II.3.2 *Metering System Accuracy***

II.3.2.1 The metering system shall accurately remain within limits defined by Metering Code, international standards and the Legislation in force.

II.3.2.2 The requirements of this Code shall be equally implemented for the main meters and controlling meters.

## **II.4 Verification of the Certification Existence and Testing of the Metering System**

### **II.4.1 *DSO, Suppliers, Qualified Suppliers, OST and Generators Responsibilities***

II.4.1.1 **The Generation Company(s) (GC), Suppliers, Qualified Suppliers** are responsible for:

- i. verification of the existence of certification and testing of the metering system owned by Generating companies, Suppliers and Qualified Supplier according to Metering Code requirements, international standards and the Legislation in force.
- ii. Registration and data for all metering equipment regarding calibration and tests results. These registrations may also include other data details that shall be considered acceptable from Market Participants. Registrations should be complete and accurate according to metering system parameters.
- iii. Sealing of all Generating Companies, Suppliers and Qualified Suppliers metering systems, registration and data collection equipment, as well as communication equipment such as modems or phone connections.

II.4.1.2 **OST** is responsible for:

- i. Verification of the existence of certification and testing of the metering system owned by OST according to Metering Code, international standards and Legislation in force.
- ii. Installation of the metering system and meters for Customers connected to the Transmission System. This equipment shall comply with requirements and norms of this Code, international standards and Legislation in force and be registered by Metering Registration System.
- iii. Maintaining records and data for the entire metering system regarding the calibration and results of each test. These records may also include other data details considered acceptable by Market Participants. Registrations should be complete and accurate according to metering system parameters. The metering system installed in

interconnection lines complies with international standards and bilateral agreements between OST and neighbor countries.

II.4.1.3 **Generators** are responsible for:

- i. Verification of the existence of certification and testing of the metering system owned by Generators according to Metering Code requirements, international standards and Legislation in force.
- ii. Installation of the metering system and meters installed in their systems/objects. This equipment should comply with requirements and norms of this Code, international standards and the Legislation in force and should be registered in Metering Registration System.
- iii. Maintaining the records and data for the whole metering system regarding calibration and results of each test. These records may also include other data details considered acceptable by Market Participants. Registrations should be complete and accurate according to metering system parameters.

**II.4.2** *Verification of the Existence of Meters Certification*

II.4.2.1 Meters used according to this Code shall be certified.

II.4.2.1 New metering equipment should be certified and tested according to the Legislation in force.

II.4.2.1 Tests shall be performed according to respective IEC standards described by this Code, the Legislation in force and EU Directive on Metering Instruments.

II.4.2.1 Meter lifespan should be defined in the certificate. The certificate validity extension may be different for different types of meters and may change periodically. For all metering systems and meters the certifying of the seal is also required. The seal shall remain undamaged in order for the meter to be considered as certified.

II.4.2.1 In case of interference to the metering system or meters, the existing seal shall be irreversibly destroyed.

II.4.2.1 Meters which are out of operation should be tested in authorized laboratories or certified again according to this Code before they are reinstalled for use.

**II.4.3** *Inspection and testing*

II.4.3.1 All meters, current and voltage transformers and other equipment of the metering system shall be tested on their accuracy before they are employed. Tests should be performed in defined periods of time to check and verify that the metering function remains within allowed limits of error established by Metering Code.

II.4.3.2 The test shall be performed according to the following time schedule.

Power level	> 50 MVA	10 MVA – 50 MVA	1 MVA – 10 MVA	< 1 MVA
Testing period	2 years	3 years	4 years	5 years

- II.4.3.3 DSO, Suppliers, Eligible Suppliers, OST and the Generators may modify these periods, with ERE's approval, based on the performance and characteristics of the metering system.
- II.4.3.4 The meter installed in the object should be equipped with testing terminals in order to be able to work in the object. These terminals should be close to the meter. This recommendation is upon Parties judgment and agreement to decide.
- II.4.3.5 In addition, if the meter installed in the object is not equipped with terminals, it is recommended to be replaced with a tested and certified meter during the testing period.
- II.4.3.6 All parties should be informed on the tests, invited to participate and have the testing outcomes available.
- II.4.3.7 Tests should minimize and avoid interruption of electricity metering in installed equipments.
- II.4.3.8 Certified testing equipment shall be used to perform these tests, according to the legislation in force and respective standards, and if necessary (with agreement of the parties) equipment and conditions offered by an authorized laboratory may be used, according to Law No. 8996, date 30.01.2003 "On metering units and control of metering equipment (metrology)".
- II.4.3.9 If the test shows an error exceeding the limits established by this Code, this error shall be registered before the repairing of the meter or meter parts or before the replacement of broken components.

#### **II.4.4 *Inspection and Testing in Special Occasions***

- II.4.4.1 It is acceptable that in addition to normal inspections according to paragraph II.4.3, Market Participants may require special inspections of the metering systems and their registering systems. For these inspections, provisions of article 51, Law 9072 "On the Power Sector" are implemented.
- II.4.4.2 The meter should be tested even beyond allowed metering limits. If after the testing, a deviation of 1.5 times larger than the allowed error limits defined by the Code exists between the main and the controlling meters, then the meter should be replaced or repaired in order to fulfill this Code standards and norms.

#### **II.5 Market Participants**

- II.5.1 Market Participants shall guarantee and provide that the whole data system is collected and registered according to procedures established by Market Rules, Market Participation Agreements of the Parties and procedures of validity, assessment, replacement and incorporation of these data according to Market Rules requirements.

**II.6 Meter Requirements and Registration**

- II.6.1 Market Participants shall provide, install and maintain all meters and metering systems registered in the Meter Registration System.
- II.6.2 **OST** shall be responsible for:
- i. Providing, installation and maintenance of the metering system and meters as well as for metering in boundaries of the Transmission System and electricity Customers.
  - ii. Providing, installation and maintenance of the metering system and meters in interconnection lines. These metering systems shall comply with norms of this Code and international standards, and shall be registered in Metering Register System.
- II.6.3 **DSO, Suppliers and Qualified Suppliers** shall be responsible for:
- i. Providing, installation and maintenance of the metering system and meters, as well as for metering in connection boundaries of Customers to the Distribution System. Customers connected to the Distribution System may be Tariff or Eligible Customers. As regards Eligible Customers, the metering system is installed by DSO or the Qualified Supplier on the account of the Eligible Customer according to agreement of the Parties. These metering systems shall comply with the norms of this Code and international standards, and shall be registered in Metering Register System.
- II.6.4 **Generators** shall be responsible for:
- i. Providing, installation and maintenance of the metering system and meters, as well as for metering to the metering point (point where Electricity is metered) and the metering systems installed in their systems/objects. These metering systems shall comply with the norms of this Code and international standards, and shall be registered in Metering Register System.
- II.6.5 Metering Register System data shall be confidential and shall be administered by the respective Party according to the Market Rules.
- II.6.6 Metering Register System shall contain at least the following specifications for the metering systems and meters in each metering point:
- i. Meter technical specifications
  - ii. Serial number
  - iii. Call number (distant control)
  - iv. Value of metering impulses
  - v. Data of metering transformers (current transformers, voltage transformers)
  - vi. Certificates of the metering system equipment (for the existing ones)
  - vii. Point of connection/address of the object where the customer meter is connected
  - viii. Customer ID number
  - ix. Supplier ID number
  - x. Installation date

- xi. Installation tests
  - xii. Different tests as may be required.
- II.6.7 Metering Register System shall register any change of Users, Customers, metering equipment and any disconnection until the actual day. Any other information regarding the metering points that may be required from Electricity Market Participants should be registered in Metering Register System.
- II.6.8 Metering Register System shall keep the information required in this paragraph for a minimal period of 10 years, for each metering point.
- II.6.9 Metering Register System data shall be available for subjects, or legal or physical persons upon to their request and in accordance with the format defined by Metering Code.

## **II.7 Management of Metering Data**

### **II.7.1 *Registration of Metering Data***

- II.7.1.1 Data regarding the amount of exported and imported Electricity by each Market Participant shall be registered, assessed and elaborated according to these Code requirements. Assessment and replacement of data shall be also done according to definitions in the Agreements of the Parties.
- II.7.1.2 **OST** shall register the reading of metering data for:
- i. All Transmission System Users including Generators, DSO, Customers directly connected to the Transmission Network and Qualified Suppliers and Eligible Customers
  - ii. Interconnection lines
- II.7.1.3 **Generators** shall register the metering data in their connection point.
- II.7.1.4 **DSO** shall register the metering data for:
- i. Tariff Customers
  - ii. Generators connected to the Distribution System
  - iii. Qualified Suppliers and Eligible Customers using the Distribution System
- II.7.1.5 **Suppliers** shall register the metering data in point(s) of electricity sale/purchase.
- II.7.1.5 **Qualified Suppliers and Eligible Customers** shall register the metering data in their point of connection according to Agreements of the Parties.

### **II.7.2 *Registration Method of Metering Data***

- II.7.2.1 In general, the registering systems of metering data are recommended to control the metering system in distance and receive data in defined time intervals. The time interval of data receiving is defined in agreements of the Parties.

II.7.2.2 In addition to the remote control and data receiving, local registers should possibly receive data manually. For final Customers in general and Tariff Customers in particular, the registration of metering data should be done directly reading the meter.

II.7.2.3 The remote control shall be performed through the following communication means:

- i. existing phone network
- ii. telecommunication dedicated lines
- iii. connection through optic fibers
- iv. automatic protection radios
- v. GSM system
- vi. other suitable communication systems

By using protocols according to international standards agreed in agreements of the Party.

II.7.2.4 Data received by the meter for each metering system shall be as follows:

II.7.2.4 ***For Tariff Customers:***

- i. Low Voltage connection: ..... active electrical energy
- ii. Medium Voltage connection: ..... active electrical energy  
..... reactive electrical energy

II.7.2.5 ***For Eligible Customers:***

- i. active electrical energy
- ii. reactive electrical energy
- iii. active power
- iv. reactive power
- v.  $\cos\phi$
- vi. Other parameters established in agreements of the Parties.

II.7.2.6 ***For Generators:***

- i. active electrical energy
- ii. reactive electrical energy
- iii. active power
- iv. reactive power

II.7.2.7 ***For OST:***

- i. active electrical energy
- ii. reactive electrical energy
- iii. active power
- iv. reactive power

v.  $\cos\phi$

II.7.2.8 ***DSO, Suppliers and Eligible Suppliers:***

For each feeder in Medium Voltage (35 kV, 20 kV, 10 kV, 6 kV):

active electrical energy

reactive electrical energy

II.7.2.9 ***For each MV/LV cabin:***

active electrical energy

reactive electrical energy (Low Voltage metering)

II.7.2.10 The above parameters are minimum requirements, but other parameters may be established with agreements between Parties.

**2.7.3 Metering and Elaboration of Data**

II.7.3.1 The metering system should be protected from local and distant interferences.

II.7.3.2 Parameters mentioned in this Code should be registered and maintained according to norms of this Code and agreements of the Parties.

II.7.3.3 **The DSO, Wholesale, Retail and Qualified Suppliers** should install computer programs that perform the automated process of electricity sale and purchase balance.

II.7.3.4 The main menu of the computer program should indicate items related to the main data of each tariff customer connected and supplied in Medium Voltage or Low Voltage, and Meter Registering Systems should provide and insert for each customer the main data that identify the customer and its parameters.

II.7.3.5 **OST** should install computer programs that perform the automated process of electricity sale and purchase balance, electricity exchanges and transactions and the main data that identify the Customer and its parameters.

II.7.3.6 **Generators** should install computer programs that perform the automated process of electricity sale and purchase balance.

II.7.3.7 The electricity demands shall be registered and kept according to standards and procedures of Market Rule and Grid Code described by paragraphs of this Code. Data maintenance, reconciliation of registered readings and management of emergency situations in case of meter breakdown shall comply with Market Rules or agreement of the Parties.

II.7.3.8 Data shall be valid according to Market Rules and respective Grid and Distribution Codes. In general, data shall be published at any time and their replacement or modification shall be made according to conditions and rules established by the Agreement of the Parties.

II.7.3.9 The data elaboration system is procedure and their communications shall comply with terms and rules established by Agreements of the Parties and the Legislation in force.

- II.7.3.10 As a general rule, data for each registered meter shall be registered for the whole period of its use.

#### **II.7.4 *Meter Reading***

- II.7.4.1 The meter shall be read and registered on the monthly basis in order to prepare the electricity balance (sale-purchase, transactions, and exchanges).
- II.7.4.2 Parties may agree to read the meter in different periods of time as agreed.
- II.7.4.3 Occasionally, or based on the agreements of the Parties, meters can be read in distance (on-line).

#### **II.7.5 *Lack of functioning of the Metering System***

- II.7.5.1 If metering data are invalid due to breakdowns of communication equipment or data central system, data received by local equipment installed at the meter should be used (for example local register, etc).
- II.7.5.2 In cases when data are invalid due to breakdowns and lack of functioning of meters installed in the object, voltage, current and cabling transformers, or protection equipment or in cases when the meters installed in the object are working beyond of allowed error limits, then the receiving of metering data shall be established by the agreement of the Parties in accordance with ERE rules.

#### **II.8 *Protection from Tampering and Damages***

- II.8.1 DSO and Suppliers should verify the electricity consumption registered in every metering point in order to define the real consumption for final customers.
- II.8.2 In case illegal interferences or use of electricity are evidenced, DSO, Suppliers and the authorized organs shall apply the Legislation in force in the territory of the Republic of Albania.
- II.8.3 When meters or meter parts have been damaged, are out of function or are working beyond allowed error limits, then measures should be taken to fix, repair or replace them or their damaged parts by enabling their restoration according to requirements for allowed error limits.
- II.8.4 Customers should carefully use and maintain the meters. In case they evidence meter damages, they should inform by a written letter the owner of the metering equipment in order to repair or replace the meter according to agreements.

#### **II.9 *Requirements for Users and Final Customers***

- II.9.1 Users or Final Customers should allow OST, DSO, Wholesale Public Supplier, Retail Public Supplier, Qualified Supplier, Electric Police, employees, inspectors, agents or any other person authorized by the Legislation in force, to enter premises or

objects owned by them for electricity consumption, in order to check and implement rules and obligations according to Metering Code and the Legislation in force.

II.9.2 According to this paragraph, the right to intervene includes the right of authorized persons to check, verify and perform necessary works in the territory of the User or Customer for each meter or metering equipment in order to implement Metering Code and the Legislation in force.

## **II.10 Composition of the Commission of Metering Code (CMC)**

II.10.1 The Commission is composed of:

- i. The Chairman appointed with the consensus of DSO
- ii. The Secretary appointed with the consensus of DSO
- iii. A member representing Retail Public Supplier
- iv. A member representing Wholesale Public Supplier
- v. A member representing OST
- vi. A member representing the KESH Gen
- vii. A member representing the IPPs
- viii. A member representing the SPPs
- ix. A member representing all Qualified Suppliers
- x. A member representing Eligible Customers
- xi. A member representing Tariff Customer interests

II.10.2 Within 15 days after this Code enters in force, the DSO shall appoint the CMC Chairman.

II.10.3 Within 30 days after this Code enters in force; the Chairman shall inform all CMC subjects on the nomination of their representatives in this commission.

II.10.4 Within 15 days from receiving this information, all subjects are obligated to send the Chairman a written reply for the nomination of their representatives.

II.10.5 The Commission shall be established within 60 days from entering in force of this Code. The Chairman shall hold the first meeting to approve the functioning regulation of the Commission.

II.10.6 CMC decisions shall be taken with consensus and submitted to ERE for approval. If consensus is not achieved, the issue shall be referred to ERE for decision. ERE shall inform all Parties on the decision. If ERE considers the decision as a Code modification, it shall be reflected in the Code.

II.10.7 Metering Code modifications shall not be implemented without ERE's approval.

**II.11 Commission of Metering Code (CMC) Functions**

II.11.1 CMC shall perform the following functions:

- i. Updating Metering Code according to suggestions from the Parties and submits to ERE for approval.
- ii. Making recommendations and updating to Metering Code when necessary showing the reasons and submitting to ERE for approval.
- iii. Assisting the Metering Code interpretation according to requirements of electricity market participants.
- iv. Examining and considering as the subject of its activity any necessary change of Metering Code due to events unpredicted by this Code.
- v. Adopting Metering Code to international guidelines and standards and submitting to ERE for approval.
- vi. Addressing all cases of failure to fulfill the terms and standards of this Code represented by Parties and submitting to ERE the respective arguments.

**II.12 Information**

II.12.1 Parties shall have access to see any information regarding meters and metering equipment according to requirements of bilateral agreement, Metering Code and the Legislation in force.

**II.13 Notice**

II.13.1 The OST, DSO and Retail Public Supplier should be informed on every change of User and Customer's metering equipment, according to the occasion.

## CHAPTER III – TECHNICAL REQUIREMENTS

### III.1 Introduction

III.1.1 The Metering Code defines the technical requirements of the metering system for electricity metering and registering in metering points.

### III.2 References

III.2.1 The following documents have been used as references to define Metering Code standards and technical conditions:

- i. IEC Standard 60687 – Alternating Current Static Watt-Hour Meters for Active Energy (Cl. 0.2S and 0.5 S).
- ii. IEC Standard 61036 – Alternating Current Static Watt-Hour Meters for Active Energy (Cl. 1 and 2).
- iii. IEC Standard 61268 – Alternating Current Static Watt-Hour Meters for Reactive Energy (Cl. 2 and 3).
- iv. IEC Standard 60044 – 1 – Instrument Current Transformer ICT.
- v. IEC Standard 60044 – 2 – Instrument Voltage Transformer IVT.
- vi. IEC Standard 60044 – 3 – Instrument Transformers – Combined Transformers.
- vii. IEC Standard 61107– Data Exchange for meter reading – direct local data exchange.

### III.3 Metering Points

III.3.1 The metering points shall be located at the borders of Customers property, at the borders of Transmission System Customers and/or as provided for by agreements of the Parties.

III.3.2 The connection point may differ from the metering point, and if this is the case it shall be subject of approval in the Agreement of the Parties. In such cases, metering accuracy requirements shall be applied to the metering point.

### III.4 Metering Equipment Standards

III.4.1 All metering equipment should comply with Metering Code requirements and conditions. These requirements and conditions may be periodically revised and approved by the ERE in order to integrate technological or technical changes related to the industrial development as well as requirements of international guidelines.

III.4.2 Meters should be installed in an individual (individual box) or collective panel (collective box or panel). The panel should protect the meter from humidity, impurity, electromagnetic fields, and physical hits and maintain an appropriate temperature.

- The panel should be protected by a lock and/or sealed in order to avoid unauthorized interferences.
- III.4.3 Meters according to IEC or IEC 61036 (or the equivalent European standard) shall be connected to current and voltage transformers.
- III.4.4 If required for the metering process, current transformers shall be installed according to IEC Standard 60044-1 (or the European equivalent standard) and voltage transformers according to IEC Standard 60044-2 (or the European equivalent standard), or combined current and voltage transformers shall be used according to standards described in IEC Standard 6044-3/8.
- III.4.5 Current and voltage transformers are recommended to be safe and/or sealed. If the metering system has telecommunication system and other accessories, they should be placed in the panel and be safe.
- III.4.6 The communication equipment should comply with the requirements of International Telecommunication Union standards and respective recommendations for data transmission in telecommunication systems.
- III.4.7 Data maintenance shall be performed inside or outside the meter with data receiving and maintenance equipment. In the latter case, the meter should have a special exit to receive the metered values.

### III.5 Accuracy and Error Limits of the Metering Equipment System

- III.5.1 The accuracy of the metering equipment system shall be defined according to the value of the required power to the metering point. Meter accuracy requirements should consider all future changes of the required maximal power values.
- III.5.2 The accuracy range based on the required maximal power (MVA) is shown in the table below.

<i>Accuracy range</i>				
Required maximal power	> 50 MVA	10-50 MVA	1-10 MVA	< 1 MVA
Current Transformer	0.2s	0.2s	0.5s	0.5s
Voltage Transformer	0.2	0.5	0.5	0.5
Meters	0.2s	0.5s	1.0	2.0

- III.5.3 In order to meter the active and reactive Electrical Energy, the metering equipment shall be tested and/or calibrated to operate within allowed limits of error (as shown in the table below), taking in consideration the current and voltage transformer errors and those caused by ohmic resistance of the cable. Cable equipment and cabling should be from a brand firm and fulfill the international standards.

<i>Condition</i>	<i>Error limits of active electrical energy according to the power factor</i>				
<i>Current expressed as percentage of nominal current value</i>	<i>Power Factor</i>	<i>Error limits in the Metering Point</i>			
10% - 120%	1	> 50 MVA ± 1.0%	10-50 MVA ± 1.0%	1-10 MVA ± 2.0%	<1MVA ± 3.0%
5% - 10%	1	± 1.5%	± 1.5%	± 2.5%	± 3.5%
1% - 5%	1	± 2.5%	± 2.5%	± 3.5%	± 4.5%
10% - 120%	0.5(-)	± 2.0%	± 2.0%	± 3.0%	± 3.5%
10% - 120%	0.5(+)	± 2.0%	± 2.0%	± 3.0%	± 3.5%

<i>Condition</i>	<i>Error limits of reactive electrical energy according to the power factor</i>				
<i>Current expressed as percentage of the metered current value</i>	<i>Power Factor</i>	<i>Error limits in the Connection Point</i>			
10% - 120%	0	> 50 MVA ± 0.4%	10-50 MVA ± 4.0%	1-10 MVA ± 4.0%	<1MVA ± 4.0%
20% - 120%	0.866(-)	± 5.0%	± 5.0%	± 5.0%	± 5.0%
20% - 120%	0.866(+)	± 5.0%	± 5.5%	± 5.0%	± 5.0%

III.5.4 The direct data from tests and calibration according to the above requirements shall be registered and maintained in Metering Registering System.

III.5.5 If the existing metering transformers do not comply with Metering Code requirements and terms, the following condition shall be accepted and implemented:

- i. If large characteristic changes exist, then new metering transformers shall be installed according to Metering Code requirements.

### III.6 Sealing of the Metering System by the OST

III.6.1 The metering system and communication equipment shall be installed in a safe and well-lighted panel for easy reading.

III.6.2 The panel should be locked and sealed by Parties. OST representative should periodically check the seal. If the seal is damaged, it should be removed and replaced immediately.

- III.6.3 Interventions in metering and communication equipment shall be done according to procedures and rules defined by OST in the presence of the customer.
- III.6.4 The meter's screen should always be clean and visible.
- III.6.5 OST shall check meter's seals and sealing pliers and keep a special register for the number and type of such pliers and controlling persons. Every year the OST should control the condition of pliers and seals.

### **III.7 Sealing of the Metering System by DSO and Suppliers**

- III.7.1 The metering system equipment should be installed in an individual (individual box) or collective panel (collective box) or safe metering keys (when metering is done in Medium Voltage) located in special environments or places for easy reading and control by DSO and Suppliers authorized representatives. When meters are located in unreadable collective or individual boxes, Distribution Company and/or Supplier is obligated to verify the meter reading and the metering system in the presence of the customer within 7 days from customer's written request.
- III.7.2 The metering system equipment should be easy to seal, giving the Distribution Company and Supplier the possibility to seal the elements and current conductors.
- III.7.3 The producer shall seal the meter (when the meter is new), and in cases when DSO and the Supplier intervenes in the equipment for adjustments, the sealing shall be done with a lead or plastic seal from an authorized laboratory according to these Code requirements.
- III.7.4 DSO and/or Supplier shall seal the meter walrus by simultaneously circling the meter equipment circuit in the presence of final or eligible customers.
- III.7.5 DSO and/or Supplier shall maintain and check the sealing pliers (metering laboratory) by registering the number and type of pliers in a special register.
- III.7.6 The meter indicator should always be clean and visible.
- III.7.7 Interventions and sealing of metering system equipment, shall be done according to procedures and rules defined by DSO or suppliers in the presence of the customer.
- III.7.8 DSO and/or Supplier may periodically check the metering system sealing and conditions of pliers and seals.

### **III.8 Seal Characteristics**

- III.8.1 Seals should be prepared with a special material to protect them from damages in temperatures – 10°C up to 120°C (this should be accompanied with the quality certificate) or other irreversibly damaging alternatives in these temperatures. The seal should not be opened with special means without being damaged in case of efforts to manipulate the seal to steal electricity.
- III.8.2 On one side of the seal should be written the 6-digit serial number in relief; while on the other side should be the DSO and/or Supplier logo.

- III.8.3 The sealing is done with a screwed wire with sufficient rivet deepness to avoid disconnection from the seal in high temperatures.

#### **CHAPTER IV – TECHNICAL REQUIREMENTS for FINAL CUSTOMERS**

##### **IV.1. Construction and Maintenance of the Metering System**

- IV.1.1 The metering system should be constructed, installed, maintained and operated according to the engineering practices of the electricity industry and international standards to provide at a reasonable extent, the continuity of service, the uniformity of service quality and the safety of people and property.
- IV.1.2 The DSO and Suppliers should implement the requirements and technical standards established by the following acts as well as by international standards:
- ii. Albanian Metering Code, approved by ERE
  - iii. Albanian Grid Code, approved by ERE
  - iv. Albanian Distribution Code, approved by ERE
  - v. Requirements of IEC Standards for Electricity metering and transforming instruments
- IV.1.3 The Electricity Market Participants should adopt an inspection program for the metering system in order to define the needs for replacement and repair. The frequency of various inspections should be based on the experience and best accepted practices.
- IV.1.4 Every DSO and/or Supplier should prepare (register) a map showing its operation areas. The map should be checked yearly except when such a control is unnecessary. In such case, the DSO and/or Supplier should inform ERE that the registered map is invalid. In addition to terms defined by the license, the map should indicate:
- i. 110/MV kV substations
  - ii. Lines under 110 kV up to 35 kV managed by the DSO
  - iii. State borders
  - iv. Territorial boundaries
- IV.1.5 All used data and maps that indicate the positions of the distribution lines, their number and orientation, circuits and distribution transformers, should be kept in a file. These data and respective modifications should be created and updated within 6 months from the factual construction.

**IV.2 Meter Location****IV.2.1 *Meters outside the object***

- IV.2.1.1 Meters installed outside the object should be placed outside the building in order to be legible for authorized persons and customers. DSO shall be responsible for meter testing and maintenance.
- IV.2.1.2 Meters should not be installed in places where persons authorized to read them or service people may damage the environment, or in places they may face difficulties to read or perform other metering services. Meters should not be installed in places they may be easily damaged, or create difficulties to the Customer and the DSO.
- IV.2.1.3 If for objective reasons, the meter cannot be installed outside the object, then the meter shall be installed where DSO believe is reasonable in order to comply with the norms of this Code.

**IV.2.2 *Meters installed to the Object (main meters)***

- IV.2.2.1 The main meters are not allowed to be installed in buildings with more than one unit. Separate meters for electricity control are required to be installed in such buildings for each unit.
- IV.2.2.2 Despite the requirements of paragraph IV.2.3, the main meters may be installed and no specific meters are required in the following occasions:
- i. In household buildings where units are on loan for less than 30 days.
  - ii. In household buildings where one family is separated and has created a new unit.
  - iii. In household buildings without special electric equipment in the unit for the following scopes:
    - a) Heating/cooling of space
    - b) Space between flats, etc.
  - iv. In student dormitories or schools, colleges and universities
  - v. In commercial centers where a company or firm occupies 70% or more of the available space.
  - vi. In commercial centers not definitely divided in units, but with established spaces for each loaner
- IV.2.2.3 The main meters should not be installed in trailers, and separate electricity meters are required for each trailer with the exception of trailers on loan for less than 30 days, for which no specific meters are required.
- IV.2.2.4 Other exceptions may be allowed by ERE's approval in specific situations where main meters may be inappropriate to be installed.

**IV.2.3** *Replacing of meters*

IV.2.3.1 The DSO with its own initiative and expenses may replace a meter when necessary.

IV.2.3.1 Upon Customer's request, the DSO shall replace a meter and the customer shall pay the cost of such service, as estimated by DSO.

**IV.3** **Meter Laboratory Testing Equipment****IV.3.1** *Metering Laboratory*

IV.3.1.1 Any DSO or any Supplying Company that maintains or decides to maintain a metering laboratory, shall be authorized, inspected, and/or certified according to the Legislation in force.

IV.3.1.2 The DSO and Suppliers that does not own metering laboratory may be authorized by DPMK to perform approved laboratory tests according to the Legislation in force.

**IV.3.2** *Metering Equipment*

IV.3.2.1 Every DSO and Supplier that performs electricity metering services should provide and have available electricity portable testing instruments or watt-hour meters within limits described in this Code, as well as models to test the watt-hour service, electricity demand meters, commuting instruments, voltage meters and other electrical instruments in use, according to the Legislation in force.

**IV.3.3** *Tests of Portable Standard Meters*

IV.3.3.1 In order to test the accuracy of portable watt-hour meters, usually called "standard portable watt-hour meters" and other portable instruments used for testing meters, every DSO and or Supplier authorized by GDMC should provide and have available for reference or check the electric instrument standards, watt-hour meters, watt meters or other equipment of the metering system according to the Legislation in force.

IV.3.3.2 Control meters shall be used to control and test the electricity metering equipment.

**IV.4** **Meters Accuracy Requirements****IV.4.1** *Meter adjustment*

IV.4.1.1 Before the installation and after periodical or other tests, the watt-hour meters should be adjusted in order to accurately fulfill the following requirements:

- i. Any Watt-hour meter with constant incorrect registration, or registering without load should be replaced or repaired to remain in service.
- ii. Any Watt-hour meter with a registration error more than +2% or -4% in low load, or  $\pm 2\%$  in full load, should be replaced or not allowed to serve without adjustments. Meters exceeding those limits should always be adjusted.

- iii. Meters should be adjusted with a range of error within allowed norms. Meters should not be adjusted for allowed error tolerances.

#### **IV.5 Location and Methods of Meter Testing**

- IV.5.1 All watt-hour meter tests should be done with approved testing equipment and in places authorized and/or certified according to the Legislation in force.

#### **IV.6 Meters Primary Tests for Installation**

- IV.6.1 Before the installation, the new watt-hour meters shall be tested and adjusted for accurate registration within the limits specified by this Code.
- IV.6.2 Watt-hour meters used in low voltage circuits shall be tested and adjusted before the installation for an accurate registering within  $\pm 2\%$ , in 50% and 100% of the nominal current.
- IV.6.3 Current and voltage transformers shall be tested to define their coefficient and accuracy. The laboratory authorized by GDCM shall perform all the tests.

#### **IV.7 Periodical Tests of Watt-Hour meters**

- IV.7.1 All types of meters and metering equipment in customer's property should be tested according to the last review of IEC standards for electricity meters and previous paragraphs of this Code.
- IV.7.2 After the enactment of this act, all meters or metering equipment in service for which no test statements exist within the specified time period should be tested as soon as possible.

#### **IV.8 Tests upon Customers Request**

- IV.8.1 Upon its request, any electricity customer could perform in the DSO laboratory or in any private licensed laboratory, an accuracy test of meter registering. The customer shall pay the cost for the test performed if the test results are within the accuracy range defined by this Code otherwise the cost will be covered by DSO if the test has been made in another laboratory.
- IV.8.2 In all cases tests performed by private licensed laboratory, should be paid. The customer should be given an official report by the Laboratory
- IV.8.2 A summary report on the test results should be prepared based on Customer's request. A copy of this report and a summary shall be kept in a file in the office of the DSO for a two-year period.

**IV.9 Metering Inaccuracies**

- IV.9.1 Adjustments of electricity metering inaccuracies shall be limited for the last 12 month period and shall be performed as follows:
- IV.9.2 Any time the DSO, the Suppliers or other subjects authorized by the legislation in force, evidence that a meter exceeds the accuracy range defined by this Metering Code (minus or plus), then the following procedures shall be applied:
- i. If the Customer has paid more due to metering error exceeding the allowed limits, then the DSO is obligated to reimburse the value to the customer for the last 12 months. The reimbursement shall be done by correcting the Customer's next monthly bill until the complete paid off, or as a payment of the total amount within 45 days from evidencing the inaccurate metering (billing). For the latter method the DSO and the Customer should agree for an installment or total payment.
  - ii. If the Customer has paid less due to metering error exceeding the allowed limits, then the Customer is obligated to pay the remained value for the last 12 months. The payment shall be done by correcting the Customer's next monthly bill until the complete paid off, or as a payment of the total amount within 45 days from evidencing the inaccurate metering (billing). For the latter method the DSO and the Customer should agree for an installment or total payment.

**CHAPTER V – ENTERING IN FORCE**

**V.1 This Metering Code shall enter in force 15 days after the publication in the Official Journal.**

**Attachment A****Terms and Definitions for Albania Metering Code**

<b>TERM</b>	<b>DEFINITION</b>
<b>Metering Code MC</b>	The Metering Code establishes the minimal technical requirements of installation and operation of the electricity metering system, to be appropriate for metering, data collection, and implementation of respective procedures according to the Market Rules, Market Participation Agreement and Legislation in force.
<b>Certifying</b>	Certifying means the activity through which a third and independent party officially testifies that a product, process or service complies with requirements established in methodical guidelines of the General Directory of Metrology and Calibration, and Standards.
<b>Working days</b>	Working days mean every day except for Saturdays, Sundays and official holidays in the Republic of Albania.
<b>Active Electricity (Wh)</b>	Active electricity is the active power generated or passing in an electric circuit during a time interval, with the defined integral of the active power being in time limits. Metered with Watt-Hour unit or standard multiplications: 1000 Wh = 1 kWh 1000 kWh = 1 MWh 1000 MWh = 1 GWh 1000 GWh = 1 TWh = $10^{12}$ Wh
<b>Reactive Electrical Energy (VArh)</b>	The Reactive Electric Energy is the defined integral with time limits of reactive power metered with volt-ampere reactive hour unit or standard multiplications: 1000 VArh = 1 kVArh 1000 kVArh = 1 MVarh 1000 MVarh = 1 GVarh 1000 GVarh = 1 GVarh = $10^{12}$ VArh

TERM	DEFINITION
<b>Reactive Power (VAr)</b>	<p>The product of voltage and current and <math>\sin\phi</math> of the angle between them. <math>Q = (U \times I) \times \sin\phi</math>.</p> <p>Metered with volt-ampere reactive unit or standard multiplications:            1000 VAr = 1 kVAr            1000 kVAr = 1 MVAr            1000 MVAr = 1 GVAr            1000 GVAr = 1 TVAr = <math>10^{12}</math>VAr</p>
<b>Active Power (W)</b>	<p>The product of voltage and current and <math>\cos\phi</math> of the angle between them. <math>P = (U \times I) \times \cos\phi</math>.</p> <p>Metered with Watt (W) unit or standard multiplications:            1000 W = 1 kW            1000 kW = 1 MW            1000 MW = 1 GW            1000 GW = 1 TW = <math>10^{12}</math>W</p>
<b>Import - Export</b>	<p>Import – Export is the circulation of the electricity flow from plants or electric installations of a country to plants or electric installations of another country.</p>
<b>User</b>	<p>Persons exercising licensed activities in the Power System such as Generators, DSO, Eligible Customers, Suppliers and any legal person benefiting from Transmission System services.</p>
<b>Maximal Demand for Electricity</b>	<p>The maximal demand is the highest value of electricity demand registered during a defined period for setting of tariffs or for other scopes.</p>
<b>Meter</b>	<p>Means equipment for metering and registering the metered values of Electricity.</p>

TERM	DEFINITION
<b>Metering</b>	Metering is a series of actions to define the value of a quantity.
<b>Authorization</b>	Authorization means granting the right to perform verifications and calibrations of metering equipment in the obligatory area of public or private subjects, local or foreigner, that exercise their activity in the Republic of Albania.
<b>Calibration</b>	Calibration means the series of activities performed in specific conditions that define the relations between the value indicated by the meter and the corresponding value indicated by the metering etalon.
<b>Metering point</b>	Metering point is the physical place of connection where the metering system fulfills all technical and accuracy conditions according to this Metering Code. The physical metering point is established by agreements of the parties.
<b>Connection point</b>	The physical point at which a User/Customer installment is joined to the Transmission or Distribution System.
<b>Controlling Meter</b>	The Controlling Meter is the meter, authorized and certified to control the metering process in cases of disputes between Parties on reading the meter installed in the object or in case of scheduled routine controls.

TERM	DEFINITION
<b>Metering reconciliation</b>	Metering reconciliation means the comparison of electricity values registered by the meter with electricity values registered in distance.
<b>Electricity Metering System</b>	The Electricity Metering System means the total of metering equipment: meters, automat devices, metering transformers, metering protection devices and isolators, circuits and equipment of data maintenance, data transmission and communication equipment and necessary cable connections that are part of the metering equipment of the active and reactive Electricity in the object.
<b>Agreement period</b>	Agreement period means the period during which the contractual values of electricity are fulfilled according to commercial agreements between persons or Parties.
<b>Metering current</b>	Metering current means the allowed current of the meter used for metering purposes.
<b>Local register</b>	Local register means registering and memorizing equipment accompanying the meter or a portable computer that receives data on active and reactive electricity metering (as well as other data), and registers and reproduces them in another place and time.
<b>Data system</b>	Data system means an integrated system that collects and receives data from meters based on a specific communication technology and applicative program.

TERM	DEFINITION
<b>Distribution System</b>	The distribution system includes busbars, switching equipment and transformers in 110/35/20/10 kV substations and all elements in less than 110 kV voltage level owned by DSO(s)
<b>Meter Registering System (MRS)</b>	Meter Registering System (MRS) means a system that identifies the meter and the respective customer and contains the meter main data according to this Metering Code.
<b>Commission of Metering Code CMC</b>	The Commission of Metering Code is an established commission with representatives from Market Participants. The functions of the commission are defined by this Metering Code.
<b>IEC</b>	International Electrotechnic Committee
<b>Inspection</b>	Inspection means the examination of a metering product, service, process or system and their compliance with specific requirements or with general requirements based on a professional judgment.
<b>Verification</b>	Verification means confirmation through examinations and evidences that the specific technical and metrological requirements have been fulfilled.

**Attachment B**

**Terms and Definitions for Albania Market Rules  
and  
for Grid Code, Metering Code and Distribution Code**

TERMS	DEFINITIONS
<b>Ancillary Services</b>	All services necessary for the operation of a transmission or distribution system. Ancillary Services include: i. Compensation of reactive power from the Users to maintain standard levels of voltage and reduce network losses. ii. Regulation of active power frequency and related reserves iii. Compensation for engagements and allocation of capacities in the interconnection lines
<b>Auto-producer</b>	An entity generating electric power of each at least 70% is directly used by the producer
<b>Balancing market</b>	A competitive market for bids and offers to provide balancing energy to ensure a real-time system balance in each hour
<b>Balancing service</b>	A service provided by a transmission system operator to compensate for imbalances of market participants
<b>Buyer</b>	Means any market participant that purchase electricity from other market participants
<b>Cogeneration</b>	The combined production of useful electrical and thermal energy, which results in a significant energy saving compare to separated production
<b>Curtailement List</b>	is a list of customer(s), group of customer(s), distribution zone(s) or DSO(s) included in the Curtailement Plan
<b>Curtailement or Load reduction</b>	A procedure to reduce load to meet resource constraints as applied to: customer(s), group of customers, distribution zone(s), DSO(s) and/or the entire power system
<b>Curtailement Plan</b>	A plan developed by the DSO to reduce load during the capacity shortage operated by the Dispatch Center
<b>Customers</b>	Wholesale and final customers of electricity
<b>Delivery point</b>	Means a point of the power system, equipped with one or more meters where electricity is delivered into the grid

TERMS	DEFINITIONS
<b>Direct Line</b>	Either an electricity line linking an isolated production site with an isolated customer or an electricity line linking an electricity producer and an electricity supply undertaking to supply directly their own premises, subsidiaries and eligible customers
<b>Dispatch Center</b>	A division of the OST which schedules and dispatches system resources to meet electric load requirements and to assure reliable system operations
<b>Dispatchable Generating Unit</b>	A generating unit that may be scheduled in the wholesale electricity market, which may be: <ul style="list-style-type: none"> <li>- Electricity hydro generating units (HPPs) directly connected to the transmission network</li> <li>- Electricity thermal generating units (TPPs) directly connected to the transmission network</li> <li>- Independent electricity hydro generating units (HPPs) directly connected to the transmission network</li> <li>- Electricity generating units generating electricity for their own needs and directly connected to the transmission network that might import/export the electricity from/to the network</li> </ul>
<b>Dispatching</b>	The operation of the power system in order to maintain balances of generation, import/export and electricity consumption in national level by providing the system security and safety
<b>Dispute</b>	It has meaning in these Market Rules and technical codes as any difference arising between the OST and any party under or in connection with the Market Rules and technical codes.
<b>Distributed generation</b>	Generation plants connected to the distribution system
<b>Distribution</b>	The transport of electricity on medium voltage and low voltage distribution systems with a view to its delivery to customers, but not including supply
<b>Distribution Code</b>	A set of technical rules, which govern the operation of distribution network, and establishes conditions and terms of service provided by the DSO to the customers
<b>Distribution System Operator – DSO</b>	A legal person responsible for operating, ensuring the maintenance of and, if necessary, developing the distribution system in a given area and, where applicable, its interconnections with other systems and for ensuring the long term ability of the system to meet reasonable demands for the distribution of electricity;
<b>Dynamic Data Declaration</b>	The physical characteristics of generators and certain large customers that inform the OST as to how output can change at the relevant generating unit or off-take unit

TERMS	DEFINITIONS
<b>Economic precedence</b>	The ranking of sources of electricity supply in accordance with economic criteria
<b>Electricity</b>	Means both, electric energy and electric power, unless the context requires otherwise
<b>Electricity Market</b>	Wholesale or retail commercial agreement to sale and purchase electricity in the power system in order to provide a reliable supply for the customers within the territory of the Republic of Albania
<b>Electricity Regulatory Commission</b>	The regulatory institution operating according to the Law on power sector and the law on natural gas sector.
<b>Eligible Customers</b>	A customer that has the right to choose and sign a contract to purchase electricity from the licensed qualified supplier for the electricity he uses for his own needs
<b>End-use Customer</b>	A customer buying electricity for his own use
<b>Energy efficiency/demand-side management</b>	A global or integrated approach aimed at influencing the amount and timing of electricity consumption in order to reduce primary energy consumption and peak loads by giving precedence to investments in energy efficiency measures, or other measures, such as interruptible supply contracts, over investments to increase generation capacity, if the former are the most effective and economical option, taking into account the positive environmental impact of reduced energy consumption and the security of supply and distribution cost aspects related to it
<b>Final customers</b>	Customers purchasing electricity for their own use
<b>Force Majeure</b>	An natural or social act or event occurred in the country as earthquakes, lightning, cyclones, floods, volcanic eruptions, fires or wars, armed conflict, insurrection, terrorist or military action, which prevent the licensee from performing its obligations under the license or other acts or events that are beyond the reasonable control and not arising out of the fault of the licensee, and the licensee has been unable to overcome such act or event by the exercise of due diligence and reasonable efforts, skill and care.
<b>Generating Unit</b>	A physical unit for the production of electricity
<b>Generation</b>	The production of electricity
<b>Generation Account</b>	An account registered with the OST by a generator or importing interconnection trading party for settlement purposes in which generator metered output and imported energy are recorded for each settlement period

TERMS	DEFINITIONS
<b>Generation Company</b>	A person licensed for carrying out the power generation activities
<b>Generator Meter</b>	A meter at a generating unit used for recording energy flow
<b>Generator Meter Register</b>	A register maintained by the OST in which each generating unit (except auto-producers and embedded generators) are registered in the Supply Meter Register
<b>Generator</b>	Legal person, holding a license for electricity generation
<b>Grid Code</b>	A set of technical rules, which governs the operation of transmission system
<b>Horizontally integrated undertaking</b>	An undertaking performing at least one of the functions of generation for sale, or transmission, or distribution, or supply of electricity, and another non electricity activity
<b>Household customers</b>	Customers purchasing electricity for their own household consumption, excluding commercial or professional activities
<b>Imbalance</b>	<p>The difference between the energy flow defined by a bilateral contract (i.e. the physical schedule nomination) and the actual metered energy flow, for a particular hour</p> <p>A generator is in balance when his metered generation equals his contracted delivery, in a particular hour.</p> <p>A supplier (external or eligible/eligible customer/DSO) is in balance when his metered off take matches his contracted off take</p> <p>A generator is short when his metered generation is less than his contracted delivery</p> <p>A supplier (external or eligible/eligible customer/DSO) is short when his metered off take is greater than his contracted off take</p> <p>A generator is long when his metered generation is greater than his contracted delivery</p> <p>A supplier (external or eligible/eligible customer/DSO) is long when his metered off take is less than his contracted off take</p>
<b>Integrated electricity undertaking</b>	A vertically or horizontally integrated undertaking
<b>Interconnected systems</b>	A number of transmission and distribution systems linked together by means of one or more interconnectors
<b>Interconnection</b>	A defined transmission line over which electricity can be traded with parties outside domain of the OST
<b>Interconnectors</b>	The equipment used to link electricity systems

TERMS	DEFINITIONS
<b>IPP - Independent Power Producer</b>	A producer generator connected to the transmission system. All Albanian producers other than the Public Generation Company are IPPs.
<b>KESH</b>	The National Electroenergetic Corporation
<b>KESH Gen</b>	Shall mean a division of KESH licensed for the production of electrical power. KESH Gen shall initially be the Public Generation Supplier.
<b>License</b>	An authorization granted to a person according to third part of the Power Sector Law
<b>Licensee</b>	a person that holds the license according to the third part of the Power Sector Law
<b>Long-term planning</b>	The planning of the need for investment in generation and transmission and distribution capacity on a long term basis, with a view to meeting the demand of the system for electricity and securing supplies to customers
<b>Market Participation Agreement</b>	The document signed by all parties who agree to be bound by the Market Rules
<b>Market Rules</b>	The rules regulating operation and management of the market, as well as commercial relations among license holders or parties that signed the Market Participation Agreement
<b>Non-household customers</b>	Any natural or legal persons purchasing electricity which is not for their own household use and shall include producers and wholesale customers
<b>Off-take</b>	It is related to electricity taken from transmission or distribution network
<b>OST</b>	Shall mean the electricity system operator with three functions: electricity market operator, transmission system operator and system dispatch operator
<b>Participant</b>	Means a legal person licensed or otherwise authorized by the ERE to participate in the Albania electricity market with the specified functions
<b>Party</b>	means a signatory to the Market Participation Agreement
<b>Person</b>	A physical or legal person

TERMS	DEFINITIONS
<b>Physical Nomination</b>	The notification made to the OST by a trading party specifying intended MW delivery or off-take over a specified day
<b>Power Generation</b>	The production of electric power through transformation of different energy resources by a Generation Company
<b>Power Sector Law</b>	Means the Law No. 9072, dated 22.05.2003 “On the power sector” as it may be amended from time to time
<b>Power System</b>	An interconnected system consisting of electric plants, power lines substations and distribution equipment, intended for transmission or distribution of electricity to the customers
<b>Producer</b>	A natural or legal person generating electricity
<b>Public Generation Company</b>	A person licensed by the ERE for carrying out the power generation activities. As long as this company has not been established, this function is performed by KESH Generation Division
<b>Qualified Supplier</b>	a person licensed to supply electricity directly to Eligible Customers
<b>Renewable energy sources</b>	The renewable non-fossil energy sources (wind, solar, geothermal, wave, tidal, hydropower, biomass, landfill gas, sewage treatment plant gas and biogases)
<b>Retail Public Supplier</b>	Shall be the licensed provider of electricity supply for tariff customers. If the Retail Public Supplier license is held by a company that is affiliated with the company holding the license for Distribution, there shall be structural and financial separation of the supply and distribution functions.
<b>Scheduled dispatch period</b>	Means the shortest period for which the dispatch center performs and publishes a projected dispatch schedule based on projected electrical loads and actual offers and participant-directed schedule for resources
<b>Security</b>	Both security of supply and provision of electricity, and technical safety
<b>SEE</b>	the Electroenergetic System
<b>Seller</b>	Means any market participant that sell electricity to other market participants
<b>Settlement period</b>	A period of one hour starting on the hour over which energy delivery and contract delivery are measured

TERMS	DEFINITIONS
<b>SPP - Small Power Plant</b>	A generator connected to the distribution system of a capacity less than 5 MW
<b>Standard parameters</b>	The values of voltage and frequency level of supplied power to customers as defined by the regulations of power system operation approved by the ERE
<b>Supply</b>	The sale, including resale, of electricity to the customers
<b>System users</b>	Any natural or legal persons supplying to, or being supplied by, a transmission or distribution system
<b>Tariff customer</b>	The customer supplied by the Retail Public Supplier with regulated prices and tariffs
<b>Tendering procedure</b>	The procedure through which planned additional requirements and replacement capacity are covered by supplies from new or existing generating capacity
<b>Third party access</b>	The legal right of eligible customers and suppliers to use the transmission and distribution networks
<b>Trader</b>	The party that has signed the Market Participation Agreement in order to trade electricity
<b>Transmission</b>	The transport of electricity on the extra high-voltage and high-voltage interconnected system with a view to its delivery to final customers or to distributors, but not including supply
<b>Transmission System</b>	A system of lines, supporting structures, transforming and switching equipment used for the transmission of electricity
<b>Transmission System Operator</b>	A natural or legal person responsible for operating, ensuring the maintenance of and, if necessary, developing the transmission system in a given area and, where applicable, its interconnections with other systems, and for ensuring the long term ability of the system to meet reasonable demands for the transmission of electricity
<b>UCTE</b>	Means “Union for the Co-ordination of Transmission of Electricity”, the European association co-coordinating the interest of European transmission system operators and guaranteeing the security of interchanges between grids
<b>Wholesale customers</b>	Any natural or legal persons who purchase electricity for the purpose of resale inside or outside the system where they are established

TERMS	DEFINITIONS
<b>Wholesale Public Supplier</b>	Shall mean the entity that purchases the electricity supply required by tariff customers and sells that supply to the Retail Public Supplier.