

# ELECTRICITY REGULATORY ENTITY

## RETAIL SALES TO REGULATED TARIFF CUSTOMERS TARIFF CALCULATION METHODOLOGY”

### PART I

#### Authority

This electricity sales tariff calculation methodology is developed according to the Law No.9072, dated on May 22, 2003 “On Power Sector.”, as amended.

#### Purpose

The purpose of this methodology is to set tariffs for regulated sales to electricity end-customers based on sound economic principles and providing the licensee, the Retail Public Supplier (or “RPS”), the opportunity to earn its allowed profit margin.

#### Objective

The short-term objective of this tariff methodology is to provide a cost-based framework for calculating the price of electricity sold to tariff customers and to provide proper price signals for efficient use of energy.

### 1. Terms used in the methodology

Standard terms used in all tariff methodologies are defined in the Power Sector Law, the Market Rules, the Metering Code, the Transmission Code, and other secondary legislation approved by the ERE. Terms used in this methodology have the following meanings.

- 1.1 **Average tariff for electricity sales to tariff customers** – average revenue per kWh from sales to tariff customers over a 12-month period, calculated as the total revenue from capacity-related charges, energy-related charges, and fixed monthly charges divided by the total kWh delivered to tariff customers.
- 1.2 **Delivery capacity** – an estimate of the total customer load in MW that can be reliably supplied by the distribution system during the tariff year.
- 1.3 **Metered Load Forecast** – the forecast developed cooperatively between the RPS, the Operator of System and Transmission (or “OST”) and the Wholesale Public Supplier (or “WPS”) of energy sales and peak load assuming all load is served (no load shedding) for tariff customers, energy sales and peak loads for non-tariff customers, total, technical and non-technical energy losses on the electricity distribution network, and forecast of distributed generation production on the distribution network.

- 1.4 **Differentiated tariffs** – tariffs for customer service that include capacity-related charges, energy-related charges, and fixed monthly charges related to the respective voltage level.
- 1.5 **Incremental block of consumption** – The top block of kWh in the tariff for all customers on which the incremental cost of energy for the power system is reflected.
- 1.6 **Tariff Year** – the 12-month period in which the tariffs approved by ERE are applied to monthly electricity bills to tariff customers.
- 1.7 **Regional Electricity Market** – a competitive electricity market operating in Albania, Austria, Bosnia-Herzegovina, Bulgaria, Croatia, FYR Macedonia, Greece, Hungary, Montenegro, Romania, Serbia, Slovenia, UNMIK, and Turkey, based on the legal framework of EU Directive 2003/54/EC.
- 1.8 **Test Year** – a 12-month period prior to the tariff year that is used as the basis for developing the revenue requirements for the tariff year for the RPS.

## 2. General regulations and basic principles

- 2.1 Non-compliance with any part of this Regulation may result in a rejection by the ERE of a tariff application by the RPS.
- 2.2 This methodology is developed in conformity with Law on Power Sector and the Government-approved Albanian Market Model (“AMM”) as well as other legal acts which are in force in the Republic of Albania and other secondary legislation approved by the ERE.
- 2.3 The ERE will establish tariffs based on the principles that:
  - There should be no cross-subsidies between customer classes (tariffs should reflect the actual cost of service for each tariff class);
  - Tariffs should provide proper price signals for the efficient use of energy;
  - Expenses included in tariffs should be transparent to all stakeholders;
  - Tariffs should cover all reasonable expenses for the RPS and the RPS will pay its liabilities to the other sector licensees on time and in the full amounts of the invoices.
  - The tariffs should allow the RPS a reasonable opportunity to earn the ERE-approved allowed profit margin on revenue;
  - **Budgetary customers** will pay all its energy invoices on time and in full;
  - Only prudently acquired services by the RPS will be accepted into public supply tariffs;
  - Prices for electricity should remain relatively stable over time.

### 3. Test Year and Tariff Year

- 3.1 The ERE will approve tariffs annually for the RPS.
- 3.2 The ERE will adopt template tables for tariff applications as part II of this tariff regulation. The RPS shall use the template tables provided by ERE for filing data from the test year and adjusted for the tariff year. The format of the tables can be modified as long as the information is organized in a similar manner and the breakdown of information in no less than that provided in the approved template tables. The tables will show test year results, adjustments made to test year results including but not limited to company expenses, capital expenditures, and regulatory asset base by regulated service.
- 3.3 The revenue requirements for the RPS is a result of the forecasted cost of the other regulated sector licensees and its own cost of operation. Any related annual tariff increase in tariffs for other licensees will be reflected in the tariff for the RPS.
- 3.4 The test year for establishing base financial costs will be based on accounting information in accordance with the ERE-approved Uniform System of Accounts. The test year should be a representative 12-month historical period of company operating costs. The ERE has the right to perform, or contract to perform, a regulatory audit of the RPS's test year accounting information during the tariff application proceedings.
- 3.5 The RPS may propose changes to the test year expense results for setting tariffs for the tariff year. Any such changes must be both known (a specific item) and measurable (quantifiable). Contingency funds to cover unexpected costs will not be approved by the ERE. The ERE will consider adjustments to test year results such as:
- 1) demand growth or decreases;
  - 2) inflation;
  - 3) contract price changes;
  - 4) changes in taxes and insurance;
  - 5) the number of customers served;
  - 6) Operations costs;
- 3.6 The RPS will provide justification for each forecasted adjustment to the test year results. The adjustments must be specified on the tables provided by the RPS in the tariff application and written testimony will be included in the tariff application providing evidence for the reason(s) for each major adjustment and the amount for each adjustments.
- 3.7 The RPS will separately charge on the tariff customers' invoices energy purchases, use of network services (transmission and distribution) including ancillary service charges, and charges related to public service obligations.
- 3.8 The RPS will propose allocation factors for all components of revenue requirements for the license types between the various services. The RPS will provide the allocation factors with the basis and justification for the different allocation factors such as number of employees, number of customers, level of

energy sales, and peak load. Some components may only be directly related to one service and therefore all such components should be completely allocated to that service.

#### 4. Revenue Requirements for Regulated Retail Services

4.1 The revenue requirements for Regulated Retail Services are calculated at the following manner:

4.1.1 The revenue requirements for generation **services** include:

a) **Power purchase costs for energy and capacity from the WPS.**

**The price for energy sold to the RPS for covering the expected metered load is approved each year by the ERE in accordance with the Tariff Methodologies for the WPS. The tariff for the WPS will assume an annual publicly owned hydro production of [4,200] MWHs.**

b) The RPS will be charged by TSO for imbalances according to the provisions of the Market Rules if applicable.

c) **Adjustment** – an annual adjustment for previous year including energy and capacity adjustments from the WPS compared to forecasted levels.

#### **The revenue requirements for network service include:**

4.1.2 The charges for transmission use to the RPS for tariff customers.

**OST Costs** – The OST tariff is a single number, is not by voltage (infrastructure and loss differentiation) and it has been approved by the ERE for the period through the end of 2008.

$$\text{OST Costs} = \text{OP} * \text{DE}$$

Where:

OP = ERE-approved tariff for the OST

DE = estimated energy delivered to the distribution network by the OST for tariff customers

**Note:** when the OST reverts to a multi-part tariff, this formula will change accordingly.

4.1.3 The revenue requirements for distribution network use will be allocated by the distribution company between tariff customers, non-tariff customers including balancing groups and distributed generators selling energy outside of the distribution company. The allocated revenue requirements for distribution network use by the RPS to serve tariff customers will be allocated to the tariff customer classes and included in the network charges

for each tariff customer. The allocations must recognize the voltage level of the customer connection.

The capacity and energy prices for network services are used to compute the customer's bill when the customer has a meter that measures both active power in kW and active energy in kWh. For all other customers the price per kWh reflects the sum of allocated revenue requirements for network service.

**4.1.4 Customer Charge** will include the public supply fee as well – This fee covers the cost of customer billing and collection, filing tariff applications, and fulfilling other supply-related responsibilities of the RPS. The fee will also include a profit margin for the RPS calculated on the annual electricity purchases by the RPS.

**4.1.5 Public service obligations (PSOs)** are defined as those obligations imposed on the RPS including reliability of supply, environmental protection and energy efficiency.

All costs associated with public service obligations in the electric power sector shall be fairly paid by each and every end-users receiving service from the transmission and distribution systems and recovered as part of the cost of service from all energy consumers based upon metered usage. The allocation of these costs and the process for handling the allocation, recovery and payment of the costs shall be determined in proceedings before the ERE.

4.2 Revenue requirements (RR) associated with end-user tariffs is the sum of the above related costs.

**RR = Generation Costs + OST Costs + Distribution Costs + Supplier Fee + PSOs Costs**

4.3 Auto-producers may wish to purchase standby energy from the RPS based on ERE-approved tariffs. In these cases, the auto-producers must contract with the RPS for both backup energy and capacity. The cost of the energy will be at the system incremental costs for non-household customers at the voltage level of the customer connection and the cost of capacity will be based on a cost of service study for all customers in the “backup energy” customer class.

4.4 If the RPS is legally bundled with the distribution network licensee, the distribution activity and public supply activity **must be completely unbundled from an accounting standpoint**. If the companies are legally separated under a holding structure, then the resultant shared service agreements will be subject to ERE review and approval before allowing the related costs within those agreements to be included within the tariffs of the RPS.

## 5. Customer Classes

- 5.1 The regulated energy and capacity tariffs are to be calculated for four main customer groups:
- a) Non-household tariff customers at High Voltage, i.e., customers with a direct connection to transformers 110/x kV and 220 kV.
  - b) Non-household customers at Medium Voltage (35/20/10/6 kV)
  - c) Non-household customers at Low Voltage (0.4 kV).
  - d) Household customers at Low Voltage.
- 5.2 The RPS should calculate tariffs for the four main customer groups by calculating tariffs for each group that accurately reflect the true economic cost of electricity service. The average sales tariff for customers at 110/x kV transformers, the average sales tariff for medium voltage customers, and the average sales tariff for low voltage customers (households and non – households) should be calculated so that they cover the true cost of service, including the cost of access to the distribution network. Within each of the three groups of non-household customers, the ERE may create customer subgroups and set different tariffs for each subgroup. The tariffs may include customer subgroups as long as the cost of service is calculated and the resulting tariffs are based on the true cost of service.
- 5.3 ERE aims to set energy tariffs so that the total annual revenue required from household customers equals the true cost of service to household customers.
- 5.4 The tariffs shall be based on costs that would be incurred by a well-managed RPS which avoids wasteful expenditures.

## 6. Retail Public Supply Tariff Designs

- 6.1 The bills for the household customers and non household customers supplied in 0.4 kV (LV) may include the following charges:
- 1) **Generation services (Leke/kwh)**
    1. **1<sup>st</sup> Block (X kWh/month for households)**
    2. **2<sup>nd</sup> Block (residual kwhs above 1<sup>st</sup> Block)**
  - 2) **Transmission Services (Leke/kwh)**
  - 3) **Distribution Services (Leke/kWh)**
  - 4) **Customer charge (in Leke/month)**

**5) Public Service Obligations, if any (Leke/kWh)**

6.2 The bills for each group of non-household customers, according to the supply level of voltage may include the following separated charges:

**1) Generation services (Leke/kwh)**

**a. capacity charge (leke/kW)**

**b. energy charge (leke/kWh)**

**2) Transmission Services (Leke/kWh)**

**a. Capacity charge (Leke/kW)**

**b. Energy charge (Leke/kWh)**

**3) Distribution Services**

**a. Capacity charge (Leke/kW)**

**b. Energy Charge (Leke/kWh)**

**c. Reactive Power Charge (Leke/kvarh)**

**4) Customer charge (in Leke/month)****5) Public Service Obligations, if any (Leke/kWh)**

6.3 For HV and MV tariff customers, the monthly invoice from the RPS will include a capacity charge. The capacity charges will be set at Zero Leke per month until the customer installs electronic metering device to record and store hourly customer demand. The electronic meters should allow for calculating reactive power flows.

6.4 RPS may ask the ERE to approve block tariffs for the non – household consumers as well, according to proper study performed based on an adequate metering system.

6.5 RPS has to determine if the customers should also be required to pay for reactive power or install reactive power compensators/ reactors.

6.6 Generation charges from the WPS, in capacity and energy, are allocated to the four customer classes;

**For household customers and non household customers supplied in 0.4 kV (LV):** the generation energy charge is calculated as the total capacity and variable costs, divided to the total forecasted energy sales respectively.

**For other non household consumer groups:** (i) the generation capacity charge is calculated as the capacity allocated costs for the customer group (s), divided to the sum of Coincident Peak demand of the respective customer group. (ii) the generation energy charge is calculated as variable allocated costs for the customer group (s) divided to the total energy sales to the respective customer group.

- 6.7 Transmission charges from the TSO, in capacity and energy, are allocated to the four customer classes;

**For household customers and non household customers supplied in 0.4 kV (LV):** the transmission service energy charge is calculated as the total capacity and variable costs, divided to the forecasted energy sales respectively.

**For other non household customer groups: (i)** the transmission service capacity charge is calculated as capacity allocated cost for transmission for the customer group(s) divided to the sum of non coincidence peak load of the respective customer group; **(ii)** the transmission service energy charge is calculated as variable costs for the customer group(s) divided to the total of energy sales to the respective customer group.

- 6.8 Distribution charges from the DSO, in capacity and energy, are allocated to the four customer classes;

**For household customers and non household customers supplied in 0.4 kV (LV):** the distribution service energy charge is calculated as the total capacity and variable costs, divided to the forecasted energy sales respectively.

**For other non household customer groups: (i)** the distribution service capacity charge is calculated as capacity allocated cost for distribution for the customer group(s) divided to the sum of non coincidence peak load of the respective customer group; **(ii)** the distribution service energy charge is calculated as variable costs for the customer group(s) divided to the total of energy sales to the respective customer group

- 6.9 Customer charges are calculated based on allocated supply fee for each customer class, divided to the number of customers for each customer class;
- 6.10 Separate charges for the public service obligations will be determined on a case by case basis where the ERE will determine the fair allocation of the PSO costs to all customer groups.
- 6.11 Distribution Charges for Eligible Customers

$$ECDS = [ECADV + ECADC + ECATL] / TES$$

Where:

ECDS = Eligible Consumers Distribution Services Tariff

ECADV = Allocated Distribution Variable Costs (including the cost of technical losses only)

ECADC = Allocated Distribution Capacity costs

TES = Total energy sales



## **7. Service Quality Standards**

- 7.1 The RPS will be required to implement a program that will include at least four measurements of service quality. The standards of service will at least include:

Service Quality:

- Average time to respond to a customer inquiry;
- Average number of customer complaints unresolved after 30 days

Energy reliability

- Customer annual interruption duration index (CAIDI)

Energy Quality

- Per cent of time voltage level is below standards at each distribution substations during peak periods

- 7.2 The energy and service quality program will be administered by the RPS. To the extent that the ERE assesses a penalty associated with the non-performance of meeting the annual targets for energy reliability and energy quality by any other licensee (DSO, OST and/or WPS), the associated penalty will be subtracted from payments made by the RPS to that licensee.
- 7.3 The retail public supply tariff methodology will be adjusted to allow for adjustments to RPS prices for not achieving the annual targets of performance.

## **8. Peak and off-peak energy charges**

- 8.1 The RPS may propose a sales tariff with peak and off-peak energy charges, in leke/kWh, to reflect the difference between in the price of energy during peak hours and the price of energy during off-peak hours.
- 8.2 The definition of peak and off-peak time periods shall be decided by the ERE on the basis of a proposal submitted by the RPS.

## **9. Reporting**

- 9.1 The RPS by April 30 of each year shall submit to the ERE the previous year's annual reporting forms in accordance with the ERE-approved regulatory Uniform System of Accounts.

## **10. Transitional Provisions**

- 10.1 The retail public supply tariff year starts on March 1

- 10.2 The tariffs for 2011 will be based on financial data in accordance with IFRS and National Accounting and Reporting Standards.
- 10.3 RPS will develop and propose to ERE the service and energy quality standards program by December 31, 2009. The ERE will approve the standards based on benchmarking of comparable regional electricity public supply companies that have reached commercial maturity.
- 10.4 The profit margin for the first three regulatory periods, 2009 through 2013, will be approved through a separate regulatory statement. Thereafter the ERE will evaluate the appropriate level of profit margin for the future regulatory periods.
- 10.5 Separate pricing of imbalance service will enter into force in the year 2010;

## **11. Final provisions**

The Retail Public Service Tariff Calculation Methodology was approved by ERE's Board of Commissioners by Decision Nr. 80, dated on June 26, 2008.

**Part II**

Tariff Application Forms