

# Albanian Market Model

## Introduction

The approval of the Albanian Market Model (AMM) is an important step towards the consolidation and steady development of the Albanian Electricity Market. This approval is part of the reform that the Government of Albania (GoA) has undertaken for the reconstruction of the Electric Power sector, pursuant to the Law on the Power Sector and the policies of the Government for the development of this sector. Moreover, the AMM has been developed according to the EU Directives on Electricity and the requirements of Energy Community Treaty of South Eastern Europe for the creation of the Regional Market of Electrical Power, as ratified by the Parliament of Albanian in 2006.

During the process of the technical implementation of the previous structure, named the Transitional Market Model, evidence emerged of the need to revise the model in view of the further development of the reform of the Power Sector in Albania. The new structure, the Albanian Market Model, provides for the development, on more consolidated basis, of the electrical power market in full compliance with the European Directives, and is expected to provide a more enduring structure than the previous model.

The Albanian Market Model takes into consideration:

- the steps that the Government is taking in the process of moving from the vertical integrated structure of the Electricity Sector, towards a structure with legally, functionally and financially separate Generation, Transmission and Distribution entities;
- the political objectives of the Government for starting the process of privatization in the Power Sector;
- the harmonization of the power legislation with that of the EU;
- the development of the electricity market according to clear market rules and grid codes as minimal technical requirements for an efficient operation of the Power System;
- higher consumer benefits in terms of securing supply of electrical power and quality service;
- the establishment of third party access in order to participate in the electricity market and the creation of the conditions for the development of a transparent and non-discriminatory market;
- the liberalization of the electricity market, creating a market structure that increases the interest and number of participants;
- the monitoring of the electricity market by ERE, as an independent institution, with the authority to approve all the secondary necessary legislation for this purpose;
- the rules for carrying out transaction in the markets that are transparent and non-discriminatory, and possible misappropriation of funds;
- the development of a tariff reform in order to protect the consumers and at the same time to increase the efficiency of the power system of Albania; and
- the integration of the Albanian Electricity Market with the Regional Market, and later with the European Electricity Market.

The Albanian Market Model can be updated according to the developments in the Electricity Sector and the commitments that Albania may undertake in the framework of regional cooperation.

## 1. Goals and Objectives

### 1.1 Aim of the Market Model

- To create the conditions required to move towards a more consolidated market.
- To establish transparent and efficient flow of funds and account settling.
- To permit market oriented import and export trades that preserve consumer benefits.

### 1.2. Requirements for the Market Model to function effectively

- The existence of transparent accounts for the regulated market, and transmission and distribution network operators.
- Regulatory oversight by the ERE.
- Market monitoring and data reporting processes.
- Market rules and related codes that provide effective safeguards against the possibility of market abuses and unfair trade practices.

### 1.3. Other important Aims of Market Model

- To take into consideration the KESH transformation from a vertically integrated entity to a structure with functionally, legally and financially separate entities.
- To create a structure within which competition can develop both in the wholesale market and for Eligible customers.
- To create the necessary legal and regulatory structure to achieve the privatization of the electrical power industry, starting with the distribution sector.
- To implement the objectives of the government in creating an independent Transmission System Operator (OST) and enhancing transparency in the market operation and functioning.
- To establish the responsibilities of the Wholesale Public Supplier for the management of the hydro power plant hydrology risks, with the objective to minimize the supply costs for the Retail Public Supplier for the benefit of the Tariff Customers.

## 2. Definitions

Terms and Abbreviations used in this document have the following meaning:

**“Electricity Market”** shall mean the exchange of demand and supply for selling, purchasing and supplying of electricity.

**“ERE”** shall mean the Albanian Electricity Regulatory Authority, which exercises its responsibilities under the authority granted by the Law No. 9072, date 22.05.2003 “On the Power Sector”, as amended.

**“Market Rules”** shall mean a set of rules approved by the ERE that establish the procedures for market operation and management and the relations among market participants.

**“Electricity System”** is an interconnected system, made of generators producing electricity, lines, substations and transmission and distribution equipments, for the transmission and distribution of electricity to customers.

“**KESH**” shall mean the Albanian Power Corporation

“**OST**” shall mean the Transmission System Operator

“**KESH Gen**” shall mean an entity within KESH with the license for the production of electricity.

“**Wholesale Public Supplier**” shall mean an entity within KESH functionally and financially separated with the license to purchase the electricity supply from KESH Gen, SPPs, IPPs and Traders that is required by tariff customers and sells that supply to the Retail Public Supplier.

“**Distribution Company**” shall mean the entity with the license for carrying out the functions of the Distribution System Operator and of Retail Public Supplier.

“**Retail Public Supplier**” shall mean an entity within the Distribution Company with the license to perform the function of purchasing electricity supply from the Wholesale Public Supplier and selling that supply to tariff customers.

“**SPP**” shall mean a Small Power Producer connected to the electricity distribution system.

“**IPP**” shall mean an independent power producer connected to the electricity transmission system.

“**Qualified Supplier**” shall mean a participant of the market, licensed to supply with electricity Eligible Customers.

“**Trader**” shall mean a licensed person that buys and sells electricity at wholesale level, except selling to Retail Public Supplier and final customers.

“**Purchases of Economy Energy**” shall mean purchases of KESH Gen to meet its contractual obligations.

“**Tariff Customer**” is a consumer of electrical power that purchases electricity from the Retail Public Supplier.

“**Eligible Customer**” is a consumer that has the right to choose from whom to purchase the electricity for own consumption.

“**NANR**” shall mean the National Agency of Natural Resources

“**Bilateral Contracts**” are agreements between and among various market participants in selling and buying of electricity and ancillary services.

“**Flow of funds**” is the exchange of monetary values as payments of contractual obligations among market participants.

“**Flow of Electricity**” is the amount of power going through the electricity networks of transmission and

distribution.

### **3. Market Model**

#### **3.1. Aims and Objectives:**

The Albanian Market Model is designed to advance the policies of the Government of Albania in the following areas:

- i. Provide a framework for reform of the electricity sector, including the privatization of the distribution and retail public supply functions in the near term. This framework will provide a sound basis for privatization of other segments of the power sector.
- ii. Move toward consistency with EU Directives and the Energy Community Treaty.
- iii. Provides bilateral contracts with simple regulated balancing market for energy transactions, which will improve transparency and avoid unnecessary “layering” of transactions.
- iv. Capture the full value of the Albanian hydro resources for the benefit of Albanian tariff customers.
- v. Enhance the efficiency and viability of the sector by clarifying responsibilities and obligations and ensuring sufficient flows of information about the operation of the market and creating a clear structure for electricity market transactions.
- vi. Provide Consumer Benefit.

These goals and objectives are consistent with, and also reflect further development of, the goals and objectives set forth in Section A of the Transitional Market Model, adopted by Decree No. 539, dated 12 August 2004. Upon adoption by the Government, the Albanian Market Model will supersede the Transitory Market Model.

#### **4. Participants and Characteristics of the Market Model**

The Market Model also outlines the responsibilities of, and relationships among, the market participants and the Electricity Regulatory Entity (ERE). In broad terms, the Albanian Market Model is characterized by bilateral contracts for electricity between and among market participants.

The Ancillary Services for the Transmission System are purchased by OST.

The regulation of price and other terms and conditions under the Albanian Market Model is wide-ranging. It reflects the current near monopoly situation of KESH Gen, DSO, Wholesale Public Supplier, Retail Public Supplier and OST.

All contracts and tariffs between the various market participants will be regulated at the inception of the market except for:

- a. contracts between Traders, and Qualified Suppliers on one hand, and the Wholesale Public Supplier and Eligible customers, on the other;

- b. contracts between SPPs and IPPs, on one hand, and Eligible Customers on the other;
- c. contracts between KESH Gen, on one hand, and Qualified Suppliers and Traders on the other, to the extent permitted under the present or subject to other restrictions on KESH Gen sales; and
- d. contracts between SPPs and IPPs, on one side, and Traders on the other.

#### **4.1. OST**

The OST is an independent state owned company that performs the following functions:

- Transmission Network physical operation function (TNO) (owning, maintaining and expanding);
- System Operator function from dispatching perspective (SO);
- Market Operator function (ensuring that the information flows to settle the various contracts are available and later might serve as a power exchange).

##### **OST verifies:**

The information whether the Wholesale Public Supplier and DSO have secured all the resources needed to supply Tariff Customers and cover distribution losses on an annual, monthly, weekly and day - ahead basis.

##### **OST has the authority:**

To request the Wholesale Public Supplier and DSO to make purchases consistent with the amount of supply required by the Retail Public Supplier for the Tariff Customers and for distribution losses.

To require Eligible Customers to provide information demonstrating that they will be able to secure sufficient supply for themselves.

To request to Qualified Supplier to provide information demonstrating that they will be able to secure sufficient supply for Eligible Customers.

To request KESH Gen, IPPs, SPPs and Dispatchable Loads to provide information demonstrating that they have the capacity or the load to meet their commitments.

##### **OST shall:**

Forecast and purchase ancillary services from KESH Gen and other suppliers, on an annual, weekly, day ahead and real time basis.

Purchase the electricity from KESH Gen and other market participants needed to cover the losses in the transmission system.

Receive compensation for its services from the market participants pursuant to tariffs approved by the ERE.

#### **4.2. KESH Gen**

Will sell ancillary services and electricity needed to cover technical losses in the transmission system to the OST.

Shall sell electricity to the Wholesale Public Supplier according to its request at prices as approved by the ERE. Sales are made according to annual contracts or of different term as approved by the ERE.

Shall sell to Wholesale Public Supplier additional electrical power required in order to meet the load of Tariff Customers, with price approved by the ERE.

Will sell excess electricity on either national market or the export market according to rules and procedures of sale of electricity approved by the ERE.

Exchanges electricity in the export market according to rules and regulations of exchange, approved by the ERE or as agreed by the competent authorities under the Energy Treaty or other regional agreements.

Makes purchases of economy energy to meet its contractual obligations.

All the net gains from the hydro resources of the country will be preserved for the Tariff Customers.

ERE will monitor the process of exchanging and selling of electricity to ensure that it is in compliance with rules and procedures of sale and exchange of electricity approved by the ERE

#### **4.3. Small Power Producers (SPPs)**

Small Power Producers are power generators that are connected to the distribution system.

SPPs with a license for generation may sell electrical power to Qualified Suppliers, Traders or DSO at freely negotiated terms.

SPPs may sell electrical power to the Wholesale Public Supplier with regulated price.

ERE shall also establish unified and simplified tariff calculation methodology for sales from SPPs under the regulated market.

SPPs may sell electrical power to OST to cover their energy losses under contract approved by the ERE.

A SPP may apply for Qualified Supplier license if he chooses to sell electricity directly to Eligible Customers.

#### **4.4. Independent Power Producers (IPPs)**

IPPs are independent producers that are connected directly to the transmission system. IPPs are licensed by the ERE and may sell capacity or energy to the OST and DSO to cover transmission and distribution system losses, Eligible Customers, Qualified Suppliers or Traders at market prices, or to the Wholesale Public Supplier with at a regulated price and contract approved by the ERE.

An IPP may apply for a Qualified Supply license if he chooses to sell directly to Eligible Customers.

#### **4.5. Qualified Suppliers (QS)**

Qualified Suppliers are domestic or foreign suppliers licensed by ERE who may buy electricity from Traders, or from SPPs or IPPs, and sell it to Eligible Customers. Qualified Suppliers may sell electricity to the Wholesale Public Supplier, Traders or other Qualified Suppliers.

IPPs and SPPs should be licensed as Qualified Suppliers if they decide to sell electricity directly to Eligible Customers.

Qualified Suppliers have the obligation to demonstrate to OST that they have sufficient capacity and energy to satisfy the needs of their Eligible Customers.

#### **4.6. Traders**

A Trader is a licensed person that buys and sells electricity except selling to Retail Public Supplier and final customers.

Traders may be domestic or foreign entities that buy and sell electric energy at wholesale level.

Traders shall be licensed by the ERE.

Traders can buy electricity from KESH Gen (surpluses), IPPs and SPPs to sell it to Qualified Suppliers, Wholesale Public Supplier or DSO (for the distribution losses).

IPPs or SPPs when they sell directly to the Wholesale Public Supplier or Other Qualified Suppliers require only a production license and not a trader license.

IPPs, SPPs and Qualified Suppliers can also be Traders and engage in wholesale transactions, so long as they also obtain the necessary Trader license.

The ERE shall ensure that licenses and licensing procedures for Qualified Suppliers and Traders are transparent and non-discriminatory, and do not create an undue burden on the entry of Traders into the Albanian market, subject to reciprocity agreement. Licensing requirements shall be made binding upon Qualified Suppliers and Traders to provide information concerning their activities and technical and financial credentials to ERE, and that Qualified Suppliers and Traders comply with all applicable Market Rules and Grid Codes.

#### **4.7. Wholesale Public Supplier**

Wholesale Public Supplier will be responsible for buying electricity and for providing sufficient supply to Retail Public Supplier according to its requests to ensure an uninterrupted supply to Tariff Customers.

Wholesale Public Supplier has the obligation to serve as the provider of last resort for all customers.

Wholesale Public Supplier has the responsibility to demonstrate to the OST that it has procured sufficient supply of energy to satisfy the load of the Retail Public Supplier.

Wholesale Public Supplier has the right to purchase from KESH Gen all the energy produced by KESH Gen from its hydro and other generation plants, as well as from IPPs, SPPs, Qualified Suppliers and Traders to fulfill its obligations to the Retail Public Supplier, i.e. to serve all the Tariff Customers.

The agreement between KESH Gen and the Wholesale Public Supplier should reflect proper optimization of the KESH Gen system, with the objective to minimize the overall supply costs charged to Retail Public Supplier and passed onto the Tariff Customers.

The Wholesale Public Supplier has the right to recover, through its contract with Retail Public Supplier, all prudently incurred costs of procuring energy, including the cost of imported power as well as the costs of purchases from KESH Gen, IPPs, SPPs, Qualified Suppliers and Traders.

The Wholesale Public Supplier shall be required to procure all available supply, including imports, to avoid shedding load. The Wholesale Public Supplier may, with ERE approval, decline to purchase supply when the cost of supply exceeds the value of lost load as determined by ERE, consistent with government policy and in consultation with the Council of Ministers.

#### **4.8. Distribution System Operator (DSO)**

DSO will own, maintain, expand and operate the distribution system throughout Albania

DSO has the responsibility to purchase the electricity to cover losses in the distribution system. The DSO may purchase such energy from any market participant at market price.

DSO will provide connection service to Tariff Customers, SPPs and Eligible Customers connected to the distribution networks on non-discriminatory terms.

Tariffs, terms and conditions of distribution service provided by DSO shall be regulated by the ERE.

DSO shall be responsible for reducing technical and non-technical losses in the distribution system under conditions determined by ERE. The ERE may establish a tariff for DSO that provides incentives for the reduction of such losses.

#### **4.9. Retail Public Supplier**

Retail Public Supplier will sell electricity only to tariff customers, under a contract which terms and tariffs are approved by the ERE.

Retail Public Supplier will purchase electricity from the Wholesale Public Supplier at rates approved by the ERE.

Retail Public Supplier has the responsibility to provide the OST and Wholesale Public Supplier the annual, weekly and day ahead schedules of its expected load to enable the Wholesale Public Supplier and OST to develop their own schedules.

Retail Public Supplier shall be responsible for reducing non-collections from tariff customers under conditions determined by ERE. The ERE may establish a tariff for Retail Public Supplier that provides



incentives for the reduction of such non-collections.

#### **4.10. Tariff Customers**

Tariff Customers are those that purchase electricity at rates regulated by the ERE, from Retail Public Supplier.

#### **4.11. Eligible Customers**

Eligible Customers are customers that have the ability to purchase electricity from Qualified Suppliers according to the law and rules established by the ERE.

Any customer is free to choose whether to be a tariff client or an eligible client if he meets the conditions. The ERE shall develop rules to determine the conditions on which a customer may return to the category of tariff customer after having chosen to become an Eligible Customer.

Eligible Customers shall provide information to the OST about their expected load.

#### **4.12. Independent Regulator (ERE)**

ERE is responsible for:

- a. defining the rights and obligations of market participants according to the rules and transparent and non-discriminatory regulations that secure third parties access;
- b. providing regulatory control for the electricity market;
- c. consistent with the Power Sector Law, the ERE shall require licensees to act in a manner consistent with ensuring both short and long-term security of supply and not to engage in unfair practices or exert market power. The ERE may require the execution of power purchase agreements by the Wholesale Public Supplier, so long as those requirements are consistent with the national strategy as developed by the Council of Ministers and any governing privatization agreements.

The legal basis for the exercise of the ERE's responsibilities is provided by Law Nr. 9072 dated 22.05.2003 "On Power Sector", as amended.

#### **4.13. Relations among Market Participants**

The relationships among, and the role of market participants in the physical operation of the Market Model are to be set forth in bilateral contracts between the various participants consistent with the descriptions below.

##### **A) Regulated market**

- 1) Between KESH Gen and Wholesale Public Supplier (at least for purpose of making transparent of the price charged by KESH Gen to Wholesale Public Supplier);

- 2) Between Wholesale Public Supplier and Retail Public Supplier;
- 3) Between OST and other market participants for transmission-related services, including ancillary services;
- 4) Between DSO and other market participants for distribution-related services;
- 5) Between SPPs or IPPs and the Wholesale Public Supplier;
- 6) Between Retail Public Supplier and its tariff customers;
- 7) Between KESH Gen and Traders, including import contracts for the exchanges of power, which are subject to ERE scrutiny or procurement rules;
- 8) Between OST and KESH Gen, SPPs, IPPs and Traders for the transmission losses and Ancillary Services.

ERE may adopt standard agreements or procurement rules that are obligatory to be executed by Qualified Suppliers, IPPs, SPPs and other market participants when carrying out bilateral contract with the Wholesale Public Supplier.

#### B) Non-regulated market

- 9) Between Qualified Suppliers and Eligible Customers;
- 10) Between and among SPPs, IPPs, Qualified Suppliers and Traders;
- 11) Between Wholesale Public Supplier and IPPs, SPPs, Qualified Suppliers and Traders; and
- 12) Between DSO and Traders, Qualified Suppliers, IPPs and SPPs for energy needed to cover losses in the distribution system.

All of the above agreements in the non-regulated market are subject to monitoring by the ERE to ensure the proper functioning of the market and that the market participants do not exert market power or conduct unfair practices. The various contractual relationships of the OST, KESH, DSO, Retail Public Supplier, Wholesale Public Supplier, Tariff Customers, Eligible Customers, SPPs, IPPs, Traders and Qualified Suppliers are illustrated in Appendices B and C.

Appendix A illustrates the flows of electricity between the various entities.

## **5. The Market Model's essential characteristics**

### **5.1. Long-term Forecasting and Operational Forecast**

OST has the responsibility to prepare 15-year forecasts for electricity needs for the country, as well as operational forecast.

In making its forecasts, OST will consider the forecasts prepared by the market participants:

- Wholesale Public Supplier
- DSO and Retail Public Supplier;
- KESH Gen, IPPs, SPPs;
- Qualified Suppliers, Eligible Customers and other market participants;
- Traders (including imports/exports);
- Forecasts prepared by the National Agency of Natural Resources (“NANR”) or other appropriate government agencies.

OST shall have the obligation to protect the confidentiality of information provided by market participants where disclosure would harm competition.

In carrying out its forecasting obligations, OST will establish a separate department within OST to ensure the development of sufficient expertise.

## **5.2. Year Ahead Supply Contracts**

### **i. Ancillary Services:**

OST is responsible for purchasing, by contract, the ancillary services required for the system consistent with the forecasts above.

KESH Gen will offer to sell the OST ancillary services under a contract, the terms of which shall be negotiated between the OST and KESH Gen and approved by the ERE.

Ancillary services shall include energy balancing. The OST may purchase additional ancillary services from KESH Gen (where not already provided by contract) or from SPPs, IPPs, Traders or Qualified Suppliers to the extent available.

### **ii. Electrical Energy:**

KESH Gen will offer energy corresponding to the capacity remaining after taking the contract for ancillary services and for the energy required by the OST for technical losses in the transmission system into account to the Wholesale Public Supplier under contracts at prices and terms approved by the ERE.

To the extent that energy purchased from KESH Gen under these contracts is insufficient to meet the energy needs of the Retail Public Supplier, the Wholesale Public Supplier must purchase sufficient additional energy from KESH Gen, SPPs, IPPs, and/or Traders.

## **5.3. Month Ahead**

Not later than 10 days before a month defined during a year ahead, the OST should prepare and publish an Operation Monthly Plan for the operation of the Power System based on monthly information

provided by Market Participants. The Operation Monthly Plan for the month ahead should include:

- the required electrical energy and how much can be supplied by domestic production;
- imported contractual energy;
- typical weekly and daily load curves during the month for Business Days, Saturdays, Sundays and holidays, and typical monthly load curves;
- verification on the level of Fierza lake;
- monthly plan of maintenance and other programmed services on generators;
- monthly plan for ancillary services;
- evaluation of the forecasted operations in terms of stability and security of the power system and the measures forecasted for the month for assuring security and stability according to the needs.

To help OST in the preparation of the Operation Monthly Plan, the market participants (KESH Gen, Wholesale Public Supplier, Eligible Customers, Qualified Suppliers, Traders, SPPs etc.) should provide OST with the specified required information, not later than the first 20 days of the month for which the report is being prepared.

#### **5.4. Week Ahead**

Prior to each week of operation, and based on the information provided by the Wholesale Public Supplier (in coordination with Retail Public Supplier), IPPs, SPPs and Eligible Customers (or Qualified Suppliers) should prepare the daily load forecast for the upcoming week, and provide such updates to the OST. Prior to each week of operation, the Wholesale Public Supplier should establish the quantity of electricity it will require from KESH Gen pursuant to its contracts with KESH Gen to cover the weekly load.

OST will cover the shortages of supply of electricity from KESH Gen, SPPs, IPPs, Traders or Qualified Suppliers through Ancillary Services or implement load shedding in accordance with section 4.12 c.

#### **5.5. Day Ahead and in-day Adjustments**

Retail Public Supplier may revise its load forecast projections when, based on an update of the forecast load, there are clear differences between the energy forecasted and the amount required. The Retail Public Supplier shall notify the OST and the Wholesale Public Supplier of the revision. Where modifications to the forecast justify the decision, the Wholesale Public Supplier can buy electricity, outside its preexisting contracts, from KESH Gen at regulated rates, from SPPs that have a power purchase contract with Wholesale Public Supplier with tariffs set by ERE, and/or from other SPPs, IPPs and Traders at unregulated prices.

In the event updated day ahead forecasts indicate that additional electricity is needed in excess of what can be provided from all available sources, including SPPs, IPPs, Traders and Qualified Suppliers, the OST may direct in-day adjustments to the DSO or the Eligible Customers to institute load shedding procedures to keep the power system balanced. In the event updated day ahead forecast indicate that less energy is required than the one forecasted, the OST may direct in-day adjustments to balance the day ahead load forecast by decreasing the supply purchased from SPPs, IPPs or Traders.

## **5.6. OST typical procedures**

The OST has the responsibility to dispatch all the units owned by KESH Gen and IPPs needed to cover the load, as well as Eligible Customer loads dispatchable, observing all the rules and procedures as provided in the Grid Code for:

- a) operating day
- b) day following operating day
- c) fifth day following the operating day
- d) day ahead and in day adjustments.

The OST shall establish, with the ERE approval, operating procedures that establish ‘gate closure’ for physical nominations and other rules required for the OST to perform its dispatch and balancing functions.

The OST shall compare the sum of the load forecasts received from the market participants with its own forecasts and determine what additional steps (e.g. purchases) may be necessary to balance the system.

ERE has the responsibility to ensure that the Market Rules describe in detail all the operations that OST should go through for dispatching and other activities involved in the power system.

## **5.7. KESH Gen sales to other Purchasers**

The supply agreements between KESH Gen and Wholesale Public Supplier shall ensure that benefits of KESH’s hydro capacity are preserved for Tariff Customers. KESH Gen may, however, subject to rules and procedures approved by the ERE, sell any of its capacity above the amounts contracted to Wholesale Public Supplier at unregulated prices.

KESH Gen may sell electricity excess/surplus it produces into the market, at unregulated prices, securing purchases of economy energy, subject to rules and procedures approved by the ERE for selling electricity and in accordance with the rules on export of electricity.

KESH Gen can sell electricity to the following conditions:

- a. It shall have obtained the appropriate license from the ERE to sell electricity;
- and

b. The terms of this sale, established by the ERE on the rules and procedures of sale, will not reduce overall benefits of Tariff Customers, and will not impair KESH Gen's obligations under its contracts with OST and the Wholesale Public Supplier.

KESH Gen will bear the commercial and credit risks associated with these sales and of meeting its continuing contract obligations to deliver energy to OST and the Wholesale Public Supplier. Any net gain, if any, from sales or "swaps" of energy made by KESH Gen should be reflected in benefits of Tariff Customers. However, ERE may consider, and adopt if appropriate, incentive mechanisms, including allowing KESH Gen to retain a portion of the net profit from export.

## **6. Flow of Funds**

Flow of Funds in the Market Model is depicted in Appendix D.

The flow of funds for the major market participants is summarized as follows:

### **6.1. OST**

#### **Payables:**

OST will pay KESH Gen, IPPs, Traders and Qualified Suppliers for ancillary services and for energy needed to cover losses in the transmission system purchased by OST.

#### **Receivables:**

a) Eligible Customers, KESH Gen, Retail Public Supplier, IPPs, SPPs, and DSO (for the energy purchased to cover losses) will pay the OST for transmission charges (to the extent applicable) calculated in accordance with the tariff included in the Transmission Services Agreement approved by the ERE.

b) Payments for the interconnection capacity allocation charges.

#### **Receivables/Payables:**

Market participants imbalance settlement according to their physical imbalances (subject to a dead-band of \_%).

### **6.2. KESH Gen**

#### **Payables:**

KESH Gen will pay (to the extent applicable, if any) OST for transmission service provided under ERE approved tariffs.

KESH Gen will pay IPP, SPP, Traders and Qualified Suppliers for the purchase of economy energy (i.e., energy that may be available at certain times of day or year that can be purchased more cheaply than KESH Gen can generate and that can economically be used for station service or to meet its contractual obligations);

#### **Receivables:**

Wholesale Public Supplier will pay KESH Gen for the electricity at regulated prices.

OST will pay KESH Gen for ancillary services and energy purchased to cover losses, and pay or receive amounts for their participation in the regulated balancing market.

DSO, counterparties to exports, Traders, and Qualified Suppliers will pay KESH Gen for electricity to the extent such sales are allowed.

The responsibility for losses in the transmission system for KESH Gen sales, IPPs, and SPPs are with the OST.

**Receivables/Payables:**

KESH Gen imbalance settlement according to its physical imbalances (subject to a dead-band of \_%).

**6.3 Wholesale Public Supplier**

**Payables:**

Wholesale Public Supplier will pay KESH Gen for all electricity purchased by Wholesale Supplier.

Wholesale Public Supplier will pay SPPs, IPPs, Qualified Suppliers and Traders for electricity sold to the Wholesale Public Supplier.

Wholesale Public Supplier will pay any applicable OST charges for transmission service, including the cost of ancillary services, under tariffs approved by the ERE.

Receivables:

**Receivables:**

Retail Public Supplier will pay Wholesale Public Supplier for electricity delivered to it under rates approved by the ERE.

**6.4 Distribution System Operator (DSO)**

**Payables:**

DSO shall pay IPPs, SPPs, Qualified Suppliers, Traders and KESH Gen (at market rates) for energy needed to cover distribution system losses.

DSO shall pay applicable OST charges for transmission service, including ancillary services under tariffs approved by ERE, with respect to energy purchased by DSO to cover distribution system losses.

**Receivables:**

Users (i.e. the Tariff Customers and the Eligible Customers connected to the distribution network) of the distribution system will pay DSO for distribution network services under tariffs approved by the ERE.

**Receivables/Payables:**

Distribution System Operator imbalance settlement according to its physical imbalances (subject to a dead-band of \_%).

**6.5. Retail Public Supplier**

**Payables:**

Retail Public Supplier will pay Wholesale Public Supplier for electricity supplied to Retail Public Supplier at rates and terms approved by the ERE.

Retail Public Supplier will pay any applicable OST charges for transmission service, including the cost of ancillary services, under tariffs approved by the ERE.

Retail Public Supplier will pay DSO for the distribution services under rates approved by the ERE.

**Receivables:**

Tariff Customers will pay Retail Public Supplier for electricity supply under tariffs approved by ERE. The Retail Public Supplier will make filings related to electricity supply that will result in each Tariff Customer within the same class of customers across the country paying the same uniform tariff rate.

**Receivables/Payables:**

Retail Public Supplier imbalance settlement according to its physical imbalances (subject to a dead-band of \_%).

Flow of funds involving these and other market participants are shown on Appendix D.

**7. Role of Independent Regulator ERE**

The ERE's exercises its responsibilities based on the Law No. 9072 dated 22.05.2003 on the Power Sector, as amended. The independent functioning of the ERE in accordance with the Power Sector Law will meet the requirements of the EU Directive 2003/54, as well as the Energy Community Treaty. The ERE has recommended a market model to the GOA for the electricity market and approves all the legal acts in accordance with the legislation in effect.

After adoption of the Albanian Market Model by the GOA, the ERE will proceed to reflect the changes in the Market Rules and other secondary legislation related to the market functioning. In developing these documents, the ERE shall address the following issues:



a. The relationship between the Eligible Customer (EC) and the Retail Public Supplier and the DSO. This must be specifically addressed in Market Rules adopted by the ERE, taking into consideration:

- An Eligible Customer (EC) cannot at the same time be a Tariff Customer.
- EC cannot buy electricity from KESH Gen (except to the extent specifically permitted by the ERE) or Wholesale Public Supplier.
- The Market Rules should precisely define the circumstances and charges for re-entry by an Eligible Customer as a Tariff Customer and should be designed to protect Tariff Customers from any increased costs caused by such re-entry.

b. ERE shall develop rules for transmission congestion management when the transmission lines are constrained and cannot carry the total requirements of both Tariff Customers and Eligible Customers. ERE shall provide within the Grid Code and Market Rules the rules for implementing load shedding among Tariff Customers and Eligible Customers when there is capacity shortage, in a way that can be implemented by the OST. Principles of non-discriminatory open access must guide the development of such rules in order to meet EU open access requirements and to comply with the Energy Community Treaty. In developing these rules, input should be sought from all interested parties.

c. Auto-producers producing energy for their own electricity requirements in whole or part and who remain connected to the system may have surplus power at certain times, are to be treated as follow:

When sufficient dispatch capability exists, the Market Rules and Grid Code could provide access to the grid for such excess and the ERE could establish rates for the purchase of such power that create Consumer Benefit.

The ERE could also establish appropriate charges for capacity to avoid allowing such a customer from imposing costs on Tariff Customers. If the customer is “off system” most of the time, but wishes to utilize the system as a back up the auto production unit in case of maintenance or breakdown, a “stand by” rate could be specified by the Market Rules and approved by the ERE.

d. In order for the market to achieve its objectives, the ERE, and in many instances the OST, must have sufficient access to information about operations, costs, and the terms and conditions of contracts among the parties. The ERE should, therefore, in developing the implementing documents, ensure that all market participants are required to provide, under appropriate protection from disclosure of competitively sensitive information where necessary, all the information required for the successful performance of the ERE and OST functions, and to do so in a timely, complete, and accurate manner. This information should include at least generating unit availability and actual use, transmission availability and actual use, and other product and price data. To the extent consistent with appropriate confidentiality requirements, the information should be posted on the ERE and OST websites.

e. ERE should, as circumstances permit, increase the effectiveness of the usage of power system through the application of a tariff system for Tariff Customers that encourages the use the electricity at night, and discourages its use during peak times, and encourages the Tariff Customers for the decrease of capacity.

f. ERE approves agreements negotiated by participants, which include the following:

- Yearly agreement between Wholesale Public Supplier and KESH Gen for net energy including price, by hour and season, for each relevant generating unit. Agreements would also specify “must run” yearly net energy and capacity.
- Bilateral long-term agreements between Wholesale Public Supplier and each IPP for net energy and capacity including price for each hour and season.
- Bilateral long-term (one year or more) agreements between Wholesale Public Supplier and each SPP (i.e. Embedded Generator) for net energy and capacity including price by hour and season.
- One year agreements between OST and KESH Gen for ancillary services and for energy needed to cover transmission losses.
- Agreements between Wholesale Public Supplier and Retail Public Supplier for electricity supply for Tariff Customers.

g. ERE approves model agreements or contracts for a number of contracts among participants, which include:

- Bilateral service agreements for distribution services between DSO and users of the distribution system.
- Agreements for transmission services between OST and users of transmission system

#### h. Imbalance

Energy Imbalance Service is provided when a difference occurs between the amounts of production/load that was scheduled day-ahead, or that is actually produced in real time, and the actual withdrawals in real time (loads). It includes deviations from bilateral transaction schedules. It also covers the inadvertent energy flow into the system (from, for example, systems outside Albania). To the extent that the market participant does not address the imbalance through its own purchases, the OST will make the purchases necessary to ensure that the system remains in balance.

Generation/load imbalance is the difference between the hourly scheduled amount and the actual delivered amount of energy from a generation resource/load.

Generation/load Imbalance Service is taken when there is a difference between scheduled and actual energy delivered from generation resources.

In establishing rates for energy imbalance services (as part of its provision of ancillary services), the OST shall ensure that the entity creating the imbalance is assessed the full cost of correcting the imbalance (including the cost of energy purchased by the OST to balance the system). Such charges shall be non-discriminatory and cost-based. The OST may also establish, with ERE approval, additional charges by way of penalty for repeated substantial deviations from forecasts. Any revenues collected by the OST in excess of the revenues required to pay the OST’s ancillary service obligations are to be returned, at the end of each month, to market participants on a pro rata basis.

i. Full performance by all market participants of their contract and tariff obligations, including full payment for energy and other services, is vital to the success of the Albanian Market Model. The ERE, in conjunction with the OST and the market participants, should develop rules and model contracts that address the issues of non-payment or partial payment. In addition, the ERE should develop rules and procedures to ensure that its regulatory authority over the Wholesale Public Supplier and the Retail Public Supplier can be exercised according to the protocol of settlements and also has the ability to trace the flows of funds within Wholesale Public Supplier and Retail Public Supplier.

## **8. Power Purchase Agreements**

The GOA encourages private investment in generation plant to meet Albania's energy requirements and to guarantee a high security of supply through diversification of generating resources.

ERE shall have the authority to limit the extent of long-term agreements between Wholesale Public Supplier and IPPs and other suppliers, in order to avoid the blocking effect in the development of the market due to these agreements.

Long-term agreements should be hedged as much as possible with respect to risks associated with fluctuations in fuel prices and currency exchange rates.

In order to maximize private investment in the country while limiting the market preclusion effects, it is recommended that the Wholesale Public Supplier purchases from an IPP only a portion of plant output, with the rest being made available inside or outside the country at market prices.

## **9. Settlement Process**

Details of the Settlements Process, including the imbalance settlement administrated by the OST, will be specified in the Settlements Protocol as part of the Market Rules adopted by the ERE. Settlement funds must be used according to the destinations in order to avoid diversion. The process must be designed to function in a transparent manner, accommodate the use of bilateral contracts and facilitate improved collection rates.

The ERE has full authority to ensure that the activities of the parties are carried out within these rules and protocols, and that all financial transactions are fully transparent and auditable.

The Market Model reflects attempts to minimize the risk of market manipulation, thereby providing sellers into the market with increased assurance of market functioning. The contractual relations between and among all the market participants should be well defined.

The Wholesale Public Supplier shall compensate the OST only for functions and services performed by the OST and pays directly to the Seller (e.g. KESH Gen, IPPs, Qualified Suppliers, etc.) the costs of electricity consistent with physical statements provided to the Wholesale Public Supplier by the OST.

In order to increase the confidence of the seller in payments:

a) For the regulated market, payments will be made directly by Retail Public Supplier, which is closer to the source of funds, to the Wholesale Public Supplier, Distribution System Operator and OST;

b) no transfer of cash will be made from the Retail Public Supplier to OST for the purpose of paying other sellers;

c) the various regulated or standard agreements will have been approved by the ERE.

## **Key Tasks Required for Implementation of the Albanian Market Model**

The institutions and entities defined in this market model will take measures for the implementation of this model in general, and more specifically to:

Review and harmonization of Effective Legal Acts;

Review and harmonization of Market Rules;

Review and harmonization of Distribution Code;

Review and harmonization of Transmission Code;

Development and adoption of standard agreements for transactions among market participants (especially for the regulated market);

Development of Settlement Rules and Protocol to address the issue of non-payment or partial payments by market participants;

Acceleration of the restructuring reforms and unbundling of activities in power sector;

Installation of metering sufficient to provide reliable information about all transactions;

Development and implementation of accounting standards;

Development and implementation of information flow protocols;

Installation of information technologies required for reliability and market information;

Development and adoption of cost based tariffs for transmission and distribution services;