



THE ENERGY IN ALBANIA



Qendra e Eficiencës së Energjisë Shqiptari-DE
Albania-EU Energy Efficiency Centre



THE ENERGY IN ALBANIA (NEWSLETTER)

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PUBLISHED BY THE
“ALBANIA-EU ENERGY EFFICIENCY
CENTRE” (EEC)

ISSUE NO 31 • JUNE 2005

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NEWSLETTER

published by the

“Albania-EU Energy Efficiency
Centre” (EEC)

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ESTABLISHMENT OF RE FUND FROM "KfW" TO SUPPORT PRIVATE OPERATION OF SMALL HYDROPOWER PLANTS IN ALBANIA

(.....Continued from previous issue.....)

The Consultant and Albanian specialists inspected 15 sites of existing or new SHPPs, for each site a technical assessment was performed, leading to an estimation of the rehabilitation or construction costs. A financial & economic assessment was done to assess the projects' profitability. All SHPPs were located at very interesting sites, considering the water availability and the potential for electricity generation (head). Most of the plants were in very bad conditions, due to their aging and damaging of the plants during the turmoil of 1997. The water is often coming from a spring, which implies that in the winter season the plants can be operated most of the time. The visited plants were related to irrigation for agricultural purposes or to potable water supply, so there can be not generation during summer. For none of the plants, hydrology records were available. For the financial analysis, cash-flow and profit & loss statements were prepared. In addition, levelised costs were estimated and they were compared with the KESH purchase price of 0.0344 Euro/kWh. The economic assessment is based on the costs of alternative electricity supply at the same site. These costs were estimated, based on least-cost electricity supply (the new Vlora TPP), reduction of transmission & distribution losses (20 %) and a premium for a more reliable and better-quality

electricity service (10 %). The resulting unit costs for alternative electricity supply are 0.077 Euro/kWh. Analysis show that especially the SHPPs with low capacities (100 kW or lower) have a low profitability. The operators are fully aware of the fact and are planning to upgrade these plants to make better use of the water resources and the site conditions. This upgrading of the existing plants would require a renegotiation of the purchase/concession contracts. Currently there are 16 licensed banks in Albania, with total assets worth of EUR 3.11 billion, equivalent to 57 % of GDP. All banks are in private hands. In terms of assets, the largest bank is the recently privatized Savings Bank (51.9 %), followed by National Commercial Bank (10.1 %), American Bank of Albania (8,3 %), Alpha Bank (7,3 %), Tirana Bank (7 %) and Italian-Albanian Bank (4.5%).

Bank lending is largely part characterized by short maturities, high interest rates and comprehensive collateralisation. By March 2004, 41 % of the outstanding credit given by the banks had maturity of one year or less. About 83 % of the loans were in foreign currency. Depending on maturity, collateral rating and loan denomination, the interest rates vary between 5 % to 22 %. Longer maturity loans require a higher degree of collateralisation and thus may be associated with lower interest rates. The maximum maturity that has been accepted by banks is seven years. There are no unsecured loans. Even a line of credit needs to be collateralised. The banks are quite choosy about the collateral they will accept. The preferred collaterals are real estate mortgages, but borrowers have also posted cash, inventories and other assets. Loans secured by receivables (or by the borrower's expected cash flow) are uncommon, however. Typically, the face value of collateralised loans is equivalent to 70 % of the value of the collateral or less. Secondary sources for loan repayment often are essential for loan approval. The following conclusions can be drawn with regard to the banking sector's position on SHPP lending:

- Banks would only provide fully secured loans with long maturity (say, up to eight years). Even partial lending against receivables is considered too risky.
- SHPP facilities will only have a low collateral value. Other highly rated collaterals will be needed for acceptable security arrangements.
- Currently, most banks are not interested in the refinancing of loans through long-term borrowing.
- The banks' preferred form of financial support for SHPP lending is credit enhancement. Their first choice are (partial) credit guarantees covering the creditor in the case of default on the part of the borrower.

Despite the very promising prospects for the SHPPs in Albania, there are a number of issues which have to be solved, because they are presenting obstacles for the a quick startup of this energy option to be operated by the private sector in Albania. The RE Fund will be composed of two facilities: Technical Assistance Facility and Financing Facility:

- The Technical Assistance Facility will be used to develop sound project proposals and for a quality insurance. The technical assistance will be available for operators, for participating banks and for regulatory & institutional aspects.
- The Financing Facility will provide to the participating banks the possibility for refinancing and partial risk guarantee.

The Albanian Government has established an Energy Efficiency Fund. After approval, the KfW Financing Support Scheme should be open for energy efficiency and other types of renewable energy sources in the framework of the Albanian Energy Efficiency Fund. Scope of activities for the Renewable Energy (RE) Fund of KfW will be:

- Provision of financing of hydro-power investments;
- Improvement of the technical design of the plants;
- Preparation of rehabilitation strategies and project studies;
- Mediation in the case of unresolved issues and felt institutional barriers.

The legal status of the proposed RE Fund should be that of a non-governmental support fund established and authorized by the project-executing agency (Ministry of Industry and Energy/ National Agency of Energy). In the initial phase, the objective of the fund is to provide financial support and technical assistance to lending operations targeted at SHPP. There should be the option to include other RE-technologies and objectives at some later stage. The institutional structure proposed by Ministry of Industry and Energy in collaboration with KfW will be:

- **Agent Bank:** Three Albanian Banks would be selected by a competitive tender to act as the Agent Bank and as Trustee.
- **Board of Trustee:** This board supervises the operation of the fund.
- **Fund Manager:** The Board of Trustee will assign a Fund Manager for the day-to-day operations.



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ALBANIAN ELECTRICITY MARKET DEVELOPMENTS

1. Introduction

Albania aspires to join the EU, and EU accession is described as "an important national goal" in the Power Sector Policy Statement adopted by the Government in April of 2002. Albania is also one of the parties to the Athens process and has been committed to cooperate in creating a Regional Electricity Market (REM) in Southeast Europe. Compliance with the minimum requirements of the applicable EU Directives (Directive 2003/54/EC in particular) and with the requirements of the latest Athens MOU executed in December, 2003 ("Athens MOU II") and of the ECSEE Treaty are therefore important objectives for power sector. In light of this process, Albania has undertaken a very challenging but indispensable initiative to establish a domestic electricity market with an ultimate goal to liberalize and open the market. Needless to emphasize the importance of making prudent steps

accompanied with all necessary legislation and institutions to guarantee to all market participants an open and fair access to the transmission and distribution networks.

2. Transitory Market Model

Based on Article 53 of Law No. 9072, May 22, 2003 "On the Power Sector", the ERE in cooperation with all power sector participants, and with USAID and Pierce Atwood prepared a model for the development of power market in Albania. The model was proposed to the Council of Ministers for approval as the power sector law required, and was adopted by the Decree No. 539, August 12, 2004. The initial structure of the Market Model not only meets the objectives defined by the National Strategy of Energy and the Power Sector Policy Statement but it is intended to be a transitional phase that provides the flexibility for the Albanian market to evolve toward full compliance with the EU Directive 2003/54 and the REM contemplated by the Athens MOUs and ECSEE Treaty. The Market Model offers accurate solutions for:

- It creates the possibilities for the liberalization of the Albanian electricity market according to the obligation defined by the Law "On the Power Sector".
- It meets the EU Directives & requirements for a Regional Electricity Market in compliance with the Athens Memorandum II.
- It is based on one-year bilateral contracts among main market participants that provide regulated tariffs and prices according to the Law "On the Power Sector".
- It will provide electricity to the Albanian customers, generated by the existing HPP, with regulated tariffs and minimal costs that are very interesting under the current Albanian economic situation.
- The Market Model also prepares the conditions for the privatization of the distribution sector from strong strategic investors, in order to make it technically and economically, an effective and competitive sector.
- The existence of initial generation and distribution sectors within KESH will help the sector development, creating possibilities for an effective privatization process and avoidance of financial transactions delay.
- The development of the wholesale electricity market will facilitate the integration to the REM, according to EU and Athens Memorandum requirements. In this way, the Albanian power market will create the possibilities for direct contracts between producers and suppliers on one side and eligible customers and distribution companies on the other side.
- The Market Model will allow the development of future competition in the generation sector by introducing Independent Power Producers in small HPP and CHP resources.

3. Market Rules and Third Party Access

Once the Market Model was adopted, the Market Rules governing the market participants' relations needed to be adopted. Article 54 of Power Sector Law stipulates that ERE shall adopt such market rules. For this reason a Task Force with participants from ERE, KESH, OST, MIE and NAE was established. The Task Force drafted the Market Rules, which were submitted to ERE's Board for final approval. The ERE approved the Market Rules on January 25, 2005. The purpose of Market Rules is to establish transparent and non-discriminatory rules to provide for the minimum requirements for the

initial phases of a national power market in Albania and Albania's participation in a REM consistently with Albania's international commitments. According to Article 4 of Market Rules, the Market Participants who shall be licensed or otherwise authorized by ERE to participate in the electricity market are KESH, the Transmission System Operator ("OST"), Public Generating Company (after being established), Distribution Company/ies (after being established), Eligible Customers, Qualified Suppliers (local or foreigner), Small Power Producers, Cogenerators, Independent Power Producers and Privileged Power Producers. Market Rules define the role, responsibilities and rights for each market participants.

In compliance with Power Sector Law provisions, both Transitory Market Model and Market Rules guarantee the access of third parties, Eligible Customers & Qualified Suppliers and require by transmission & distribution system operators to provide this access on nondiscriminatory bases. Eligible Customers, who have the right to choose the electric supplier for the electricity used for their own needs, will enjoy the same rights to use transmission & distribution networks after they decide to leave KESH. Despite the law envisages a relatively high threshold (100 GWh/year) for a customer to become eligible, actually in Albania two big industrial customers have been granted by the ERE the status of eligible customer. However, both customers are negotiating with KESH and OST the terms & conditions of agreements for use of networks and for backup energy. In order to comply with this requirement, the unbundling of transmission & distribution activities from KESH is required. OST, which is authorized to play the Market Operator's role, is expected to be the cornerstone of market development. By the Government Decree no. 797, of December 4, 2003 on the establishment of the company "Transmission System Operator" sh.a., the legal bases for unbundling of transmission system operator were created. In meantime, the company has established its organization structure. Each department has been reorganized and structured according to functions and responsibilities. The progress of unbundling transmission activity was followed up by preparation and adoption by the ERE in December 2004 of two important secondary legislations, Transmission System Code and Transmission Tariff Methodology. In order to complete the process of establishing a fully functioning OST, a number of other actions have to be completed:

- Transfer of the Assets from KESH sh.a. to OST sh.a.
- Transfer of the liabilities from KESH sh.a. to OST sh.a. through Subsidiary Loan Agreement.
- Establishment of the Agreement between KESH and OST for the definition of the revenues sources for OST.
- Transmission tariff filling with ERE, including ancillary service tariffs.

On the other hand, distribution activity continues to remain integral part of KESH utility. However, the process of preparation of the Distribution System Code and Distribution Use of Network Tariff Methodology has made progress. ERE is expected to adopt both documents by June 2005. Unbundling of distribution activity it is not very likely to occur in short time, but at this stage only financial unbundling may be satisfactory for implementing market model in Albania. Another constraint for third party access is the accuracy of the metering system.

Metering is currently available at all interface boundary points of Transmission with Generation & Distribution, but there remains some interface points where new meters are needed.

4. Conclusions

Despite the fact Albania is in the first steps of establishing a competitive electricity market, the creation of legal & institutional basis could be considered an important step forward. However, the implementation phase seems to bring more challenges than it was thought at the beginning of process. Fully unbundling of OST should be one of priorities of Albanian Power System followed by a financial unbundling of distribution and generation within KESH in order to guarantee to Eligible Customers, Qualified Suppliers and IPPs a fair and non-discriminatory treatment as to the network access and fair transmission and distribution tariffs. ERE should play a stronger role for Market Rules enforcement and for monitoring market development. It is ERE's responsibility to make sure all market participants enjoy the same fair and nondiscriminatory treatment.



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ENERGY LABELLING AND STANDARDIZATION OF HOUSEHOLD ELECTRICAL APPLIANCES

1. Background

During the first year of implementation of Albanian National Strategy of Energy (NSE) have been prepared and approved the following main documents:

- National Action Plan for the implementation of NSE;
- Energy Saving Law in Private and Public Buildings;
- Energy Efficiency Law.

On most of them, the Albanian specialists have worked with the valuable assistance of USAID. From September 1, 2004 the second year of implementation of the NSE has started. As it was mentioned above, one of the important documents is the Energy Efficiency Law. This law is recently approved by Albanian Parliament (April 27, 2005). Article 7 of this Law, named "Energy Labelling of Electrical Appliances", provides for:

1. Any natural or legal person who manufactures or imports household electrical appliances will not sell them unless it has fulfilled the standards and provided such appliances with energy labels. The data on the labels shall be in the Albanian language.
2. The standardization procedures for the electrical appliances shall be stipulated by a decision of the Council of Ministers.
3. The labels shall include data on the specific energy consumption of the electrical appliance, its energy efficiency in relation to the lowest and highest values of energy efficiency for the given type of electrical appliances.
4. The label shall be placed visibly on the appliance.

5. The manufacturer or importer of such appliances shall be responsible for data on the labels.

6. The procedures regarding energy labelling of household electrical appliances should be prepared by the Ministry of Industry and Energy (MIE) and National Agency of Energy (NAE) and approved by the Council of Ministers.

Currently Albania produces no domestic appliances and imports such appliances without energy efficiency labels, mainly from eastern markets. Consumers make their purchase decisions based mainly on price unaware that the lower priced appliances will consume much more energy. The current law requires standards & labelling but must be accompanied by secondary legal framework in order to be implemented. The MIE through NAE and Albania-EU Energy Efficiency Centre (EEC) will need to create the necessary regulations based in the requirement of Article 7, points 2 & 6, that will then be issued as decrees of the Council of Ministers.

2. Project Development

The main objective is to develop expertise necessary to encourage reduced energy consumption in household and service sectors by increasing efficient use of energy in electrical appliances. A group of four representatives from the NAE, MIE and EEC have participated in a four-day practical training program, organized by Austrian Energy Agency in Vienna. Specific Training Objectives has been:

1. Identify elements of an effective organizational structure including staffing for implementing Article 7, points 2 & 6.
2. Identify elements for secondary legislation preparation.
3. Identify systems for testing equipment regarding energy labelling for household electrical appliances.
4. Identify effective means of subsidizing the shift to more energy efficient electrical appliances in household and service sector.
5. Identify elements of a consumer public awareness program.

3. Final Remarks

After the training, the group of experts have prepared an action plan and have submitted it to World Learning (USAID) for financial support. The action plan mainly consists of drafting Secondary Legal Framework for effective implementation of Article 7 of Energy Efficiency Law, and preparation of an Awareness Campaign for Consumers related to energy efficiency labelling. The energy labelling will allow the consumers to evaluate appliances not only according to price, but also to their energy efficiency, discounting higher purchasing price with savings over time from lower energy consumption. By increasing their efficiency only 20% (there is room up to 50%), the reduction of electricity consumption in Albania will be 1,200 GWh or more than 50 Million USD/year.



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