



#### **1** FOREWORD

#### Dear all,

This is the Energy Regulatory Office's Annual Report 2013, structured in line with Article 9 of the Law on Energy Regulator, for submission to the Assembly of the Republic of Kosovo for information, review and approval.

The report contains a summary of activities that were carried out as well as main achievements of ERO and energy sector during the calendar year 2013. The report contains information on the most important events on the energy market, the energy tariffs review, the financial report of ERO, as well as data on regulated activities in the energy sector of the Republic of Kosovo.

Kosovo has adopted its primary legislation on energy, which sets out the rights and obligations of the parties in the sector in order to ensure sustainable, secure, reliable and quality electricity supply.

The insufficiency of the existing generation capacities to meet the supply demands and the need for investments in the energy sector in Kosovo requires initiation of energy sector restructuring through liberalization of the market and growth of competition in the market of electricity. In order to achieve these objectives, KOSTT during 2012 developed a draft Electricity Market Design document, and in March 2013 it was approved by the ERO Board. Market Rules were developed and at the end of 2013 were approved based on the Market Design.

Energy sector reforms started since 2004 as a result of the establishment of ERO. The reforming process further continued with unbundling of KEK, a vertical integrated company, whereby KOSTT (2006) was established, which now operates as an independent transmission and market entity. Further on, unbundling continued with KEK's distribution and supply, and thereafter with their privatization, transferring them under the ownership of Limak-Çalik. Thus, on May 8<sup>th</sup>, 2013, the Government of Kosovo finalized the project on privatization of distribution and public supply which is managed by the consortium Limak-Çalik, while the other part of KEK remains a publicly owned property, including mines and generation.

Important investments have been made in the transmission system that resulted in decreased bottlenecks, improved quality of supply and decrease of technical losses in transmission. It is worth mentioning that at the end of 2013 the contract on construction of the OHL 400 kV Kosovo – Albania was signed, which will have a positive impact on the entire power system in Kosovo.

The state of the distribution network remains poor due to insufficient investment, suffering huge technical and commercial electricity losses, disabling quality electricity supply for the customers.

Generation of electricity from local generators during 2013 was high and for the first time after 1999, Kosovo has been a net exporter. However, a huge change in consumption during different periods (day / night, etc.), and the inflexibility of the generating units to follow these changes has led to importation of the missing electricity from the regional market with relatively lower prices compared to previous years, while during other periods electricity was exported with very low prices.

Also during 2013, ERO continued to monitor the licensees and supervise implementation of applicable laws and rules, aiming to raise the level of quality in terms of supply and customer service. A particular importance was paid also to the field of customer protection, reviewing and resolving customer complaints and disputes.

Regarding the district heating sector, it should be noted that the 2012/2013 season was characterized by a disrupted and insufficient supply in terms of meeting customer needs for heating. Due to difficulties in supplying fuel - heavy oil, the season was featured with a poor quality heating, frequent interruptions lasting up to several days and finally with a termination of heating supply approximately two months before the end of the heating season.



During 2013, ERO has been very active in international activities related to the energy sector. Firstly, it must be noted the regular participation of ERO representatives in work of the Technical Group on Energy, established to support the Dialogue between the Republic of Kosovo and the Republic of Serbia on energy issues. ERO also actively participated in all the activities of the South East Europe Energy Community (SEE EC) in all working groups, as well as those of the Energy Community Regulatory Board (ECRB).

Note:

It should be pointed out that the Report was submitted to the Assembly of Republic of Kosovo for review, but it wasn't evaluated due to the circumstances in relation to the dissolution of the Assembly. However, without any prejudiction of the final review from the Assembly, ERO has decided to publish the Annual report for 2013, considering that it contains valuable information and data for energy sector. After the evaluation from the Assembly, ERO shall consider all eventual remarks and amendments, which will publish as the Annex of this Report.

Respectfully,

Enver Halimi \_\_\_\_\_

Chairperson of the Board of ERO



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#### **EXECUTIVE SUMMARY**

Based on Article 9 of the Law on Energy Regulator No. 03/L-185, the Energy Regulatory Office ("ERO") has compiled the Annual Report on the Situation of the Energy Sector in Kosovo and ERO Activities in 2013.

The first chapter of the report presents the organization of the ERO, the description of the ERO mandate based on the Law on Energy Regulator. The report explains the organizational structure of ERO and provides a brief description of the activities of the ERO Board, ERO Departments and Administration Unit. A special emphasis on this chapter is dedicated to the need for ERO staffing. This chapter includes also a section addressing the documents and decisions approved by the ERO Board during 2013.

The report describes the technical assistance projects and professional trainings that have contributed to ERO capacity building.

The second chapter of the report presents the financial report, including the revenues, budget and expenditures.

The third chapter addresses ERO activity segments related to licensing of energy companies and the process of issuing authorizations for the construction of new generation capacities.

The fourth chapter describes the monitoring process performed by ERO during the reporting period. This includes the monitoring based on reports prepared and submitted to ERO by licensed companies in accordance with the Energy Sector Reporting Manual. Monitoring is also carried out based on the Licensed Enterprises Monitoring Program, which was prepared by ERO in 2013, and started to be implemented in early 2014. ERO Monitoring of the billing process conducted by the energy enterprise (KEK) in January 2013 is also described in details. This part of the Annual Report includes also the monitoring of the security of supply as provided by the Report on Security of Supply issued and published by the ERO based on legal requirements.

The fifth chapter of the report presents an analysis of the electrical energy sector and it also provides the relevant considerations related to the management of the electricity situation in 2013. This section of the report provides an overview of the electrical energy sector by describing the situation and features of the transmission and distribution networks, generation, electricity flows and total consumption. It also describes in detail the specifics of the electricity market such as: the load on the electrical energy system of Kosovo, loss of electricity, power supply, import and export of electricity and billing and collection. Further, the report provides an assessment of the electricity supply and service quality.

The sixth chapter addresses electricity tariffs, describing the legal basis for their determination. This section of the report describes the Seventh Electricity Tariff Review (ETR7) with special emphasis on analyzing the multi-year electricity tariffs, a process which for the first time allowed the determination of the maximum allowed revenues of the licensees for a five-year period in order to achieve a long-term management, planning and forecast of revenues and expenditures during this period.

The district heating sector is presented in the seventh chapter, providing initially an overview of the sector and key developments during 2013. Further, it describes the technical characteristics of the district heating systems and the performance of district heating enterprises, with a special emphasis on the consumption of fuel and the price, generation, supply and system losses. Billing, collection, and central heating tariffs for the season 2012/2013 are also a part of this Chapter.

The eighth chapter contains developments in the natural gas sector. ERO is also responsible for the regulation of the natural gas sector, thus this chapter addresses the development potentials of this sector.



The ninth chapter addresses the customer care, which has always been a very important part of ERO activities; therefore the annual report addresses this activity, with a particular emphasis on resolving complaints and disputes.

An additional activity of ERO is legal representation related to disputes in court proceedings.

The tenth chapter of this report describes the international activity of the ERO. Initially, it addresses the relation between ERO and the Energy Community of South East Europe (ECSEE), ERO role and activities undertaken during 2013. It describes all working groups of the ECSEE where ERO participates based the Treaty signed by Kosovo.

#### **Legal Basis**

In order to address the legal basis on the establishment and functioning of the ERO, initially should be addressed the history of events that have highlighted the need for the establishment of an independent regulator of the energy sector in Kosovo.

In April 2002, Kosovo<sup>1</sup> became a signatory of the Athens Memorandum of Understanding on "Regional Energy Market" (later called Energy Community of South East Europe - ECSEE), and the revised version in December 2003. Hereby, Kosovo became an equal partner and participant in the establishment of ECSEE, which is of primary importance for its economic development, due to its reserves of lignite and Kosovo's ideal position for exchange of energy in the region of Southeast Europe.

To meet the obligations of the Athens Memorandum, Kosovo in 2005 signed the Treaty establishing the Energy Community, which resulted in several state obligations.

One of the subsequent Treaty obligations is (inter alia) application of the "Acquis Communautaire" on energy, obliging particularly application of the EC Directives No.  $2003/54^2$  and 2003/55, and EC Regulations No. : 1228/2003 within six months of entry into force of the Treaty.

As a result of these obligations, especially provisions of Articles 23 and 25 of the EC Directives No.: 2003/54 and 2003/55, the Assembly of Kosovo in 2004 adopted the Law on Energy Regulator No.: 2004/9. Based on this law was established the independent regulatory authority – ERO, bearing the duties to regulate the energy sector including: electricity, central heating and natural gas.

ERO was established as an authority independent from any Government institution and industry, to exercise the economic regulation in the energy sector by issuing and monitoring the licenses for energy activities, granting authorizations for construction of new energy capacities, approval of pricing and tariff methodologies regarding the activities that are not subject to the market, issuing secondary legislation regulating the sector, monitoring the effective unbundling of energy enterprises, development of competition in the energy market, and resolving disputes.

<sup>&</sup>lt;sup>1</sup> UNMIK signed the Agreements on behalf of Kosovo

<sup>&</sup>lt;sup>2</sup> EC Directives No. 2003/54 and No. 2003/55 have been replaced with the EC Directive No. 2009/72 (electricity) and No. 2009/73 (natural gas) whereas the EC Regulation No.: 1228/2003 has been replaced with the Regulation No. 714/2009



Fig. 0.1 Primary Legislation on Energy, adopted by the Assembly of Kosovo

The Treaty establishing the Energy Community (ECT) was signed for a 10 years period and by a Ministerial Council Decision No. EC. No. D/2013/03/MC it has been extended for the next ten years as well.

In the meantime the EC Directive No. 2003/54 and No. 2003/55 have been replaced with the EC Directive No. 2009/72 (electricity) and No. 2009/73 (natural gas) whereas the Regulation EC No.: 1228/2003 has been replaced with the Regulation No. 714/2009. Transposition of these provisions of these EC Directives and Regulation are under process, and will be reflected in the new Laws on Energy.

Establishment and functioning of ERO, as an independent agency of the Republic of Kosovo, is guaranteed by the highest legislation act adopted by the Assembly of Kosovo, the Constitution of the Republic of Kosovo.

# **1 ABOUT THE ENERGY REGULATORY OFFICE**

# 1.1. Organisation of the Energy Regulatory Office

The Energy Regulatory Office (ERO), as an independent agency is obliged to regulate activities in the energy sector in Kosovo, including electricity, district heating and natural gas, in accordance with the Law on Energy Regulator and obligations arising from ECT.

ERO exercises its powers, as a part of the institutions of the Republic of Kosovo, in accordance with all laws and regulations of Kosovo.

# **1.2.** Organisational structure of ERO

Organisational structure of ERO consists of: the Board, five (5) departments and the administration unit.

Heads of Departments organize, control, plan, cooperate, and evaluate their staff and hold responsibility for activities and fulfilment of all tasks under their responsibility.

Staff members perform analysis and other tasks whenever necessary in accordance with legal requirements, and submit their proposals to the Head of Department and the Board to make decisions.

Heads of Departments and staff members undergo the procedure of recruitment and are appointed by the Board of ERO.

# **1.3.** Board of the Energy Regulatory Office

The Board of ERO is composed of five (5) members, including the Chairperson. The Board members are proposed by the Government and appointed by the Assembly of the Republic of Kosovo. The term of each Board members starts from the day of his/her appointment.

The Chairman of the Board represents ERO before third parties, and reports to the Assembly of Kosovo and its functional committees, upon request.

The Chairman of the Board, based on the Law on Energy Regulator, submits an annual report to the Assembly of the Republic of Kosovo, not later than three (3) months after closure of calendar year.

# **1.4.** Competences of the Board of Energy Regulatory Office

The Board of ERO, in line with responsibilities vested by the Law, exercises the following activities:

- approves ERO regulatory and operational policies;
- organizes and supervises ERO's operation;
- supervises implementation of the budget and financial management of ERO and approves its financial reports and statements;
- organizes employment, appoints and supervises the work of staff employed by ERO;
- approves the levels of compensation and other conditions of employment, for the employees of ERO;
- makes decisions and issues rules and other bylaws prepared by the ERO.

The Board must hold at least ten (10) meetings per year, which are open to the public and are announced five (5) days ahead of the date of the meeting, by publishing the agenda on ERO's official website.

ERO Board addresses all issues for which it is responsible, through decisions, taken in meetings open to the public. Board meetings are recorded in the minutes of meetings, whereas decisions are published.

# **1.5.** Departments of the Energy Regulatory Office

# 1.5.1 Legal and Licensing Department (LLD)

Legal and Licensing Department is responsible for drafting secondary legislation, review of licensing applications by energy enterprises, review of applications for issuance of authorizations for construction of new capacities. This Department also carries out supervision and monitoring of licensees' activities.

# **1.5.2** Energy Market Department (EMD)

Energy Market Department is responsible for market structure, monitoring the parties on the market, to evaluate and analyze data in the energy sector. The Department also monitors competition and behaviour of market participants against principles of objectivity, transparency and non-discrimination.

# **1.5.3** Tariffs and Pricing Department (TPD)

Tariffs and Pricing Department is responsible for the review of tariff applications of licensed enterprises and submits them to the board for approval; it monitors operational and capital expenses through Tariff Reviews; undertakes all necessary measures to ensure that the tariffs are cost-reflective, reasonable, non-discriminatory, based on objective criteria and established in a transparent manner taking due consideration of customer protection.

# 1.5.4 Customer Protection Department (CPD)

Customer Care Department is responsible for reviewing and resolving complaints and disputes between customers and energy enterprises, system operators and energy enterprises, and between two energy enterprises. In the course of exercising its duties and responsibilities, this Department cooperates with all institutions and organizations which legitimately represent the customers.

# 1.5.5 Thermal Energy and Natural Gas Department (TENGD)

Thermal Energy and Natural Gas Department is responsible for the review and implementation of strategies, performance standards and other operational practices related to these sectors. This Department carries out the monitoring of licensed enterprises through the collection, analysis and evaluation of relevant data and information, and also it contributes to the development of reporting systems of district heating enterprises, focusing on technical-technological elements and the integration of incentives and targets for efficiency. It also cooperates with other departments of the ERO by providing technical support and expertise on issues related to thermal energy and natural gas.

# 1.5.6 Administration Unit (AU)

Administration Unit supports ERO's functioning, organizes efficient recruitment of ERO staff, coordinates ERO staff trainings, supply and maintenance of office equipment and assists in arranging the office by making it suitable for work for all the ERO staff.



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Fig.1.1 Organizational Structure of ERO - 2013

A short description of the organisational structure with the completed and vacant positions in 2013 is provided in the following table.

Organizational positions	Positions	Employment	Vacancies (description)	
ERO Board	5	5		
Public Relations Officer	1	1		
Legal and Licensing Department (LLD)				
* Head of the department			* Legal Affairs & Monitoring	
* Legal Affairs & Monitoring Expert	4	3	Expert	
* License Monitoring Analyst				
* Legal & Licensing Officer				
*Head of the department (CPD)	-			
* Performance standards analyst	3	3		
* Customer Care Officer				
Energy Market Department (EMD)				
*Head of the Department	-			
* Power Plant Expert	_	_	*Power Supply and Market Structure Analyst	
* Power System Analyst	5	4		
* Market Monitoring Analyst				
* Power Supply and Market Structure Analyst				
Pricing and Tariffs Department (PTD)				
* Head of the Department		3	* Tariff Structure Analyst	
* Expert for Regulatory Affairs and Tariffs	4			
* Economy Officer				
* Tariff Structure Analyst				
Administrative Office (AO)				
* Head of the Administrative Unit				
* Chief Financial Officer				
* Procurement Manager			* Board Assistant	
* Administration Officer	a	6	* Translator for English	
* Data Management Officer		0	Languaget	
* Board Assistant			*Translator for Serbian Language	
* Translator for English Language	_			
* Translator for Serbian Language	_			
* Driver/Maintenance Officer				
Thermal Energy and Natural Gas Department (TENGD)	-			
* Head of the Department	2	2		
* Thermal Energy Analyst				
TOTAL	33	27	6	

Tah 1	11	Current	nositions	at the	end o	f 2013
1 U.D. 1	1.1	CULLETIC		ullie	End	1 2013



As it can be seen, at the end of 2013 ERO had 6 vacant positions.

Two positions, Head of Pricing and Tariff Department and Head of the Thermal Energy and Natural Gas Department were completed in September 2013.

Job descriptions for ERO staff are developed analytically.

Current work load is covered with maximum engagement of ERO staff. However, ERO has a small number of staff compared to the work load which has grown significantly with the recent changes in the energy sector such as: changes in legislation, privatization of distribution and supply, and additional obligations arising from EC directives and regulations.

# **1.6. Human Resources**

ERO considers human resources as a key factor to fulfil the obligations set out by law, therefore constantly pays due attention to capacity building for all employees.

Human resource planning for ERO is a process that identifies the current and future needs for employees, in order to achieve the goals of the ERO. ERO is committed to establish a professional team having values and principles, in order to carry out activities in a responsible manner.

Members of ERO staff have a rich experience and knowledge in the energy sector including electricity, thermal energy and gas, qualities that have been acquired through the work and trainings.

In generally, ERO employees have university education, serving as a basis for future development in specific areas of the energy sector.

#### 1.6.1 Number of employees in 2013 and needs for new employees

In accordance with the budget presented in 2013, the organisational structure consists of 33 positions. ERO currently employs 27 employees, as illustrated in the above table. The process of completion of 3 vacant positions (Analyst for tariff structure, Officer for assistance to the Board and Translator of English Language) is under the process. It must be noted that for several years, due to budget cuts, the completion of vacant positions was impossible.

# 1.6.2 Challenges relating to staff retention

As a result of budget cuts, ERO is continuously facing problems in terms of retaining quality employees who were trained intensively for a long time. Loss of well trained employees, caused to ERO big difficulties in meeting its obligations, since new employees need to be trained and during this time ERO must rely on less experienced employees.

Also during the early 2014 ERO is facing staff shortages, which in turn affect the performance of the institution and regulation of the energy sector<sup>3</sup>.

# **1.7.** Funding sources – ERO employees salaries

Law on Energy Regulator, No. 03/L-185, Chapter IV, Article 18, defines the sources of ERO funding through licensing fees, which are paid by energy enterprises. Based on this law, ERO is financed by self revenues.

Based on the abovementioned provisions the annual licensing fee to finance ERO is defined in the amount of up to 2% of gross turnover of licensed enterprises. However, due to budget cuts by the Assembly of Kosovo, the current budget of ERO is about 0.31 % of gross turnover of licensees. This makes it unable for a normal functioning of the ERO.

<sup>&</sup>lt;sup>3</sup> When this report was finished, the total number from 27 was decreased to 22 staff members, including 2 Board members, who are still not appointed by the Assembly of the Republic of Kosovo.

Also, Article 7 of the same law provides that the ERO employees are not civil servants. ERO considers that the level of salaries of its employees must be at the same level with the salaries of the employees of the sector it regulates (for example KOSTT, KEDS, KEK, etc.), however currently the situation is not such. This has led to professional staff leaving, creating difficulties in recruiting staff possessing skills and experience of the required level .

# **1.8.** ERO capacity building – technical assistance projects and professional trainings

Due to the volume of work, and additional activities in the sector, as well as their complexity, in 2013 derived the need for the ERO to be assisted with technical consultancy. Below are presented the consultancy projects:

- Project "Assistance to ERO on monitoring capacity building", funded by USAID, implemented by "Advanced Engineering Associates International Inc." (AEAI), was developed in December 2012 and January 2013. This project was aimed at providing support ERO as new energy legislation passed in 2010 has significantly increased monitoring role and responsibilities of the ERO.
- Project "Consulting services to assist in the Privatization of Distribution and Supply" funded by USAID and implemented by the "Advanced Engineering Associates International Inc." (AEAI), was modified and extended until June 30, 2013, in order to assist ERO in the effective completion of the privatization transaction of KEDS.

The project provided assistance ERO concerning transactions that support the privatization of KEDS and energy sector in general. Within the scope of this project was incorporated also the support to ERO in relation to preparation for the multi-year tariff review (2013-17) for production, transmission, distribution and supply of electricity.

 Project funded by the World Bank, signed on June 20, 2013, assigned IFC to assist ERO to enhance the existing regulatory framework of the energy sector on renewable sources and promotion of investment in this area. This assistance includes the support in drafting standardized agreements on sale/purchase of energy produced from RES, feed-in tariff for solar energy, as well as regulation on the certificate of origin.

# 1.8.1. Meetings, round-tables and trainings

ERO considers that participation in meetings, round-tables and trainings is very important for the institution. This contributes to attaining skills and experience from regional and international regulation practices, which is necessary considering that regulation in the energy sector, is a relatively new field. Regional developments are very fast and need to be followed in due time.

ERO pays due attention to training and providing equal opportunities on employee development. ERO employees are entitled to non-discriminatory treatment in the workplace, which protects the dignity and integrity of the employees. ERO evaluates employees and, through systematic methods, encourages them to achieve the objectives and develop professionally.

During 2013 were held a series of regional meetings, round-tables and trainings that contributed to further capacity building of ERO employees on regulation of the energy sector in line with EU standards.

Below you may find the meetings, round-tables and trainings held during 2013:

- **13 January 2013** – Participation in the training on "Simulation of actual challenges in media", London, Great Britain, funded by USAID;

- **24 -26 January 2013** Participation in the IV<sup>th</sup> meeting of the Group on energy strategy, in Vienna, Austria;
- **14-15 January 2013** Study visit on "Monitoring the Activities in the Energy Sector", in Podgorica, Montenegro, funded by USAID;
- 17 18 January 2013 Study visit on "Monitoring the Activities in the Energy Sector", in Budapest, Hungary, funded by USAID;
- **24 January 2013** Meeting with the Energy Regulatory Entity of Albania, Tirana, Albania;
- **25-27 January 2013** Training on "Managing public relations and the art of communication", in Durres, Albania.
- O3 -06 February/10-12 June/16-18 May/29 May/1 June/16-21 June/30 June/03 July/23-25 July/ 09-11 October/ 2013 Part of the delegation in the dialogue with Serbia, regarding the energy sector, in Brussels, Belgium;
- 04-07 February 2013 Participation in the regular meeting of the working group on electricity within ECRB as well as in the Workshop on monitoring the Dry-Run regional market, in Vienna, Austria;
- **06-07 February 2013,** Meeting of the Committee on Licensing and Competition of the Energy Regulators Regional Association of (ERRA), Abu Dhabi, EBA;
- **11-13 February 2013 –** 25<sup>th</sup> meeting of GPG and meeting of SoS Coordination Group within

the ECRB SEE ECT, Vienna, Austria, partially funded by ECS;

- **14 February 2013** Regular meeting of the working group on customers within ECRB SEE ECT, Vienna, Austria, partially funded by ECS;
- **21 22 February 2013** Round table meeting with the Energy Regulatory Entity of Albania, Tirana, Albania;
- **25 28 February 2013** Training "Management of property and assets in public institutions", Istanbul, Turkey;
- **26 28 March 2013** Participation in the 23<sup>rd</sup> meeting of the Board of Energy Community Regulators, Athens, Greece, partially funded by ECS;
- 03 09 April 2013 Participation in the annual conference CAMPUT, Canada;
- 08 13 April 2013 "Study visit in relation to RES", Austria;
- **22 April 2013** Regular meeting of the working group on customers within ECRB ECT SEE, Vienna, Austria, partially funded by ECS;
- **23 24 April 2013** The Sixth Social Forum within the Energy Community, Belgrade, Serbia, partially funded by ECS;
- **23-24 April 2013** Workshop on implementing the Directive 2009/28/EC on RES held in Vienna, Austria;
- **20 to 21 May 2013** 26<sup>th</sup> Meeting of the GPG and Development Plan Workshop Decennial Gas Networks, Vienna, Austria, partly funded by ECS;
- 21 22 May 2013 Participation in the regular 28<sup>th</sup> meeting of the ECRB working group on electricity, and workshop on implementation of the 3<sup>rd</sup> package of the network codes, Vienna, Austria;
- 22 May 2012 Workshop for the Network Codes according to the Third Package of the European Union, Secretariat of the Energy Community, Vienna, Austria, partially funded by ECS;
- **25 May 2013** Seminar on authorizations for construction of new generation capacities, Durres, Albania;

- 26 27 May 2013 Meeting between the Secretariat of Vienna, Norwegian Embassy and Energy Regulator of Albania and Kosovo. Vienna, Austria;
- **03-07 June 2013** Participation in the 24<sup>th</sup> meeting of ECRB and the 18<sup>th</sup> meeting of the Athens Forum, Athens, Greece;
- **11 June 2013** Regular meeting of the Working Group on Licensing / Competition of the Energy Regulators Regional Association (ERRA); Budapest, Hungary;
- **11 June 2013** Regular meeting of the Working Group on Tariffs/Prices of the Energy Regulators Regional Association (ERRA); Budapest, Hungary;
- **11-12 June 2013** Workshop on the energy efficiency within ECT, Vienna, Austria;
- **20 June 2013** Workshop on the III-rd Package of the Energy Legislation of the European Union and its implementation by the signatory countries if the Energy Community Treaty, Vienna, Austria;
- **22-25 September 2013** Training "Recommendations of the Auditory General and addressing them before the preparation of financial statements", Durres, Albania;
- **25-26 September 2013** 27<sup>th</sup> meeting of GPG and the 8<sup>th</sup> Forum on Gas, Ljubljana, Slovenia, partially funded by ECS;
- **30 September 2013** Participation in the 29<sup>th</sup> meeting of the working group on electricity, Vienna, Austria, partially funded by ECS;
- **01-02 October 2013** Participation in the regular meeting of ECRB ECT SEE, Vienna, Austria, partially funded by ECS;
- **09 October 2013** Joined round table between ECRB, CEER and ERRA organized by ECRB ECT SEE, Vienna, Austria, partially funded by ECS;
- **10 October 2013** Regular meeting of the working group on customers within ECRB ECT SEE, Vienna, Austria, partially funded by ECS;
- **18-26 October 2013** Study visit organized by Fichner GmbH concerning the Feasibility Study on capture and storage of the CO2, Cologne, Germany, funded by WB;
- **20-30 October 2013** Training Program "Alternative Dispute Settlement", Hague, Holland, partially funded by Dutch Government;
- **03-06 November 2013** Participation in regular meetings of EWG, Vienna, Austria, partially funded by ECS;
- **04-05 November 2013** Participation in regular meeting of ECRB EWG and workshop on technical codes, Vienna, Austria, partially funded by ECS;
- **12 -13 November 2013** 28<sup>th</sup> meeting of GPG within ECRB ECT, Vienna, Austria, partially funded by ECS;
- **12 November 2013** Regular meeting of the working group on customers within ECRB ECT SEE, Vienna, Austria, partially funded by ECS;
- **03 December 2013** Participation in the meeting of the working Group on Electricity, Vienna, Austria, partially funded by ECS;
- **09 11 December 2013 –** Participation in the Working Group on Energy, Vienna, Austria, partially funded by ECS;
- **10- 12 December 2013** Participation in the 26<sup>th</sup> meeting of ECRB, Athens, Greece, partially funded by ECS;
- 10 December 2013 7<sup>th</sup> Workshop concerning the Energy Statistics: Statistics Quality, Vienna, Austria, partially funded by ECS;
- **11 December 2013** 26<sup>th</sup> meeting of ECRB, Athens, Greece, partially funded by ECS.

# **1.9.** Documents approved by the Board of ERO

During 2013 the Board of ERO held 11 public sessions where, following the review of documents prepared by the professional services of ERO, issued a considerable number of Decisions approving:

- Maximum Allowable Revenue (MAR) of the licensed operator TPP Kosovo A and TPP Kosovo B (Regulated Generators), collected through charges for provision of electricity and capacity to the Public Supplier for a 4-year regulatory period starting from 1 April 2013 to 31 March 2016.
- Maximum Allowable Revenue (MAR) of the licensed operator of the Distribution System Operator (DSO), collected through charges for use of the distribution system for a 5-year regulatory period starting from 1 April 2013 until 31 March 2017.
- Maximum Allowable Revenue (MAR) of the licensed operator of the Transmission System and Market Operator (KOSTT JSC), collected through tariffs and charges for a 5-year regulatory period starting from 1 April 2013 until 31 March 2017.
- Maximum Allowable Revenue (MAR) of the licensed operator for Public Supply, collected through retail tariffs of electricity to regulated customers, to be applied for the relevant (tariff) year in a period of 12 months starting from 1 April 2013 to 31 March 2014.
- Transfer (Alienation) of assets from KEK JSC Supply Division at KEDS JSC Supply Division.
- Transfer (Alienation) of assets from KEK JSC Distribution Division to KEDS JSC Distribution Division.
- District heating tariffs for the District Heating (DH) Termokos JSC for the heating season 2013/2014.
- District heating tariffs for the District Heating (DH) Gjakova JSC for the heating season 2013/2014.
- Change in control of the Licensee for Distribution System Operation granted to "Kosovo Electricity Distribution and Supply Company" KEDS JSC.
- KEDS pilot project for meter reading and billing through hand held equipment in the District of Ferizaj, starting from 1 January 2014.

Documents drafted by the licensees and reviewed and approved by the Board of ERO:

- Transmission Development Plan 2013 2022;
- Kosovo Electricity Market Design;
- Distribution Use of System Charges Methodology;
- Transmission Network Use of System (TNUOS) Charges Methodology;
- System Operator Charges Methodology ;
- Market Operator Charges Methodology;
- District Heating Termokos JSC Distribution Code;
- Transmission Connection Charging Methodology;
- Distribution System Security and Planning Standards;
- Market Rules;
- Grid Code TSO;
- Metering Code TSO;



Besides the above mentioned documents, the Board of ERO during 2013 approved decisions on authorizations for the construction of new generation capacity and decisions on issuance / modification of licenses (their registers are presented in Chapter 2 of this report). The Board of ERO has also issued decisions relating to customer and licensees complaints (described in Chapter 9).

# **1.10.** Participation of ERO Representatives in the Technical Group on Energy Dialogue between the Republic of Kosovo and the Republic of Serbia

As an important activity of ERO during 2013 is noted the participation of ERO representative in the work of the Technical Group on Energy, established to support the Dialogue between the Republic of Kosovo and the Republic of Serbia on Energy Issues. Technical dialogue meetings were held in Brussels starting from May to November 2013. These meetings established a relevant basis to ensure that the interests of Kosovo's electricity sector will be handled appropriately within the scope of talks with Serbia.

As a result of the meetings, which provided a technical platform was achieved the signing of an Energy Agreement between the Republic of Kosovo and the Republic of Serbia.

Benefits of the energy sector agreement reached with Serbia relating to electricity are as follows:

**1.** At the level of transmission: Transmission Operator of Serbia (EMS) has committed to recognize KOSTT as the sole operator of the transmission in the entire territory of the Republic of Kosovo, and this recognition will be realized after the signing of the relevant Agreement in accordance with ENTSO-E (European Network of Transmission System Operators for Electricity). Based on this agreement EMS will also support the membership of KOSTT in ENTSO-E, and will not create obstacles as it has happened so far.

KOSTT, by taking under its control one aspect of the operation of the substation Vallaqi (110/35kV) in the north of Kosovo (which occurred immediately after the signing of the Agreement), has practically been enabled to establish its control over the entire transmission system, including the dispatch control of HPP Ujmani, and exchanges in the 110 line from Novi Pazar. KOSTT remains in charge as the owner of SS Vallaq.

**2.** At the level of distribution and supply: In order solve the illegal action in the north, in accordance with the agreement; discussions will start between KEDS and supply services enterprise which may be established in the meantime. These services can be contracted by KEDS (reading, billing, collection, etc.). Outsourcing of some services may be made only on the basis of Kosovo legislation and regulations approved by the ERO.

KEDS remains in charge and owner of the assets in the north. The enterprise in question can supply electricity to eligible customers in an open market when the market liberalization commences, however, it must be equipped with a connection agreement from KOSTT and KEDS as well as with a license by ERO.

**3.** Cooperation at the level of Regulatory Authorities: Parties agreed to cooperate in the creation of regulatory frameworks in line with the Treaty Establishing the Energy Community, and can recognize each other's licenses in electricity trading.

Following the signing, in addition to those provisions that were addressed in the agreement that obliges the parties for immediate action such as: signing of Interconnection Agreement, requests from the past addressed to KOSTT and EMS and others, implementing groups have been established to prepare the Implementation Plan and thereafter the Action Plan. These two plans are expected to be completed during the first quarter of 2014.

**4. Benefits Expected from this Agreement** (and other agreements to be concluded in early 2014) that will have positive effects on tariffs are the following:



- Kosovo (respectively KOSTT) can collect revenue from the transit energy, since upon the signing of the agreement KOSTT becomes part of the mechanism for cooperation between operators at European level.
- KOSTT can collect revenue from division of transmission capacity on the interconnection lines with neighbouring countries in case of congestions.
- Reduction of electricity import cost by 19% of the VAT value, as Serbia charged with VAT commercial enterprises that have exported to Kosovo.

Relating to the previous period parties have also committed to, on the basis of applicable mechanisms principles and practices, find solutions for mutual requests on transit and division of transmission capacity in the interconnection lines. If they will not be able to find a mutual satisfactory agreement, then the international arbitration shall be involved.



# **2** FINANCIAL REPORT

ERO is financed from own-source revenues, in line with the Law on Energy Regulator, Chapter 4, respectively from fees collected by licensed enterprises and operators of the energy sector.

# 2.1 Revenues

All revenues collected by ERO were deposited in the official bank account established by the Director General of the Treasury, in line with Article 64 of the Law on Public Financial Management and Accountability.

In 2012, 2013 generated 683,073.28€ revenues. Based on the Law on the Budget of the Republic of Kosovo for 2013, the amount of unspent revenues in 2012 in the value of 55,333.25 € were carried forward to 2013 budget. The total amount of generated and carried forward revenues for 2013 is therefore 738,406.53€, respectively 53,950.53€ more than the budget of ERO for 2013.

Tab. 2.1 Revenues

Description	Revenues (€)
Own source revenues 2012	683,073.28
Own source revenues carried forward form 2011	55,333.25
Total revenues	738,406.53

Based on Article 22 of the Law on Energy Regulator No. 03/L-185, determining the types of fees, ERO collects fees on:

- Initial and annual licensing fee;
- License modification and amending, and application for licenses;
- Fee on issuance of the certificate of origin;
- Administrative dispute resolution fee.

Since ERO collected sufficient revenue from the initial and annual fee, and in order not to charge the licensees and customers with additional obligations, in 2013, from these four types of fees ERO applied and collected only the initial and annual licensing fee, in a total amount of 683,073.28€.

The following tables show the amount of annual fees collected by ERO in 2013, from each licensed company separately.

Tab.	2.2	Revenues	collected	from	the	annual	fee,	by	licensed	companie	es.
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Name of the licensee	Amount (€)
KEK-Electricity Generation-Kosova A	191,220.29
KEK- Electricity Generation -Kosova B	382,619.07
POE Ibër Lepenc HPP Ujmani	12,242.78
Kelkos Energy LLC	3,639.50
KEDS	37,547.84
District Heating "Gjakova"	303.80
Total	627,573.28

The table above presents the Revenues collected from the annual feed, whereas the following table shows the Revenue collected from the initial fee.

Name of the company	Amount (€)
"Air Energy" sh.p.k	5,000
"Danske Kommodities Kosovo" sh.p.k.	5,000
"Edelweiss Energy" sh.p.k.	3,000
"Era Energji" sh.p.k.	5,000
"Hidro Energji" sh.p.k.	6,000
"Hydro-Line" sh.p.k.	12,000
"Matkos Group" sh.p.k.	6,000
"MCM Commodities" sh.p.k.	2,000
"Upwind International I GmbH"	5,000
"Upwind International II GmbH"	5,000
N.T.SH. "Rimed"	1,500
Total	55,500

Tab. 2.3 Revenues collected from the initial fee (review of applications)

In order to reconcile the Revenues with the Budged, the Board of ERO, at its meeting held on 28 June 2013 made a decision that, during the period of November 2012 – April 2013, the licensees shall be exempt from paying the annual fee as it is provided in the Rule on Taxes.

# 2.2 Budget

Through the Law No.04/L-079 - on the Budget of the Republic of Kosovo for 2013, Kosovo Assembly has approved the ERO budget in the amount of 684,456 €, which as entirely allocated as government grant, even though by the Law on Energy Regulator, ERO is financed from its own source revenues and only when these revenues are insufficient, then ERO may use allocations in the form of a government grant. ERO budget, by economic categories, is as follows:

Description	Budget (€)
Wages and salaries	372,456
Goods and services	240,000
Utilities	22,000
Capital expenditures	50,000
Total	684,456

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ERO budget request for 2013, sent to the Assembly Committee on Budget and Finances, approved in advance by the Ministry of Finance, was in the amount of 767,656. However, the Assembly Committee reduced the budget for an amount of 83,200, seriously hampering a normal functioning of the Energy Regulatory Office. In addition, through a Government Decision No. 12/158, dated 29.11.2013, the budget allocated for the category "salaries and wages" was further reduced for an amount of 19,041 $\in$ .

Description	Budget (€)
Wages and salaries	353,415
Goods and services	240,000
Utilities	22,000
Capital expenditures	50,000
Total	665,415

Tab.	2.5	Allocated	budaet
		,	Suuget

Based on the data presented in the following table, it can be seen that since 2010, ERO budget was reduced drastically. Expressed in percentage, compared with the 2010 budget, ERO budget for 2011, 2012 and 2013, was reduced for around 30%.

Tab. 2.6 Budget in 2013 compared with the budget of three previous years

Description	Budget 2010	Budget 2011	Budget 2012
	(€)	(€)	(€)
Wages and salaries	397,134	372,456	372,456
Goods and services	299,454	250,000	250,000
Utilities	12,000	12,000	12,000
Capital expenditures	230,400	41,000	44,000
Total	938,988	675,456	678,456

# 2.3 Budgetary expenditures

To finance the activities conducted during 2013, ERO spent 587,519.94€.

By economic categories, ERO expenditures are as follows:

Description	Amount (€)
Wages and salaries	351,829.91
Goods and services	194,068.38
Utilities	18,625.57
Capital expenditures	22,996.08
Total	587,519.94

Budget expenditure rate compared to the approved budget for fiscal year 2013 is 85.84%.

The degree of budget expenditure by economic category, expressed in percentage, is shown in Table 2.8.

Tab. 2.	8 Budget	expenditure	expressed	in	percentage
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Description	Budget (€)	Expenditure (€)	Difference (€)	Performance in %
Wages and salaries	372,456.00	351,829.91	20,626.09	94.46%
Goods and services	240,000.00	194,068.38	45,931.62	80.86%
Utilities	22,000.00	18,625.57	3,374.43	84.66%
Capital expenditures	50,000.00	22,996.08	27,003.92	45.99%
Total	684,456.00	587,519.94	96,936.06	85.84%





Fig. 2.1 Budget/expenditures in 2013

The following tables reflect the expenditures by economic codes.

Tab.2.9 Salaries and wages

WAGES AND SALARIES	Amount (€)
Net wages	293,607.99
Personal income tax	24,714.30
Employer's pension contribution	16,753.81
Employees' pension contribution	16,753.81
Total	351,829.91

These expenditure categories consumed a total of 351,829.91€ and this entire amount was spent on regular salaries of the ERO staff, since ERO does not pay other per diems, except for official travelling abroad, that are paid from goods and services.

Goods and services	Amount (€)
Business travel expenses abroad	18,433.96
Per diem for business travel abroad	20,791.33
Accommodation for business travel abroad	12,704.13
Other business travel expenses abroad	3,081.33
Internet expenses	3,663.24
Mobile telephones expenses	10,044.51
Postal expenses	188.76
Education and training services	2,991.00
Different intellectual and advisory services	5,077.60
Printing services	2,372.50
Technical services	134.62
Membership expenses	2,500.00
Furniture	1,850.00
Other equipment	880.27
Office supplies	8,647.97
Beverages	4,670.66
Generator fuel	132.05
Fuel for vehicles	4,623.09
Registration of vehicles	420.00
Vehicleinsurance	3,968.79
Municipal fee for vehicle registration	40.00
Security of premises	10,225.85
Maintenance and repair of vehicles	2,522.39
Maintenance of premises	9,369.33
Maintenance of information technology	1,732.60
Maintenance of furniture and equipment	336.40
Rent	49,140.00
Advertisements and competitions	3,480.00
Official lunches	5,186.00
Payment on tax on rent	4,860.00
Total	194,068.38

Tab. 2.10	Goods and	d services
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As it can be seen in table 2.10, the amount of expenditures for this expenditure category is 194,068.38€. Budgetary expenses based on activities as follows:

•	Travelling expenditures	55,010.75€
•	Telecommunication expenditures	13,896.51€
•	Service expenditures	13,075.72€
•	Furniture and equipment purchases	2,730.27€
•	Other goods and services purchase	13,318.63€
•	Fuels	4,755.14€
•	Registration and insurance services	14,654.64€
•	Maintenance	13,960.72€
•	Rent	54,000.00€
•	Marketing expenditures	3,480.00€
•	Representation expenditures	5,186.00€



For official travelling abroad were spent from the ERO budget 55,010.75€, of which travel expenses 18,433.96 €, 20,791.33 € per diem, accommodation 12,704.13€ and other travelling expenses (visa, health insurance, etc.) 3,081.33 €.

In addition to this amount spent from the ERO budget for these purposes, regarding the meetings held within the working groups of the SEE Energy Community, participants of ERO were reimbursed from this Secretariat for the travel and accommodation expenses in a total amount of 11,286.47 €.

As part of the delegation for the technical negotiations on energy, in the dialogue between the Republic of Kosovo and the Republic of Serbia, members of the Board have conducted 11 trips to Brussels and Vienna. For those trips 21,362.51€ were spent from the ERO budget.

# 2.3.1 Utilities

Utilities in 2013 reach the amount of 18,625.57€. Compared to the previous year, this expenditure category increased for 83%, as the electricity expenditures for heating increased. ERO at the end of 2012 changed the premises, and in the current facility the central heating system does not operate with fuel (goods and services) as in the previous facility but with electricity (utilities).

Tab. 2.11 Utilities			
Utilities	Amount (€)		
Electricity	16,195.81		
Water	464.75		
Landline telephone expenses	1,965.01		
Total utility expenditures	18,625.57		

#### 2.3.2 Capital expenditures

In this category were spent a total of  $22,996.08 \in$ , respectively 45.99% of planned budget. The reasons for such a low performance is due to the fact that the payment relating to a planned project for purchase of an official vehicle in the amount of  $25,000 \in$  couldn't be made due to a delay of the delivery of the vehicle.

Tab. 2.12.	Capital	expenditure
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Capital expenditures	Amount (€)
Information technology equipment	9,888.08
Computer	13,108.00
Total capital expenditures	22,996.08

#### 2.3.3 Carried forward revenues

According to the data above, it is clear that in 2013, ERO generated 738,406.53€, € revenues, against 587,519.94€ of expenditure. The difference in the amount of 150,886.59€, between the revenues and expenditures represent surplus funds that ERO has collected during this year which, in line with Article 6 of the Law on the Budget of the Republic of Kosovo for 2014 as well as Article 64 of the Law on Management of Public Finances and Accountability, will be carried over to 2014.

Carried forward own-source revenues	Amount (€)
Revenues carried forward from 2012	55,333.25
Revenues collected in 2013	683 <i>,</i> 073.28
Total revenues 2013	738,406.53
Expenditures on wages and salaries	-351,829.91
Expenditures on goods and services	-194,068.38
Utilities	-18,625.57
Capital expenditures	-22,996.08
Total expenditures 2013	-587,519.94
Carried forward own-source revenues in	150,886.59

Tab. 2.13 Carried forward own-source revenues

#### 2.3.4 Report of the Office of Auditor Genera on financial statements

During 2013 the Office of the Auditor General (OAG) conducted an audit of the financial statements of ERO for 2012. In the opinion of the OAG, ERO financial statements for 2012, in all material aspects present a fair and true situation (Unqualified Opinion).

Regarding the issues such as: recommendations of the previous year; planning and budget execution, revenues, procurement, cash handling, receivables and debt handling, the OAG has no findings and has not given any recommendations.

However, the OAG for 2013 recommended ERO to make improvements in these four areas:

- Prepare reports on internal controls and the Self-assessment checklists;
- Develop a document that would regulate the maintenance and updating of information on staff;
- Inventorying of assets at the end of the year, according to AI No. 21/2009; and
- Setting the bar codes on all assets and inventory.

So far, ERO has fully addressed the first three recommendations, while setting the bar codes on all assets and inventory is under process.

Report on the actions taken and proposed relating to the findings and recommendations of the Auditor General for the previous year:

No.	Recommendation or finding	Action taken or proposed	Impleme ntation time	Effect
1	ERO will prepare internal controls and the self-assessment checklists to evaluate the effectivity of the financial and control management system	Self-assessment reports for 2013 have been prepared	Decembe 2013	Increased effectivity of the financial management system
2	Management will draft a document that will regulate the maintenance of files and update information on staff.	Document drafted	January 2014	Accurate information on ERO staff. Maintenance of files and update of staff fluctuations.
3	To make the inventorying of assets according to Al No. 21/2009, in order to confirm the status of all assets on the day of inventorying	Commission completed the task in accordance with Administrative Instruction AI No. 21/2009	January 2014	Accurate information on assets owned by ERO.
4	To place bar codes on all assets and inventory	Under process		

Tah	2 14	Recommend	ations of	the Auditor	General
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#### **3** LICENSING AND AUTHORIZATION FOR CONSTRUCTION OF NEW CAPACITIES

#### 3.1 LICENCES

Activities in the energy sector such as: generation, distribution, transmission, supply, import/export of electricity, production, distribution and supply with district heating, foreseen by the applicable legislation, may be conducted in Kosovo, only if the enterprise is equipped with a licence issued by ERO. Licensing these activities is done in compliance with the Law on Energy Regulator (Law No. 03/L-185), Article 27, paragraph 2, and based on the Rule on Licensing Energy Activities in Kosovo, Article 4, paragraph 1.

The applicable law allows the enterprises that perform the following activities to not have a licence:

- Generation of electricity with capacity below 5 MW;
- Production of heat for self-consumption with capacity below 1 MW;
- Generation of electricity for self-consumption if generation plant or customer is not connected to the transmission or distribution system; and
- Deposits of natural gas if total deposit capacities do not exceed ten thousand cubic meters.

Below have been presented the activities on which enterprises filed their applications with ERO for licensing purposes, which, following fulfilment of conditions, have been licensed and operate in Kosovo:

- Generation of electricity;
- Transmission system operator;
- Electricity distribution system operator;
- Market operator;
- Public electricity supplier;
- Import and export of electricity;
- District heating production
- District heating distribution;
- District heating public supply.

Also, during 2013, licensed enterprises related to abovementioned activities continued operation pursuant to licenses issued by ERO.

**Licences issued during 2013** – During 2013 ERO did not receive applications for licensing any other activity in the energy sector, apart from applications for licenses for import and export of electricity.

Enterprise, which following fulfilment of conditions required by the law have been provided with licenses to import and export the electricity are "Danske Commodities Kosovo" LLC and "MCM COMMODITIES" LLC.

No.	Name of licensed enterprise	Description of licensed activity	Licence No.	Address, Headquarters of the Licensee	Validity of License
1	"Danske Commodities Kosovo" SH.P.K	Electricity Import and Export	ZRRE/Li_39 /13	Q.Pejton Str."M.Ulqinaku", No.5, Ap 4, Prishtina, Republic of Kosovo	22.04.2013 to 22.04.2018
2	"MCM COMMODITIES" SH.P.K	Electricity Import and Export	ZRRE/Li_40 /13	Mother Theresa, 10000 Prishtina, Republic of Kosovo	02.05.2013 to 02.05.2018

#### Tab. 3.1 Licenses issued by Energy Regulatory Office during 2013



# **3.1.1** Transfer of licences

Licences issued by ERO are in use until the end of the validity period allowed for carrying out relevant activities that have been licensed to. However, if an energy company licensed by ERO asks to transfer its licence to another legal entity, ERO has the authority and responsibility to assess whether the conditions for such a transfer have been met, and if new entity meets the conditions and applicable legal requirements, then it will allow such a transfer.

**Transfer of licences of KEK JSC** - in accordance with Article 38 of the Rule on Licensing of Energy Activities in Kosovo, the company licensed to supply and distribute electricity in Kosovo (KEK JSC), at the end of 2012, has applied to transfer the licences to a new legal entity for both these activities. Such a process came as a result of the Decision no. 04/36 rendered by Government of Kosovo on legal unbundling of KEK JSC, a process that is in accordance with the Energy Strategy of Kosovo (ESK) for 2009-2018 and Decision no. 03/38 rendered by Government of Kosovo for privatization through the sale of KEDS shares. This process aims to improve system stability, increase competition, and attract private capital and to meet requirements of regional energy reforms in accordance with EU Directives and ECT.

Following application of KEK to transfer licences, ERO has received also the KEDS application (in 2013) for recognition of the transfer from KEK for both these activities (public supply and distribution of electricity). ERO has analyzed KEK JSC application for transfer of licences, as well as documents attached to the application of KEDS for recognition of the transfer and ERO Board has approved the transfer of these licences. In more details the data on transferred licenses have been presented below:

No.	Name of licensed enterprise	Description of licensed activity	Licence No.	Address, Headquarters of the Licensee	Validity of License	Transferred
1	KOSOVO ENERGY CORPORATION JSC (KEK JSC) - Supply Division	Supply of Electricity	ZRRE/Li_07/12	Mother Theresa, 10000 Prishtina, Republic of Kosovo	04.10.2006 to 01.03.2013	from KEK JSC
	Kosovo Electricity Distribution and Supply (MADFE) Company - Supply Division	Supply of Electricity	ZRRE/Li/Tr_07/12	Mother Theresa, 10000 Prishtina, Republic of Kosovo	01.03.2013 to 04.10.2036	to MADFE JSC
2	KOSOVO ENERGY CORPORATION JSC (KEK JSC) - Distribution Division	Distribution of Electricity	ZRRE/Li_06/12	Mother Theresa, 10000 Prishtina, Republic of Kosovo	04.10.2006 to 01.03.2013	from KEK JSC
	Kosovo Electricity Distribution and Supply (MADFE) Company - Distribution Division	Distribution of Electricity	ZRRE/Li/Tr_06/12	Mother Theresa, 10000 Prishtina, Republic of Kosovo	01.03.2013 to 04.10.2036	to MADFE JSC

Tab. 3.2 License transferred by Energy Regulatory Office during 2013

Duration of validity and conditions of licences remain the same (04.10.2006 to 10.04.2036), and from the moment of transfer of licences, the licensee is obliged to immediately notify the ERO on any eventual changes or amendments to the documents or other data, delivered during the period of application for licence. The transfer of licences was made on 01.03.2013.

**Change in control of the licensee** - Another important activity, monitored by ERO, relates to changes in control of the licensee for public supply and distribution of electricity provided to "Kosovo Electricity Distribution and Supply" JSC. This process has started since 2008, as the Government of Kosovo had ordered the legal unbundling of KEK JSC and establishment of a new legal entity which has been closed during 2013. The Kosovo Government began the KEDS privatization process through



the sale of shares. In this regard, during 2013 KEDS filed an application with ERO requesting for change in control, from KEDS to "Limak Kosovo Calik Energy" JSC. The Board of ERO, following analysis made to the KEDS's request and other documents of the company "Calik Limak Kosovo Energy" JSC, has approved the changes in control.

**Alienation of assets from KEK JSC to KEDS JSC -** Transfer (alienation) of assets from KEK JSC - (Supply Division and Distribution Division) to KEDS JSC has been done simultaneously with the transfer of licences to these two activities. After the request filed by KEK JSC on alienation of assets, ERO in accordance with Section 14 of the Law on Energy Regulator, has approved the request - transfer of assets.

# 3.1.2 Extension of licenses

Each company licensed by ERO, depending on the activity, few months prior to expiry of the licence, is entitled to submit a written request for extension of the term of the license. ERO grants the extension of validity of the license for another relevant period of time to all those enterprises that meet the licence conditions and obligations under applicable laws, as well as whether the company has submitted a written request within the legal time limit.

Since in October 2013, validity of the licence of the enterprise for electricity generation (KEK JSC – TPP Kosovo A) would expire, the enterprise, in a timely manner filed the request for extension of its validity, requesting ERO for the licence become valid effective from 4<sup>th</sup> October 2013 to 4<sup>th</sup> October 2020. ERO has taken into consideration the request filed by the licensee, TPP Kosovo A KEK JSC, and extended the validity of the licence until October 4<sup>th</sup>, 2014.

ERO Board has not permitted, as requested, the extension of the term of the licence subject to this matter, until 4<sup>th</sup> October 2020 because, Article 12 of the Licence for electricity generation requires that the enterprise serves to the ERO a copy of "Integrated Environmental Permit". TPP Kosovo A on 21.06.2013 filed an application with the Ministry of Environment and Spatial Planning (MESP) for "Integrated Environmental Permit", and MESP in its Notice dated 25.06.2013 has given the following response: "MESP has received an application for an Integrated Environmental Permit and is considering the case on the basis of the Law on Integrated Prevention and Control of Pollution (Law no. 03/L-043), which Article 11 of the Law stipulates that all existing plants, in this case KEK shall comply with the requirements set forth by the provisions of this law no later than 31 December 2017, taking into account the proposed Compliance Scheduled Plan for that installation. Given the fact that implementation of the provisions deriving by the aforementioned law require a thorough analysis of the technical condition of the installations of KEK, which represent a large industrial complex but also with a considerable seniority, then there will be required a close cooperation with KEK in order to properly plan for the period of eligibility to meet the standards set by environmental legislation. Since a decision was made that PP A should be decommissioned (shut down) effective from 2017, then the proposed Compliance Scheduled Plan for the plant must be realized much earlier than 2017. After reviewing the report and fulfilment of the conditions set forth in Article 9 of the aforementioned Law MESP will issue Decision on Integrated Environmental Permit".

Due to abovementioned reasons, the licensee during 2013 did not ensure the "Integrated Environmental Permit".

In the table below have been presented data of the enterprise whose validity of licences has been extended:



No.	Name of licensed enterprise	Description of licensed activity	Licence No.	Address, Headquarters of the Licensee	Validity of License
1	KOSOVO ENERGY CORPORATION JSC (KEK JSC) - TPP Kosova A	Generation of Electricity	ZRRE/Li_05 /12_A	Mother Theresa, 10000 Prishtina, Republic of Kosovo	04.10.2013 to 04.10.2014

Tab. 3.3 Licences extended by the Energy Regulatory Office during 2013

# 3.1.3 Modification of licences

Compared with 2012, when ERO has modified almost all licences as a result of changes to primary legislation in the energy sector, during 2013 ERO modified only the licences of one enterprise (two divisions) for electricity generation, as follows:

- Kosovo Energy Corporation (KEK JSC), Generation Division "TPP Kosova A", with licence no. of ERO/Li\_05/12\_A.
- Kosovo Energy Corporation (KEK JSC), Generation Division "TPP Kosova B", with licence no. of ERO/Li\_05/12\_B.

Modification of these licences has come as a result of privatization of public enterprise licensed for public electricity supply and is related to the right of KEK generation for import of electricity.

In fact, based on Article 38 of the Law on Electricity, apart from the public supplier, also a public enterprise must also have the right to import and export of electricity. In this regard, ERO has determined that this right shall be granted to the licensee for electricity generation, allowing it to import electricity needed to meet the needs of illegible customers, during the periods when domestic production is insufficient and in the absence of such imports, customers will be subject to disconnections.

Notwithstanding this, the import and export of electricity can be performed by all licensees who have the right allowed by their respective licences.

**Derogation of certain provisions of licences** – being unable to implement certain provisions of the applicable licenses and codes of licensees, some licensees have requested from ERO derogation relating to fulfilment of certain provisions for a certain period of time. Taking into consideration the circumstances, ERO permitted or dismissed requested derogations. All derogations are published on the website of the ERO.

# **3.2** Authorization – Construction of new capacities

During this year ERO has continued to review and evaluate applications for authorization for the construction of new generation capacities from Renewable Energy Sources (RES). Such applications were reviewed within the time limits specified in the Rule on Authorization procedure for construction of new capacity and ERO issued preliminary authorizations and final authorization for construction.

#### 3.2.1 Issuance of preliminary authorization

ERO has reviewed the applications received for obtaining preliminary authorization for construction of new generating capacity and ensured that such applications are reviewed in an objective, transparent and non-discriminatory manner. In reviewing these applications, ERO has taken into account objective and relevant criteria that must be ensured by the applicant under Rule for authorization.



For applicants that have met the requirements and criteria set forth in the procedure for rendering a decision on a notification for preliminary authorization, the Board of ERO issued fourteen (14) preliminary authorizations, see table 3.4 below.

No.	Name of enterprise	Description of activity	Installed capacity	Location	Date of issuance of Decision
1	N.T.SH. "RIMED"	Construction of generator for generation of electricity from WATER	3.1 MW	Bistrica e Pejës River, HPP Kuqishtë, MA Peja, Republic of Kosovo	V_497_2013 23 January 2013
2	Upwind International I GmbH, Branch in Kosovo	Construction of generator for generation of electricity from WIND	30 MW	Wind Park Zatriç, MA Rahovec, Republic of Kosovo	V_405_2013 01 March 2013
3	"Edelweiss Energy" L.L.C.	Construction of generator for generation of electricity from WATER	6.5 MW	Drini i Bardhë River (HPP Ura e Shenjtë), MA Gjakova, Republic of Kosovo	V_535_2013 02 May 2013
4	Upwind International II GmbH, Branch in Kosovo	Construction of generator for generation of electricity from WIND	30 MW	WindPark - "Budakova", MA Suhareka/Shtërpce, Republic of Kosovo	V_542_2013 28 June 2013
5	"Matkos Group" L.L.C.	Construction of generator for generation of electricity from WATER	9.1 MW	Lepenc River, HPP Sharri 5.5 MW and HPP Brezovica 3.6 MW, MA Shtërpce, Republic of Kosovo	V_540_2013 28 June 2013
6	"Matkos Group" L.L.C.	Construction of generator for generation of electricity from WATER	7.07 MW	Lumi Lepenc, HPP Shtërpce 2.47 MW, HPP Bitinja 2.1 MW dhe HPP Vica 2.5 MW, MA Shtërpce, Republic of Kosovo	V_541_2013 28 June 2013
7	"Hidro- Line" L.L.C.	Construction of generator for generation of electricity from WATER	6.8 MW	Bistrica River, HPP Albaniku 1(Vllaiu), MA Mitrovica, Republic of Kosovo	V_536_2013 28 June 2013
8	"Hidro- Line" L.L.C.	Construction of generator for generation of electricity from WATER	9.85 MW	Bistrica River, HPP Albaniku 2 (Batahir), MA Mitrovica, Republic of Kosovo	V_537_2013 28 June 2013
9	"Hidro- Line" L.L.C.	Construction of generator for generation of electricity from WATER	9.9 MW	Bistrica River, HPP Albaniku 3(Delac), MA Mitrovica, Republic of Kosovo	V_538_2013 28 June 2013
10	"Hidro- Line" L.L.C.	Construction of generator for generation of electricity from WATER	6.2 MW	Bistrica River, HPP Albaniku 4(Delac), MA Mitrovica, Republic of Kosovo	V_539_2013 28 June 2013
11	"Era Energji" L.L.C.	Construction of generator for generation of electricity from WIND	21 MW	Wind Generators Park, MA Drenas, Republic of Kosovo	V_559_2013 06 September 2013
12	"Hidroenergji" L.L.C.	Construction of generator for generation of electricity from WATER	9.98 MW	Lepenc River, HPP Lepenci 1 (Uji i Thartë), MA Hani i Elezit, Republic of Kosovo	V_557_2013 06 September 2013
13	"Hidroenergji" L.L.C.	Construction of generator for generation of electricity from WATER	8.5 MW	Lepenc River, HPP Lepenci 3 (Sllatinë), MA Kaçanik, Republic of Kosovo	V_558_2013 06 September 2013
14	"Air-Energy" L.L.C.	Construction of generator for generation of electricity from WIND	32.5 MW	WINDPARK "KITKA", village Poliqkë, MA Kamenica, Republic of Kosovo	V_604_2013 27 December 2013

Tab. 3.4 E	nterprises	granted wit	n Notificatior	n on Preliminary	Authorization



Decisions on Notification for Preliminary Authorization have determined that the applicants have demonstrated their eligibility for the construction of new generation facilities, but they have not yet met other relevant requirements, whereas it is also determined that holders of the preliminary authorization shall not continue building new generating plants before they meet all conditions and requirements set by legislation. Decisions oblige that within two (2) years from the issuance of a preliminary authorization, applicants shall file a written request seeking to be granted with a Final Authorization for construction.

Compared with 2012, when ERO has issued only four (4) preliminary authorizations, in 2013, we have a significant increase of the number of applicants as well as the planned generation capacity to be constructed, which is about 190.49 MW, from water and wind sources.

# 3.2.2 Issuance of final authorization

ERO continued to review applications for obtaining final authorization and received applications along with complete documentation for the conversion of decision on notification for preliminary authorization into final authorization.

Below are shown the enterprises to which were issued a Final Authorization for Construction of New Generation Capacities (see table 3.5 below).

No.	Name of enterprise	Description of activity	Installed capacity	Location	Date of issuance of Final Authorization
1	"Kelkos – Energy" L.L.C.	Construction of generator for generation of electricity from WATER	5.5 MW	Deçan River, HPP Lumëbardhi II, MA Deçan, Republic of Kosovo	V_568_2013 24 October 2013
2	"Euro-Kos JH & Loreto Consult AG"	Construction of generator for generation of electricity from WATER	6.17 MW	Brod dhe Restelica River, HPP Brod II, 3.89 MW and HPP Restelica I & II. 2.28 MW, MA Dragash, Republic of Kosovo	V_572_2013 24 October 2013
3	"Hidro- Line" L.L.C.	Construction of generator for generation of electricity from WATER	4.267 MW	Bistrica River, HPP Albaniku 3(Selac), MA Mitrovica, Republic of Kosovo	V_569_2013 24 October 2013

#### Tab. 3.5 Enterprise granted with Final Authorization

Compared to 2012, when ERO issued only one final authorization that is under the process of construction in the Deçan River (HPP Belaja and HPP Deçan) with a total capacity of 17.6 MW, during this year have been issued three (3) final authorizations for construction with a total capacity of 15.93 MW, expected to be completed within a two years period, in accordance with the Authorization terms.

# **3.2.3** Termination of final authorization

ERO has reviewed also the decisions on termination of preliminary authorization, as a consequence of incomplete documentation. Below are presented the enterprises to whom was terminated the preliminary authorization (see the table 3.6 below).

No.	Name of enterprise	Description of activity	Installed capacity	Location	Date of issuance of Decision
1	"KelKos-Energy" SH.P.K.	Construction of generator for generation of electricity from WATER	57.8 MW	Peja River, HPP Kuqishta 4.7 MW, HPP Drelaj I. 4.3 MW, HPP Drelaj II. 5.4 MW, HPP Shtupeq 11.6 MW dhe EGU Rugova 31.8 MW, MA Peja, Republic of Kosovo	V_543_2013 28 June 2013

Tab. 3.6 Enterprise to whom was terminated the preliminary authorization



Termination of the term of validity of the preliminary authorization was due to the request of the enterprise in question, where they explained that the reasons for withdrawal were the changes made to the original project, and the enterprise is preparing a new application in order to apply to ERO, in accordance with the procedures for authorization. The Board of ERO, in accordance with legal procedures in force has issued an order to terminate the preliminary authorization.

# 3.2.4 Rejection to issue preliminary authorization

ERO reviewed applications the preliminary authorization of which was rejected due to incomplete documentation and due to lack of relevant evidences. Below are shown the enterprises to whom was rejected the issuance of preliminary authorization (see table 3.7 below).

No.	Name of enterprise	Description of activity	Installed capacity	Location	Date of issuance of Decision
1	Triangle General Contractors INC Branch Kosova	Construction of generator for generation of electricity from WATER	5.2 MW	Lepenc River, (HPP Lepenc & Shtërpce), MA Shtërpce, Republic of Kosovo	V_566_2013 24 October 2013
2	Triangle General Contractors INC Branch Kosova	Construction of generator for generation of electricity from WATER	2.2 MW	Lumbardhë i Prizrenit River (HPP Reçan), MA Prizren, Republic of Kosovo	V_567_2013 24 October 2013
3	Triangle General Contractors INC Branch Kosova	Construction of generator for generation of electricity from WATER	3.6 MW	Lepenc River (HPP Shtërpce), MA Shtërpce, Republic of Kosovo	V_565_2013 24 October 2013
4	"Matkos Group" L.L.C.	Construction of generator for generation of electricity from WATER	2.5 MW	Lepenc River, HPP Brod 2.5 MW, MA Shtërpce, Republic of Kosovo	V_571_2013 24 October 2013

Tab. 3.7 Enterprises to whom was rejected issuance of preliminary authorization

Rejection to issue a preliminary authorization to the Triangle General Contractors Inc., Branch Kosovo, was due to the request of the enterprise in question, where they asked for withdrawal of applications, since the enterprise could not provide within the legal deadlines relevant evidence for completion of the applications. In the absence of complete evidences, the Board of ERO approved the request for withdrawal of applications for preliminary authorization.

Also for the Matkos Group LLC, the Board of Board rejected granting of preliminary authorization, since the enterprise in question failed to complete the application by not providing evidence on the use of water.

# 3.2.5 Applications under review by ERO

Also this year ERO continued reviewing applications for issuance of authorization for construction of new generation capacities, currently at the stage of completing the applications. Below is presented the list of applicants under review. (see table 3.8).

#### ANNUAL REPORT 2013

No.	Name of enterprise	Description of activity	Installed capacity	Location	Date of application
1	"Kelkos Energy PEJA" L.L.C.	Construction of generator for generation of electricity from WATER	60.4 MW	PejaRiver (HPP Kuqishta I & II 4.5 MW, HPP Drelaj I 4.6 MW, HPP Drelaj II., 4.4 MW, HPP Shtupeq 6.5 MW, EGU Rugiva 40.5 MW, MA Pejë, Republic of Kosovo	24 June 2013
2	Upwind International AG , Dega në Kosovë	Construction of generator for generation of electricity from WIND	51 MW	WIND PARK "ÇIÇAVICA" MA Vushtrri/Drenas/Skenderaj & Obiliq, Republic of Kosovo	27 August 2013
3	Led Light Tehnology Kosova L.L.C.	Construction of Photovoltaics Panels	102 kW	Gjurgjevik/Malishevë, MA Klina, Republic of Kosovo	11 November 2013

Tab. 3.8 Enterprises under the process of review to be granted with a decision on preliminary authorization

ERO will continue to review and assess applications for authorization for construction of new generation capacities, while complying with all legal procedures and criteria on fulfilment of indicative targets set out by the applicable instructions.

# 3.2.6 Renewable Energy Sources (RES)

Through the Decision No. D/2012/04/MC-EnC of the Ministerial Council of the Energy Community of South East Europe (SEE EC), to Kosovo was set the mandatory target for RES by 2020. Based on this obligation, 25 % of final energy consumption shall be from RES.

To meet this obligation, the Government of Kosovo on 31.01.2013 has issued the Administrative Instruction no. 01/2013 by which it defined the annual and long-term RES Energy targets. This Instruction replaces the Administrative Instruction No. 06/2007 on indicative targets for the generation of electrical and thermal energy from RES.

In order to achieve the targets for generation of electricity from RES, set forth by the Instructions mentioned above, and in accordance with the legal mandate given by the energy legislation in force, ERO has issued: the Rule on the support of electricity for which a Certificate of Origin bas been issued and procedures for admission to the support scheme and the Rule for the establishment of a system of certificates of origin for electricity produced from renewable sources, from waste and co-generation in combination with heat in a single generating unit.



Fig. 5.1 Images of Wind Power generation Golesh



These rules aim to support the generation of electricity from RES, and fulfil the obligations mentioned above.

The Board of ERO through the Decision V-359-2011 has defined the feed-in tariffs for the generation of electricity from RES. According to this decision the electricity produced from water (hydro power plants < 10MW has the price of  $63.3 \notin$ /MWh, electricity produced from wind has the price of  $85.0 \notin$ /MWh, and from solid biomass has the price of  $71.3 \notin$ /MWh.

For the electricity produced from the sun (photovoltaic panels), by the Administrative Instruction No. 01/2013 it is set out that the target of this energy will be applied from 2014. ERO has developed during 2013 the Feed-in Tariff Methodology for the electricity produced from the sun/photovoltaic, setting out the criteria based on which will be determined the feed-in tariffs for this RES.

As a result of completing the regulatory framework for the electricity produced from RES, ERO during this reporting year also continued to review and evaluate applications for authorizations for construction of new generation capacities, mentioned in item 3.5 of this Report.



# 4 MONITORING OF ENERGY ENTERPRISES

ERO, in line with the Law on Energy Regulator, Law on Electricity and secondary legislation carries out the monitoring of all enterprises licensed for energy activities.

# 4.1 Monitoring based on Energy Sector Reporting Manual

One of the methods ERO applies in monitoring the activities of the licensees is applied in line with the document titled "Energy Sector Reporting Manual". According to this manual, the enterprises must submit quarterly and annual reports to ERO on their activities. In addition, the enterprises must submit their reports to ERO within the deadlines foreseen in this manual as regards any violation of any article or provision of the license. For some of the license articles having a more special importance, that is, the violation of the license conditions which might have a serious impact on the energy sector and customers, the licensed enterprises must immediately notify ERO. In case such a notification is not made on time, ERO is entitled to impose administrative measures or fines in accordance with the Rule on Administrative Measures and Fines.

Notifications and reporting, in line with this manual, have been submitted to ERO by all energy enterprises except for the central heating enterprise "District Heating Gjakova" JSC, which has not submitted to ERO the quarterly and annual reports on compliance with the license conditions. Non-reporting has been due to the organizational and managerial problems "DH Gjakova" has faced during 2013. During that period it has been warned several times through official letters for not reporting.

# 4.2 Licensed Enterprises Monitoring Program

To simplify the energy companies monitoring process, at the end of 2013, ERO developed a Licensed Enterprises Monitoring Program, according to which the enterprises shall report upon request of ERO, on a quarterly and annual basis, and, in certain cases, as needed. Besides receiving reports from the licensees, ERO, through its own teams, will monitor on site each of the licensed companies. Monitoring can be done with or without notice. The new modified monitoring program will be implemented starting from 2014.

**Efficient functioning of competitive market** – one of the tasks of ERO is also monitoring the efficient functioning of competitive energy market, as well as the tariffs regulation criteria and conditions for supply of energy. ERO has monitored the functioning of the market in order to ensure transparency and non-discrimination, based on the document on competition assessment criteria in supplying electricity, approved in 2011.

In order for a relevant competitive market to exist, and also based on the approved criteria, the following conditions need to be met: the number of suppliers in the relevant market (including public supplier) must be 3 or more; and the relevant market share, served by suppliers (not including public supplier) should exceed 30 %.

Taking into account the abovementioned criteria, also in 2013 there was no effective competition in the energy market, since there was only one public electricity supplier, supplying all customers in Kosovo, i.e. no other supplier entered the market, of whom the customers could buy electricity.

As a result of the lack of effective competition, in addition to domestic customers, regulated tariffs have been applied on power supply for other customers as well, such as:

- 1. Major users of energy: customers connected at 110kV and above (tariff category 0);
- 2. Users of medium voltage power: customers connected at levels of 35kV and 10 (20) kV (tariff categories 1 and 2);


- 3. Users of low voltage power: customers connected at 0.4 kV (tariff category 3); and
- 4. Small users of low voltage power (tariff categories 4 and 8).

# 4.3 Monitoring of billing conducted by the energy enterprise (KEK) in January 2013

In line with Article 51 of the Law on Energy Regulator and Article 29 of the Rule on Licensing of Energy Activities in Kosovo, dated in the 7<sup>th</sup> of February 2013, ERO has monitored KEK activities regarding the situation created due to the billing conducted in January 2013.

Dissatisfaction from customers has been reported as far as the billing conducted in January is concerned. Therefore, starting from the 12<sup>th</sup> of February 2013, ERO has carried out the monitoring of the public supplier in two districts: in Prishtina district and Ferizaj district. In the course of this monitoring, ERO has required information concerning: the customer complaints, electric meter reading, as well as the measures taken to respond to customer complaints and resolving the billing problem of January.

From 11 to 16th of February 2013, ERO has participated also in the Committee on monitoring the review and analyzing of complaints concerning the invoices of January 2013, established by the Ministry of Economic Development. ERO participation in this commission has been only in the capacity of observer – professional assistance.

Due to the high number of customer complaints of January 2013, ERO has asked the public supplier to increase the number of customer service staff regarding the invoices of January 2013, so that the complaints of customers are received, analyzed, verified and solved as soon as possible.

Therefore, the public supplier has increased the number of customer service staff in order to receive and review the customer complaints, and has corrected the invoices which have resulted with problems in reading.

Based on the analyses carried out, reports have been issued which can be downloaded from our official website. It can be noticed, from these reports, that the energy received in the distribution is read on 31st of December at 24:00 o'clock, and the reading of electricity meters of customers has been carried out a few days earlier by KEK. The unbilled energy in December 2012 has been billed in January 2013. Therefore, a part of the energy consumed in December has been billed in January 2013, causing an increase in the bill of January 2013, which in return, caused dissatisfaction on a part of the customers.

Based on the analysis of data provided by the energy enterprise (KEK) on electricity billing in December 2012 and January 2013, ERO has been able to identify the findings of customer dissatisfaction, which, in addition to those mentioned above, are: failures related to electricity meter reading, errors in reading, and errors in changing the electric meters.

### Incorrect time of electricity meters reading

Based on the analyses of data of KEK and customers complaints, ERO noticed that KEK has made errors related to reading procedure and tariff customers billing, by not reading (billing) the customers in the same days as in previous months. Due to the relocation of the billed energy, some customers have gone from lower blocks to higher ones.

### Errors in reading and irregular readings

During the analyses of KEK reports and customers complaints, it has been noticed that the largest number of customer complaints has been associated with errors in reading and irregular readings, hence the situation of electricity spending has not been accurately reflected, and this has detrimental financial impact on customers.



### Impact of replacement of electricity meters on billing

ERO noted that in some cases KEK has made mistakes when replacing the electric meters (from mechanical to digital). During the month of electric meter replacement, the customer was billed only with a part of the invoice of the old electricity meter, which in most cases has been a small value (only for some days), whereas in the following month, they have been billed with the amount of consumption of the current month plus the remaining from the previous month.

For the mistakes it has made during the reading and billing process, replacement of meters, calculating the bills, etc., ERO has asked KEK to act in line with the applicable regulations and procedures, and also provided recommendations for further actions to overcome the situation. On this basis, KEK has made the necessary corrections of electricity bills. The customers dissatisfied by the corrections or treatment by KEK, have filed complaints in ERO, which have been reviewed and resolved.

# 4.4 Report on Security of Supply

Based on Article 37 of the Law on the Energy Regulator, "The Energy Regulatory Office shall be responsible for monitoring and taking the actions specified in this law to promote and enhance the short-term and long-term security of supply of energy". To meet this legal requirement, ERO "shall prepare and publish every two (2) years, by 31 July at the latest, a report outlining the findings resulting from the monitoring of security of supply issues, as well as details of any measures taken or envisaged to be taken to address them"

In July 2013, ERO published the Security of Supply Report, which covers two previous years. This report refers also to the Article 29 of Energy Community Treaty. The 2013 Report is based on the structure proposed by the EC Secretariat for all the signatory countries of the Treaty, which defines the need to report only on the security of supply and natural gas, as required by Directives 2003/54/EC and 2003/55/EC, and amended Directives.

Security of Supply Report contains: a) the diversity of supply; b) the technological security; and c) the geographical origin of imported fuels. The published Security of Supply Report contains data on supply of energy, and it particularly includes:

- a) Supply/ Demand Balance on the national market;
- b) The level of the available demand and supplies expected in the future;
- c) Additional planned/constructed capacities;
- d) The quality and level of maintenance of the networks;
- e) Measures covering the peak demand; and
- f) Measures which are taken in the case of failure of one or more suppliers.

The Security of Supply Report, prepared by ERO is considered as a high-quality report, and in line with the requirements mentioned above.



### **5 ELECTRICITY SECTOR**

### 5.1 Electricity market

From the mid 80s, a large number of European and worldwide countries entered into an energy sector reform. Initially, institutional reform was made by dividing responsibilities between the energy ministries such as drafting policies and strategies, and regulatory authorities regulating energy sector in economic terms. Therefore, the division of institutional responsibilities allowed reforming the operative part, starting with unbundling vertically integrated companies, by separating sections considered as natural monopolies from those competitive.

Division began with the transmission, continuing with unbundling of distribution system, and by supporting the opening of the energy market to all customers.

The figure below provides an illustration explaining the market, divided into regulated activities (regulated prices) from those non-regulated (competitive activities). Generation and supply are considered as unregulated activities, whilst transmission and distribution network elements constitute regulated market and are considered natural monopolies.



*Fig. 5.1 Energy market regulated and competitive elements* 

It should be highlighted that in countries where there is sufficient competition in terms of generation and supply, regulation often applies to all market elements (generation, transmission, distribution and supply), as in case of Kosovo, including other countries as well.

### 5.2 Reforming the electricity sector in Kosovo

Reforming the electricity sector aims to develop free markets by promoting better quality of supply. Further on, it has a positive impact for investors and traders, as well as an impact on achieving costreflective prices. This reform is required due to a more secure and quality supply with electricity to customers, especially when we consider small regulatory areas which often may face problems with balancing (electricity lack or excess) and support services for system operations.





Fig. 5.2 System and Ancillary services

European Commission as part of its project on establishing a single common electricity market has undertaken an initiative to support Southeast Europe countries (SEE) in harmonising their national energy policies and development of a common regulatory framework in order to:

- Attract and facilitate investment in the energy sector;
- enhance the security of supply; and
- Promote economic growth.

Kosovo adopted primary energy legislation which sets forth the rights and obligations of the parties in the sector to ensure sustainable, safe, reliable, and quality supply with electricity.

The commencement of reforming process in energy sector dates from 2004 when ERO was established. The process further continued by unbundling vertically integrated company, KEK, thus creating KOSTT (2006) operating now as a separate transmission and market entity. Further unbundling continued with KEK distribution and supply, being subject to privatisation and transferring the ownership to Limak - Calik consortium. Hence, since 8th of May 2013, public distribution and supply is managed by this company, whilst the remaining part of KEK includes mining and generation which is publicly owned.



Fig 5.3- a) Vertically integrated company, KEK, b) Vertically unbundling companies



Market development and reform aims at creating a proper competition, both in terms of generation and supply. This allows customers to have the right to be supplied from different electricity suppliers.

Kosovo determined the right for qualification to all non-household customers for selecting the supplier. Pursuant to the Law on Electricity since 1<sup>st</sup> of January 2015, all customers shall have the right to be qualified and select a supplier, and get supplied with unregulated tariffs. The interest of qualified customers to use the right for selecting suppliers has been limited, this explained by the fact that they will face higher prices in the open market, than under regulated tariffs.

### 5.3 Market Design and Market Rules

It is a legal requirement for Kosovo to apply an open, competitive and sustainable market.

Essential elements to be considered by ERO in securing a competitive and liquid market are:

- supply and demand (supply exceeding demand);
- > Third party non-discriminatory access (TPA) in the network and reflective costs;
- Proper signals (generation and customer response to price signals);
- sufficient number of buyers and sellers with not large concentration; and
- Proper treatment of subsidies.

A Working Group on Market Design was established in the beginning of 2010, and on 21st of July 2010, the Government of Kosovo adopted a Concept Paper specifying the principles of a revised energy market for Kosovo, which serves as a base for developing Kosovo Electricity Market Design (KEMD).

KOSTT in 2012 prepared a draft document for Electricity Market Design. Comments were provided to the document while being developed by ERO staff. Comments were provided for the document by stakeholders, as well as the Energy Community Secretariat (ECS), whilst it has been finalised at the beginning of 2013. Therefore, after sending the final document in March 2013, Design of Energy Market is approved by the ERO Board.

Market design is in line with the Law on Electricity, and aims to support further restructuring of the energy sector, and creates conditions for establishing competitive and sustainable energy market.

Market design main objectives are:

- Creating prerequisites for a competitive energy market and assisting investments in electricity generation, more efficient cross-border trade with the aim of creating a common market for electricity in the region and throughout EU.
- Securing conditions for safe, reliable and efficient generation, transmission, distribution and supply with electricity.

Nevertheless, taking into account the current situation of energy sector in Kosovo, we cannot expect that the approved Market Design immediately supports full opening of the competitive market. Dependence from imports, lack of sufficient generating capacity to meet increasing demand, insufficient flexibility, as well as unacceptable high level of non-technical losses, emphasises a need to develop a temporary (transitional) market - which would be attractive for private investors in energy generation, transmission, distribution and supply and will contribute in enhancing transparency in the market.

The design of the energy market is a bilateral market in which licensed participants buy and sell energy enabling a balanced energy system. According to the design, the market is supported by a balancing mechanism in which the TSO receives the offer from the licensee to purchase and sale energy in order to manage differences of flows which are not covered by bilateral contracts.





Figure 5.4 indicates market participants and their relationships.



Market Design will accommodate a variety of bilateral contracts:

- KEK as a licensed generator will continue to own units of TPP Kosovo A and Kosovo B up to privatisation;
- > PS will supply all non-qualified customers and may also supply qualified customers;
- Investors for TPP Kosova e Re will have a bilateral contract between their company which will be a licensed generator, and Public Supplier (PS). These bilateral contracts are expected to have a form of Power Purchase Agreements (PPAs);
- HPP Ujmani (Iber Lepenc) will have bilateral contracts regulated with PS for capacity and energy produced;
- Importers and exporters may import or export energy through interconnections with neighbouring countries depending on the availability of interconnection capacity. Within Kosovo, they will conclude bilateral contracts with generators and suppliers in order to buy and sell this power.
- Qualified customers (currently non-household customers, and by 2015 all customers) will have the opportunity to exercise their right to select a supplier according to DEMK. Qualified customers may be transferred to the new supplier.
- Suppliers to adhere to the market, will have the freedom to sign bilateral contracts with generators or other supplier in Kosovo, import or export power under bilateral contracts



with importers and exporters in order to provide qualified customers with whom they have entered into bilateral contract.

KOSTT developed Market Rules based on Market Design. They present a more detailed operation of the parties in the market. KOSTT in coordination with ERO when drafting a document received comments from interested parties including comments from ECS, and in late 2013 the final version of the document is approved by the Board of ERO.

Market Rules also require different procedures to be developed in order to make the activities in market fully operational, a portion of which is under development.

# 5.4 Technical aspects of the energy sector

The economy of a country, among other things, may be determined from the level of energy consumption, specifically industrial consumption and development of the energy sector comprises a base for overall economic development.

Existing generating capacity in most cases do not meet the needs of supply for customers, especially at peak hours when demand for electricity increases, therefore an urgent a need for investment in these capacities appears. Besides this, market liberalization should be urged in order to increase competition.

The Government of Kosovo showed interest for project package TPP Kosova e Re. ERO participated in the Steering Committee and working group for preparing tender documents package. Kosova e Re represents a main pillar of sustainable production from lignite securing basic energy system.

Renewable Energy Sources (RES) represent a special interest in the energy sector. European directives and obligations arising from ECT define requirements related to RES. These resources should occupy an important place in projection of investments in the energy sector. Laws for energy sector in Kosovo support investments in RES. Criteria for investment in RES should consider the level of customer affordability, system stability and their impact on system balancing.

### 5.4.1 Lignite Production and Consumption

Lignite represents the main reserve as a primary energy source in Republic of Kosovo with a share of about 97% of the total electricity production. Mining south-west Sibovc, Bardh and Mirash, supply power plants Kosovo A and B with lignite.

The following table shows production and consumption of lignite during the month, for 2013.

Lignite Production/consumption 2013, t*1000	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Lignite production	767	609	588	795	644	531	681	695	740	722	692	753	8,219
Lignite consumption	882	866	768	769	736	746	800	447	631	707	734	818	8,904
Lignite market consumption	13	14	12	9	10	16	20	17	21	21	20	19	192

### Tab. 5.1 Lignite production and consumption

Production in 2013 is 8.2 million tonnes whilst consumption is 8.9 million tons. Lignite production and consumption in 2013 is higher compared with 2012.





Fig. 5.5 Lignite Production and consumption for 2012 and 2013

# 5.4.2 Electricity Generation

Electricity generating capacities consists of two thermal power plants, Kosovo A and Kosovo B, and HPP Ujmani with distribution HPP constituting around 3 % of the total capacity. The table below presents the installed generation capacity by type and year introduced into operation.

Constation unit	Ca	pacity of Units (MW)		Set in operation
Generation unit	Installed	Net	Min/max	Set in operation
A1	65	Non-operational		1962
A2	125	Non-operational		1964
A3	200	182	100-130	1970
A4	200	182	100-130	1971
A5	210	187	100-135	1975
TPP Kosova A	800	551		
B1	339	310	180-260	1983
B2	339	310	180-260	1984
TPP Kososva B	678	620		
HPP Ujmani	35.00	32.00		1983
HPP Lumbardhi	8.08	8.00		(1957) 2006
HPP Dikanci	1.00	0.94		(1957) 2010
HPP Radavci	0.90	0.84		(1934) 2010
HPP Burimi	0.86	0.80		(1948) 2011
Total HPP	45.84	42.58		
Wind Power	1.35	1.35		2010
Total	1,525.19	1,214.93		

Tab. 5.2 Generating capacities within Kosovo energy systems

The total generation of electricity in 2013 was 5.862 GWh, compared with 2012, higher for 10.3% when generation was 5.314 GWh. This increase in generation, amongst other things, is due to the fact that KEK did not execute some capital renovations in its generating units that were scheduled for 2013.

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Fig. 5.6 Images of TPP Kosova B

Own source electricity costs of power plants comprise around 11.3% of overall generation. Often, misunderstandings occur when calculating own source costs given that a part of them (two generators of Kosovo A and Kosovo B) are directly executed, whereas the rest through transmission lines.

Generation on monthly basis, Including own source costs is shown in the following table.

Generation units (MWh)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
A3	91,165	77,131	109,237	51,417	53,843	100,542	33,644	108,271	41,625	104,749	84,112	58,906	914,642
A4	81,296	20,618	29,298	71,284	0	52,380	84,161	0	0	0	0	53,597	392,635
A5	25,338	99,474	72,142	50,279	94,610	0	80,690	108,461	105,005	40,003	93,240	109,012	878,253
Self-consumption - TPP A	25,936	24,134	25,806	22,098	19,897	18,969	25,137	26,636	19,439	18,824	22,730	29,114	278,721
TPP Kosova A	171,862	173,088	184,871	150,883	128,556	133,952	173,357	190,097	127,191	125,928	154,622	192,401	1,906,808
B1	218,358	188,931	182,333	207,952	183,764	195,793	201,805	54,645	120,626	198,317	183,637	170,024	2,106,186
B2	197,273	197,926	123,429	208,987	202,126	201,188	147,972	28,930	203,153	177,120	191,078	210,948	2,090,128
Self-consumption - TPP B	37,447	34,369	29,030	36,447	34,542	35,603	31,868	9,313	29,561	35,391	35,200	35,511	384,282
TPP Kosova B	378,185	352,488	276,732	380,491	351,349	361,378	317,908	74,262	294,219	340,046	339,515	345,460	3,812,032
HPP Ujmani	5,362	4,480	6,575	17,055	11,785	15,426	7,751	7,615	6,657	6,415	3,860	6,406	99,387
HPP Distribution	1,385	1,496	3,604	7,089	8,218	7,095	3,659	1,619	1,106	1,994	4,187	2,484	43,936
Total Hydro	6,747	5,976	10,179	24,144	20,003	22,521	11,410	9,234	7,763	8,409	8,046	8,890	143,323
Total production	556,794	531,552	471,782	555,518	499,907	517,852	502,675	273,593	429,172	474,383	502,183	546,751	5,862,163

### Tab. 5.3 Generation of electricity during 2013

Share of generators in overall generation during 2013 is presented in the graph shown below.





Fig. 5.7 Share of generators in overall generation during 2013

During 2013, a record generation was achieved which may be also reflected through operating indicators in manufacturing units. Therefore, one of the indicators of generating units operation is the number of exits from the system, planned and unplanned, which in 2013 was significantly lower compared with 2012.

- The situation in TPP Kosovo B was:
- B1 Unit this year suffered a total of 17 failures (four planned failures, 6 unplanned failures and 7 disconnections).
- B2 Unit suffered a total of 9 failures (2 planned failures, 4 unplanned failures and 3 disconnections).
- The situation in TPP Kosovo A was:
- A3 Unit suffered a total of 8 failures (3 planned failures, 3 unplanned failures and 2 disconnections),
- A4 Unit suffered a total of 9 failures (3 planned failures, 3 unplanned failures and 3 disconnections), and
- A5 Unit suffered 11 failures (10 planned failures, 0 unplanned failures and 1 drop).

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Fig. 5.8 Image of TPP Kosova A

During August, TPP Kosovo B, due to the planned annual renovation, produced less electricity which is compensated through increased imports.

Below is the graph of generation during 2004-2013 which shows a steady increase as a result of investment in generating units.



Fig. 5.9 Electricity generation for 2004 – 2013

# 5.5 Transmission System

Transmission system plays an important role in the security of supply and welfare of overall power system. Transmission network of Kosovo is an important point and it is interconnected to the regional and European power interconnection system. There are 400 kV interconnectivity lines with neighbouring countries, except with Albania where there is only 220 kV line. It is expected that 400 kV interconnection lines SS Kosova B – SS Kashar (Tirana) to start in 2014.

The following tables show transformational capabilities and network transmission lines, according to the voltage level:

Tal	Table 5.4 Basic data on the transmission lines in 2013						
	Voltage (kV)	Owner	Length (km)				
	400	KOSTT	188.49				
	220	KOSTT	231.83				
	110	козтт	802.70				

### Table 5.5 basic data for network transmission substations

Transformation (kV/kV)	Owner	SS No.	TR No.	Power (MVA)
400/220	коѕтт	1	3	1,200
400/110	KOSTT	2	2	600
220/110	KOSTT	3	9	1,350
220/35	Alferon	1	2	320
220/35/10(20)	KOSTT	1	1	40
220/10(20)	KOSTT	-	1	40
110/35/10(20)	KOSTT	1	4	158
110/35/6.3	Trepça	1	2	126
110/6.3	Trepça	-	2	63
110/35	Ujmani	1	1	20
110/6.3	Sharri	1	2	40
110/10(20)	KOSTT	15	19	678
110/35	KOSTT	8	20	692
110/10	козтт	3	11	252

Transmission network is mostly stable, and sustainable. Transmission losses are reduced significantly over recent years thanks to the investments made, more accurate measurements and better management.

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Fig. 5.10 Images of SS Kosova B

In order to maintain a desirable level of supply, further reduction of loses but also further improvement in security and quality of services, investments are required in certain network parts, both in new capacities and in maintenance and upgrading of the existing capacities.

During 2013, there were also significant investments made in the transmission system network. Below is a list of capital projects implemented or presently under development:

1. Projects which started in earlier years and completed during 2013:

- Revitalisation of high voltage equipment 110 kV in SS Gjilan 1 and SS Ferizaj 1;
- Connection into SS Lipjan in LP 112 lines (Kosova A Ferizaj 2);
- Installation of two new line areas 110 kV in SS Prizren 2;

2. Projects which started in earlier years and continued in 2013 and further on:

- Installation of Supervisory, Control and Data Acquisition, (SCADA/EMS & telecommunication LoT-2);
- Relocation of line 110 KV, no.1805, SS Gjakova 2 & Replacing parts of HV 110 KV in SS Gjakova 1
- Replacing conductors, insulation and connecting devices in lines 110 kV LP 125/2 and LP 125/3.
- Installing measuring groups in new border between KOSTT and DSO (project is under tendering phase).
- Supply with power transformers in SS Burim.

3. Projects which started in 2013 and will continue further on:

- Consulting Services & Construction of line 400 kV line Kosovo Albania LOT 1;
- Consulting Services & Construction of line of the 400 kV HV and LFC Field- LOT 2;



- Rehabilitation of HV facilities in SS Gjakova 2 and SS Prizren 3;
- Rehabilitation of several polls of OHL 2298 220 kV and OHL 1806 110 kV;
- Supply and installation of relay protection in auto-transforming areas SS Kos B;
- Supply with power transformer.
- Installation of transformer TR 3 in SS 110/10 kV Decan. This project is carried out by KelKos Energy under Agreement on network transmission connection.

### 5.5.1 Electricity flows in interconnection lines

Eastern European region is generally characterised with lack of electricity, especially the southern part therefore the energy mainly flows from the north to the south.

Electricity flows through the transmission network in Kosovo are shown in the following figure for each interconnection line, in both directions.



Fig. 5.11 Electricity flows through interconnection lines

Kosovo is in favourable position as a regional focal point, whereby the transmission network has considerable flow of electricity. Therefore, a considerable transit is made through transmission network, which overloads the network and also causes additional losses in the network. These losses and maintenance costs for TSOs horizontal network are compensated through ITC mechanism through contribution of each transitory. Kosovo was not included in the regional mechanism for compensation of cross-border capacity and makes no allocation of interconnection line capacities due to problems it has with Serbia. Following recent developments in the negotiations with Serbia, we might expect that during 2014 these problems are resolved such as the issue of transit and allocation of interconnection capacity.



The following figure presents data on generation, import, export, transit, deviations, loss in transmission and distribution and consumption.



Fig. 5.12 Electricity flows in the system

### 5.5.2 Load in the Kosovo Power System

Until several years ago, the transmission network in different parts was considerably overloaded in peak hours, particularly during winter seasons. The load of transmission system is assessed by analysing energy flows especially at the peak. It is therefore necessary to take five (5) peak values (maximum loads) occurred at different weeks of the year. The following table shows peak values during 2013.

Peak load (MW)	Hour	Date
1,101	18	09.01.2013
1,101	20	25.12.2013
1,080	20	15.12.2013
1,079	19	27.01.2013
1,071	20	03.01.2013

Tab. 5.6 Five peak values at different weeks of 2013

The highest load in Kosovo's electricity system, 1101 MWh/h, was recorded on 09<sup>th</sup> of January 2013 and the same on 25<sup>th</sup> of December 2013. Peak value recorded in 2013 was lower than the one recorded in 2012



Important to consider is the analysis of daily consumption diagram, shown for each hour during the day, as consumption changes in daily and seasonal periods. In order to create a clearer picture of the consumption change during the entire year, a diagram with annual values for each hour should be created which is shown in the figure below. Despite the consumption, the diagram also shows generation, exchange and reductions per hour.



Fig. 5.13 Daily diagram as an annual average per 24 hours for 2013

The difference between the maximum and minimum average daily consumption during 2013 is shown in the following figure, indicating a significant difference between the maximum and minimum consumption. Such differences pose a serious obstacle for following-up consumption diagram and maintaining system deviation at allowed limits, especially when we take into account non-flexibility lignite generation units. We also noticed a considerable difference between high and low season (winter and summer).



Fig. 5.14 Monthly average of maximum and minimum daily loads in 2013

In case of inability to follow-up consumption with domestic generation and import, sometimes a need for energy reductions for customers arises. Reductions in 2013 were lower than in previous



years, which is 53,352 MWh. This can be attributed, amongst others, to higher generation but also a better management of the situation by all parties.

### 5.5.3 Overall demand and electricity losses in transmission

The overall demand of electricity in 2013 was 5,520 GWh, an increase of 1% when compared with 2012 when the demand was 5,467 GWh. This demand compared with projections in electricity balance 2013 is with 5.17% lower.

Table 5.7 shows overall demand executed in 2013 compared to projected demand.

2013	Gross Cons. Realized	Gross Cons. Balance	Real/Bal	Transmission losses realization		Transmission losses balance	
	MWh	MWh	%	MWh	%	MWh	%
Jan	609,884	632,228	96.47	11,102	1.82	12,607	1.99
Feb	524,602	562,402	93.28	9,594	1.83	11,215	1.99
Mar	543,150	555 <i>,</i> 897	97.71	10,646	1.96	11,692	2.10
Apr	441,461	442,251	99.82	9,304	2.11	9,639	2.18
May	381,668	403,363	94.62	9,739	2.55	10,248	2.54
Jun	360,931	365,383	98.78	8,097	2.24	9,882	2.70
Jul	377,047	405,717	92.93	7,920	2.10	10,007	2.47
Aug	378,565	400,383	94.55	6,587	1.74	7,983	1.99
Sep	369,157	395,834	93.26	7,117	1.93	8,502	2.15
Oct	436,547	492,116	88.71	7,834	1.79	10,877	2.21
Nov	471,143	538,435	87.50	9,070	1.93	10,736	1.99
Dec	625,920	626,716	99.87	13,327	2.13	12,497	1.99
Total	5,520,075	5,820,725	94.83	110,336	2.00	125,885	2.16

 Table.5.7 Overall demand and transmission losses, executed, and as per balance 2013

During the 2000s and onwards there was a constant increasing demand except in 2012 when there was a significant decline in demand compared to the previous year. In 2013, we have a slight increase of demand compared with previous year.

In the graph below we can see demand stabilisation trends in terms of electricity since 2010.



Fig. 5.15 Demand in Kosovo electricity system 2000-2013



Electricity demand in the transmission system, divided by spenders for 2013 is given in Table 5.8. A part of customers as Ferronikel, Trepca and Sharrcem, are directly connected to the transmission network.

Energy demand at Transmission	Total
Energy demand at fransmission	MWh
Gross consumption at distribution*	4,794,220
Trepça+Sharrcemi	83,988
Ferronikeli	403,154
KEK internal consumption	128,377
Transmission losses	110,336
Total consumption	5,520,075

#### Tab. 5.8 Demand as per spenders and electricity losses

(\*)Electricity received in distribution from Transmission +Generation from distributive HPP

The figure below graphically shows monthly demand as per categories and losses in transmission and distribution.



Fig. 5.16 Share of various categories in overall consumption 2013

Commercial losses are higher in the winter season than the chart above shows, a period when electricity is used for heating. In other categories of consumption and losses, difference in seasons is less significant.

### 5.5.4 Transmission Losses

Losses in the transmission system in Kosovo are at a satisfactory level, especially when compared with the period before being unbundled from KEK when transmission losses were quite high. The table below shows the reduction of transmission losses from 2006 to 2013 as a result of investments made in the transmission system. Transmission losses are expressed as a percentage of overall consumption, not including electricity placed in transmission that is used for generators own source costs. Further on, the transit of electricity causes additional losses and loads the transmission network.



Fig. 5.17 Losses in transmission network 2006-2013

Losses in Kosovo transmission network are approximately at the same level as losses in transmission systems in the region and Europe, even it stands better than some of regional countries. This is justified through the fact that the distance between consumption and generation in Kosovo is short, which results in not causing high losses during electricity transmission.



Fig. 5.18 Losses in transmission network for regional countries for 2012 taken from ECRB annual report

Transmission losses for the region cover the year 2012, since reporting losses by respective countries will be published in the coming period, but usually these figures may differ quite a little from year to year, therefore they can be considered as valid for comparison.

# 5.6 Distribution System

Distribution Network over the years has improved in terms of supply and quality service to customer. However, despite the investments made in recent years, distribution network is not yet able to ensure a proper and satisfactory quality for customers. To achieve acceptable level of quality and service, additional investments are required both in the medium voltage level and low voltage level.



The distribution system includes 35 /x kV substations and lower and 35 kV lines and lower.

Basic data for substations and lines by voltage levels and lengths, in distribution system, are shown in the following tables.

Voltage (kV)	Owner	Aerial network (km)	Cable network (km)	Total (km)
35	KEDS	595.8	29	624.5
10(20)	KEDS	926.9	332.2	1259.2
10	KEDS	4,966.8	776.7	5,743.5
6	KEDS	44.6	5.42	50.1
0.4	KEDS	11,212.9	422.9	11,635.9

Tab.	5.9	Basic	data	for	DSO	lines
	5.5	Dasie	aaca	,	200	mes

Tab. 5.10 Substations and transformers according to voltage level in DSO

Transformation (kV/kV)	Owner	SS No.	TR No.	Power (MVA)
35/10	KEDS	46	95	626.00
35/06	KEDS	9	21	69.00
35/0.4	KEDS	12	15	38.51
(10)20/0.4	KEDS	2,266	2,321	830.16
10/0.4	KEDS	5,224	5357	1,680.66
6/0.4	KEDS	53	54	15.07

DSO during 2013 made investments to improve the distribution system:

- Equipment for meter reading;
- Equipment for meter disconnection;
- Improvements to households metering points;
- Strengthening MV and LV network;
- Installation of multifunctional protection of HV in SS 110/xx kV and 35/xx kV ;
- Construction of cable channels HV lines 10 (20) kV in new SS, 110 kV Gjilan 5;
- Expansion of 3 kV substations 110/xx (SS Bibaj, SS Prizren 1, SS Peja 1) part of the MV;
- Construction of the new SS 110/10 (20) kV Prishtina 7.

### 5.6.1 Consumption in distribution

DSO is organised into seven districts: Prishtina, Mitrovica, Peja, Gjakova, Prizren, Ferizaj and Gjilan. The figure below shows seven districts geographically.





Fig. 5.19 Expansion of Kosovo distribution system in districts

Consumption of electricity in distribution for 2013 was 4,794.2 GWh, whilst 4,768.3 GWh in 2012, representing an increase of 0.4%.

The highest consumption was made in the Prishtina district with 30.9% of overall consumption in distribution, and lowest consumption in Gjilan district with 8.7%. The table shows the details for consumption of Distribution districts per years.

Consumption in Districts	Load in districts 2010 MWh	Load in districts 2011 MWh	Load in districts 2012 MWh	Load in districts 2013 MWh	Share in consumption (2013)
Prishtina	1,392,420	1,441,698	1,470,929	1,478,578	30.9%
Mitrovica	619,483	651,824	658,058	667,050	13.9%
Реја	521,655	511,296	519,410	533,364	11.1%
Gjakova	417,169	581,765	450,205	452,342	9.4%
Prizren	638,532	407,254	650,883	652,059	13.5%
Ferizaj	575,067	645,616	599,504	595,655	12.4%
Gjilan	394,710	442,797	419,394	415,170	8.7%
Total at Distribution	4,559,037	4,682,250	4,768,383	4,794,220	100%

Tah	5 1 1	Consum	ntion in	distribution	hy districts	2010-2013
rub.	5.11	Consum	ριιοπ π	uistribution	by districts	2010-2013

Since 2000 there is a significant increase of demand, which is also presented in graph below, however since 2010 there is a stabilisation trend in terms of overall electricity demand in the distribution system.

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Fig. 5.20 Overall consumption in the Kosovo's distribution system – 2000 - 2013

Consumption demand can be categorized according to the voltage level and customers using electricity. Table 12.5 shows data for consumption by voltage level and customer categories.

Consumption by categories for the years	2010	2011	2012	2013
consumption by categories for the years	MWh	MWh	MWh	MWh
220 kV (Ferronikeli)	619,645	596,425	406,697	403,154
110 kV (Trepça + Sharrcem)	80,974	83,063	66,373	83,988
35 kV	35,755	40,052	32,061	32,074
10 kV	190,845	204,381	208,888	207,327
Household under 200 kWh/month and Hosp	628,056	674,737	704,047	731,876
Household 201kWh up to 600kWh)/month	750,562	827,681	873 <i>,</i> 651	915,310
Household above 600 kWh/month	465,617	488,816	495,176	475,054
0.4 kV I	200,572	224,381	249,129	268,249
0.4 kV 11	369,382	410,315	427,831	434,333
Public lighting	9,949	12,834	16,954	17,963
Household customer without meters	28,974	16,484	11,126	7,943
Total	3,380,332	3,579,169	3,491,933	3,577,272

Tab. 5.12 Electricity billed as per tariff categories 2010-2013

Participation in household consumption is still dominant against overall consumption billed and comprises 59.5%. The figures below show participation in of consumption categories compared to overall consumption (shown with loss and without loss in distribution).



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Fig. 5.21 Share of categories in gross and net consumption

### 5.6.2 Losses in the distribution system

Around 90% of consumption is made by customers connected to the distribution network, and therefore special importance should be paid to the fact that the losses are analysed with the main focus on the distribution network.

Electricity losses in the distribution system are quite high and pose a concern for the power sector negatively impacting customer supply and financial sustainability of Supply and Distribution. Technical and commercial losses by district for 2013 are presented in Table 5.13:

Consumption in	Load	Billed energy	Technica	allosses	Commerci	al losses	Total lo	osses
DISTRICTS	MWh	MWh	MWh	%	MWh	%	MWh	%
Prishtina	1,478,578	1,005,433	217,544	14.71	255,601	17.29	473,145	32.00
Mitrovica	667,050	260,701	82,697	12.40	323,652	48.52	406,350	60.92
Реја	533,364	340,349	92,359	17.32	100,656	18.87	193,015	36.19
Gjakova	452,342	283,565	88,507	19.57	80,270	17.75	168,777	37.31
Prizreni	652,059	450,625	109,367	16.77	92,066	14.12	201,434	30.89
Ferizaji	595,655	417,152	108,549	18.22	69,954	11.74	178,503	29.97
Gjilani	415,170	332,305	69,962	16.85	12,904	3.11	82,866	19.96
Total in distribution	4,794,220	3,090,130	768,986	16.04	935,104	19.50	1,704,090	35.54

Tab. 5.13 Distribution losses by district for 2013

In Kosovo, technical losses, according to data submitted by the DSO, amounted to 16.4%, while in developed and stable networks these levels to 5 to 7%.

Commercial losses are even more concerning, which are quite high. Commercial losses comprise 19.5% of total consumption in distribution networks whilst in developed power systems, these losses are around 1 to 5%.

Unbilled energy in northern Kosovo comprises around 5% of commercial losses, which is dominated by Serbian minority.

It is worth mentioning that reduction of commercial losses has positive impact on technical losses and network load. With the reduction of commercial losses, energy savings by customers is increased, and this directly affects the reduction of load and therefore reduces technical losses.



Fig. 5.22 Technical and commercial losses in the distribution for the period 2006-2013

# 5.7 Billing and Collection

The billed electricity has been steadily increasing over recent years, and the collection is also increasing and now is almost at acceptable levels of approximately 90%. Billed energy expressed in monetary values is &247.5 million, whilst collection is &217.9 million. Out of these &25.6 million is a value of electricity billed and collected from customers connected to the transmission. These values include VAT.

The level of collection against billing in distribution for 2013 was 86.7%, whilst in total, when the calculating customers connected to transmission where collection is 100%, the total collection reaches 88.1%. It is worth mentioning that in 2012 the ratio collection/billing was higher (88.8%), meaning that collection in 2013 was lower compared to 2012.

2012	Load	Billing	Collection	Coll/Bill
2013	MWh	€	€	%
Distribution	4,789,628	221,948,127	192,369,016	86.67
Transmission connected Cust.	487,142	25,607,100	25,607,100	100.00
Total	5,276,770	247,555,227	217,976,116	88.05

Tab. 5.14 Billing and co	ollection 2013
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The table 5.15 below shows that in several months, ratio collection/billing is higher than the value of 100%, which means that PS in these months collected electricity billed for previous months including older debt.

Distribution	Load	Realization	Billing	Collection	Coll/Bill
2013	MWh	MWh	€	€	%
Jan	550,464	313,642	26,100,843	19,492,116	74.68
Feb	469,917	278,604	23,046,779	18,276,075	79.30
Mar	480,306	268,947	22,254,961	17,175,500	77.18
Apr	379,918	250,676	14,684,848	17,234,506	117.36
May	318,724	228,125	13,342,844	13,992,894	104.87
June	303,378	224,001	13,262,721	14,201,944	107.08
Jul	315,687	242,809	14,252,309	13,280,124	93.18
Aug	321,572	235,362	13,863,804	14,475,090	104.41
Sep	309,633	237,336	13,989,929	14,309,232	102.28
Oct	375,796	240,284	19,719,421	13,265,980	67.27
Nov	411,675	259,031	21,475,938	17,470,158	81.35
Dec	557,150	311,313	25,953,728	19,195,397	73.96
Total	4,794,220	3,090,130	221,948,127	192,369,016	86.67

Tab. 5.15 Billing and Collection by monthly distribution for 2013

The data for billing and collection of electricity is analysed by districts, and it is presented in the following table. It indicates that the highest percentage of collection is made in the Prishtina district (ratio billing/collection: 90.61%) followed by Gjakova district, and the lowest in Peja district.

### Tab. 5.16 Billing and Collection by districts

Districts	Load	Realization	Billing	Collection	Coll/Bill
Districts	MWh	MWh	€	€	%
Prishtina	1,478,578	75,000,901	67,959,658	90.61	35.33
Mitovica	667,050	18,303,799	14,454,788	78.97	7.51
Peja	533,364	24,898,425	19,373,802	77.81	10.07
Gjakovëa	452,342	19,844,753	17,914,740	90.27	9.31
Prizren	652,059	31,931,202	28,339,292	88.75	14.73
Ferizaj	595,655	29,404,665	24,820,232	84.41	12.90
Gjilan	415,170	22,564,382	19,506,505	86.45	10.14
Total	4,794,220	221,948,127	192,369,016	86.67	100.00

Electricity billed and collected from 2008 to 2013 is shown in the following table.

Tab. 5.17 Billing and Collection in Distribution 2008-2012

Vears	Load	Realization	Billing	Collection	Coll/Bill
Tears	MWh	MWh	(000)€	(000)€	%
2008	4,035,076	2,093,372	165,351	118,845	71.87
2009	4,428,053	2,532,626	178,296	142,110	79.70
2010	4,559,037	2,679,713	174,747	151,805	86.87
2011	4,682,250	2,890,172	188,399	168,952	89.68
2012	4,768,383	3,018,863	207,878	184,541	88.77
2013	4,794,220	3,090,130	221,948	192,369	86.67



### 5.8 Electricity Import and Export

### 5.8.1 Import

In 2013 the public supplier imported electricity through commercial contracts and through exchanges with systems of regional countries, covering this way customer needs.

Imported electricity through commercial contracts (tender) during 2013 was 457.815 MWh amounted to  $\leq 28,447,948$  with an average price of  $\leq 62.14$ /MWh, whilst imported electricity in 2012 was 571.897 MWh, with an average price  $\leq 79.46$ /MWh. The amount of imported electricity is 20% lower than last year, whilst the average price is around 22% lower when compared with 2012.

Further on, electricity is imported through exchanges in quantities of 63.897 MWh, which is executed with KESH. Compared with 2012 (53.161 MWh), the quantity imported in form of exchange is increased to 20%.

The following figure shows the import with contracts and exchange executed during 2013. The graph shows that in May no electricity is imported, whilst a very small quantity was imported for April, June and September. However, for other months, import is higher (Table 5.18).



Fig. 5.23 Import of electricity with contracts and exchange for 2013

### 5.8.2 Export

During 2013 there has been a significant increase in generation and this allowed that for the first time after 1999 the generation to exceed the overall consumption, and exports have increased significantly compared to previous years, therefore, there was electricity surplus. These surpluses mainly result at night (low tariff), when in regional level supply for energy increases over night, and had an impact on export prices to be significantly lower than import prices.

Electricity exported through commercial contracts during 2013 was 755.504 MWh amounted to  $\notin$ 21,341,724 with an average price of  $\notin$ 28.2/MWh, whilst electricity exported in 2012 was 371.316 MWh, with average price  $\notin$ 31.16/MWh. The amount of electricity exported is 103% higher than the previous year, whilst the average price is around 9% lower when compared with 2012.

Public supplier during 2013 exported electricity in form of exchange in quantities of 101.365 MWh. The difference between exports and imports in form of exchange is 37.468 MWh, which shows that DSO during 2013 exported more electricity in form of exchange than it imported.



Fig. 5.24 Exports of electricity through contracts and exchange for 2013

Export through contracts in 2013 was made throughout the period, except January. This occurred, amongst others, due to the fact that some of the planned capital repairs within generating units were not executed in 2013.

		Import	t		Export			Exchange			Total	
Month	Qnt. MWh	Price €/MWh	Amount €	Qnt. MWh	Price €/MWh	Amount €	Intake MWh	Offtake MWh	Differen. MWh	Intake MWh	Offtake MWh	Differen. MWh
Jan	89,695	74.65	6,695,405	0		0	0	15,556	15,556	89 <i>,</i> 695	15,556	-74,139
Feb	48,468	75.95	3,681,103	41,257	29.99	1,237,339	0	17,565	17,565	48,468	58,822	10,354
Mar	27,640	72.90	2,015,070	19,900	27.83	553,898	63,897	6,105	-57,792	91,537	26,005	-65,532
Apr	1,000	76.41	76,410	83,071	26.41	2,193,832	0	0	0	1,000	83,071	82,071
May	0		0	161,867	23.46	3,797,152	0	0	0	0	161,867	161,867
Jun	1,050	43.09	45,243	148,150	24.69	3,658,221	0	0	0	1,050	148,150	147,100
Jul	14,320	54.75	783,964	126,063	34.47	4,345,977	0	20,951	20,951	14,320	147,014	132,694
Aug	124,316	50.97	6,336,272	5,721	36.09	206,478	0	5,117	5,117	124,316	10,838	-113,478
Sep	3,840	51.50	197,760	43,730	31.10	1,360,121	0	19,730	19,730	3,840	63,460	59,620
Oct	27,146	70.78	1,921,270	61,767	33.67	2,079,955	0	5,556	5,556	27,146	67,323	40,177
Nov	25,710	58.82	1,512,163	52,088	30.05	1,565,398	0	5,231	5,231	25,710	57,319	31,609
Dec	94,630	54.77	5,183,289	11,890	28.88	343,352	0	5,554	5,554	94,630	17,444	-77,186
Total	457,815	62.14	28,447,948	755,504	28.25	21,341,724	63,897	101,365	37,468	521,712	856,869	335,157

Tab. 5.18 Import, export and exchange of electricity for 2013

From the above data it appears that Kosovo during 2013 (for the first time after 1999) was a net exporter of electricity. The figure below shows the net electricity export and import made during 2013.

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### Fig. 5.25 Net import and export for 2013

There were ups and downs in terms of electricity import and export during 2000-2013 and this may be seen in the following table.

Voars		port	Ехро	Net Import/export	
Tears	MWh	Çmimi (€/MWh)	MWh	Çmimi (€/MWh)	MWh
2000	778,870	30.43	1,440		777,430
2001	921,485	29.60	236,190		685,295
2002	627,265	32.67	552,783		74,482
2003	314,794	44.53	279,510		35,284
2004	483,580	39.64	191,665		291,915
2005	349,335	47.87	40,690	29.60	308,645
2006	393,054	54.87	80,172	40.70	312,882
2007	539,812	83.66	170,175	38.45	369,637
2008	457,817	112.52	125,277	36.59	332,540
2009	610,509	75.77	113,910	20.17	496,599
2010	818,387	57.91	352,471	26.44	465,916
2011	816,199	69.66	371,164	45.05	445,035
2012	625,058	79.46	472,794	31.16	152,264
2013	521,712	62.14	856,869	28.25	-335,157
Total	8,257,877	58.62	3,845,110	32.93	4,412,767

Tab. 5.19 Import and export including their prices over the years

\* Note: In 2000-2002 prices are in US dollars - US\$ with exchange rate with €, approximately 1:1

The quantity imported since 2000-2013 was 8.258 GWh, with an average price of €58.62/MWh, which means that €484,101,324 was spent so far for import of electricity. Whilst export quantity since 2005-2013 is 3,845 GWh at an average price of €32.93/MWh, €126,632,211 in monetary value. The prices suffered significant changes over the years. The record price of import was in 2008 when the average import price was €112.5/MWh as shown in the diagram below. Export price is



significantly lower, which means that energy was exported mainly to lower fees (at night), when the system has surplus, but this includes network usage fees (payment for allocation of capacity).



Fig. 5.26 The average price of import and export over the years

# 5.9 Electricity supply and service quality standards

ERO, based on Article 14 paragraph 2, sub-paragraph 2.12 of the Law on Energy Regulator, has jurisdiction over determination of the electricity supply and service quality standards to be met by the licensees.

ERO approved electricity supply and services quality standards to the licensees, in effect as of 1<sup>st</sup> of January, 2011.

Electricity supply and service quality standards are defined and monitored by:

- Continuity of supply;
- Voltage quality; and
- Commercial quality.

### 5.9.1 Continuity of supply

Continuity of supply is related to the availability of electricity and is measured by the following indexes:

- SAIDI System Average Interruption Duration Index;
- SAIFI System Average Interruption Frequency Index;
- ENS Electricity Non-Supplied.

Electricity supply and services quality standards that DSO should have met are:

- SAIDI not exceeding twenty (20) hours of planned interruptions and thirty (30) hours of unplanned interruptions per customer;
- SAIFI not exceeding five (5) planned interruptions and eight (8) unplanned interruptions per customer; whilst
- ENS not exceeding eighteen (18) GWh



Indexes achieved during this reporting year were as follows:

- SAIDI for the planned interruptions in the distribution system were 4.97 hours;
- SAIDI for the unplanned interruptions in the distribution system were 85.55 hours;
- SAIFI for the planned interruptions in the distribution system were 2.68;
- SAIFI for the unplanned interruptions in the distribution system were 43.27; and
- ENS- distribution system was 51.58 GWh

The figure below shows SAIDI and SAIFI achieved index values during 2013.



Fig. 5.27 SAIDI and SAIFI during 2013

The following diagrams show the annual index of SAIDI, SAIFI and ENS from 2011 to 2013.









- SAIDI index diagram shows that there is a decline of unplanned interruptions with 28.12% in 2013 compared with 2012 and a decline of 15.50% compared with 2011.
- SAIFI index diagram also shows that there is a decline of unplanned interruptions with 31.52% in 2013 compared with 2012 and compared with 2011 there is a decline of 14.95%.
- ENS index diagram shows that in 2013 we have a decline of not supplied electricity compared with 2012 of 200.9 % and with 32.8% when compared with 2011.

### 5.9.2 Voltage Quality

Voltage Quality is related to the technical aspects of the electricity system and it is monitored by recording customer's complaints on the quality of voltage.

During 2013 the number of complaints filed by customers in energy undertaking on the quality of voltage was 51, out of which 36 or 67 % are resolved whereas 17 or 33% complaints remained unresolved.



Fig. 5.29 Customer's complaints for voltage quality during 2013

Voltage quality standards are set forth in Rule on General Conditions of Energy Supply, Distribution Code and the Distribution Metering Code.

### 5.9.3 Commercial Quality

Commercial quality determines the speed and accuracy of resolving customer's complaints and requests. Commercial quality regulation takes into account the interrelationships between customers and suppliers.

During 2013 public supplier reported that 21.886 customer's complaints were recorded. Most of them have been resolved, whilst some of them were addressed to ERO (which is shown in details in Chapter 9 of this report).

The Rule on the general conditions of supply, Rule for disconnection and reconnection of customers in the electricity sector and Rule for resolving complaints and disputes in the electricity sector in Kosovo set forth commercial quality standards.



# **6 ELECTRICITY TARIFFS AND PRICES**

Based on Article 41 of the Law on Energy Regulator and other bylaws (Pricing Rules), ERO has duties and jurisdiction related to determining the Maximum Allowable Revenues (MAR) for licensees and regulated energy sector activity fees.

In this context, one of the main ERO tasks in 2013 was to review licensees' applications for the allowed revenues and tariffs in the electricity sector, including generation, transmission, distribution and electricity retail supply for the regulated tariff customers. ERO considered the allowed revenues and tariffs through an inclusive and careful analysis of the technical, economic and financial information presented in the applications that were submitted by licensees. ERO set the allowed revenues for the above mentioned activities, then the fees for the transmission system operator and market operator and electricity retail tariffs for regulated customers. In previous year's reviews, only data collected from the previous year were required, and the data provided for in the relevant tariff. In this multi-year tariff review, ERO required data for past five years and forecasts for the next five years.

Energy Strategy of Kosovo foresees reforms in the energy sector which should offer the supply with best quality and service to customers. These improvements in supply have a cost, which should be recovered by the licensees through tariffs. Multi-year review allows efficient cost planning and creates mutual relationship between service cost and service quality. It is important for customers to understand that for quality of electricity supply, adequate price and regular payments for these services are needed.

# 6.1 Multi-year tariff review

Under Pricings Rules, ERO is required to determine an efficiency factor which will apply for operation and maintenance costs. A single factor is determined for the whole period of multi-year tariff on the level that would reflect benefits that can be expected during this period by an efficient licensee. In determining the level of efficiency, ERO has taken into account the costs and quality of services provided by the licensee in comparison with the levels of service quality and productivity of international companies. Further on, it took into account the efficiency factor levels which have been successfully applied in regulatory practices elsewhere in the world.

In a memo dated 8<sup>th</sup> of June 2012, ERO announced a multi-year electricity tariff review (ETR7), which for the first time allows determination of the maximum allowable revenues of licensees.

ERO has a legal obligation to ensure that licensees cover costs and earn a reasonable return on their investment. ERO cannot accept all the requests for costs that licensees seek in terms of tariffs, but it carries out a thorough review of expenditures securing that customers do not pay more than necessary, and that their payments have an impact on improving the supply and quality of electricity service.

The pricing rules approved by ERO, contain clear incentives, linking revenues with performance to reward licensees with outcomes improving the functioning of the power system.

ERO approved new performance standards for licensees, which foresee penalties in cases where the licensee fails to meet required standards. Such penalties are accomplished by reducing the allowed revenues in the next tariff review. ERO is closely monitoring the licensees, the level and quality of meeting these standards.

In line with the new pricing rules, ERO determined the maximum allowed revenues during 2013 as follows:

• 5 years for TSO and DSO activities licensed;



- 4 years for licensed production/mining activities, and
- 1 year for public suppliers licensed activities.

New revenue multi-year review determines the maximum allowed revenue that each licensee may receive during the relevant period in order to cover both operating and capital expenses. Licensees have the freedom to conduct their activities within those overall revenue constraints, which encourages higher efficiency. At the end of the period, and as part of future determining of multi-year reviews, ERO will aim to confirm whether or not the activity has met the planned targets. In cases where licensees could provide the same or better quality of service for lower costs whereby undertakings would have a benefit, whilst customers will benefit in the next review period.

### 6.2 Charges for electricity generation capacity and power for KEK JSC

In line with the pricing rules, ERO carefully assessed licensees' projected costs.

KEK JSC licensed for electricity generation activity, submitted a request to ERO for Maximum Allowable Revenues for TPP Kosovo A and Kosovo B for period 2013-2016. These revenues will be covered through charges for energy and capacity approved by the ERO Board for regulated generators.

Under generation pricing rules, issued by ERO, in the absence of an agreement for the supply with lignite, ERO should determine a cost for supply with lignite for regulated generators TPP Kosovo A and Kosovo B. Pursuant to Article 11 of this Rule, the cost of supply with lignite is also calculated in the same manner as other reasonable costs of regulated generation, including operating and maintenance costs, assumed depreciation and assumed return of capital.

After completing the analysis and evaluation of components for operating and maintenance expenses (OPEX) and capital expenditures (CAPEX), for which depreciation and return on Maximum Allowed Revenues is calculated. 150.9 million euro resulted for KEK generation for 2013, which compared with 2012 when these revenues were  $\leq 128.7$  million, increased considerably. This increase in revenue was due to increased lignite royalty for mining division with  $\leq 18.3$  million, which entered into force on  $1^{st}$  of January 2013 according to the decision of the Assembly of Kosovo.

KEK requested that capital investments are allowed for regulatory period 2013-2016, in the amount of €284 million. After carefully evaluating the costs of capital projects proposed by KEK, ERO deducted capital expenditures to €208 million. These capital investments are foreseen for capital renovation of mining equipment, investment in supporting equipment (bulldozers, trucks, excavators, loaders, forklifts, mini-buses, jeeps, etc.), expropriation costs (village Hade), renovation of combined machines A&B for TPP Kosovo B, replacement of heavy machines, repair of two excavators SRs130, investment in double transport straps for South East Sibovc etc. ERO found that a number of proposed investments for mining and generation are not sufficiently justified, both in terms of cost and time of the investment. Covering capital expenditures means depreciation costs for all assets and return on equity for assets financed commercially.

MAR - which will be covered by regulated generators for 4 -year regulatory period from 1<sup>st</sup> of April 2013 to 31<sup>st</sup> of March 2016, is presented in the following table.

KEK Generation MAR	2013	2014	2015	2016	Total
KER Generation MAR	€ 000's				
"TPP Kosova A" and "TPP Kosova B"	150,957	151,584	152,776	152,697	608,014

### Tab. 6.1 MAR Evaluation for KEK generators



It should be mentioned that these projections of revenues for regulated generators presented in the table will be subject to regular annual adjustments at the end of each tariff year, under Generation pricing rules.

These maximum allowed revenues reflect an average price of electricity for TPP Kosovo A and Kosovo B, of  $\leq 27$ /MWh in 2013, which compared with 2012 when it was  $\leq 23$ /MWh, increased with around 17%. The average price calculated can be obtained by taking an average of two tariff elements in the following table.

Structure of electricity charges and capacity for KEK-generation, which apply from 1<sup>st</sup> of April 2013 until 31<sup>st</sup> of March 2014 is presented in the following table.

Tariff Elements	Unit	Tariff
Power charge	€/MWh	6.09
Capacity charge	€/muaj	9,818,438

Tab. 6.2 Charges for capacity and power, KEK-generation

# 6.3 KOSTT JSC charges and tariffs for

ERO received an application for maximum allowable revenues for a five-year period from KOSTT JSC, licensed for the activity of electricity transmission and market operation in Kosovo.

Capital expenditures in KOSTT application were listed in the amount of €120 million for a period of five years, which were approved by ERO, given that it considers that these investments are reasonable and necessary for the efficient system operation.

ERO following a careful analysis of operating costs presented by KOSTT, considered that these costs should be reduced to €23 million for the period of Price Review 2013 - 2017.

KOSTT identified a number of capital projects, most of which relate to: SCADA - EMS expansion to control assets 110kV transferred by the DSO activity, LP 400 kV Kosovo - Albania, installing autotransformers, package projects SS 110/10 (20) Gjilan 5, Palaj and Prishtina, as well as other smaller projects.

Ultimately, MAR is determined from capital and operating costs, as provided in the following table.

		-	-			
KOSTT MAR	2013	2014	2015	2016	2,017	Total
	€m	€m	€ m	€ m	€ m	€ m
Total	17.49	18.19	19.17	20.29	21.51	96.65

Tab. 6.3 MAR final assessment for KOSTT

These designated revenues include transmission losses, and taking those to account, charges are defined for use of the transmission network (TNUOS), charges of Transmission System Operator and Market Operator charges comprising a tariff of  $\leq 2.8$ /MWh in 2013, which compared with 2012 when the average rate was  $\leq 2.09$ /MWh, represents a reduction of around 5%.

The tariff structure and charges for KOSTT JSC, which apply from 1<sup>st</sup> of April 2013, are provided in the following table.

TARIFF GROUP	TARIFF ELEMENT	UNIT	TARIFF
Constation connected in Transmission	System Operator Tariff	€/MWh	0.438
Generation connected in transmission	Market Operator Tariff	€/MWh	0.029
Concration connected in Distribution	System Operator Tariff	€/MWh	0.142
Generation connected in Distribution	Market Operator Tariff	€/MWh	0.029
	TNUOS Tariff 400/220 kV	€/kW	5.296
Supply	TNUOS Tariff110 kV	€/kW	10.366
	System Operator Tariff	€/MWh	0.400
	Market Operator Tariff	€/MWh	0.026

Tab. 6.4 – Tariffs per KOSTT JSC

# 6.4 Distribution and supply Service tariffs for regulated customers

KEDS JSC is licensed by ERO for distribution activity and the activity of the public electricity supply.

Change of ownership during the period of price review has no impact on the performance of licensed activities for which tariffs should be determined.

Evaluation of DSO capital expenditures, prepared in cooperation with ERO consultants highlighted that the DSO investment plan was consistent with capital expenditure requirements and DSO priorities. These planned investments are: strengthening the network, replacement of lines, piles, transformers, improving metering points to households and energy calculations, eliminate bottlenecks, implementation of SCADA DMS in substations SS 110 kV and full automation of SS 35kV, elimination of air distribution lines hazardous for public and returning to cable lines, etc.

DSO Capital expenditures have undergone rigorous verification to assess whether or not costs per unit for any of the projects costs are in accordance with relevant international comparisons. Data from the evaluation showed that the cost per unit of the DSO, as reported in the DSO's application from November, were higher than those expected, particularly those for air lines (all voltages) and 400 V cables.

After review, allowed capital costs for 2013-2017 are estimated at  $\leq 107.2$  million, not  $\leq 114$  million as originally proposed by the DSO. ERO acknowledged that projects are based on network needs and DSO priorities, and consequently did not cancel any projects requested, but it only reduced costs per unit that were regarded as overestimated.

ERO determined the level of losses that can be recovered through regulated tariffs based on the decision issued by ERO no. V\_399\_2012 dated  $6^{th}$  of February 2012.

Final MAR for DSO includes the costs of operation and maintenance (O & M), depreciation, allowed return and loss, shown in the following table.

	2013	2014	2015	2016	2,017	Total
DSO WAR	€m	€m	€m	€m	€m	€m
Total	70.19	67.93	67.72	66.05	65.84	337.73

Tab. 6.5 Final assessment of MAR for DSO

Maximum Allowable Revenues reflect an average price for distribution network of €15/MWh in 2013, compared with 2012 when the average price was €14.05/MWh, an increase of around 3.8%.

The following table shows the tariff and charges structure for DSO, which applies from 1<sup>st</sup> of April 2013.

Charges for customers connected in DSO					
Voltage level	Unit	Tariff			
35 kV	€c/kWh	0.88			
10 kV	€c/kWh	1.17			
0.4 kV	€c/kWh	2.26			

Tab. 6.6 Tariff and charges structure for DSO

### 6.5 MAR Final assessment

Within functional, legal and financial division of licensees, division of costs and charges is made in order to apply the principle of payments division for activities of generation, transmission, distribution and supply to the end customer, which also facilitates liberalisation of electricity market.

ERO during tariff review for determining MAR for licensees to take into account costs for mines using the same principles of calculation for generators.

Final MAR						
Enterprises		2013	2014	2015	2016	2017
KEK Mine	€m	87.821	88.001	89.005	88.955	83.663
KEK Generation (without lignite	€m	60.747	61.018	61.138	61.141	58.893
KOSTT TSO + MO (except lossess)	€m	14.135	14.763	15.707	16.846	18.016
KEDS DSO (except lossess)	€m	33.113	34.110	36.913	38.781	40.527
KEDS PES-Other net energy purchase costs	€m	13.808	18.401	19.847	19.700	38.685
KEDS PES (except purchase of electricity	€m	14.974	32.909	30.935	31.267	32.264
Total	€m	224.598	249.202	253.546	256.690	272.049

Tab. 6.7 MAR Final Assessment

In the end of each tariff year, ERO through regular adjustments calculates corresponding MAR change allowed with revenues collected, by applying of indexation factors (efficiency and inflation) and costs which are outside control of the licensee, which are specific to each licensee.

A typical example which shows participation of electricity costs by licensees to end customers is presented in the figure below.



Fig. 6.2 Share of costs by the licensee in 2013


ERO, after analysis and evaluation of applications and after regular consultation with stakeholders decided that regulated electricity tariffs were not increased for 2013, given that applications were considered as unreasonable.

Electricity tariffs in line with the relevant rules and methodologies are based on real cost principle for supply service for each customer group under different voltage levels charged with different tariffs. Costs involved in regulated tariffs should be allocated among customer classes, within each group of customers such as:

- electricity charge which applies to the measured energy (kWh) for each customer group;
- reactive electricity charge which applies to certain customers groups (kVArh);
- capacity charge (kW) which applies to relevant customers group; and
- customer charge (also known as fixed charge) which is applied as a fixed price for each customer in every billing period;

Billing period is calculated on a monthly basis and tariffs may vary by time of use, daily (day - night), and seasonal (winter-summer).



					Appr	oved
Tariff	Voltage level of supply	To all the low each	Unit	Time of day	High season	Low season
Group		Tarin element	Unit	rime-or-day	1 October -	1 April - 30
					31 March	September
		Standing (customer) charge	€/customer/month	ı	182	2.53
0-1	220kV	Standing (demand) charge	€/kW/month		14	.44
		Active energy (P)	€c/kWh		2.23	
		Standing (customer) charge	€/customer/month		91	.27
		Standing (demand) charge	€/kW/month		6.09	6.09
0-2	110kV	Active energy (D) of which	€c/kWh	High Tariff	7.07	2.09
		Active energy (P), of which	€c/kWh	Low Tariff	2.94	1.72
		Reactive energy (Q)	€c/kVArh		0.00	0.00
		Standing (customer) charge	€/customer/month		12	.07
		Standing (demand) charge	€/kW		6.33	6.33
1	35kV	Active energy (P), of which	€c/kWh	High Tariff	7.39	3.20
			€c/kWh	Low Tariff	3.91	2.88
		Reactive energy (Q)	€c/kVArh		0.72	0.72
		Standing (customer) charge	€/customer/month		4.	99
		Standing (demand) charge	€/kW		5.45	5.45
2	10kV	Active energy (P), of which	€c/kWh	High Tariff	8.28	3.69
			€c/kWh	Low Tariff	4.46	3.36
		Reactive energy (Q)	€c/kVArh		0.72	0.72
		Standing (customer) charge	€/customer/month		2.	81
0.4 kV Ca	0.4 kV Category I	Standing (demand) charge	€/kW		3.17	3.17
3	nower	Active energy (P), of which	€c/kWh	High Tariff	9.20	5.11
customers)e)	customers)e)		€c/kWh	Low Tariff	5.80	4.82
	Reactive energy (Q)	€c/kVArh		0.72	0.72	
		Standing (customer) charge	€/customer/month		3.18	
4	0.4kV Category II	Active energy (P)	€c/kWh	Single tarif	11.33	7.33
		Active energy (P), of which	€c/kWh	High Tariff	13.64	8.94
			€c/kWh	Low Tariff	6.82	4.46
		Standing (customer) charge	€/customer/month		2.	27
		Active energy (P) for consumption:				
		<200kWh/month (First block):	€c/kWh	High Tariff	5.05	3.63
5	0.4kV 2 domestic 2-	,	€c/kWh	Low Tariff	2.54	1.81
	rate meter	200-600kWh/month (Second Block):	€c/kWh	High Tariff	7.00	5.01
			€c/kWh	Low Tariff	3.51	2.51
		>600 kWh/month (Third block):	€c/kWh	High Tariff	10.16	7.27
		· · ·	€c/kWh	Low Tariff	5.07	3.65
		Standing (customer) charge	€/customer/month		2.	27
	0.4kV domestic 1	Active energy (P) for consumption:	- 4			
6	rate meter	<200kWh/month (First block):	€c/kWh	Single tarif	4.51	3.22
		200-600kWh/month (Second Block):	€c/kWh	Single tarif	6.24	4.46
		>600 kWh/month (Third block):	€c/kWh	Single tarif	9.05	6.49
		Estimated consumption:			<b>22</b> · · ·	
7	0.4kV (domestic	<200 kWh/month	€/customer/month		23.41	
	unmetered)	200-600 kWh/month	€/customer/month		42.37	
		>600 kWh/month	€/customer/month		71.40	
8	Public lighiting	Standing (customer) charge	€/customer/month		3.18	
Ľ ľ	5 5	Active energy (P) for consumption:	€c/kWh	Single tarif	9.17	9.17

#### Tab. 6.8 The structure of retail tariffs of electricity for regulated customers implemented from 1st of April, 2013

High Tariff applies from 07:00 - 22:00 during the High Season and 08:00 - 23:00 during the Low Season.

The customer is charged for the reactive energy consumed over the allowed limit, which corresponds with  $\cos(\Phi)$ =0.95



# 6.6 Lawsuit against ERO Decision

Kosovo Energy Corporation (KEK) JSC, dated 03.05.2013, filed a lawsuit against the decision of the ERO Board, V-519-2013 dated 22.03.2013.

KEK in the statement of the lawsuit requested a judicial review from a relevant authority to review the tariff which was not consistent with the primary and Kosovo secondary legislation. Tariff decision according to plaintiff-KEK JSC is not in accordance with the Kosovo secondary legislation due to lack of revenue adjustment factor based on PES Pricing Rule, causing financial damage to the plaintiff in the amount of €19.8 million.

Further on, it is stated in the lawsuit that the ERO did not act in line with Article 5 of the PES Pricing Rule, issued by ERO, since it failed to calculate complete formula for Maximum Allowable Revenues (MAR), which emphasises that the maximum allowable revenues should be based on: Under or Over coverage of maximum allowable revenues in the relevant year due to differences between projected and executed electricity billing.

ERO received a verdict on 18.07.2013 from Basic Court in Prishtina - Department of Administrative Affairs obliging it that within 30 days to submit a response to the Court, against the lawsuit with all documents related to the disputed case.

ERO within the legal timelimit, respectively on 14.08.2013, pursuant to Article 37 of the Law no. 03/L-202 on Administrative Disputes, filed a response to the lawsuit and fully challenged the claims submitted by KEK.

Response to the lawsuit explains that the ERO Board in the hearing session held on 22<sup>nd</sup> March 2013 considered the application submitted by KEK JSC. Against Seventh Electricity Tariff Review (ETR 7) with relevant explanatory documentation, as well as following the reviewing and analysing the decision V\_519-2013 approved Maximum Revenues to be collected from retail electricity tariffs for regulated customers to be applied by the Public Supplier for the relevant (tariff) year of 12 months from 1<sup>st</sup> of April 2013 until 31<sup>st</sup> March 2014.

By the response to the lawsuit, the plaintiff's claims were rejected and it is argued that decision V\_519\_2013 dated 03.22.2013 is fully in compliance with the legal provisions governing the energy sector, both with primary and the secondary legislation. The decision took into account all KEK costs and revenues required, as well as the adjustment factor (KREV) and decided based on the legislation in force. ERO in the response requested that the claim submitted by KEK JSC is REJECTED as ungrounded and that the decision issued by ERO Board remains in force.

ERO is awaiting the commencement of the hearing within Basic Court in Prishtina.

# 7 DISTRICT HEATING SECTOR

# 7.1 Overview of district heating sector

Heating sector has a very limited extent locally. This sector consists of four heating systems which supply heat to urban areas of municipalities: Prishtina, Gjakova, Mitrovica and Zvecan. Having a total installed capacity of around 192  $MW_t$ , heating sector fails to fill approximately 5% of overall heat demand in Kosovo.

#### 7.1.1 Main developments in the District Heating Sector

Main developments in the district heating sector are mainly inked to co-generation project – supply with thermal energy from Kosovo B for DH Termokos heating system. It should be emphasised that the project is developed through WBIF ("Western Balkans Investment Framework"), where a leading financial institution for this project is the German Development Bank - KfW.

During 2013, progress was made towards project execution, which resulted in work commencing at the end of September. More specifically, in the following we have shown progress the reporting activities and planned activities to the complete project execution, which is expected to be completed by the beginning of next heating season 2014-2015:

- A tendering package no.1 for thermal energy transport pipe line from TPP Kosovo B to DH Termokos is finalised. Construction works in 10.5 km route began in late September 2013, firstly in location of TPP Kosovo B. In the meantime, the expropriation process is concluded and general terms of the construction were approved by MESP. According to the schedule, construction of the pipe line is expected to be completed in September 2014.
- The second tendering package heat exchanger in TPP Kosovo B and Receiving Station/ exchanger in DH Termokos – was contracted in December 2013. This includes the installation work for getting steam into turbine. It is important to mention that in order to make turbine installations, we need to have a timely coordination with renovation plans for TPP Kosovo B generating units. The works related to this package are projected to be completed in mid-October 2014.
- The project foresees two additional tendering packages rehabilitation of 50 substations identified as priority and rehabilitation of some segment in distribution network, execution of which depends from securing additional funds. Currently efforts are being made to secure funds from the German Government or other donors.

In parallel to the activities mentioned above, another project component is also developed for personnel capacity building in DH Termokos. Within this component, project consultancy supported DH Termokos in several areas such as: efficient business planning, investment planning and accounting and finance. Among ERO related activities, it is worth mentioning: drafting of the Agreement for the Sale of thermal energy between TPP Kosovo B and DH Termokos; preparation of methodology for determining the price of thermal energy produced from TPP Kosovo B, structuring and drafting of model for presenting costs and relevant technical data within preparations for reviewing end customer tariffs.

When it comes to DH Gjakova, there is an ongoing project having modification/replacement of existing boilers for fuel switching as main component. The project started in mid 2013 with the drafting of a pre-feasibility study *"Identification Study for fuel replacement and expansion of Gjakova DHC system"*. The first draft of the study conducted in November 2013, resulted with approval by WBIF Steering Committee for subsequent phase which includes feasibility study, ESIA - Environmental and Social Impact Assessment, and Tendering Documents.

It should be mentioned that ERO had ongoing cooperation and is actively involved in projects mentioned in matters related to but not limited to regulatory aspects.

# 7.1.2 Technical characteristics of central heating systems

As mentioned in the beginning, the heating sector in Kosovo includes 4 heating systems with an installed capacity of around 192  $MW_t$ . Given that Termomit and Zvecan heating, due to known circumstances, do not respond to requests for licensing/regulation and monitoring by ERO, relevant and updated information cannot be provided.

Detailed data for DH Termokos and DH Gjakova are presented in the following:

#### Central heating production plants

Heating generation plants in DH Termokos consist of main heating with overall installed capacity of 121.62  $MW_t$ , and auxiliary heating in the University Clinical Centre with a capacity of 14  $MW_t$ .

District Heating Gjakova is equipped with two oil-fired boilers with a total installed capacity of 38.6  $MW_t$ -one with a generating capacity of 20  $MW_t$ , while the other, with a capacity of 18.6  $MW_t$  which is currently out of order.

#### **Distribution Systems**

The common characteristic of all central heating systems in Kosovo is that their distribution network consists of primary network to the point of supply to substations and the secondary network which extends from point of supply to substations up to end users.

The primary distribution network of DH Termokos has a length of 35 km. Integral part of the distribution network is also pumping station and heat exchange which is located at Sunny Hill and 312 active substations which are boundary points between the primary and secondary network.

The primary distribution network of DH Gjakova has a length of around 23.5 km. Integral part of this network are around 251 active substations which are boundary points between the primary and secondary network.

Technical features of central heating systems of DH Termokos and DH Gjakova, are shown in the table below.



- · · ·		Oranatianal	Distribution network		
(City)	Installed capacity $[MW_t]$	capacity [MW <sub>t</sub> ]	Network length [km]	Subst. No.	
	2 x 58 = 116	2 x 58 = 116			
DH TERMOKOS	2 x 7 = 14	2 x 7 = 14	35.0	312	
(Prishtina)	2 x 0,81 = 1.62	0			
	1 x 4 = 4	1 x 4 = 4			
Sub-total	135.62	134.00	35.00	312	
DH GJAKOVA	1 x 20 = 20	1 x 20 = 20	23.5	249	
(Gjakovë)	1 x 18.6 = 18.60				
Sub-total	38.60	20.00	23.50	249	
Total	174.22	154.00	59.00	561	

Tab. 7.1 Technical data of central heating systems

# 7.2 Performance of district heating companies

#### 7.2.1 Fuel Consumption and Price

In general, fuel consumption (crude oil) by district heating companies, in season 2012/2013 was significantly lower than planned consumption. This has been mainly due to the financial difficulties faced by the district heating companies, preventing a steady supply with fuel. During the season 2012/2013 DH Termokos consumed only 4,988 tonnes, respectively 42.63% of the planned quantity. Further on, crude oil consumption by DH Gjakova was quite small, 905 tons or 41.90% of the planned quantity.

The following table shows fuel consumption for season 2012/2013 and a comparative overview of the planned quantities.

	Crude oil consumption (t)					
Company – DH System	Planned Season 2012/2013	Achieved Season 2012/2013	Difference (t)	Performance (%)		
DH TERMOKOS - Prishtina	11,700	4,988	6,712	42.63		
DH GJAKOVA	2,160	905	1,255	41.90		
Total of DH Sector	13,860	5,893	7,967	42.52		

Tab. 7.2 Fuel Consumption

Fuel (crude oil) is imported with reference to the stock exchange prices plus "premium" for covering supplier's costs. For this reason, the purchase price is fairly influenced by price movements in international markets, which are generally quite high. More specifically, the prices of crude oil with sulphur content up to 3.5%, during the period of October 2012 - April 2013, moved from  $\notin$ 434.22/ton up to  $\notin$ 519.64/ton, respectively, the average stock exchange price for the period was  $\notin$ 472.71 / ton.

The figure below shows the graph of the crude oil prices movement under contracts traded in the international stock exchange "Mediterranean Cal Swap" for period October 2012 - April 2013.





Fig. 7.1 Crude oil price in international stock exchange "Mediterranean Cal Swap" for period October 2012–April 2013

# 7.2.2 Production, supply and system losses

#### **Production**

Difficulties in supplying with fuel (crude oil) have conditioned the production of thermal energy in the season 2012/2013 to be significantly lower than planned. Net production from the DH Termokos was 40.10% or 47.718 MW<sub>t</sub>h than planned. In the case of DH Gjakova, net production of heat was 7,477 MW<sub>t</sub>h or 34.81% than planned.

# Heat Supply

Season 2012/2013 was characterised with significantly lower supply than planned, and this was insufficient to meet customer needs for heating. Throughout the season, due to irregular supply with fuel, there were frequent interruptions for several days and quality of heat was poor, and heat supply was completely interrupted approximately 2 months before the official ending of the heating season.

Heat supply to customers by DH Termokos was 37.50% of planned supply. Whilst, heat supply to customers by DH Gjakova was 28.15% lower than planned

#### System losses

Losses in production and distribution network generally marked the same level with past seasons not showing any significant improvement. The level of production and distribution losses for both heating companies is detailed in Table 7.3.

Enterprise	Fuel based energy	Net heat generation	Generation losses	Heating plant efficiency	Distributi	on losses	Supply
	(MWh)	(MWh)	(MWh)	(%)	(MWh)	(%)	(MWh)
DH Termokos	56,365	47,718	8,647	84.66	8,455	17.72	39,263
DH Gjakova	10,233	7,477	2,756	73.07	1,330	17.79	6,147
Total	66,598	55,195	11,403	82.88	9,785	17.73	45,410

Tab. 7.3 Energy performance of heating companies season 2012/2013





*Fig. 7.2 Energy performance of heating companies - season 2012/2013* 

# 7.2.3 Billing, collection and heating service area

Same as in previous seasons, billing in season 2012/2013 for the majority of customers of central heating has been based on pre-estimated heat area (per square meter). When it comes to billing, the planned level of billing was not achieved in this year as well, mainly due to irregular heat supply. Billing specific reasons are: i) non-billing for periods without heat ii) deductions in billing due to days without heat and poor quality of supply, and iii) deductions of heating area following field verification and non-billing disconnected premises in different periods of the heating season.

When it comes to collection in the heating season 2012/2013, the data reported by the district heating companies show that in general, the same trend continued in collection of payments, without any significant improvement. As seen from the figures presented in the table below, average collection rate for the entire heating sector is 46.46%, and of particular concern is low collection rate for household customers.

The total area of service by Termokos DH in season 2012/2013 was 1,051,432 m<sup>2</sup>. In this area, the total household customer group participates with 61.35%, whilst commercial and institutional customers with 38.65%.

DH Gjakova had an overall heat service area of 158.358  $m^2$ . The participation of household customer group in the overall area is 57.81%, whilst the group of commercial and institutional customers participate with 41.19%.

Details regarding billing and collection are shown in the following table.

Heating season 2012/2013	Heating area [m <sup>2</sup> ]	Billing (incl. VAT ) [€]	Collection [€]	Collection rate [%]	
	DH "1	Termokos" Prishtina			
Domestic	645,005	1,165,861.00	236,626	20.30	
Comm. and Instit.	406,427	1,086,706.04	784,043	72.15	
Total	1,051,432	2,252,567.04	1,020,670	45.31	
DH "Gjakova"					
Domestic	91,543	52,782.91	28,971	54.89	
Comm. and Instit.	66,814	247,674.30	136,592	55.15	
Total	158,357	300,457.21	165,564	55.10	
Total DH	1,209,788.67	2,553,024.25	1,186,233	46.46	

Tab. 7.4 Heating area, billing and collection - season 2012/2013

#### 7.3 District heating tariffs for 2013/2014 season

ERO determines heating tariffs according to the Tariff Methodology, developed in line with provisions of the Law on Energy Regulator and the Law on District Heating.

While district heating sector, in respect to the heat transportation and distribution, is qualified as a natural monopoly, in absence of a competitive heat generation and supply, then the district heating tariffs containing all components listed to the above are subject to approval by the ERO.

For calculation of tariffs and district heating prices, ERO selected and applied the method of Rate of Return (RoR) or the so-called cost plus methodology.

Graphically, the RoR methodology can be shown as follows:



#### *Fig. 7.3 Scheme of calculating allowed revenues as per RoR methodology*

Based on RoR methodology, ERO determines the Allowed Revenues that the district heating company has to generate through tariff, i.e. the reasonable allowed costs, which should be



recovered along with a reasonable profit rate calculated according to Rate of Return (RoR), based on Regulated Asset Base (RAB).

The table below presents heating tariffs for the 2013/2014 heating season.

A. DISTRICT HEATING T	ARIFFS FOR UNMETERED CUSTOMERS		
DH COMPANIES	Tariff components	Domestic customers [€/m <sup>2</sup> per month]	Commercial and institutional customers [€/m <sup>2</sup> per month]
	Contracted heating capacity (fixed comp.)	0.07	0.08
DH TEKIMOKOS JSC	Supplied heating (variable comp.)	0.77	0.92
	Contracted heating capacity (fixed comp.)	0.09	0.12
DH GJAKOVA JSC	Supplied heating (variable comp.)	0.88	1.27
B. DISTRICT HEATING T	ARIFFS FOR METERED CUSTOMERS		
DH COMPANIES	Komponentët e tarifave	Metering unit	Price
	Contracted heating capacity (fixed comp.)	€ / kW per month	0.66
DH TERMOKOS JSC	Supplied heating (variable comp.)	€/MWh	45.50
	Contracted heating capacity (fixed comp.)	€ / kW per month	0.91
DH GJAKOVA JSC	Supplied heating (variable comp.)	€/MWh	58.76

#### Tab. 7.5 Summary of district heating tariffs for 2013/2014



Fig. 7.4 Pamje e Termokosit

# 8 NATURAL GAS SECTOR

# 8.1 Development perspective of natural gas sector in Kosovo

Kosovo has approved the Law No. 03/L-133 on Natural Gas although there is no market and natural gas infrastructure, having in mind two main goals: fulfilment of obligations that Kosovo has to the EC Treaty as a full member and opening a perspective for the development of this sector.

The law on Natural Gas sets out the basis and defines organisation and functioning of natural gas sector, market approach as well as the conditions and criteria for conducting transmission, storage, distribution and supply of natural gas. It should be emphasised that during 2013, amendments and supplements to the law on natural gas were made aiming at transposing third European legislation package for energy.

The perspective of developing natural gas sector is closely related to gas infrastructure projects in South-eastern region of Europe, especially with the Energy Community Gas Ring which links seven countries of the Southeast Europe, including our country, as well as TAP pipeline project ("Trans – Adriatic-Pipeline").



Fig. 8.1 TAP Project and interconnection to "Gas ring" of Energy Community (Source: TAP A.G. and ECS)

The most important event for the development perspective of gas infrastructure in Kosovo relates to TAP pipeline. In June 2013, TAP pipeline was selected by Shah Deniz II consortium as technically and economically more advantageous project for transportation of natural gas from the rich gas fields of Azerbaijan to Europe. The route of the pipeline with a length of approximately 870 km starts in Turkey, traversing Greece, Albania and across the Adriatic ends in the south of Italy. TAP is considered as a project which will have a positive impact on the development of gas infrastructure in the Energy Community respectively South East region of Europe, offering opportunities for connection of planned regional projects such as Gas Ring and Ionian-Adriatic pipeline.

ERO continuously monitors regional developments closely associated with natural gas, and participates actively in the work of the Energy Community, namely: Working Group for Gas Regulatory Board within Community Energy, Gas Forum and security supply coordination group,



gas sub-group. In this regard, by giving direct inputs, analysis and comments, ERO contributed to preparation and finalisation of several documents, among which we can distinguish: Report on Gas Transmission Balancing within Energy Community, and Implementation Study Rule (EU) 994/2010 on Gas Supply Security in the Energy Community.

# 9 CUSTOMER CARE

# 9.1 ERO activity in the field of customer protection

According to article 14, paragraph 2, sub-paragraph 2.14 of the Law on Energy Regulator, ERO is responsible for resolving complaints and disputes between customer and energy companies, system operators and energy companies, as well as between two energy companies.

Even during 2013 ERO has been dedicated towards securing and protecting the rights of customers, including notifications to customers of their rights and obligations, as well as services to be provided by the supplier.

ERO in its activities cooperates with all organisations which legitimately represent customers in the energy sector.

# 9.2 **Procedures developed to resolve complaints/disputes**

ERO based on its powers conferred by primary legislation drafted and approved secondary legislation that includes the area of customer protection in the energy sector, such as: Rule on resolution of complaint and disputes in the energy sector, Rule on General Conditions of Energy Supply and Rule on disconnection and reconnection of customers in the energy sector.

Rule on resolution of complaint and disputes in the energy sector establishes the conditions and procedures for submission, review and resolution of customer's complaints against energy companies. This rule also specifies conditions and procedures for submission, review and resolution of disputes between licensees.

According to provisions of the Rule on resolution of complaint and disputes in the energy sector, all customers are entitled to submit complaints related to services provided by supplier or system operator, where these complaints are first submitted to the supplier, who reviews the complaint and issues a response within the legal period. The customers, upon receiving a response, may address to ERO for further review, which is considered as second instance authority.

This rule also sets forth several other mechanisms to resolve complaints or disputes, such as alternative dispute resolution (ADR). ADR procedure is an informal, voluntary, and can be used in various forms such as negotiation, mediation or other alternative solutions. The purpose of ADR is to avoid regular complaint procedure and decrease the number of complaints that require formal decisions, such as decisions by ERO or the Court.

# 9.3 Complaints received from customers against licensees

Customer complaints are reviewed based on commitment, transparency, impartiality principles and fully in compliance with legal provisions.

During 2013 ERO registered 353 customer complaints/disputes, out of which 227 were resolved or 64% in percentage, whilst outstanding complaints of this year are in the process of completing the documentation and evidence needed to resolve them. Besides complaints resolved in 2013, ERO resolved 26customer complaints from previous years, whereas during 2013 a total of 253 complaints have been resolved.

From 253 customer complaints resolved during this year, 187 complaints have been approved in favour of the customer, or 73.91%, whilst 66 customer complaints were rejected as unfounded or 26.09%.

Customer complaints registered during 2013 in ERO were of different natures, as shown in the following table.

Nature of complaints	No	Percentage [%]
Dispute of electricity bill	189	53.54
Dispute of electricity debt	53	15.01
Dispute of transfer of electricity debt	78	22.10
Dispute of lump sum billing	15	4.25
Dispute of new connection	9	2.55
Dispute of joint consumptioin	2	0.57
Others	7	1.98
Total	353	100.00

Tab. 9.1 Customer complaints by nature during 2013

**Disputing electricity bills** – relates to customer complaints addressed to ERO expressing their dissatisfactions in cases of errors when reading and non-regular reading made by employees of the public electricity supplier, and in which case, they inaccurately presented the factual situation of electricity consumption, causing financial impact to the detriment of customers. The table above shows that the highest number of customer complaints proved to be disputing the electricity bills, whose participation in percentage was 53.54%.

**Disputing electricity debt** – relates to customer complaints addressed to ERO and which deal with dissatisfactions regarding problems for not precisely defining debt of uncollected electricity from the public electricity supplier in case of property sale. Further on, complaints of this nature relate to debts incurred for electricity by persons occupying properties illegally, as a result of which caused problems to new legitimate owners, to whom the same debt was requested. The table above shows the percentage of customer complaints disputing electricity debt proved to be 15.1%.

**Disputing the transfer of electricity debt** – relates to customer complaints, which energy company transferred electricity debt from one customer to another, respectively from one to another code. In this case, this transfer caused a significant concern to customer because, in regular monthly bills, the electricity debt transferred from other codes appeared. The percentage of this category of complaints in 2013 was around 22.10%.

**Disputing unmetered billing (lump sum)** – relates to customer complaints which electricity company s billed with unmetered values /lump sum. These complaints are a result of not reading the metering points by employees of public electricity suppliers. Further on, this billing is made as a result that public supplier's employees have no access to metering points. This prevented meter reading of electricity, and in some cases the company is forced to provide billing based on the average consumption of the previous months. The percentage of this category of complaints in 2013 was around 25.4%.

**Disputing new connections** – relates to customer complaints, whose the right to a new connection was denied by the company. In these cases of complaints, customers in order to make new connections are required by the company to firstly pay old debts in the code which existed earlier. In some other cases the company conditioned customers with debt for customer codes in different locations.

Further on, other customer complaints relate to billing for gathering electricity consumption into a single month, in the electric meters in newly constructed buildings. This is also identified due to delays caused by investors regarding their obligations and company itself. Percentage of complaints in this category during 2013 was around 2.55%.



**Disputing joint consumption** - has to do with the disputing debt created as a result of joint consumption in collective premises, which debt is billed by public electricity supplier. The concern of customers is because the supplier did not proportionally divide customer debt according to their spending due to legal obstacles. In this regard, ERO held meetings with the Construction Department under the Ministry of Environment and Spatial Planning, where the obstacles in the implementing the Law on the use, management and maintenance of premises in joint ownership is discussed, which Ministry has a legal obligation to license building administrators.

The table below shows the number and percentage of complaints registered by customer category.

Customer complaints by category	Number	Percentage [%]
Household	318	90.08
Commercial	35	9.92
Industrial		
Total	353	100.00

Tab. 9.2	Customer	compla	ints bv	cateaorv	durina	2013
		00				

The chart below shows the number of customer complaints recorded and resolved by ERO in years.



Fig. 9.1 Customer complaints by years

The figure above shows that the number of customer complaints filed in ERO during 2010 - 2012 has decreased. This decrease occurred as a result of the amendments made to primary and secondary legislation in the energy sector. This amendment also reflected in the resolution of customer complaints, since under Rule for Complaint and Dispute Resolution in the Energy Sector, which rule, based on the Law on Electricity, determines that customer complaints qualified as unauthorised use of electricity will not examined by ERO, given that this is under courts competence, and this category of customers used their right to appeal to the competent courts. The increased number of customer complaints in 2013 occurred as a result of disputing bills for January 2013.

According to ERO considerations, increased number of customer complaints for 2013 occurred as a result of customer awareness of the role and credibility of the ERO in resolving complaints and disputes.



#### 9.3.1 Complaints addressed to ERO Board

Customers and licensees under provisions outlined in Rule on resolution of complaint and disputes in the energy sector have the right to appeal against the decision issued by Department for Customer Protection to the ERO Board.

Public supplier during 2013 appealed 38 DCP decisions to ERO Board. From 38 complaints submitted to the ERO Board, all were rejected as unfounded.

Customers during 2013 filed 11 complaints to ERO Board against the DCP decisions. From 11 complaints submitted to the ERO Board, number of complaints approved was 1, the number of rejected complaints was 10.

# 9.4 Complaints received by licensees against other licensees

As mentioned above, ERO pursuant to Article 14, paragraph 2, sub-paragraph 14.2, except complaints submitted from customers and energy companies, has the power to examine and resolve the dispute between the two licensees.

During this reporting year ERO had no dispute raised between licensees.

# 9.5 Complaints regarding third party access and cross-border flows

ERO during 2013 had no complaints recorded regarding third party access to the transmission or distribution of electricity, central heating or natural gas, as well as transmission, cross-border flows of electricity and natural gas.

#### 9.6 Actions performed by ERO in terms of customer protection

Besides complaints registered, ERO staff during this reporting year conducted 732 meetings and 325 telephone conversations with parties, including electronic communication addressed to Office for various contractual issues between the customer and energy companies. ERO staff in communication with customers, informed and instructed them to the rules, procedures and the rights and obligations associated with energy supply.

During 2013 public supplier has taken some action to review non-active customers and as a result of these actions debt of several metering point was transferred which the energy company marked as inactive. Debts incurred have been transferred to other customers who are now active users of facilities or locations where these metering points have been located in other premises or locations. Many customers have disputed this action by public suppliers and addressed it to ERO, arguing that debts belong to earlier customer and they did not generate those debts, and therefore have challenged the payment of this debt transfer. ERO after gathering additional information and evidence from both parties reacted through an official letter by warning public electricity suppliers. In regard to this action made by public suppliers, ERO requested immediate termination of transferring debt from one code to another, as well as review all debt adjustments/transfers.

ERO noticed that a licensee for public electricity supply has disconnected some electricity customers even in cases when customers submitted a complaint to the ERO. After identifying these cases, ERO reacted by asking the supplier to implement legal provisions defined in Rule for disconnection and reconnection of customers in the energy sector, which sets forth that the energy company cannot disconnect a customer for non- payment if the latter challenges the reasons for disconnection in writing, whilst energy company reviews and issues a decision on the objection, and when the customer submits a complaint against the decision to the other responsible authorities.



ERO within its scope of protecting customer rights monitored public electricity supplier and noticed that in some cases this company when calculating bills for unauthorised use of electricity made mistakes by not adhering to legal procedure provisions for identifying and preventing unauthorised use of electricity, thus causing a financial impact to the detriment of customers. For these cases, ERO reacted by informing and instructing this enterprise to adjust these bills.

Regarding customer complaints for replacing meters from mechanical to digital meters by licensee for public electricity supply, ERO has taken some monitoring activities seeking information on meter replacement, as well as their impact on electricity billing. ERO findings indicate that the licensee in December 2012 made flaws when replacing electric meter by not correctly adhering to procedure of reading and billing tariff customer, given that it did not make the billing per kilowatt hour ( kWh) fully consumed. During that period, the customer is billed only with the bill from old meter which often was in smaller value (for few days only), whilst in the following month, together with the amount of current consumption charged the remaining part of the previous month. After these analyses made, ERO requested from licensee to correctly adhere to the procedure of reading and billing tariff customer, being careful when replacing the meter, making sure that the customer gets two bills for that month, one bill for consumption with old meter and other consumption with the new meter.

ERO, same as in previous years, in 2013 also had a close cooperation with the Department for Customer Protection in the Ministry of Trade and Industry, where during this reporting year, it received several customer complaints from this institution. These complaints have been received and reviewed by ERO in line with legal provisions. ERO also cooperated with the Department of Metrology under the MTI, where from this department we have received warranties for the accuracy of electricity meters.

During 2013, ERO participated in a number of court cases proceeded within the competent courts. In some cases, ERO participated in these trials as a witness, whilst in other cases, ERO participated as the defendant. Compared with previous years, the number of trials in this year reporting that ERO followed has significantly increased.



# **10 ERO'S INTERNATIONAL ACTIVITY**

# 10.1 ERO and the Energy Community Treaty of Southeast Europe

Since October 2013 ECSEE Contracting Parties are the following: Albania, Bosnia and Herzegovina, Kosovo, Macedonia, Montenegro, Serbia, Moldova and Ukraine, and in the capacity of participants are the European Union member states, while Norway, Turkey, Armenia and Georgia have the status of Observer. Georgia currently is a candidate for membership in the EC SEE



Fig. 10.1 Member states of the Energy Community of Southeast Europe

Energy Community Treaty (ECT) is a key strategic element of the European Union (EU) for the Southeast Europe and a very effective pre-accession tool, aimed at enhancing the benefits of the Internal Energy Market before the countries of the region may join the EU.

Main institutions of the Energy Community are: the Ministerial Council (MC), the Permanent High Level Group (PHLG), ECT Secretariat based in Vienna, and four advisory forums on: electricity, natural gas, social issues and petroleum.

ECRB is an institution established in accordance with Article 58 of the EC SEE, made of regulatory authorities of contracting parties, participants and observers. ECRB plays the role of a coordinating body for the regulatory authorities relating to harmonisation of the regulatory framework, exchange of knowledge and development of practices on implementation of the Treaty.

Based on provisions of the Energy Community Treaty, ECRB has the following responsibilities:

- Provides advice to the Ministerial Council as well as the Permanent High Level Group on statutory, technical and regulatory issues;
- Issues recommendations to parties, in line with Treaty provisions on any cross-border disagreements, etc.;
- Takes action against parties, if so authorized by MC;
- Facilitates cooperation and coordination between the regulatory authorities;
- Issues recommendations and drafts reports related to functioning of energy markets, and
- Seeks completion of parties' obligations under ECT.

The objectives and priorities of the ECRB are:

- Development of competitive national market in the gas and electricity sector,
- Integration of national markets and eliminating barriers for cross-border activities and competition,
- Customer protection and social cases, regulatory aspects of safety of supply, security of electrical network and quality of supply, etc., and
- Renewable sources and energy efficiency.

To meet its responsibilities and objectives, ECRB is organized in working groups that undertake activities in relevant areas. ECRB is managed by the chairperson elected annually by the representatives of the national regulators, and the deputy chairperson, delegated by the European Commission.



Fig. 10.2 EC Regulatory Board Structure

# **10.2 ECRB activities during 2013**

In accordance with its obligations to ECT, ERO nominated its member in the ECRB and in every working group, and it actively participates in the work of the Board and respective working groups. Activities of relevant working groups are presented below:

# 10.2.1 Electricity Working Group

During 2013 the working group held four meetings, where the representative of ERO participated. In order to have a more efficient work, this group has established its Task Forces- TF, the description and activities of whom are presented below:

# • TF-1 Regulatory framework on establishment of Capacity Allocation Regional Mechanisms and Congestion Management Procedures:

This TF deals with the issues of congestion management and allocation of cross-border transmission capacities, based on requirements of Regulation 714/2009 of the European Commission (EC). In 2013 its activities were focused on developing a coordinated review of SEE CAO documents.



# • TF-2 Balancing:

Balancing electrical energy flows is of essential importance for functioning of transmission systems and their development as well as regional integration of energy market. In 2013, this group developed the Balancing Vocabulary, and reviewed the implementation of the study on imbalances in order to create a common regional approach in accordance with the European experiences and rules.

#### • TF-3 Market Opening and Compatibility of Market Rules:

Opening the wholesale market and compatibility of market rules still remains a main regional objective. During this year the main activities were related to the implementation of the Regional Action Plan on SEE Wholesale Market Opening.

#### • TF-4 Harmonisation of wholesale trading licences.

Harmonization of licenses for trading remains a priority for the mutual recognition of licenses by contracting parties of the ECT. In 2013 the focus was in the development of measures to ensure equal conditions for wholesale vendors and to guarantee a fair and reasonable trade through monitoring trade activities.

#### • TF-5 Regulatory incentive measures on investment:

Special attention was paid to identification of "PECI – Projects of Energy Community Interest", including implementation of the study on incentive measures on investment.

#### • TF-6 Monitoring of SEE market:

Monitoring of the SEE regional Market was in focus since 2006 by the project "Monitoring the SEE Market", implemented by a consulting company from USA "Potomac Economics". The work on finalisation of the Guidelines on Monitoring the Market and developing the market data base continued also in 2013.

#### • TF-7 Renewable Sources:

This sub-group was established in 2012. In 2012 there were few presentations relating to experiences whether the adequate solutions were found to support renewable sources in SEE region states.

# 10.2.2 Gas Working Group (GWG)

This group focuses its activities in the natural gas regulatory matters, harmonizing the regulatory framework at regional level and other matters related to development of the natural gas infrastructure in the SEE region. For efficiency purposes and in favor of treatment of specific issues, specific sub-groups have been established ("Task Force" – TF).

# • TF-1 Regulator Aspects for the Development of Energy Community Gas Ring

The main objective of this "Task Force" is to evaluate regulatory options and incentive measures for the implementation of the "Energy Community Gas Ring". In connection to this, attention was paid to review of requirements for harmonization of the regulatory framework and incentive measures for funding investments for Energy Community Gas Ring.

In the context of the work of this subgroup, in 2013, the focus was on providing inputs to identify the Projects of Energy Community Interest – PECI and potential impacts on the Gas Ring as a consequence of new developments in the natural gas sector.



# • TF-2 Role of Regulatory Authorities in Preparing and Monitoring the Ten Year Network Development Plan, ENTSO-G (TYNDP)

The work of this "Task Force" included gaining and exchanging knowledge and experiences on the role of regulatory authorities in preparing and monitoring the implementation of the TYNDP.

#### • TF-3 Input on the Grid Code and EU Guideline Framework

Following the decision of the PM on implementation of the EU Grid Codes, activities of this "Task Force" were focused on providing inputs to the process of preparation and implementation of Grid Codes and Guidelines Framework. In this aspect was reviewed the draft Grid Code on Interoperability and the draft Guidelines Framework on Transmission Fees.

#### 10.2.3 Customer Working Group

Within the ECRB exist the Customer Working Group with its task forces, dealing with activities related to customer protection, tariffs and prices, contractual relations between supplier and customers, and the quality of electricity supply and voltage quality adjustment.

#### • TF1 – Customer Protection

This task force was engaged in protection of customers and vulnerable customers, through analysis and discussions on secondary legislation, other state's practices on this sensitive subject. During 2013 the Energy Community Secretariat has organized the Social Forum, the sixth one, discussing practices of different states on social issues, as well as the progress on implementation of the Social Action Plan (SAP) of the Energy Community.

# • TF2 – Tariffs and prices

During 2013 this task force developed questionnaires regarding tariff methodologies and tariffs in general for the SEE EC member states, and it developed a general document regarding the main criteria on determining the allowable revenues for transmission, distribution and supply system operators. The aim of this activity was to present each member state of the EC SEE the principles during determination of the allowable revenues and determination of electricity and gas tariffs. It should be noted that during 2013 this task force has successfully completed this activity as the document was drafted and sent for approval to the ECRB.

#### • TF3 – Customer Education

In 2013 this task force held a joint workshop with ECRB, CEER and ERRA on the subject "Empowering the role of household customers in an open market and during the establishment of the market". In this workshop were presented the experiences of different SEE EC states and it was decided to hold again a similar workshop on 2014.

# TF4 – Contractual relationships between the supplier and customers in electricity and gas market

The main focus of this task force was developing a joint document of signatory states of SEE EC, relating to contractual relationships between the supplier and customers. The aim of this document was protecting customers in terms of their rights and obligations in the contract, so that the contracts need to be made transparent from all parties. In 2013 this task force prepared the document "Status of contractual relationships between the supplier and customers" and currently it is in the final phase to be sent for approval to ECRB.

TF5 – Guidelines on the best practices on implementation of the use of voltage quality

The activities of this task force relate to filling in the questionnaires on the quality of voltage, primary and secondary legislation as well as respective codes and procedures. During 2013 there not many activities except of one meeting between ECRB and CEER on improvement and efficiency of this activity.

# **10.3 Electricity Regional Regulatory Association - ERRA**

Representatives of ERO during 2013 attended meetings and conferences organized by the Energy Regulators Regional Association. ERO has the following committees / task forces: Committee on licensing and competition, Committee on tariffs, Committee on legal regulation, Committee of Board Presidents and Committee on Gas. In these committees are treated various regulatory matters and are exchanged knowledge and experiences between the states representatives. ERO is represented as an associate member and takes place in the General Assembly and in the work of committees of this association. More precisely, in 2013, ERO representatives took place in the following ERRA activities:

- 12<sup>th</sup> Meeting of the General Assembly, Committee on Licensing and Competition, and Committee on Tariffs, held in Abu Dhabi, United Arab Emirates;
- Regular meeting of the Committee on Licensing / Competition and Committee on Tariffs and Prices of ERRA; Budapest, Hungary.

# 10.4 Cooperation Agreements between ERO and ERE

Following a few meetings in Prishtina and in Tirana, on 22 February 2013 in Tirana, supported by the Norwegian Embassy, the Energy Regulatory Entity (ERE) of Albania organized a workshop. On this occasion a Memorandum of Understanding was

signed between the ERB and ERO.

Representatives of both regulators and other participants involved in the energy sectors of both countries discussed on the liberalisation of energy market between the two countries and the potential of cooperation in establishing a common energy market between Albania and Kosovo.

Fig. 10.3 Signing of the cooperation agreement between the ERO and ERE



# 10.5 Memorandum of Understanding between ERO, NARUC and PUC

On 7 November 2013, the Energy Regulatory Office of Kosovo (ERO), National Association of Regulatory Utility Commissioners (NARUC) and The Public Utility Commission (PUC) of Pennsylvania signed a Memorandum of Understanding (MoU).

This Memorandum of Understanding serves as the base for Partnership Activity between the two regulators, and it objective describes the respective roles of all the parties involved in this partnership. Through this cooperation, the two Regulators will share





experiences, lessons learned and best practices, which are valuable for Kosovo in continuing to create and implement a sound and independent regulatory framework to ensure the efficient, transparent, and stable functioning of the electricity sector and its market, while protecting the interests of customers and investors.

#### Fig. 10.4 Signing of the Memorandum of Understanding between ERO, NARUC and PUC

This partnership is funded by the USAID – mission in Prishtina and it is a part of NARUC program on Regulator and Security of Energy in Europe and Euro-Asia.



#### **ABBREVIATIONS**

AEAI	Advanced Engineering Associates International Inc (Consultants)
WB	World Bank
EU	European Union
RES	Renewable Energy Sources
CAO	Coordinated Auction Office
CAPEX	Capital Expenditures
CEER	Council of European Energy Regulators
TEGD	Thermal Energy and Gas Department;
LLD	Legal and Licensing Department;
CPD	Customer Protection Department
TPD	Tariffs and Prices Department
EMD	Energy Market Department
KEMD	Kosovo Electricity Market Design
EC	European Commission
ECS	Energy Community Secretariat
ECRB	Energy Community Regulatory Board
SEEL	Southeast Europe
ENS	Energy Not Supplied
ENTSO-E	European Network of Transmission System Operators for Electricity
ENTSO-G	European Network of Transmission System Operators for Gas
ERE	Energy Regulatory Entity
ERRA	Energy Regulators Regional Association
ESIA	Environmental and Social Impact Assessment
PS	Public Supplier
GIZ	German Society for International Cooperation
GWG	Gas Working Group
PHLG	Permanent High Level Group
GWh	Gigavat hours
нс	Hydro Power Plants
ITC	Inter TSO Compensation
KE	Energy Community
EC SEE	Energy Community of Southeast Europe
КЕК	Kosovo Energy Corporation
KESH	Albanian Energy Corporation
KEDS	Kosovo Electricity Distribution and Supply Company

# ENERGY REGULATORY OFFICE

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KfW	Kreditanstalt für Wiederaufbau (German Bank for Development)
MC	Ministerial Council
km	Kilometre
козтт	Kosovo Transmission System and Market Operator
kV	Kilovolt
kW	Kilowatt
OL	Overhead line
MAR	Maximum Allowed Revenues
СА	Cooperation Agreement
EPA	Energy Purchase Agreement
MESP	Ministry of Environment and Spatial Planning
ΜΤΙ	Ministry of Trade and Industry
MVA	Megavoltamper
MW	Megawatt
MWt	Thermal megawatts
MWh	Megawatt hours
NARUC	National Association of Regulatory Utility Commissioners
AU	Administrative Unit
СН	Central Heating
SS	Substation
OPEX	Operational Expenditures
DSO	Distribution System Operator
TSO	Transmission System Operator
MO	Market Operator
PECI	Projects of Energy Community Interest
PUC	Public Utility Commission
RoR	Rate of Return
RAB	Regulated Asset Base
SCADA	Supervisory Control and Data Acquisition
SAIDI	System Average Interruption Duration Index
SAIFI	System Average Interruption Frequency Index
SEE	Southeast Europe
JSC	Joint Stock Company
ТАР	Trans-Adriatic-Pipeline
ТРА	Third party Access
ТРР	Thermal Power Plant

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TF	Task Force
ТКЕ	Energy Community Treaty
HW	High Voltage
TR	Transformer
MW	Medium Voltage
LW	Low Voltage
TNUOS	Transmission Network Use of System
VAT	Value Added Tax
USAID	United States Agency for International Development
WBIF	Western Balkans Investment Framework
OAG	Office of Auditor General
ADS	Alternative Dispute Settlement
ERO	Energy Regulatory Office



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