BOSNIA AND HERZEGOVINA

STATE ELECTRICITY REGULATORY COMMISSION

REPORT ON ACTIVITIES

OF STATE ELECTRICITY REGULATORY COMMISSION IN 2010

Bosnia and Herzegovina

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Tuzla, December 2010

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1. INTRODUCTION

The key challenges of the power sector of Bosnia and Herzegovina (BIH), first of all with regard to the implementation of the so-called Third Package of Energy Legislation, were announced in *the SERC Report on Activities in 2009*, and subsequently in *the 2009 Report on the Energy Sector of Bosnia and Herzegovina*. The reporting year confirmed the full certainty that the fastest possible process of transposition of the new *acquis communautaire* concerning the internal energy market into the legislation of the Energy Community countries, including BIH, would have the full support of the highest institutions of this Community.

Adjustments to the specificities of the regional and European target wholesale market model are also before BIH. The three regulatory commissions in BIH, in cooperation with market participants including the ministries, have prepared the document: *Obstacles, preconditions and solutions to the successful functioning of the electricity market in BIH*, which should face the BIH Council of Ministers and entity governments, as energy policy leaders, with the identified preconditions and obstacles with solutions to successful functioning of the BIH electricity market. Namely, the BIH Council of Ministers and the entity governments are expected to provide guidelines for and support to the regulators with regard to approaches to market opening as soon as possible, because the end of the transition period (January 1, 2012), during which all customers but households are entitled to choose tariff or eligible customer status, is approaching quickly.

The State Electricity Regulatory Commission is an independent institution of Bosnia and Herzegovina, which acts in accordance with the principles of objectivity, transparency and equality, and has jurisdiction over and responsibility for transmission of electricity, transmission system operation and international trade in electricity as well as generation, distribution and supply of electricity for customers in Brčko District BIH.

SERC is a non-profit institution and is financed by regulatory fees which are paid by the licensed entities.

The BIH power system operated steadily throughout 2010 with indicators of new historic maximum volumes. The highest electricity generation of 16,068 GWh was reached, of which 7,946 GWh by hydropower plants, 7,869 GWh by thermal power plants and 253 GWh by small and industrial power plants. Also a record in total electricity consumption in BIH of 12,266 GWh was reached, being by 5.8% higher than the last year.

Good connections of the BIH System with the neighboring countries enabled a record in export (4,898 GWh) to be reached in 2010, the highest being with Montenegro and Croatia as usual, an increased number of cross-border trading transactions and registered transit of electricity via the BIH transmission network of 2,751 GWh, which is by 29.6% higher than in 2009. Electricity import reached 1,056 GWh, of which 82.9% was realized by Aluminij d.d. Mostar through import for self-consumption.

There have not been any changes in the retail sector. Unfinished restructuring process of the power companies within which the activities of generation and supply are performed still enables their dominant position in the electricity market. Only two customers purchased some part of their required electricity on the market: Aluminij d.d. Mostar which purchased 876 GWh on the market (48.6% of total consumption) and BSI d.o.o. Jajce with 192.48 GWh (84.4% of

total consumption). Thus, 1,068.48 GWh were purchased in this way, which accounts for 10.03% of electricity taken over by end customers in BIH. Unfortunately, BSI Jajce had already announced its decision to withdraw from the market and choose the tariff customer status again in the next year.

Business results of companies in the power sector as a whole are positive (at the level of around 50 million BAM (1€=1.95583BAM)), although they are considerably lower in comparison with the best results reached in 2009. In particular, Elektroprijenos BIH (Transmission Company – TRANSCO) and Elektroprivreda HZHB achieved good financial results, while some companies had losses due to low wholesale prices and increased operational costs.

It is discouraging that in spite of numerous previous warnings and measures undertaken by SERC, the power system functioned for yet another year without the necessary volume of ancillary services which caused reoccurrence of considerable deviations towards the European connection and reactions of the block coordinator.

Two vital institutions of the BIH power system have been running business operations successfully for years now. This year's revenues of the Independent System Operator BIH will cover all costs and expenses, while the total revenue of Elektroprijenos BIH will exceed 150 million BAM, with a gross profit of around 25 million BAM which ensures it a top position among similar companies in the near and wider surroundings. However, there is no justification for years-long disagreements about investment of now considerable means accumulated so far in the transmission network development and non-commitment to the creation of conditions for connection of new facilities to the transmission network. In addition, the implementation of conclusions agreed earlier by shareholders' representatives is still on hold.

With completion of the required legal regulation concerning electricity in Brčko District of Bosnia and Herzegovina, preconditions have been created for SERC to start using its regulatory jurisdictions to issue licenses to the Public Company Komunalno Brčko for the performance of electricity distribution and supply activities in the District area and to set temporary tariff rates for customers.

A valuable experience gained in 2010 while preparing *Report on the BIH Energy Sector*, for the first time through joint efforts and using data of all relevant regulatory and national authorities in the energy sector and based upon the model used by EU countries, will improve quality and reliability of energy statistics as a basis for decision-making processes at different levels.

The auditing report on assets, capital, financial results, transactions and business events for yet another business year confirms that SERC does it in an objective and transparent manner, which is the reason to believe that this continuity will be noticed and publicly commended by the relevant working bodies of both Houses of the BIH Parliamentary Assembly, just as it has been the case so far.

2. COMPOSITION AND ORGANIZATION OF WORK OF THE STATE REGULATORY COMMISSION

SERC was established by the Parliamentary Assembly of Bosnia and Herzegovina by adoption of the Act on Transmission of Electric Power, Regulator and System Operator of BIH, and appointment of the Members of the Commission.

Members of the Commission from the Federation of Bosnia and Herzegovina are:

- Mr. Mirsad Salkić, with his second five-year term (from December 30, 2009 to December 29, 2014) and
- Mr. Nikola Pejić, with a five-year term (from September 25, 2007 to September 24, 2012).

The Member of the Commission from the Republika Srpska is

- Mr. Vladimir Dokić, M.A. with a four-year term (from July 1, 2003 to June 30, 2007).

It is evident that the four-year term of Mr. Vladimir Dokić, the Member of the Commission from Republika Srpska, expired on June 30, 2007 who, in accordance with a decision of the Republika Srpska Government[1], continues to perform this function until the election of the new member of the Commission by the BIH Parliamentary Assembly.

After the appointment of Mr. Vladimir Dokić, M.A., as the first Chairman of the Commission (who was the Chairman until June 30, 2004), the Members of the Commission rotate in this position equally on an annual basis. Mr. Mirsad Salkić is the current Chairman of the Commission until June 30, 2011.

The work of SERC is organized within four departments:

- Tariff and Market Department,
- Licensing and Technical Affairs Department,
- Legal Department,
- Financial and Administrative Department.

SERC will follow the requirements of the regulatory practice by using different ways to improve its knowledge and experience, i.e. by strengthening its professional capacities. The improvement of knowledge is achieved by participation in different professional consultations, conferences and topical seminars, in the country and abroad, and by distance e-learning. In this context,

[1] At the time of the creation of this report, the procedure for appointment of the Member of the Commission from the Republika Srpska is in process before the Parliamentary Assembly of Bosnia and Herzegovina. After the Government's proposal was confirmed by the National Assembly of the Republika Srpska, the nomination was submitted to the Council of Ministers of Bosnia and Herzegovina, which proposed the appointment to the Parliamentary Assembly of Bosnia and Herzegovina at the end of September 2010.

The Report on Activities of the State Electricity Regulatory Commission in 2009 was considered at the sessions of both Houses of the Parliamentary Assembly of Bosnia and Herzegovina,

- *at the 77th session of the House of Representatives, held on May 12, 2010*
- *and at the 47th session of the House of Peoples held on June 24, 2010.*

valuable support is provided by the United States Agency for International Development (USAID) through the Regulatory and Energy Assistance Project (REAP), within which in 2010 the following seminars were organized: Seminar on supplier of last resort and default supplier and contracts and Seminar on load charts.

SERC shall continue to develop human resources through well-established as well as new training methods and the use of modern technical equipment. The justification of such approach has been confirmed by professional knowledge and experience in the regulatory practice acquired up to now, which is ever more successfully presented at regional international professional gatherings by the staff with improved information, communication and presentation skills.

In addition to professional training of its employees, SERC also informed of and shared experiences in the regulatory practice with regulated companies' employees in an adequate manner, and participated in professional training of staff of other regulatory authorities in the region.

In the reporting period, purchase of the necessary technical equipment was continued, which is needed for an efficient work of the State Electricity Regulatory Commission.

3. KEY ACTIVITIES

During 2010, the State Electricity Regulatory Commission held 12 regular sessions, 25 internal meetings and organized 8 public hearings, of which two were formal hearings.

In the reporting period, the Commission adopted or approved several documents. This Report presents the most important ones, which, as a rule, were adopted through the process of public hearings.

Transparency toward the public through consultation and communication with all interested members of professional as well as wider public is the fundamental orientation of the Commission which is conducive to checking the suitability of proposed solutions before their final adoption. The practice of mutual exchange of collected public comments in the same or similar procedures is applied by all three electricity regulatory authorities in Bosnia and Herzegovina.

Regulations and proceedings from the regulatory competencies are reviewed and determined in regular sessions, in accordance with the authorities prescribed by the law; issues and documents of an organizational and administrative nature are reviewed and discussed in internal meetings.

With the view to soliciting comments of interested parties and members of the public on rules and regulations, or on any other document, SERC organizes general hearings; technical hearings, which are organized to resolve technical issues during the proceedings, e.g. the processing of procedural or essential issues; and formal hearings, which are organized to establish decisive facts based on which SERC might resolve certain applications or disputes.

Regular sessions and all types of public hearings are open to the public.

3.1 SERC Rules

Procedure for Changes to the Tariff Pricing Methodology for Services of Electricity Transmission, Operation of the Independent System Operator and Ancillary Services

The Tariff Pricing Methodology for Services of Electricity Transmission, Operation of the Independent System Operator and Ancillary Services, adopted in June 2005, enables to set prices of services for utilization of a natural monopoly in a fair manner, and at the same time ensures revenues for regulated companies, needed for their normal operation.

Taking into account the European regulation and practice in the field of tariffication of services provided by national transmission system operators, SERC concluded that conditions were created for changes to the concept of tariffication of these services pursuant to provisions prescribed by Regulation 1228/2003/EC of the European Parliament and of the Council of June 26, 2005 on conditions for access to the network for cross-border electricity trade and Regulation 774/2010 relating to common regulatory approach to transmission charging. With an aim to fully harmonize its acts regulating these issues with the aforementioned provisions, at its session held on December 1, 2010 SERC defined *Draft Decision on Modifications and Amendments to the Tariff Pricing Methodology for Services of Electricity Transmission, Operation of the Independent System Operator and Ancillary Services.*

After the initiated procedure for creation and evaluation of proposed solutions has been completed during the following year, it is expected that the Decision on Changes to Tariff Methodology will be adopted.

Adoption of the Rules on Changes and Amendments to the (Transmission Network) Connection Rules

The Connection Rules ("Official Gazette of BIH", number 95/08) prescribe the procedure for connection of new generators´ or customers´ facilities to the transmission network at 400, 220 and 110 kV voltage level, connection of facilities to 35, 20, 10 and 6 kV medium voltage level at 110/x kV substations of the Transmission Company, as well as connection of the existing facilities in case of an increase in granted capacity, upgrade or reconstruction of facilities.

While applying these Rules it was noticed that a procedural obstacle existed for users of power facilities in the Federation of BIH due to the requirement for users to provide the Transmission Company with an approval of the Urban Planning Department for construction of facilities during the procedure for connection of facilities to the transmission network. Users were not able to obtain the required approval because pursuant to the official position of the relevant federal ministry, they were obligated to attach conditions for connection to the transmission network issued by the Transmission Company to the application for approval of the Urban Planning Department. By this interpretation, obtaining one document was conditioned by obtaining the other one and vice versa, which complicated the procedure for connection of facilities to the transmission infrastructure to the detriment of the user.

These were the reasons for SERC to conduct a public hearing at the end of June 2010, and subsequently in September to adopt *the Rules on Changes and Amendments to the Connection Rules* in which a compromise solution was found for the aforementioned situation by introducing a '*Pre-approval of Connection'* to the transmission network in the function of issuance of approval of the Urban Planning Department (by which construction is approved and which is issued pursuant to the relevant laws on construction). The application for issuance of Pre-approval of Connection can be filed both by the investor and the authority competent for issuance of approval of the Urban Planning Department with the term of one year and a possibility to extend it for yet another year. Changes of the Connection Rules were published in the "Official Gazette of BIH" number 79/10 and came into force on October 5, 2010.

3.2 Documents Approved by SERC

Rules of Allocation of the Right to Use Cross-Border Transmission Capacities

Cross-border transmission lines are the infrastructure enabling free international trade in electricity. Congestion in these lines reduces possibilities for free trade; consequently, it is necessary

to apply congestion management rules, i.e., rules allocating available capacities in a non-discriminatory, transparent and market-oriented manner.

Explicit auctions are used for allocation of transmission capacities at almost all borders of European countries, pursuant to Regulation 1228/2003/EC of the European Parliament and of the Council of June 26, 2003 on conditions for access to the network for cross-border electricity trade.

The Independent System Operator in Bosnia and Herzegovina developed and submitted to SERC for approval *the Draft Rules of Allocation of the Right to Use Cross-Border Transmission Capacities* which are based on market principles and implemented via explicit auctions, thus maximizing market value of transmission capacities.

The application of *Rules of Allocation of the Right to Use Cross-Border Transmission Capacities* was approved by the decision of the State Electricity Regulatory Commission of March 24, 2010, whereby explicit auctions, as a market-based method for allocation of transmission capacities applicable on almost all borders of the European states, became applicable on the BIH borders as well.

On June 1, 2010 ISO BIH started to perform auctions of cross-border transmission capacities pursuant to the aforementioned Rules. Figure1. and Figure 2. provide an overview of realized revenues on the basis of monthly and daily auctions per borders and directions and by moths respectively.

The previously approved *Temporary Rules of Allocation of Cross-Border Transmission Capacities* were used until the adoption of new rules.

In accordance with these Temporary Rules, in 2010 SERC issued conclusions on allocation of funds based on charges for non-use of allocated cross-border transmission capacities thus

Figure 1. Revenues on the basis of auctions, by borders and directions (BAM)

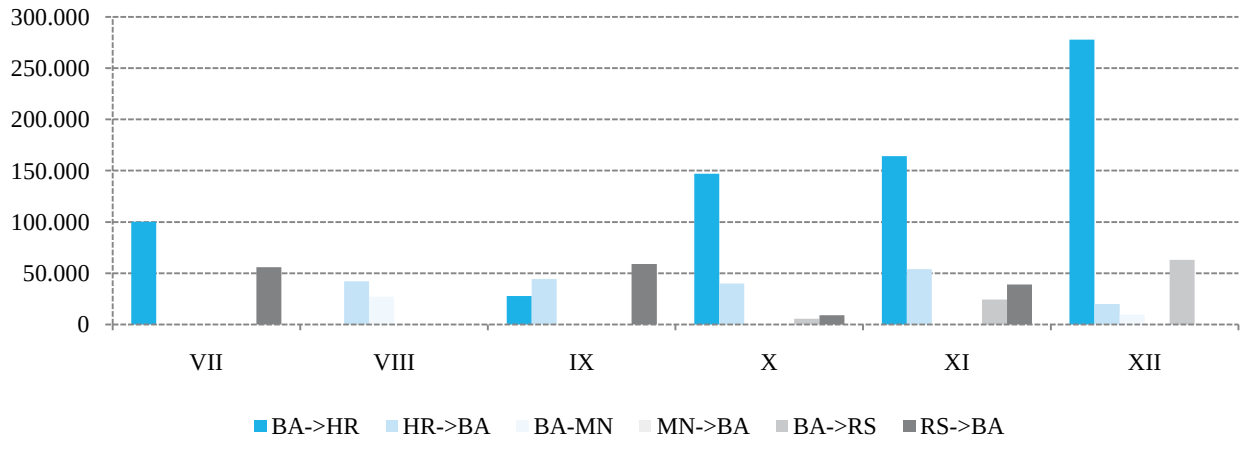
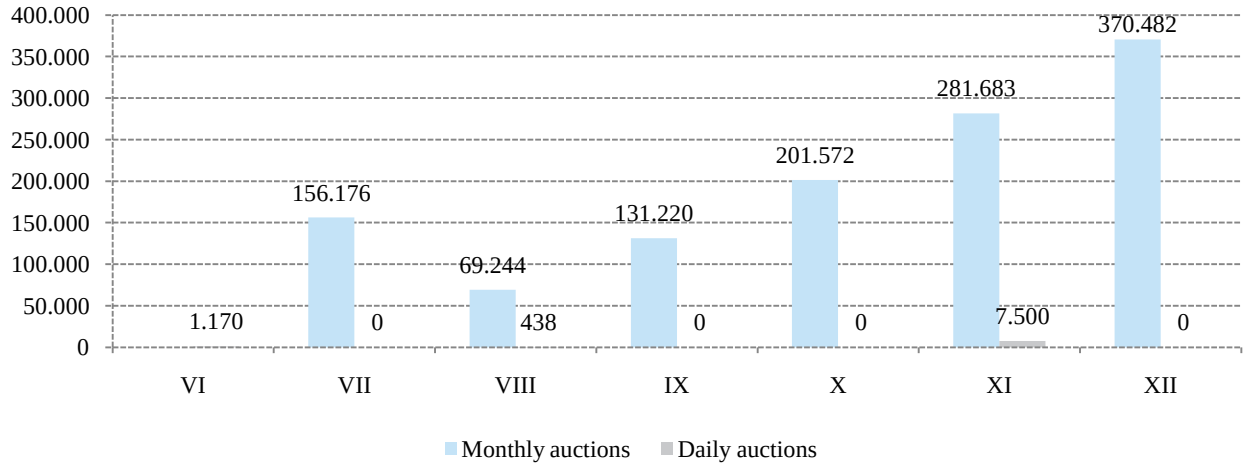


Figure 2. Revenues on the basis of monthly and daily auctions, by months (BAM)

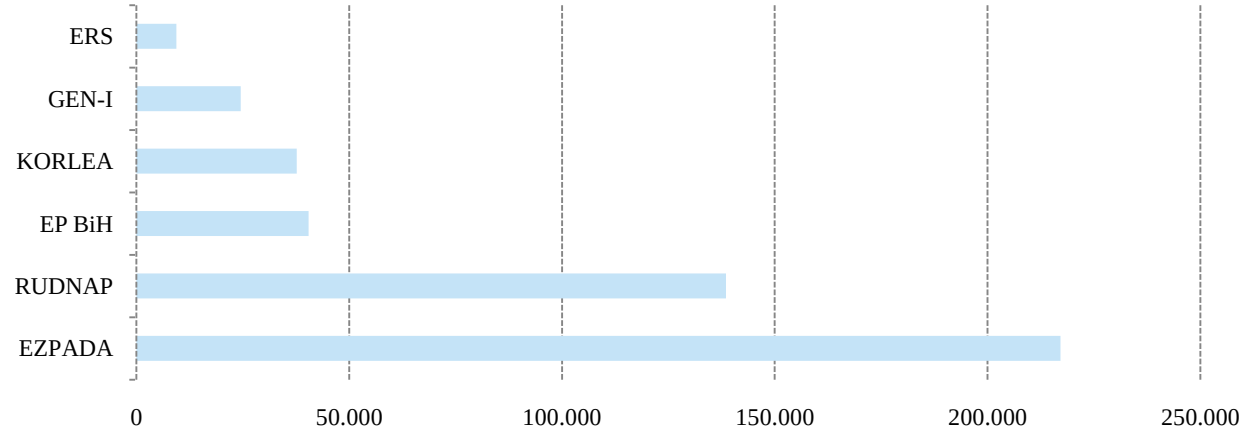


obligating users of the funds to invest them in development and construction of cross-border transmission capacities towards the neighboring countries. On this basis, the Transmission Company collected the amount of 467,745 BAM. Figure 3. provides an overview of entities which did not use cross-border transmission capacities pursuant to allocations made.

Hence, total revenue realized on the basis of rules of use of cross-border transmission capacities in 2010 amounted to 1,687,229 BAM.

Pursuant to the Rules, on December 6, 2010 ISO BIH organized an annual auction for 2011. A total revenue on the basis of the annual allocation of capacities for 2011 amounts to 4,789.300 BAM. The user of the all revenues on the basis of auctions for allocation of the right to use cross-border capacities is the Transmission Company.

Figure 3. Overview of funds paid by entities (BAM)



The Indicative Generation Development Plan for the Period 2011-2020

The Indicative Generation Development Plan is developed for a ten-year period every year. The goal of the plan is to inform the current and future users of the needs and existing projects for construction of new generation capacities. At the same time, this plan is used as one of the bases for the development of *the Long-Term Transmission Network Development Plan* in Bosnia and Herzegovina, which covers the issue of new cross-border lines as well and which is also developed every year covering a ten-year period.

Relying on the experience acquired during preparations of four previous Indicative Plans, for development of the Indicative Generation Development Plan for the Period 2011-2020 ISO BIH ensured qualitative input data which not only expanded the plan for one more year, but also updated and improved it. A previously conducted public hearing on the Indicative Plan confirmed the matching of provided consumption forecasts, new generation capacities and capacity and power balances in the transmission network. While approving the plan, once again SERC took note of crucial importance of the proactive engagement of all entities in planning as well as ensuring quality data for the feasibility of this type of plans.

The adoption of the Decision on Approval of the Indicative Plan was followed by adequate conclusions which obligate ISO BIH to update the next indicative plan with all elements as envisaged by the Grid Code. The conclusions put a special emphasis on monitoring of consumption by different customer categories in BIH, also pursuant to the Grid Code, although some statistical standards are only in the initial phase. Furthermore, ISO BIH is obligated to determine regulation possibilities of the power system in BIH, that is, maximum possibilities for connection of new generation facilities using unmanageable energy sources. A higher safety margin can be used until more precise limitations are established.

Grid Code Changes

ISO BIH initiated the procedure for changes and amendments to the Grid Code, which, inter alia, refer to the harmonization of schedules of development of the Indicative Generation Development Plan and the Long-Term Transmission Network Development Plan. In this way, ISO BIH and “Elektroprenos BIH” would have sufficient time to prepare the plans in the same year, and would be able to submit them to SERC for approval by the end of the current year. It is expected that the draft changes and amendments to the Grid Code include the part which deals with conditions for connection. Furthermore, the Grid Code will be added a

part which takes into consideration specificities of wind power plant operation (technical requirements for connection of wind power plants, regulation of active power and frequency response, voltage regulation and reactive power compensation etc). In addition, it is planned to make some changes to parts pertaining to metering code, operational planning code and operational cooperation and reporting. The completion of activities on Grid Code Changes is expected in the first half of 2011.

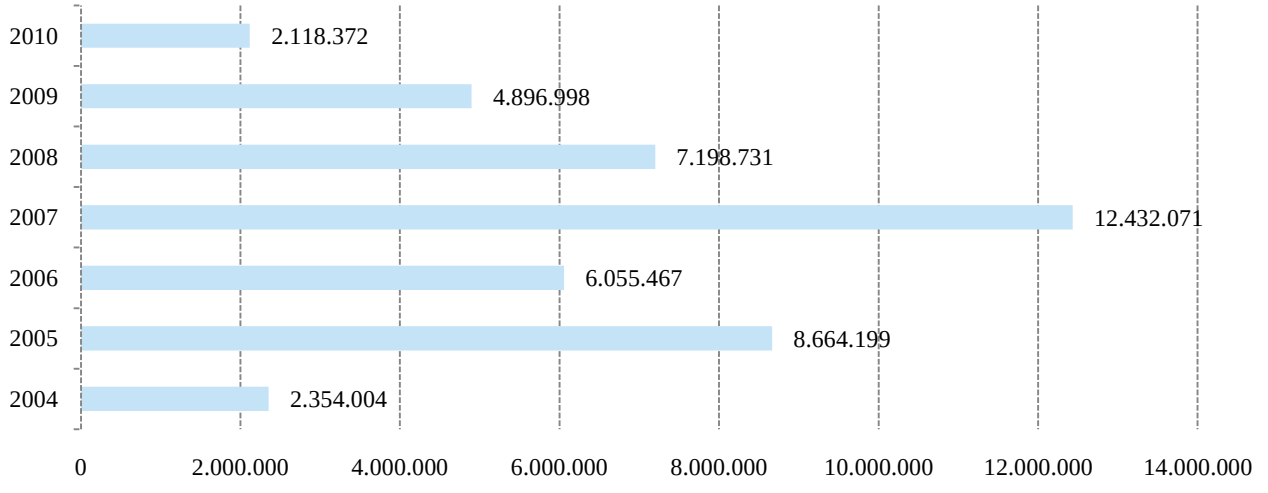
ISO BIH Approval for Participation in ITC Mechanism

The Inter-TSO Compensation Mechanism (ITC Mechanism - *Inter TSO Compensation*) is a method of compensation for costs in the national transmission network caused by electricity flows due to cross-border trade. In this manner, an important platform has been created that enables electricity trade in the region of South East Europe, as well as between the region and the European Union.

The ITC mechanism has been implemented in Western Europe since 2002, and in South East Europe since 2004, under the previously-used term CBT mechanism (Cross-border trade mechanism). In June 2007, the planned merger of ITC mechanisms of SETSO and ETSO countries, i.e. of ITC funds, was achieved, thus for the first time creating a single ITC mechanism encompassing 29 European countries. The complex procedure of calculation and harmonization of data on electricity flows in 2009 and 2010 was performed on a monthly basis by Swissgrid, Switzerland and Amprion, Germany in the capacity of data administrators.

It is in the jurisdiction of the regulator to approve the implementation of the mechanism, which, in the first place, involves the implementation of Regulation EC 1228/203 of the European Parlia-

Figure 4. ITC mechanism-based revenue, by years (BAM)



ment and of the Council of June 26, 2003, on conditions for access to the network for cross-border electricity trade. The State Electricity Regulatory Commission gave its approval to the Independent System Operator in Bosnia and Herzegovina to accept and sign the ITC agreement for 2010. ISO BIH is obligated to report on a regular basis to SERC and "Elektroprenos BIH" on all topical issues, planned activities and monthly energy and financial results achieved during the implementation of the Agreement.

Due to its geographic position as a transit country in the region and Europe and the structure of the transmission network, Bosnia and Herzegovina realizes regular revenue based on the ITC mechanism implementation (Figure 4). It should be noted that invoicing is conducted with delays of several months due to the complexity of calculation; consequently, the above Figure provides incomplete revenue in 2010 encompassing only the first ten month.

3.3 Procedures for License Issuance

During 2010, in several proceedings conducted mostly due to the expiration of the term of the previously issued *temporary* licenses, renewed, i.e., *new* licenses have been granted with a five-year term for the activity of international trade to:

- GEN-I d.o.o. Sarajevo (November 2010),
- "Interenergo" d.o.o. Sarajevo (November 2010).

Additionally, during the year, the proceedings for issuance of a temporary license to HSE BH d.o.o. Sarajevo were conducted (December 2010), with a two-year term of license issued to an entity which appears for the first time as a participant in international electricity trading in the market.

Upon an application of "LTS" d.o.o. Banja Luka, the proceedings for processing of the application for issuance of temporary license for international trading are in progress. Furthermore, in February 2010 the procedure for processing of an application for the change of the name and address of the already licensed subject was completed – changing Atel BH d.o.o. Sarajevo into ALPIQ Energija BH d.o.o. Sarajevo, while the same was done in December 2010 with "RE Energija" d.o.o. Sarajevo which changed the name into "Repower Adria" d.o.o. Sarajevo under the same licensing conditions.

As licensees for the activity of international trade in electricity, the following entities have been also registered: JP "Elektroprivreda Hrvatske zajednice Herceg Bosne" d.d. Mostar, JP "Elektroprivreda Bosne i Hercegovine" d.d. – Sarajevo, MH "Elektroprivreda Republike Srpske" Parent Company, a.d. Trebinje, "Energy Financing Team" d.o.o. Trebinje, EZPADA d.o.o. Čapljina, "KORLEA" d.o.o. Mostar, "Rudnap" d.o.o. Banja Lu-

ka, and "ALUMINIJ" d.d. Mostar i "B.S.I." d.o.o. Jajce (import of electricity for self-consumption).

At the end of 2010, the term of temporary license granted to "ČEZ BIH" d.o.o. Sarajevo expired. This entity has not applied for issuance of the license in the forthcoming period.

It should be recalled that the "Independent System Operator in Bosnia and Herzegovina" and "Elektroprenos Bosne i Hercegovine" a.d. Banja Luka are also among the licensed entities, with licenses being granted in 2007 for the performance of the activities of the independent system operator and transmission of electricity respectively.

3.4 Monitoring of Activities of Licensed Entities

Throughout the year, SERC monitors compliance of the licensed entities´ operations with the licensing conditions, first of all by monitoring regulated activities performed by ISO and Elektroprenos BIH. Monitoring of activities is performed by an analysis of regular and special reports submitted by licensed entities as well as by announced or unannounced visits to license holders. License holders submit annual, semi-annual, monthly and daily reports on individual activities, of financial as well as technical and organizational character. Reports of license holders on contingency events in the system are also available.

Visits of SERC experts to regulated entities enable a direct insight in their documents and activities as well as more complex analysis of the operation and the financial position of the entity from the aspect of application of approved tariffs.

This year has been also marked by problems in the operation of "Elektroprenos Bosne i Hercegovine" a.d. Banja Luka whose operation has been burdened for a longer period with disagreements among members of the company management as well as the Steering Board of the Company on all key issues. On several occasions, the State Electricity Regulatory Commission expressed its concerns over such situation and urged both the entity governments – owners and members of the Assembly of Shareholders of "Elektroprenos BIH" to resolve it.

SERC believes that the problems present in the operation of "Elektroprenos BIH" up to now will be resolved.

3.5 Technical Aspect of Transmission System Operation

Operation of the BIH power system was stable throughout the year. All system users were able to work under optimum conditions in accordance with the defined quality standards. Genera-

tors were able to realize the planned generation balance, while licensed electricity traders were able to perform all transactions.

The period March – May 2010 was characterized by the occurrence of high voltage levels in the 220 and 400 kV network. The voltage levels were regulated by changing a transmission ratio of network transformers, changing working regimes of individual power plants, even by disconnecting transmission lines (19 disconnections in the period from March 27 to May 2, 20010).

The hydro power plant Mostarsko Blato with installed capacity 2×30 MW was put into test operation, connected to the 110 kV network between TS Mostar 4 and TS Mostar 5. There were no new facilities in the transmission network (transmission lines or substations).

The whole year was characterized by favorable hydrological conditions and an increase in generation of hydro power plants. Extremely high inflows in November and December caused floods in all river basins in BIH. On November 29, 2010, the Agency for the water area of the Adriatic Sea put a ban on operation of PHE Čapljina which considerably reduced the tertiary reserve in the BIH power system.

SAIFI (System Average Interruption Frequency Index) indicates the average number of interruptions per customer during a year.

SAIDI index (System Average Interruption Duration Index) indicates the average interruption duration for each customer in minutes per year.

ENS - Energy Not Supplied

SERC monitors the quality of operation of the power system also by analyzing Transmission Company's data on technical aspects of transmission system operation, which are presented through indices of continuity of customer supply: SAIFI, SAIDI and ENS.

SAIFI and SAIDI indices are obtained by monitoring of the number and duration of interruptions in TRANSCO's facilities resulting in supply interruptions for customers directly connected to the transmission network and/or supply interruptions in middle voltage feeders exceeding three minutes.

Tables 1. and 2. show SAIFI and SAIDI indices in the previous three years. Table 1 includes only interruptions caused by events in the network under TRANSCO jurisdiction, while Table 2 includes also interruptions in MV feeders in TRANSCO substations caused by events in the distribution network.

Supply interruptions are divided into short (lasting less than three minutes) and long (three minutes and longer) interruptions. Long interruption include planned (announced) and unplanned (unannounced) interruptions.

Indices are considerably less favorable in Table 2, due to the widespread connections and the size of the distribution network which, in practice, is more inclined to different types of outages.

Table 1: SAIFI and SAIDI for the transmission network

		2008	2009	2010
SAIFI	Planned interruptions	1.89	2.06	2.49
	Unplanned interruptions		1.00	1.58
	Total		3.06	4.08
SAIDI	Planned interruptions (min/customer)	1.73	213.07	503.58
	Unplanned interruptions (min/customer)	3.62	94.17	103.03
	Total (min/customer)	401.59	307.24	606.60

Table 2: SAIFI i SAIDI including outages of MV feeders caused by interruptions in the distribution network

		2008	2009	2010
SAIFI	Planned interruptions	7.08	6.16	6.18
	Unplanned interruptions	10.04	11.85	11.99
	Total	17.12	18.01	18.17
SAIDI	Planned interruptions (min/ customer)	533.78	810.02	847.61
	Unplanned interruptions (min/ customer)	742.87	661.66	877.17
	Total (min/ customer)	1,276.74	1,471.68	1,724.78

Data on ENS (*Energy-Not-Supplied*) due to unplanned supply interruptions (ENS_{unpl}), as well on ENS due to planned interruptions (ENS_{pl}) in the BIH power system, for 2008, 2009 and 2010 are provided in Table 3.

Separately from „Elektroprenos BIH“, similar indices are gathered by all companies performing the activity of distribution on the distribution level, that is, on voltage levels of 35, 20 and10 kV.

Values of SAIDI indices in minuets per end-customer for individual licensed entities in the activity of distribution in 2009 and 2010 are presented in Table 4.

Table 3. Energy-Not-Supplied due to interruptions in the transmission network

	2008		*2009*		*2010*	
	MWh	*min*	*MWh*	*min*	*MWh*	*min*
ENS_{unpl}	1.526,60	17.642	1.570,86	17.683	1.340,79	22.865
ENS_{pl}	2.991,66	40.241	2.252,23	35.225	2.042,28	33.842
Total	4.518,26	57.883	3.823,09	52.908	3.383,07	56.707

Table 4. SAIDI for distribution network *(min/customer)*

Distributor	2009			2010		
	planned interruptions	*unplanned interruptions*	*total*	*planned interruptions*	*unplanned interruptions*	*total*
Elektrokrajina	914	1,302	2,216	1,054	1,935	2,989
Elektro Bijeljina	1,096	2,034	3,130	881	1,792	2,673
Elektro Doboj	322	320	642	344	447	791
Elektrodistribucija Pale	462	3,364	3,826	820	1537	2,357
Elektro Hercegovina	510	1,437	1,947	486	1590	2,076
Elektroprivreda HZHB	577	644	1,221	735	586	1,320
Elektroprivreda BIH	806	634	1,440	673	452	1,125
Komunalno Brčko				1,486	1,777	3,263

3.6 Tariff Proceedings

Tariffs for Electricity Transmission Services

Pursuant to its jurisdictions as defined by law, at the session held on November 24, 2009, the State Electricity Regulatory Commission adopted a conclusion on initiating tariff proceedings for electricity transmission services.

The regulated company, "Elektroprijenos Bosne i Hercegovine" Banja Luka, submitted required documentation in which it presented its requirements for revenues and expenditures as well as costs which it intends to include in tariffs for its services. Pursuant to the Law establishing the Company for the transmission of electric power in Bosnia and Herzegovina, the Company is obligated to prove that the proposed tariffs are in compliance with requirements of the regulatory rules and regulations.

The revenue requirement planned by Elektroprijenos BIH in 2010 was 141,397,773 BAM which in relation to electricity planned in the transmission network (13,048,051,591 kWh) produces an average tariff for transmission services in the amount of 1.084 pfennig /kWh (1 BAM = 100 pfennig).

The tariff application was resolved in accordance with the criteria set out in the Law on Transmission of Electric Power, Regulator and System Operator in BIH and the Tariff Pricing Methodology for Services of Electricity Transmission, Operation of the Independent System Operator and Ancillary Services.

While reviewing the application, SERC complied with the basic principles prescribing that tariffs shall be fair and reasonable, non-discriminatory, founded on objective criteria, based on justified costs and set in a transparent manner.

A formal hearing, at which facts related to tariff proceedings were established, was held on February 3, 2010 and was open to

the public. Authorized persons as representatives of interveners, who had been granted that status previously by SERC, were entitled to participate in discussions.

At the session held on April 27, 2010, the State Electricity Regulatory Commission adopted a decision on approved revenue for 2010 and the level of the tariff for electricity transmission services.

Taking into account the overall situation in Bosnia and Herzegovina and the global economic crisis affecting the business climate and the economic situation in the country in 2010 as well, the Commission estimated that realistic conditions to increase the transmission network fee and the cost of electricity transmission services in comparison to the previous period were not created, and consequently, limited the average tariff for transmission services to the reached level of 0.870 pfennig/kWh. Customers in Bosnia and Herzegovina who take over electricity from the transmission network pay for part pertaining to energy in the amount of 0.566 pfennig/kWh and for part pertaining to capacity in the amount of 1.478 BAM/kW.

Tariffs for ISO Operation and Ancillary Services

In October 2009, the Independent System Operator in BIH filed a tariff application for approval of tariffs which would enable it to have positive business operations in 2010. Pursuant to the prescribed procedure, the tariff application was filed in the established forms which enable a clear and transparent structural overview of economic and energy values which are used as the basis to set tariffs.

ISO BIH application was resolved by conducting the formal hearing procedure which enables active and transparent participation both of the public and third interested parties (interveners) who can prove their own interest in the tariff proceedings.

Having conducted planned activities including a detailed analysis of application data, as well as comments made in hearings held, using its discretionary right to modify, accept or reject some expenditure items, SERC set a total revenue requirement for ISO BIH operation in 20019 in the amount of 6,182,071 BAM. Based on the revenue requirement set in this manner and planned scope of services, the tariff for ISO operation in 2010 was set in the amount of 0.0435 pfennig/kWh.

Alongside the tariff proceedings for ISO BIH operation in 2010, the tariff proceedings for ancillary services were conducted, which also was the subject of a formal hearing. Ancillary services are an exceptionally complex and important factor enabling safe operation of the power system. In the previous period, operation of the system of ancillary services encountered a range

of difficulties in practice which reflect complex and unregulated relations between the key entities in the power sector. In addition, some other circumstances also caused inefficiency of the system of ancillary services such as lack of or non-compliance with nominations made by the power utilities. Due to the fact that all measurements required for precise determination of energy values do not exist or are not available, on several occasions power utilities in BIH challenged monthly calculations done by ISO BIH.

Pursuant to the applicable rules defining system operation, ISO BIH set required scopes of services for secondary and tertiary regulation. The power utilities offered in their nominations a higher scope of services than required. To avoid unnecessary increase of costs in the system, the Commission decided to accept nominations up to the required level for these two services.

Taking into account all specificities and comments and remarks provided during the proceedings as well as the overall situation and relations in the power sector of Bosnia and Herzegovina, the Commission was of the opinion that it was not either realistic or possible to introduce new elements into the model of ancillary services (energy in secondary regulation, negative secondary and tertiary regulation and penalizing).

By setting tariffs for each ancillary service individually, the State Regulatory Commission clearly stated in its decision obligations of all entities with an aim to improve the system of ancillary services.

Tariffs for Customers in Brčko District of Bosnia and Herzegovina

By changes made to the Electricity Law in 2009 and at the end of 2010, the jurisdiction of the State Electricity Regulatory Commission was expanded to include the activities of generation, distribution and supply of electricity for customers in Brčko District of Bosnia and Herzegovina.

At the end of 2010, SERC initiated the preparation of draft rules on procedures for issuance of temporary licenses for performance of these activities and the method to determine temporary tariffs for distribution system users and non-eligible customers in Brčko District of BIH. These rules will enable the issuance of a temporary license to the Public Utility Company “Komunalno Brčko”, and the adoption of temporary tariff rates for electricity customers, thus introducing the regulatory practice in this part of Bosnia and Herzegovina. The completion of these activities is planned for January 2011.

3.7 Electricity Market

Power Indicators

Year 2010 was the year of record indicators – Figure 5. provides an overview of the most important balance volumes.

The highest historic generation of electricity of 16,068 GWh was achieved. Of that amount generation in hydro power plants amounted to 7,946 GWh, which is also a historic maximum, while generation in thermal power plants amounted to 7,869 GWh. In addition, small hydro and industrial power plants produced 253 GWh. Participation by percentage, that is, the bread-down of electricity generation in 2010 is provided in Figure 6.

In comparison to the previous year, hydro generation was increased by 29.2%, which is a consequence of exceptionally favorable hydrological conditions, which, in spite of reduced generation in thermal power plants by 4.4%, resulted in a total increase in electricity generation in comparison to the previous year by 10.3%.

Figure 5. Balance volumes realized in 2010 (GWh)

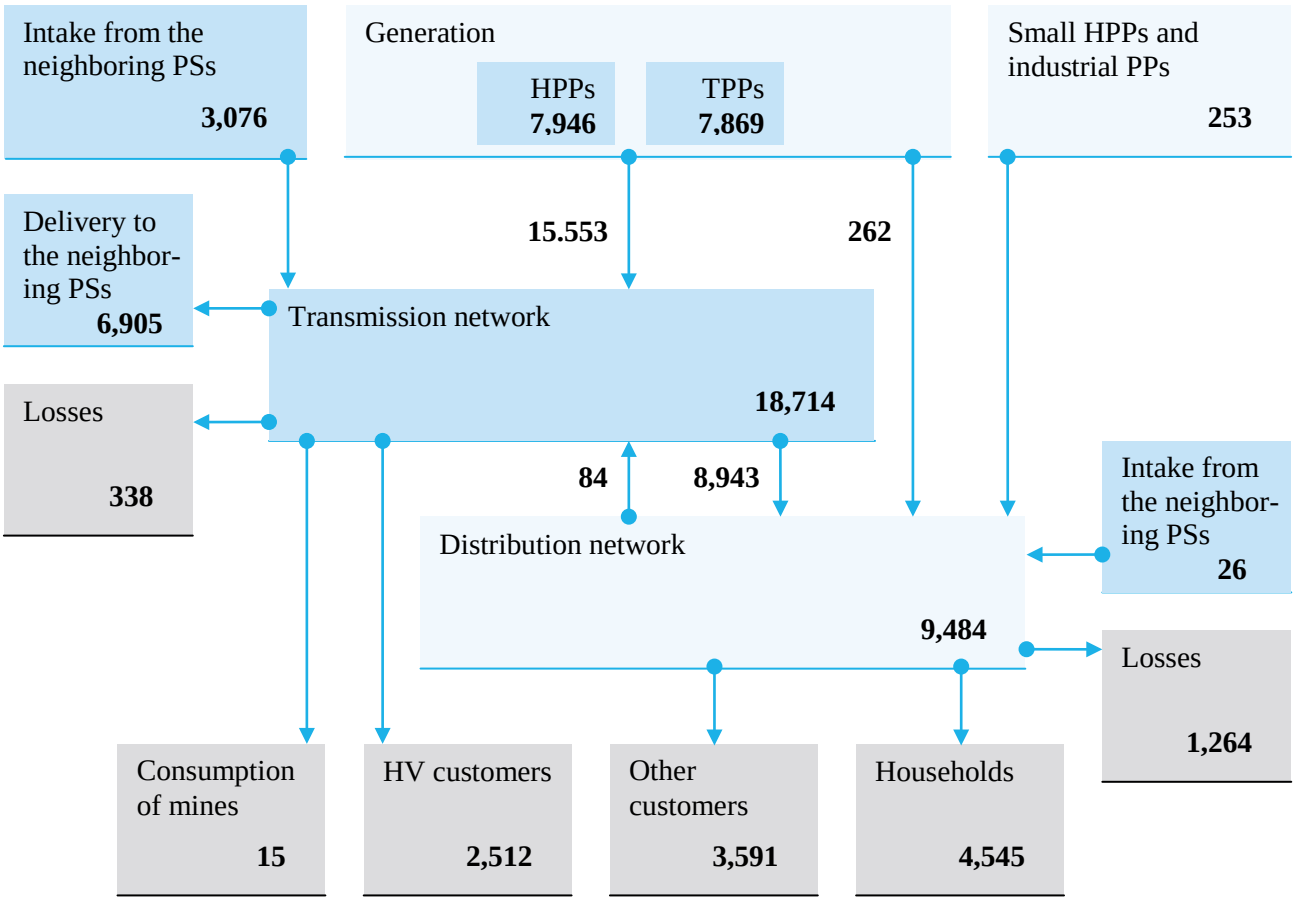
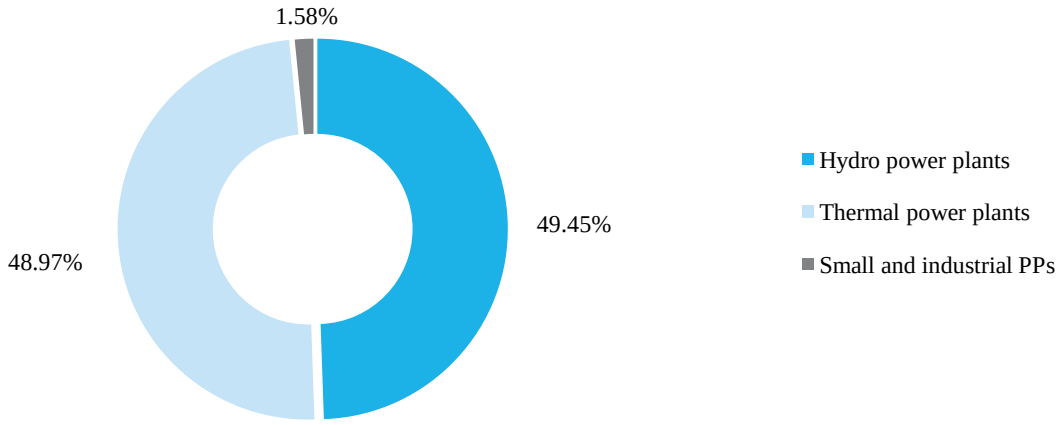


Figure 6. Break-down of electricity generation in BIH in 2010



Take-over of electricity from the transmission network amounted to 11,471 GWh, which is an increase by 6.4%. Data on energy taken over from the transmission network by months and by entities are provided in Figures 7. and 8. respectively.

A maximum overload of the power system in 2010 amounted to 2,173 MW, which is also a historic record registered on December 31, 2010 at 18:00 hrs.

Figure 7. Energy taken over in BIH from the transmission network (GWh) – monthly data

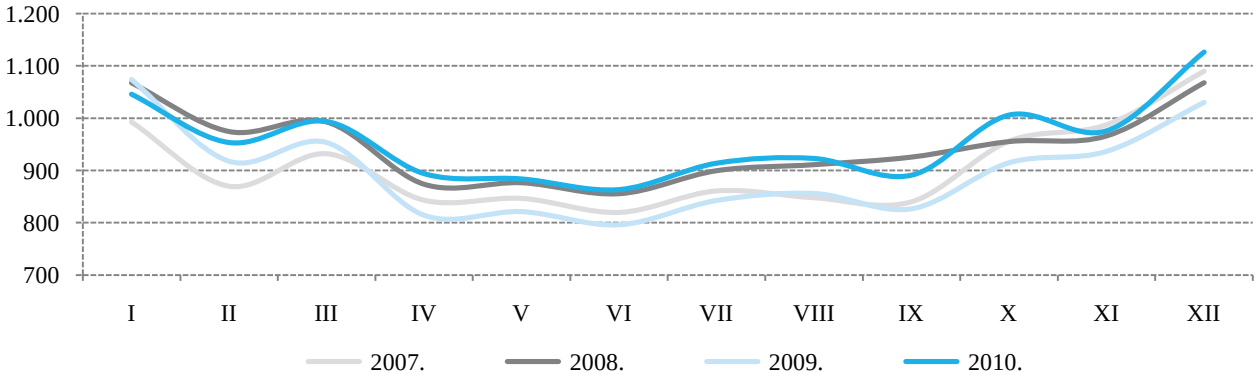


Figure 8. Energy taken over in BIH from the transmission network in 2009 by entities (GWh)

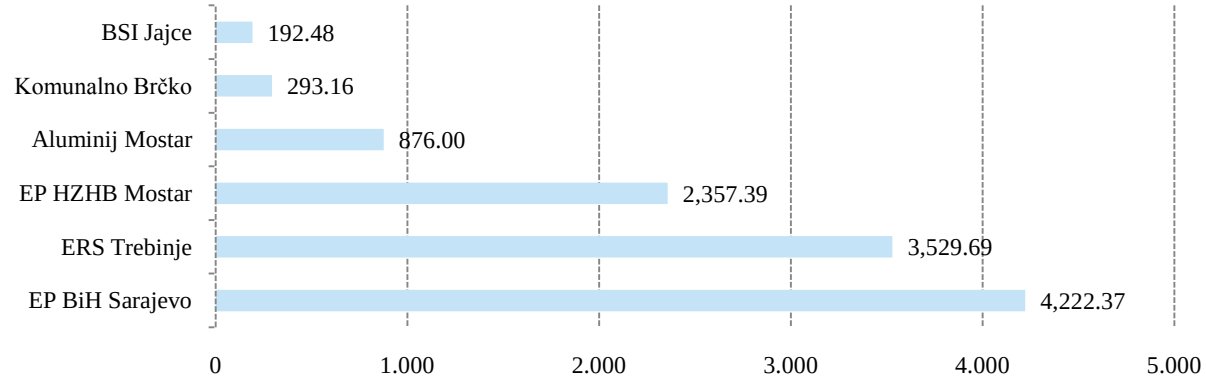
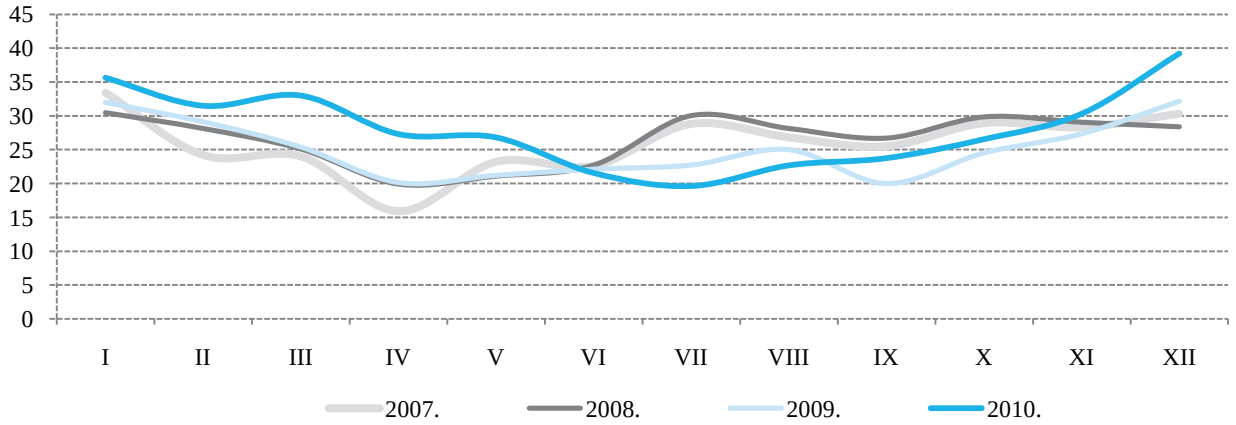


Figure 9. Monthly losses in the transmission network (GWh)



When it comes to electricity losses, a positive trend was noted because distribution losses amounted to 1,264 GWh or 13.45% in relation to gross distribution consumption, which is the lowest level in the post-war period. Transmission losses amounted to 338 GWh thus being by 10.3% higher than in 2009, which is the result of increased generation, consumption and transit of electricity in 2010. Data on monthly losses in the transmission network are provided in Figure 9.

Regional Electricity Market

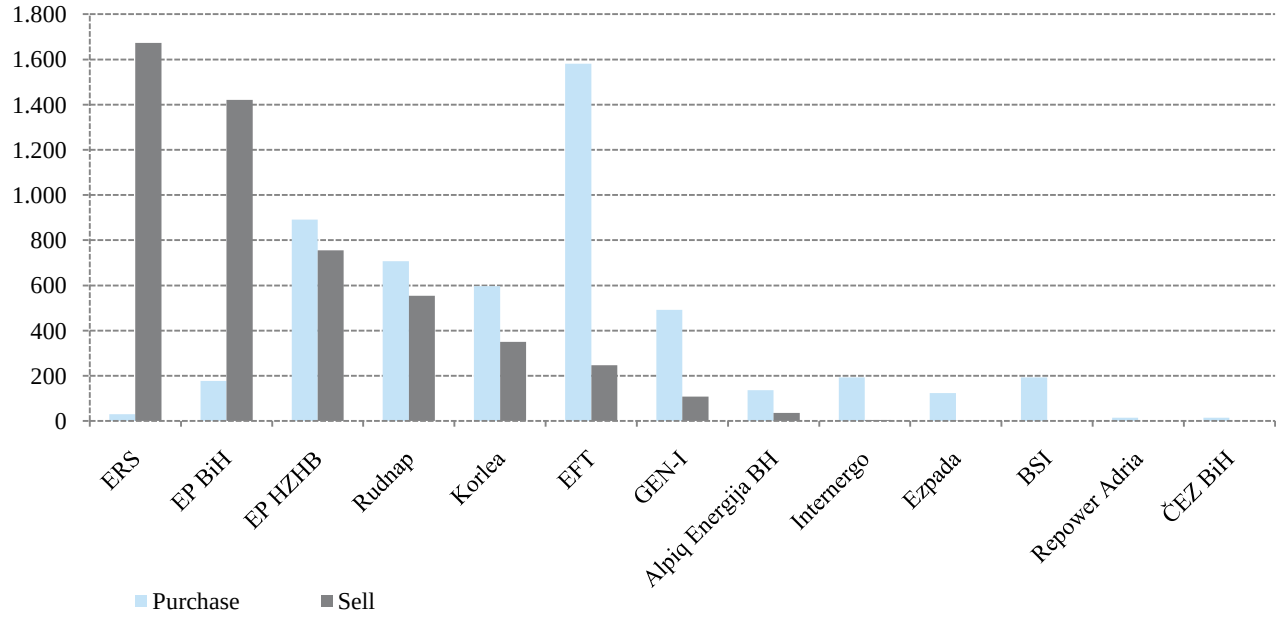
In the regional market 2010 was a year of recovery after a significant downfall of electricity consumption in 2009. Although sale of electricity recovered and, in general, returned to the 2008 level, regional wholesale prices did not follow that trend, but remained anchored at the 2009 level, amounting to approximately 40 €/MWh. Only at the end of the year a slow increase was registered up to the level of 50 €/MWh. Although the import of 4,898 GWh was the highest ever, due to the low export price, financial results were poorer than in 2009.

Electricity Market in BIH

A record in electricity consumption in BIH was also registered. Total consumption amounted to 12,266 GWh which is an increase of 5.8% compared to the previous year. Of that amount customers at 110 kV network took over 2,512 GWh, which is by 18.6% higher than in 2009.

An increase in consumption of 3.6% by customers at the distribution network was registered, so total sale to BIH customers

Figure 10. Overview of electricity traded by licensed entities in 2010 (GWh)



was increased by 6.8% and amounted to 10,648 GWh, with an average sales price for tariff customers amounting to 12.68 pfennig/kWh, being by 0.03% higher than in 2009. An average price for households amounted to 12.37 pfennig/kWh, which is an increase of 2.7% in comparison to the previous year.

Business results of the companies in the sector are considerably poorer than in 2009 which is seen as the best business year of the power sector so far. As a whole, the business results were positive at the level of around 50 million BAM, with the best financial results achieved by Elektroprijenos BIH and Elektroprivreda HZHB, while some companies had losses.

The retail segment of trade has not been considerably changed. The activity of electricity supply is fully performed within the three public power companies which are the only ones with generation capacities as well. The process of restructuring has not been completed yet, which enables the public power companies to have the dominant position on the retail electricity market.

All customer at the middle (35, 20 and 10 kV) and low (0.4) voltage levels are supplied at regulated prices that are set by the entity regulatory commissions. Two customers purchasing electricity in the market were registered, one being Aluminij d.d. Mostar that purchased 876 GWh in the market (48.6% of total consumption) and BSI d.o.o. Jajce with 192.48 GWh (84.4% of total consumption). Hence, 1,068.48 GWh was purchased in the market which accounts for 10.03% of total electricity taken over by end-customers in Bosnia and Herzegovina. BSI Jajce announced that they would purchase electricity in 2011 as a tariff customer.

Cross-Border Trade

Good connections of the BIH System with the neighboring countries enable sale of electricity to the countries in the region which have significant shortages.

A record in export in 2010 resulted in a higher number of cross-border trade transactions. These transactions cover a large number of traders who take over electricity on BIH borders with the neighboring countries. Figure 11. provides an overview of participants in cross-border trade on all borders of Bosnia and Herzegovina while Table 5. gives an overview of cross-border transactions.

In 2010, registered transit of electricity through the BIH transmission network amounted to 2,751 GWh, which is an increase of 29.6% in comparison to 2009. International trade companies perform transit of electricity via their companies registered in BIH. BIH realizes income on the basis of transit by participation in the ITC mechanism, which is described in more detail in Section 3.2 of this report.

Usually, the biggest export is realized with Montenegro and Croatia. Among the domestic entities, the biggest import was realized by Aluminij d.d. Mostar, which imported 876 GWh for self-consumption or 82.9% of total import realized in 2010.

Figure 11. Participants in cross-border trade per borders

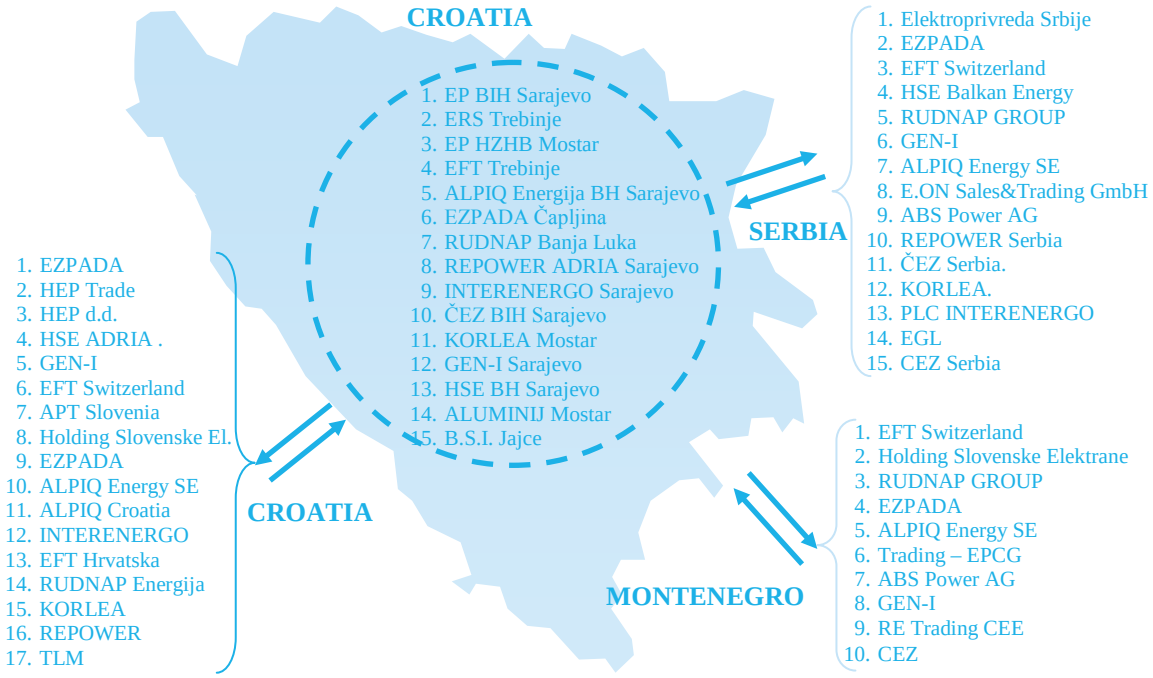


Table 5. Cross-border trade by entities *(MWh)*

Licensed entity	*Export*	*Import*	*Transit*
EFT	1,350,182	15,856	1,006,156
EP BIH	1,193,137	1,262	0
ERS	648,432	6,234	0
KORLEA	268,045	21,362	65,328
EP HZHB	328,373	2,032	0
GEN-I	384,207	600	231,408
RUDNAP	283,337	130,198	1,188,570
INTERENERGO	188,931	1,450	70,703
EZPADA	123,592	496	158,250
ALPIQ ENERGIJA	100,809	521	13,363
ČEZ BIH	14,124	0	15,920
ALUMINIJ	0	876,000	0
REPOWER ADRIA	14,870	0	1,350
Total	4,898,039	1,056,011	2,751,048

Export and import between Bosnia and Herzegovina and the neighboring countries are provided in Table 6.

Table 6. Cross-border trade per borders, including transit (MWh)

Country	*Export*	*Import*
Croatia	4,026,952	2,421,868
Serbia	1,848,880	1,022,375
Montenegro	1,773,255	362,816
Total	7,649,087	3,807,059

3.8 Customer Protection

Customer protection is an important issue of regulatory policy in all countries where the process of deregulation and liberalization of the power sector is in progress. To this end, besides other state bodies, regulatory authorities are even more entrusted with the obligation to consider and achieve the main goals of customer protection, protection of power entities and the environment through a transparent and impartial solution to the issues occurring in the regulatory field.

The subsidizing of the most vulnerable energy consumers has become a widely accepted practice in most European countries. The main problems here are the identification of subsidy beneficiaries, the level of subsidization, funds and the manner of implementation. Lack of initiative and coordination as the major shortcoming of up-to-date activities makes logical that the main stakeholders in the future should be the ministries competent for

Subsidization programs for most vulnerable electricity consumers are established in:

- *Republika Srpska (electricity),*
- *Brčko District of BIH, and*
- *Sarajevo Canton (during winter months).*

social protection with the support of other competent authorities, including the regulatory commissions.

In 2010, SERC continued to make efforts to protect electricity customers, especially vulnerable categories of the population, by active participation in all initiatives of the institutions at the state level within the authority vested in it by law. SERC gave a significant contribution to the development of *the Social Action Plan for BIH*, acting within the Working Group of the BIH Ministry of Civil Affairs which gathered representatives of the relevant ministries at the state and entity levels as well as representatives of employers, unions etc. The Social Action Plan for Bosnia and Herzegovina in connection with the Memorandum of Understanding on Social Issues, which had been previously approved by the governments, that is, the relevant ministries of the Federation of BIH, Republika Srpska and Brčko District BIH, was finally approved at the session of the BIH Council of Ministers on March 25, 2010.

3.9 Other Activities

Besides the aforementioned activities, in 2010 SERC has exchanged data with a number of state institutions (the BIH Council of Ministers, Directorate for Economic Planning of the BIH Council of Ministers, the Council of Competition of BIH, the Foreign Investments Promotion Agency in BIH and others) and prepared different types of information they needed.

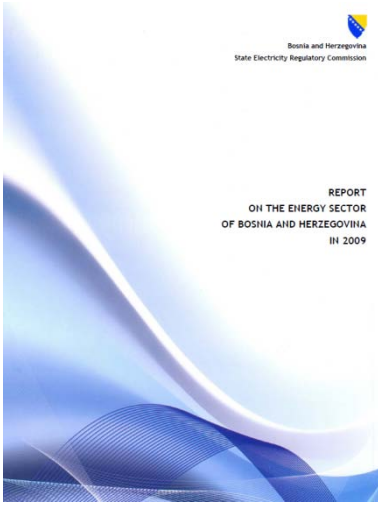
Since their establishment, the State Electricity Regulatory Commission, the Regulatory Commission for Electricity in the Federation of BIH and the Regulatory Commission for Energy of the Republika Srpska cooperate and harmonize their activities.

The power sector reform in Bosnia and Herzegovina continues to be supported by the United States Agency for International Development (USAID) through the Regulatory and Energy Assistance Project (*REAP*).

USAID | Regulatory and Energy Assistance

Components of the REAP project, which will last from 2007 to 2011, are as follows: (1) continuous support to the Independent System Operator in BIH, including further development of the Grid Code and the Market Rules with further integration of BIH market into the regional and internal EU markets pursuant to the obligations form the Treaty Establishing the Energy Community, (2) Monitoring of and assistance with the implementation of action plans, and (3) Further assistance with the unification of regulations, including the completion of all activities pertaining to the development of a new gas law and necessary modifications of the state and entity electricity laws. At the end of 2010, a number of seminars on the market opening were organized within the REAP project.

Report on the Energy Sector of BIH in 2009



The State Electricity Regulatory Commission in Bosnia and Herzegovina, in cooperation with Regulatory Commission for Electricity in Federation of Bosnia and Herzegovina and Regulatory Commission for Energy of Republika Srpska as well as the Ministry of Foreign Trade and Economic Relations of Bosnia and Herzegovina, Ministry of Energy, Mining and Industry of the BIH Federation and the Ministry of Industry, Energy and Mining of Republika Srpska prepared the Report on the Energy Sector of Bosnia and Herzegovina which covers all issues as foreseen by the common reporting structure agreed by the members of the Energy Community Regulatory Board. The structure is based on the same pattern used by ERGEG, with some changes and integrations as required by the Energy Community framework.

The Report is delivered to the BIH institutions dealing with energy issues and the Energy Community Secretariat with the purpose of overall reporting to the Energy Community institutions, which is done by the energy regulators of all contracting parties. The report is published on the internet site of SERC, ECRB and the Energy Community.

Obstacles, preconditions and solutions to the successful functioning of the electricity market in BIH

The Regulatory Market Working Group established by the three regulatory commissions in BIH, in cooperation with market participants including the ministries, have prepared the document: *Obstacles, preconditions and solutions to the successful functioning of the electricity market in BIH*.

Pursuant to the Treaty Establishing the Energy Community and national laws, Bosnia and Herzegovina is obligated to open the electricity market. The end of the transition period (January 1, 2012) during which all customers but households are entitled to choose tariff or eligible customer status is approaching quickly.

The BIH Council of Ministers and the entity governments are expected to provide guidelines for and support to the regulators with regard to market opening activities as soon as possible.

The document identifies preconditions and obstacles to the functioning of the market, while activities of policy leaders are required in the following areas: unbundling of activities, cost-based tariffs, deregulation of generation, vulnerable customer protection programs and changes and amendments to the Law on public procurement.

4. INTERNATIONAL ACTIVITIES

4.1 Energy Community

The Treaty Establishing the Energy Community, which was signed in Athens on October 25, 2005, and came into effect on July 1, 2006, provides for the creation of the biggest internal market in the world for electricity and gas, with effective participation of the European Union, on one side, the following eight Contracting Parties: Albania, Bosnia and Herzegovina, Croatia, Macedonia, Montenegro, Serbia and UNMIK – Kosovo.[2]

In accordance with the interest expressed, the following countries participate in the work of the Energy Community bodies: Austria, Bulgaria, Czech Republic, Cyprus, France, Germany, Greece, Hungary, Italy, the Netherlands, Romania, Slovakia, Slovenia and the United Kingdom. These fourteen countries, the so-called Participants from the European Union, directly participate in the work of the Energy Community bodies, and in the voting procedure their positions are expressed by votes of the European Commission.

Georgia, Moldova, Norway, Turkey and Ukraine have observer status in the Energy Community bodies.

Investments, economic development, security of electricity supply, social security, solidarity, and mutual trust are the key words characterizing the Energy Community, which exists as the first joint institutional project undertaken by the South East European countries which are not members of the European Union. The Energy Community has three levels of ambition: national, regional and pan-European.

The main goals of the Treaty are the creation of a stable and single regulatory framework and market space that ensures reliable energy supply and attracts investments in the electricity and gas sectors. In addition, it assumes the development of alternative sources of gas supply and improvement of the condition of the environment, with the implementation of energy efficiency and the utilization of renewable sources.

By signing the Treaty, the contracting parties from the region are obligated to establish a common electricity and gas market which will operate in accordance with the standards of the EU energy market with which it will integrate. It is to be achieved by gradual transposition of the EU *Acquis Communautaire* pertaining to energy, environment and competition, which means the implementation of the relevant EU directives and regulations pertaining to energy and environment (Please see Table 7).

[2] The list shows the Contracting Parties on December 31, 2010. Moldova has the Contracting Party status as of May 1, 2010. It is expected that Ukraine will obtain the same status, after the Ukrainian Parliament ratified the Treaty on December 15, 2010.

Table 7. Energy Community Acquis

Acquis, that is, the legal framework of the Energy Community which has been continuously developing since 2005, continues to be focused on two directives foreseeing common rules for internal electricity and gas markets. They are supplemented by rules on cross-border trade as well as horizontal rules in the area of environment, competition and renewable energy sources. In 2007, *acquis* was expanded to include the EU directives on security of electricity and gas supply, while as of 2008 the term "net energy", which initially included electricity and gas, includes the oil sector as well. In 2009 and 2010 *acquis* was further expanded to include directives on energy efficiency (Directive on the energy performance of buildings, energy labeling and energy end-use efficiency and energy services).

Acquis on Energy

- Directive 2003/54/EC of the European Parliament and of the Council of June 26, 2003 concerning common rules for the internal electricity market,
- Directive 2005/89/EC of the European Parliament and of the Council of January 18, 2006 concerning measures to safeguard security of electricity supply and infrastructure investment,
- Regulation 1228/2003/EC of the European Parliament and of the Council of June 26, 2005 on conditions for access to the network for cross-border electricity trade.

Acquis on Gas

- Directive 2003/55/EC of the European Parliament and of the Council of June 26, 2003 concerning common rules for the internal natural gas market,
- Directive 2004/67/EC of the European Union Council of April 26, 2004 concerning measures to safeguard security of natural gas supply,
- Regulation 1775/2005/EC of the European Parliament and of the Council of September 28, 2005 on conditions for access to the natural gas transmission networks.

Acquis on Environment

- European Community Council Directive 85/337/EEC of June 27, 1985 on assessment of the effects of certain public and private projects on environment, with subsequent amendments of March 3, 1997 (Directive 97/11/EC) and Directive 2003/35/EC of the European Parliament and the Council of May 26, 2003,
- Directive 2005/53 of the European Parliament and of the Council of July 6, 2005, amending Directive 199/32 of April 26, 1999 relating to the reduction of sulfur content of certain liquid fuels; implementation by December 31, 2011,
- Directive 2001/80/EC of the European Parliament and of the Council of October 23, 2001 on limitation of emissions of certain air pollutants by large combustion plants (50MW); implementation by Dec 31, 2017,
- Article 4(2) of the European Community Council Directive 79/409/EEC of April 2, 1979 on conservation of wild birds,
- Endeavour to accede to the Kyoto Protocol and implementation of the Directive 96/61/EC of September 24, 1996 on pollution prevention and control.

Acquis on Competition

The following activities are not allowed and shall be assessed pursuant to Article 81, 82 and 87 of the Treaty Establishing the Energy Community:

- Prevention, restriction or distortion of competition,
- Abuse of dominant position,
- Any public aid which distorts or threatens to distort competition.

In particular, with regard to public undertakings and undertakings to which special rights have been granted, six months following the date of entry into force of the Treaty, provisions of the Treaty Establishing the Energy Community, in particular Article 86, shall be upheld.

Acquis on Renewable Energy Sources

- Directive 2001/77/EC of the European Parliament and of the Council of September 27, 2001, on promotion of electricity generated by using renewable sources in the internal market
- Directive 2003/30/EC of the European Parliament and of the Council of May 8, 2003 on promotion of use of bio-fuels or other renewable fuels in transportation.

Continued on next page ⇨

⇨ Continuation of Table 7 from the previous page

Besides the EU *acquis*-a, the Ministerial Council has adopted several independent measures pertaining to dispute resolution, establishment of the so-called "8th Region" aimed at facilitation of cross-border electricity trade and measures for coordination of security of supply.

Indicators of further development of the Energy Community *Acquis* are recommendations of the Ministerial Council in 2010, which call on the Contracting Parties to implement new European Union rules on internal energy market which comprise the so-called 'Third Package' and Directive 2009/28/EC of the European Parliament and of the Council of April 23, 2009 on the promotion of the use of energy from renewable sources amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC.

Third Package

- Regulation 713/2009/EC of the European Parliament and of the Council of July 13, 2009 establishing the EU Agency for the cooperation of National Energy Regulators,
- Regulation 714/2009/EC of the European Parliament and of the Council of July 13, 2009 concerning conditions for access to the network for cross-border electricity trade, replacing Regulation 1228/2003/EC,
- Regulation 715/2009/EC of the European Parliament and of the Council of July 13, 2009 concerning conditions for access to the network for cross-border natural gas trade, replacing Regulation 1775/2005/EC,
- Directive 2009/72/EC of the European Parliament and of the Council of July 13, 2009 concerning common rules for the internal electricity market, replacing Directive 2003/54/EC,
- Directive 2009/73/EC of the European Parliament and of the Council of July 13, 2009 concerning common rules for the internal natural gas market, replacing Directive 2003/55/EC.

Note: Texts of EU rules provided in this table are available on the website of the State Electricity Regulatory Commission (www.derk.ba).

The Energy Community was created for a period of 10 years, expiring in July 2016 and it can be extended by unanimous decision of its Ministerial Council.

To ensure an adequate process of establishing and functioning of the Energy Community, the Treaty establishes Ministerial Council, Permanent High Level Group, Regulatory Board, Electricity Forum (Athens Forum), Gas Forum (Maribor Forum), Social Forum, Oil Forum (seated in Belgrade) and the Secretariat.

The Ministerial Council, as the highest body of the Energy Community, ensures the achievement of goals that are determined by the Treaty Establishing the Energy Community. The Ministerial Council consists of one representative of each Contracting Party and two representatives of the European Union.

The Permanent High Level Group brings together senior officials from each Contracting Party and two representatives of the European Community, ensuring continuity of and follow-up to Ministerial Council's meetings, implementing agreed activities and deciding on implementing measures in certain cases.

Figure 12. Energy Community

The Energy Community Regulatory Board (ECRB), seated in Athens, is composed of representatives of the regional state regulatory bodies, and the European Union is represented by the European Commission, with the assistance of one regulator of the EU participants and one representative of the European Energy Regulators Group for Electricity and Gas (ERGEG). ECRB considers the issues of regulatory cooperation and may become a body issuing regional regulatory decisions and serving as a dispute resolution institution. The Regulatory Board has a key role in the expanded market operation. According to the opinion of the European Commission, this supranational body may become a role model for other parts of the world.

Energy Community Fora, dedicated to electricity, gas, oil and social aspects, bring together all interested stakeholders – representatives of governments, regulators, industry, customers, international financial institutions etc.

The Energy Community Secretariat, seated in Vienna, represents the key administrative actor and together with the European Commission it ensures the necessary coordination and provides support for the work of the other institutions. The Secretariat is responsible for reviewing the proper implementation by the Contracting Parties of their obligations under the Treaty and it submits yearly progress reports to the Ministerial Council. To this extent, the Secretariat acts as a 'guardian' of the Energy Community Treaty while the European Commission plays a general coordinator role under the same Treaty.

While the Energy Community was originally conceived as a European Union pre-accession instrument, its membership has in the meantime been opened to countries in the European Neighborhood Policy area (Moldova, Ukraine and Armenia). In its documents, the European Union identifies the Energy Community concept as a key component for a strong international partnership with the EU's neighbors.

After four years of existence, the Energy Community has grown into a mature organization, which provides a solid institutional framework for cooperation, mutual support and exchange of experiences and, therefore, serves as a model for regional cooperation on energy matters.

The interest in the Energy Community is growing throughout the region. The first enlargement of the Energy Community was completed in 2010 with the accession of the Republic of Moldova; with the accession by Ukraine, the size of the potential regional market has almost tripled (from approximately 26 million inhabitants to around 73 million). In addition, negotiations with Turkey were opened in September 2009; Georgia is envisaging applying for membership and Armenia has requested to become an observer. It can be noted that the centre of gravity of the Energy Community has started to shift towards the East.

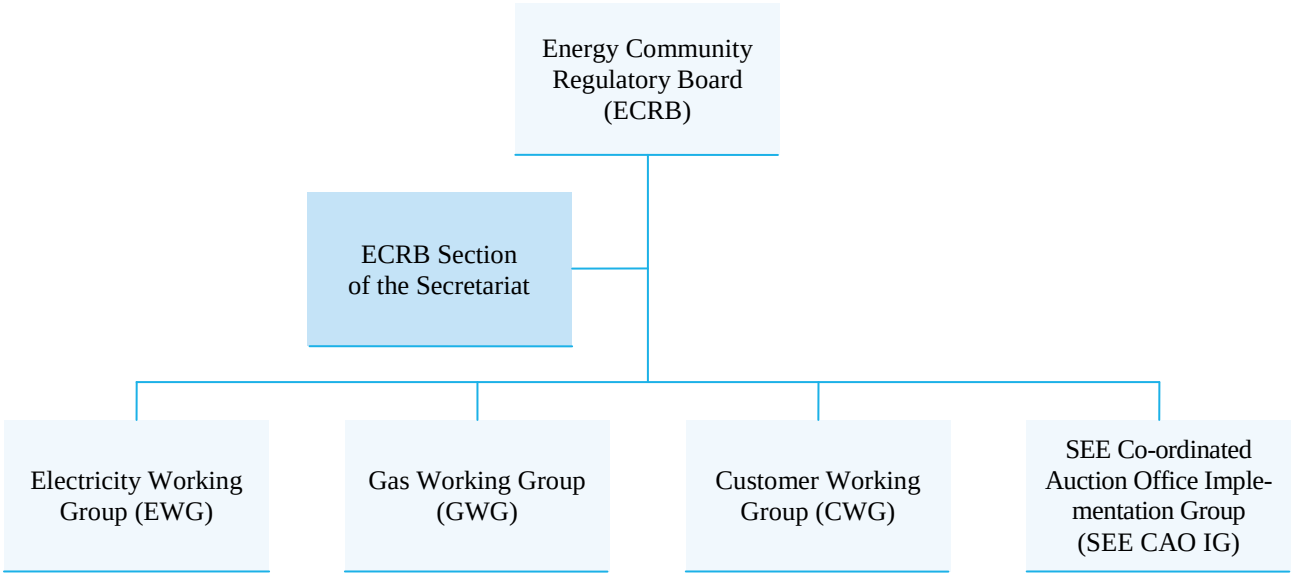
By participation in this process, Bosnia and Herzegovina confirms its commitment to the reform of the energy sector, liberalization of the energy market and harmonization of its policy with EU members.

The work of the State Electricity Regulatory Commission, in the field of Energy Community, was carried out with necessary cooperation of the Ministry of Foreign Trade and Economic Relations of Bosnia and Herzegovina, then, through support and contribution to the realization of different projects supporting the establishment of the Energy Community, and in particular, through proactive involvement in surveys which were planned and implemented by different groups with a wider thematic spectrum which include energy regulators from the region and the European Union.

However, SERC activities in the Energy Community are focused on the Regulatory Board, in which Bosnia and Herzegovina and its interests are represented by the State Electricity Regulatory Commission. The formal establishment of the Regulatory Board of the Energy Community took place on December 11, 2006 in Athens. In 2010, the Regulatory Board held three meetings.

Mr. Mirsad Salkić, SERC Chairman, was the President of ECRB in 2010, while Mr. Edin Zametica, M.Sc., Secretary, had also contributed to the affirmation of the Regulatory Commission in the capacity of the Chairman of the Customer Working Group since 2007.

Figure 13. Regulatory Board Structure



From the structure of the Regulatory Board (Figure 13.), it is obvious that some ECRB activities are organized through several working groups with the support of the relevant Energy Community Secretariat Section.

During 2010, **the Electricity Working Group (EWG)** was focused on the process of establishing a common regional mechanism for allocation of cross-border capacities, the establishment of the regional balancing mechanism in view of the harmonization of national legal frameworks, the issue of the design and regional market opening through comments on working versions of the World Bank's Study on the wholesale market taking into consideration simultaneous development of national electricity markets, development of proposals for the establishment of harmonized licensing regimes in the region, framework analysis and a possibility for regulatory cooperation focusing on investment projects with a regional dimension and preparation of guidelines for electricity market monitoring.

By establishing a few sub-groups in the operational organization of its work, EWG prepared several important reports and benchmarking reports, among which of special importance are *Assessment of the national balancing models, Model for the regulatory monitoring of cross border flows and a future CAO, Regulatory instruments for promoting new investments – Assessment of existing mechanisms – Recommendations*

EWG prepares overviews of the regulatory environment, identifies legal and financial obstacles and proposes solutions at regional and national levels for the implementation and function-

ing of new mechanisms within the regional market of South East Europe. The area of activities of the Working Group requires a wide range of skills including technical, legal and financial issues.

Gas Working Group (GWG) has been committed to the regional gas market development, which is less developed than the electricity market. Only a few countries have developed their gas markets, while the others use gas within a limited scope or not at all. Currently, there are a large number of projects aimed at regional gas market development. In 2010, the Working Group continued its activities on formulating a common regulatory approach for the development of the Energy Community Gas Ring, which will enhance security of supply and further gasification in South East Europe.

The Working Group focused part of its activities on the preparation of reports on gas market models in the Energy Community and their compliance with Regulation 1775/2005/EC of the European Parliament and of the Council of September 28, 2005 on conditions for access to the natural gas transmission networks. In addition, GWG prepared Report on natural gas regulation in the Energy Community.

In 2010, the Customer Working Group (CWG) was primarily committed to the development of customer protection mechanisms in the process of energy market liberalization, including the enhancement of customer representation in the regulatory process.

Having continued the activities initiated in the previous year, within the CWG's scope of work, *Study on Regulation of Tariffs and Quality of the Gas Distribution Service in the Energy Community* and *Assistance to regulators in introducing and improving service quality regulation in the Energy Community* were produced. In addition, CWG prepared several documents pertaining to the state of play in the Energy Community including *A Review of Smart Meters Rollout for Electricity*, *Report on electricity tariffs and prices in the Energy Community 2008-2009* and *Survey on the status quo of electricity billing*. CWG's work results are presented to the Social Forum as well as the Electricity and Gas Fora on a regular basis.
In the forthcoming period, CWG plans to continue its activities on vulnerable customer protection, analysis of complaint handling issues, gas billing, smart meter roll-out, with full commitment to the methods of supply quality improvement.

The South East Europe Co-ordinated Auction Office Implementation Group (SEE CAO IG). Increased trading volumes resulting from the liberalization of electricity market have come to the point where the limited cross-border capacities become an obstacle for further increase of volumes of cross-border trade in electricity. Coordinated cross-border transmission capacity auctions are a step further in an attempt to use the existing connections among national power systems to the extent possible, i.e. to maximize the level of their use. To achieve this goal, the South East Europe Co-ordinated Auction Office Implementation Group (SEE CAO IG) was formed comprising representatives of regulatory authorities and transmission system operators. This composition takes into account the fact that continuous and close cooperation between regional system operators and regulators is required to deal with the issues of coordinated auctions.

According to the initial Action Plan, the establishment of the Office was expected at the beginning of 2009. However, due to several pending issues, including the method of revenue allocation, definition of regional borders that will be covered by the Office, the existence of legal barriers in national legislations of participant countries and the choice of the Office's location, its establishment was postponed for 2011. Other activities in accordance with the initial action plan were also postponed, but the continuation of activities is expected in 2011, as it was determined that the seat of the Office would be in Podgorica and that most of the regional transmission system operators (including ISO BIH) signed an Agreement on establishment of the Project Team Company and its financing.

4.2 Energy Regulators Regional Association – ERRA

The Energy Regulators Regional Association (ERRA) is an organization composed of independent energy regulatory bodies in Central and East Europe and newly independent states in the region. ERRA has 24 full and four associate members, all established at the national level. In addition, five affiliate members are engaged in ERRA activities, including the National Association of Regulatory Utility Commissioners (NARUC).

The goals of ERRA are improvement of energy regulation in the member countries, development of independent and stable energy regulators, improvement of cooperation among regulators, exchange of information, research and experience among the members, better access to information on world-wide experience on regulation of energy activities.

The State Electricity Regulatory Commission is a full ERRA member as of May 19, 2004. At the General Assembly meeting

Figure 14. ERRA Membership

held in May 2010, the two entity regulatory commissions, FERK and RERS, became ERRA associate members.

SERC representatives actively participate in the work of the General Assembly and Investment Conference, as well as in the work of standing committees and working groups with particular emphasis on the Standing Licensing/ Competition Committee and Standing Tariff/Pricing Committee, the latter being chaired by Mr. Saša Šćekić, Head of Licensing and Technical Affairs Department of SERC, and the Legal Regulation Working Group.

In September 2010, for the first time ever a joint meeting of the Standing Licensing/ Competition Committee and the Legal Regulation Working Group was organized in Bosnia and Herzegovina. SERC was a co-host of the gathering of more than 50 representatives of regulatory authorities brought together within ERRA, while the gathering was supported by all tree power utilities in BIH.

The most important topics elaborated in 2010 include the economic crisis and energy markets (drop in demand, new investments, tariff regulation), efficiency assessment of distribution companies, the market structure in ERRA countries, incentives for electricity generation using alternative (renewable) energy sources, harmonization of licensing procedure, market supervision and regulatory monitoring, regulatory aspects of smart metering, energy efficiency, commercial losses and uncollected receivables, allocation of costs and profits of combined power

plants, incentive tariffs, balancing contracts, relations between the regulator and the competition council with regard to ensuring energy sector competition, regulatory implications of the Third EU Energy Package, regulatory independence and mutual relations with national authorities, regulatory and legal aspects of climate change, state vs. private ownership in the energy sector.

Besides active participation in ERRA bodies, by providing the relevant information on the power sector of Bosnia and Herzegovina, in particular on the applicable regulatory practice, the State Electricity Regulatory Commission fulfills its role acquired by full ERRA membership.

4.3 Mediterranean Working Group on Electricity and Natural Gas Regulation – MEDREG

The Mediterranean Working Group on Electricity and Natural Gas Regulation – MEDREG, created in May 2006 as a working group, is today a non-profit Association under the Italian law established in Rome in November 2007. MEDREG gathers regulatory authorities coming from Albania, Algeria, Bosnia and Herzegovina, Croatia, Cyprus, Egypt, France, Greece, Italy, Israel, Jordan, Lebanon, Libya, Malta, Montenegro, Morocco, the Palestinian Authority, Portugal, Slovenia, Spain, Syria, Tunisia and Turkey.

Its organization is structured around a sixmonthly General Assembly, as well as around four permanent Ad Hoc Groups: (1) on Institutional Issues (chaired by France), (2) on Electricity (chaired by Egypt), (3) on Gas (chaired by Turkey since 2010) and (4) on Environment, Renewable Energy Sources and Energy Efficiency (chaired by Spain). Ad Hoc Groups meet at least twice a year.

MEDREG is supported by the Italian Government, REMEP (Rome Euro-Mediterranean Energy Platform) and CEER (Council of European Energy Regulators). In particular, a strong collaboration is foreseen between MEDREG and REMEP, which will also provide logistical back up. MEDREG is co-financed by the European Union, with the purpose of promoting clear, stable and harmonized legal and regulatory frameworks, facilitating investments, infrastructures and interconnections developments, efficiency and integration of the energy markets, based on secure, safe, cost-effective and environmentally sustainable energy systems in the Mediterranean basin. Moreover, MEDREG fosters co-operation, information exchange and mutual assistance among the EU and Mediterranean countries, providing the maximum benefits to energy consumers in both regions.

The Ministerial Declaration signed in Cyprus in December 2007 by energy ministers from Euro-Mediterranean countries acknowledged the unique and strategic role of MEDREG in establishing and enhancing cooperation among energy regulators, reinforcing transparency, enhancing mutual knowledge and contributing to the harmonization of the regulatory framework in the Euro-Mediterranean energy market.

As opposed to the regular participation in General Assembly meetings, the representatives of the State Electricity Regulatory Commission in Ad Hoc Groups are not able to attend working groups' meetings, but they actively implement their work programs by preparing and circulating requested information and comments on draft documents.

In General Assembly meetings in 2010, MEDREG confirmed that one of its main goals was to improve and harmonize the regulatory framework functional to new energy infrastructure investments and regional market integration. A special emphasis was put on the increasing importance of MEDREG external relations. In that context, the Florence School of Regulation exhibited the project for a new MEDREG website to facilitate the work among the members and to enhance effectiveness of external communication, which was supported by the EU-funded ENPI (European Neighborhood and Partnership Instrument) Info Center.

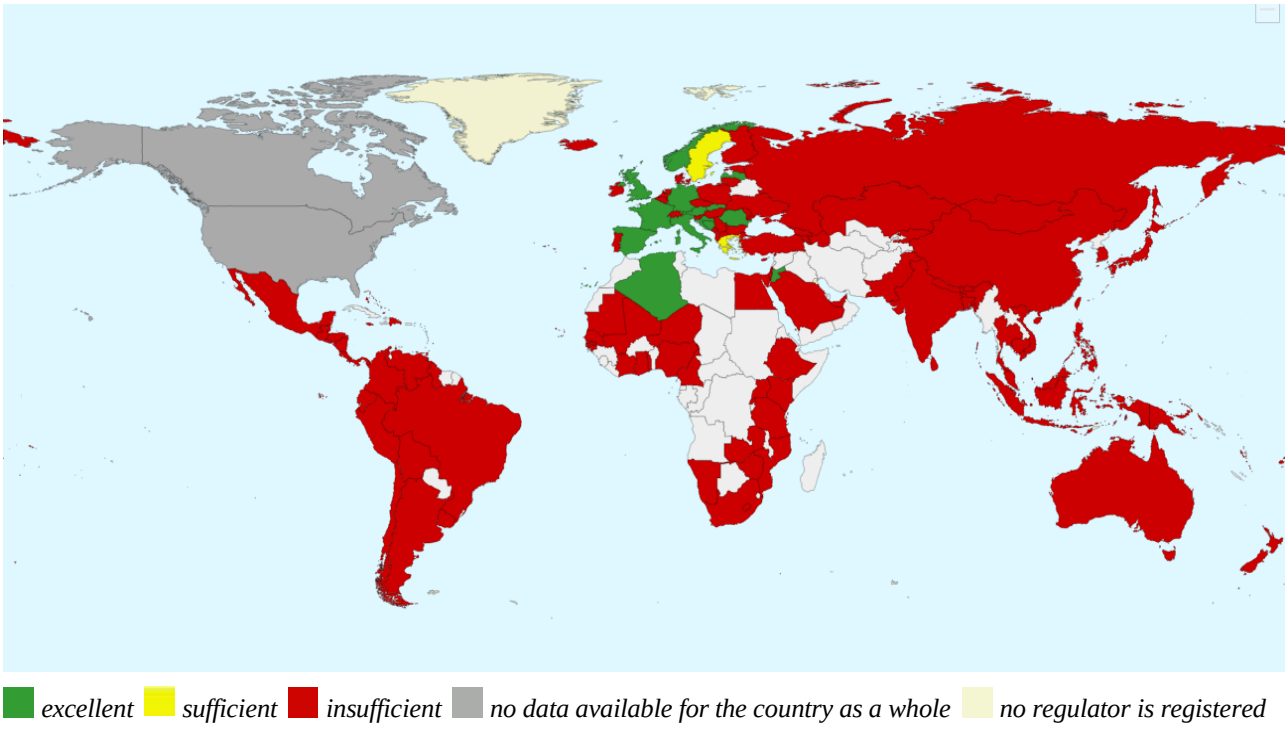
MEDREG is also actively involved in the activities of ICER (the International Confederation of Energy Regulators), in particular, in the work of ICER Virtual Working Group 1 dedicated to security of supply which is chaired by MEDREG and coordinated by the Italian Authority (AEEG). This Working Group is preparing a Report on the role of energy regulators in guaranteeing reliability and security of supply, to which SERC staff contributed by providing required data.

4.4 International Energy Regulation Network – IERN

International Energy Regulation Network (IERN) is a web platform established in 2003 by the II World Forum on Energy Regulation (WFER). IERN aims at facilitating information exchange on electricity and natural gas market regulation, to the benefit of regulators, but also of other interested users. IERN is managed by the Florence School of regulation in close cooperation with Council of European Energy Regulators (CEER).

IERN is a place where regulators can exchange information about training courses, conferences and online resources on energy regulation. In a longer term, IERN aims to become not only a vector for exchanging existing information, but also a producer of in-house working papers based on best practices.

Figure 15. Data quality



IERN brings together 314 regulatory authorities that are at the same time members of regional regulatory associations.

In order to guarantee the quality of the data to be found in the website, IERN is supported by the main regional associations of regulators worldwide, individual energy regulators and by some international institutions. SERC directly participated in the creation of the Network, which made the data on the power sector and regulatory practice in BIH accessible in this manner as well.

IERN is currently promoting an online survey in order to provide information on electricity regulation, and in particular on the scope and depth of the activities of regulatory authorities, including transmission, distribution, generation, wholesale, retail and others. In 2010, SERC staff actively participated in provision of required data ensuring that interested users can access the relevant information provided by the platform in a timely and efficient manner.

4.5 New European Union Rules on Internal Energy Market

Year 2010 in the European Union and the neighborhood was also marked by the new rules on internal energy market – the so-called Third Legislative Package which is expected to strengthen the energy market, give consumers more protection and the benefit of the lowest possible energy prices while offering companies the chance to compete on a level playing field.

The main objective of the legislative package is to put in place the regulatory framework needed to make market opening fully effective. The rules adopted aim at:

- Providing for more effective regulatory oversight by truly independent and competent National Energy Regulators. Certain cross-border issues will be addressed by an EU Agency for the Cooperation of Energy Regulators (ACER).
- Increasing cross border collaboration and investment with a new European Network for Transmission System Operators (ENTSO). Grid operators in the Union will have to develop common commercial and technical codes and security standards, as well as coordinate the investments needed at EU level.
- Increasing solidarity. By bringing national markets closer together, Member States will be better equipped to assist one another in case of energy supply threats.
- Creating a level playing field by separating effectively the production and sale of energy from the transmission of energy. This is to avoid companies involved with both the generation and transmission of energy to use their privileged position on transmission to block access to transmission grids to other suppliers. Unbundling supply from transmission activities of integrated companies will serve to eliminate conflict of interests, promote network investments and prevent any discriminatory behavior.
- Increasing transparency. Improving market transparency on network operation and supply will guarantee equal access to information, make pricing more transparent, increase trust in the market and help avoid market manipulation.
- Putting the rights of citizens at the centre of the market opening process with strong obligations on Member States to protect vulnerable energy consumers.
- Implementing intelligent metering systems with a target of 80% of the population to be covered by 2020. The installation of smart meters allows consumers to be informed precisely of their consumption and promotes energy efficiency.

The Agency for the Cooperation of Energy Regulators (ACER), seated in Ljubljana, shall start its operation within the deadline as stipulated for the implementation.

The role of ACER will be to provide assistance to regulatory authorities with implementation of regulatory activities with coordinated approach. Its tasks shall include:

- *Giving opinions and recommendations to transmission/transportation system operators, national regulatory authorities, the European Parliament, the Council and the Commission,*
- *Issuance of individual decision in specific cases as requested by regulatory authorities of individual countries,*
- *Issuance of framework guidelines for cross-border trade development.*

The most important bodies of ACER are: Administrative Board, Board of Regulators, Director and Board of Appeal.

The Third Package, whose content was provided in Table 7 (in Section 4.1 of this Report) was published in the EU Official Journal on August 14, 2009, and came into force on the 20th day after its publication.

The deadline for the implementation of the Regulations and transposition of provisions of the directives into national legislations is March 11, 2011. The deadline is expanded for one year with regard to the obligations pertaining to unbundling of transmission activities.

Three models have been envisaged with regard to increased requirements for unbundling of transmission system operators:

- ownership unbundling,
- establishment of an Independent System Operator (ISO) where the ownership of transmission assets remain with the vertically integrated company, but technical and commercial management of assets is performed by ISO,
- establishment of an Independent Transmission Operator (ITO), which implies functional unbundling but with very strict requirements for independence in decision-making process, business activities and independence of the management and staff.

The adoption of the Third Package strengthens the role and jurisdictions of national regulators including:

- ensuring legal and functional independence from any public or private body, and independence in decision-making, (independence from any political body), including determination and allocation of an annual budget, and human and financial resources for independent performance of activities,
- setting or approving methodologies and tariffs for network activities,
- approving investment plans for network activities,
- issuing penalties amounting to 10% of total annual turnover or proposing to a competent court to impose such penalties to a non-compliant company.

5. AUDITING REPORT

Pursuant to the Law on Transmission of Electric Power, Regulator and System Operator of BIH, it is determined that SERC is basically financed by the regulatory fee paid by holders of licenses for transmission of electricity, independent system operator and international electricity trading. The regulatory fee is determined in such manner as to cover estimated SERC's costs, while the obligation to pay the regulatory fee in the forthcoming period is reduced by the realized difference in revenues over expenditures.

SERC financial dealings cover mostly the following areas:

- incurrence and settlement of financial obligations for the needs as defined in the approved Financial Plan;
- short-term planning and cash flow management;
- regular monitoring of the Financial Plan realization in the current year;
- an analysis and estimation of future cash flows within the current year, as the basis for development of a new financial plan;
- preparation of the financial plan for the following year;
- internal financial reporting as the basis for adoption of the relevant business decisions;
- financial reporting to external bodies, authorized institutions and the public.

"In our opinion, the financial reports show objectively the financial standing of the State Electricity Regulatory Commission (SERC) on December 31, 2009 in all materially relevant aspects, as well as its business results and changes in cash flows for the year which ended at that point, in accordance with the International Financial Reporting Standards ("IFRS")."

("REVIK", April 20, 2010)

Pursuant to the obligations as defined in the Law based on which SERC was established, SERC is obligated to enable an audit of its financial reports which are the result of all aforementioned activities in order to have an independent and impartial audit of the stated business results and well as the compliance of these procedures with the applicable regulations.

In 2010, the auditing of SERC financial reports was performed by the Auditing, Accounting and Consulting Company "REVIK" d.o.o. Sarajevo, with whom a contract was concluded based on a published public invitation for auditing services.

In addition to determining the objectivity of financial reports as a whole, the performed audit included a simultaneous evaluation of accounting policies applied and relevant estimates made by the SERC management.

In opinion of the independent auditor, the overall presentation of financial reports, recognizing and measuring of transactions and business occurrences, objectively and realistically present the state of play of assets, liabilities, capital and financial results of performance.

With the mentioned opinion, SERC maintained the highest auditing appraisal of both its financial reports and internal auditing procedures which had been previously reviewed by the Office for Auditing of the Institutions of Bosnia and Herzegovina.

Permanent improvement of the financial management and internal control system was continued along these lines which enables well-organized and efficient work with the simultaneous prevention or identification of possible mistakes in order to protect property loss caused by negligence or poor management.

In previous reporting periods, while reviewing the Auditing Report of the Office for Auditing of the Institutions of Bosnia and Herzegovina both Houses of the Parliamentary Assembly of Bosnia and Herzegovina commended SERC openly for the conscientious management of funds and compliance of its activities with the applicable legal regulations.

Lead by its commitment and principles of objectivity and transparency in its work, and with an aim to provide information on its financial standing and business results to the interested persons and the wider public, SERC publishes revised annual financial reports every year. Revised financial reports for 2009 were published in the “Official gazette of BIH, number 50/10 and on the SERC internet site.

6. MAIN ACTIVITIES IN 2011

The State Electricity Regulatory Commission will continue its activities on the creation of conditions for free trade and unhindered electricity supply in accordance with the previously defined quality standard to the benefit of the citizens of Bosnia and Herzegovina, and in compliance with the relevant European directives and the rules on internal electricity market. In this context, SERC representatives will participate in the planned revision and further development of the legal framework pertaining to the electricity sector.

In 2011, SERC will continue to cooperate with the Parliamentary Assembly of Bosnia and Herzegovina (PA BIH), in particular with the Commission for Traffic and Communication of the House of Representatives of PA BIH and the Commission for Foreign and Trade Policy, Customs, Traffic and Communication of the House of Peoples of PA BIH. Of particular importance is the continuation of information exchange and harmonization of key regulatory activities with the Ministry of Foreign Trade and Economic Relation of BIH, which is competent for policy creation in accordance with the Law on Transmission of Electric Power, Regulator and System Operator of Bosnia and Herzegovina.

All existing modalities of mutual follow up and harmonization of activities will be continued in 2010 with the Regulatory Commission for Electricity in the Federation of BIH and the Regulatory Commission for Energy of the Republika Srpska as well as with other regulatory bodies established at the state level, primarily the Council of Competition of BIH.

Taking into account the need for providing quality and reliable statistical data which can be used as a decision-making basis at different levels, primarily by state and other institutions, in 2011 SERC is planning to strengthen cooperation with the BIH Agency for Statistics.

Furthermore, SERC will follow up activities and trends in the whole energy sector and directly participate in all relevant events.

Through its activities SERC will be focused on:

- Setting of tariffs for services of electricity transmission, the operation of the Independent System Operator and ancillary services and supply of customers in Brčko District of BIH,
- Issuance of licenses,
- Regulatory monitoring of licensed entities,
- Analysis of regulatory rules and practice,
- Creation of regulatory rules,
- Design of a single electricity market,

- Capacity building in terms of the fulfillment of international obligations with regard to regulatory reporting in line with the ERGEG structure,
- Social aspect within the field of regulatory practice,
- Monitoring the implementation of the ITC mechanism and establishment of the mechanism for coordinated explicit capacity auctions,
- Approving and monitoring rules developed by ISO BIH and the Transmission Company,
- Monitoring the development of *the Indicative Generation Development Plan for the Period 2012-2021* and approving *the Long-Term Transmission Network Development Plan for a ten-year period* as well as annual investment plan of Elektroprenos BIH,
- Sharing information on the regulatory practice with the regulated entities and the public,
- Performing other tasks entrusted to SERC.

SERC will also focus on the activities of international bodies pertaining to the regulation of the electricity market, primarily those in whose activities SERC participates:

- ECRB – the Energy Community Regulatory Board (including the Electricity Working Group, Gas Working Group, Customers Working Group, South East Europe Co-ordinated Auction Office Implementation Group),
- ERRA – the Energy Regulators Regional Association (including the Standing Licensing/Competition Committee, Standing Tariff/Pricing Committee and Legal Regulation Working Group),
- MEDREG – the Mediterranean Working Group on Electricity and Natural Gas Regulation (including Ad Hoc Working Groups on institutional issues, electricity, gas and environment, renewable energy sources and energy efficiency),
- IERN – International Energy Regulation Network.

Furthermore, SERC will continue to follow up the work of CEER (Council of European Energy Regulators) and ERGEG (European Regulators' Group for Electricity and Gas) as well as the process of establishment of the Agency for the Cooperation of Energy Regulators (ACER).

Taking into account the fact that the new rules of the European Union on internal energy market (Third Package) will become mandatory for Bosnia and Herzegovina through the Treaty Establishing the Energy Community, in the forthcoming period SERC shall pay due attention to a detailed analysis of the content and conduct preparatory activities for the implementation of the relevant provisions of the Third Package on EU energy market liberalization.

Additional information on the operation and procedures conducted by the State Electricity Regulatory Commission may be obtained on the internet at www.derk.ba, or by phone on +387 35 302060 and 302070, fax +387 35 302077, e-mail info@derk.ba or at the seat of the SERC in Tuzla, M. Jovanovića Street 4/II.

ATTACHMENT A: Basic Data on the Power System of Bosnia and Herzegovina

(used data provided by ISO BIH, the Company for Transmission of Electric Power of BIH and public power utilities)

Major generation facilities

Hydro power plants	Capacity of power unit (MW)	Total installed capacity (MW)
Trebinje I	3×60	180
Trebinje II	8	8
Dubrovnik (BIH+Hr.)	2×108	216
Čapljina	2×210	420
Rama	2×80	160
Jablanica	6×30	180
Grabovica	2×57.5	115
Salakovac	3×70	210
Mostar	3×24	72
Mostarsko blato	2×30	60
Peć-Mlini	2×15	30
Jajce I	2×30	60
Jajce II	3×10	30
Bočac	2×55	110
Višegrad	3×105	315

Thermal power plants	Installed capacity (MW)	Available capacity (MW)
TUZLA	715	635
G3	100	85
G4	200	182
G5	200	180
G6	215	188
KAKANJ	450	398
G5	110	100
G6	110	90
G7	230	208
GACKO	300	276
UGLJEVIK	280	250

Basic data on the transmission system

transmission lines

Nominal voltage of transmission lines	Length (km)
400 kV	864.73
220 kV	1,524.80
110 kV	3,887.93
110 kV - cable line	31.35

interconnectors

Nominal voltage of transmission lines	No. of interconnections
400 kV	4
220 kV	10
110 kV	22
Total	36

transmission sub-stations

Type of substation	No. of substations	Installed capacity (MVA)
TS 400/x kV	9	6,090.5
TS 220/x kV	8	1,423.0
TS 110/x kV	127	4,690.5

transformers

Transmission ratio of transformers	No. of transformers	Installed capacity (MVA)
TR 400/x kV	14	4,900
TR 220/x kV	14	2,100
TR 110/x kV	216	5,204

ATTACHMENT B: Basic Power Indicators in Bosnia and Herzegovina

(GWh)

Year 2010 (preliminary data)	EP BIH	ERS	EP HZHB	Komunalno Brčko	BIH
Generation in hydro power plants	2,094.61	3,246.91	2,604.67		7,946.20
Generation in thermal power plants	5,012.79	2,856.00			7,868.80
Generation in small and industrial PPs	182.77	62.11	8.54		253.41
Generation	7,290.17	6,165.02	2,613.21		**16,068.40**
Distribution consumption	4,232.92	3,522.19	1,367.75	277.35	9,400.21
Transmission losses					337.95
Large customers	371.43	110.26	2,030.80*		2,512.49
Pumping and mines consumption		12.96	2.21		15.17
Consumption	4,604.35	3,645.41	3,400.76	277.35	**12,265.82**

* Including the amount of1068.48 GWh which the "Aluminij" Company and BSI purchased as eligible customers,

Year 2009	EP BIH	ERS	EP HZHB	Komunalno Brčko	BIH
Generation in hydro power plants	1,631.23	2,577.36	1,939.82		6,148.41
Generation in thermal power plants	5,233.60	2,993.02			8,226.63
Generation in small and industrial PPs	128.39	52.85	5.24		186.47
Generation	6,993.22	5,623.24	1,945.06		**14,561.52**
Distribution consumption	4,132.46	3,403.46	1,349.97	272.22	9,158.11
Transmission losses					306.46
Large customers	367.30	120.90	1,630.16*		2,118.37
Pumping and mines consumption		14.34			14.34
Consumption	4,499.76	3,538.70	2,980.13	272.22	**11,597.28**

* Including the amount of 876.00 GWh which the "Aluminij" Company purchased as an eligible customer

Year 2008	EP BIH	ERS	EP HZHB	Komunalno Brčko	BIH
Generation in hydro power plants	1,478.17	1,931.38	1,355.20		4,764.75
Generation in thermal power plants	5,749.51	3,094.41			8,843.92
Generation in small and industrial PPs	112.60	58.70	4.30		175.60
Generation	7,340.29	5,084.49	1,359.50		**13,784.28**
Distribution consumption	4,042.65	3,309.06	1,334.09	268.86	8,954.66
Transmission losses					326.50
Large customers	658.42	148.23	2,091.17*		2,897.83
Pumping and mines consumption		14.15			14.15
Consumption	4,701.08	3,471.45	3,425.26	268.86	**12,193.15**

* Including the amount of 1223.04 GWh which the "Aluminij" Company purchased as an eligible customer

Year 2007	EP BIH	ERS	EP HZHB	Komunalno Brčko	BIH
Generation in hydro power plants	1,120.10	1,780.31	1,124.09		4,024.50
Generation in thermal power plants	5,365.00	2,607.16			7,972.16
Generation in small and industrial PPs	107.51	66.94	4.01		178.46
Generation	6,592.61	4,454.41	1,128.10		**12,175.12**
Distribution consumption	3,809.38	3,109.09	1,307.60	257.02	8,483.09
Transmission losses					312.00
Large customers	549.36	156.77	2,045.37*		2,751.50
Pumping and mines consumption		45.11	10.86		55.97
Consumption	4,358.74	3,310.97	3,363.83	257.02	**11,602.56**

* Including the amount of 547.78 GWh which the "Aluminij" Company purchased as an eligible customer

Year 2006	EP BIH	ERS	EP HZHB	Brčko District BIH	BIH
Generation in hydro power plants	1,488.03	2,528.13	1,883.55		5,899.71
Generation in thermal power plants	4,811.56	2,802.50			7,614.06
Generation in small and industrial PPs	101.54	59.86			161.40
Generation	6,401.13	5,390.49	1,883.55		**13,675.17**
Distribution consumption	3,722.72	3,061.31	1,279.49	252.60	8,316.12
Transmission losses					311.10
Large customers	542.90	199.50	2,053.79		2,796.19
Pumping and mines consumption		49.08	19.32		68.40
Consumption	4,265.62	3,309.89	3,352.60	252.60	**11,491.81**

ATTACHMENT C: **Map of the Power System of Bosnia and Herzegovina**
with Operational Areas of "Elektroprenos BIH"
(the Company for Transmission of Electric Power in BIH)
and Areas of Public Utilities
(December 2010)