BOSNIA AND HERZEGOVINA

STATE ELECTRICITY
REGULATORY COMMISSION

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Bosnia and Herzegovina

STATE ELECTRICITY REGULATORY COMMISSION

REPORT ON ACTIVITIES OF THE STATE ELECTRICITY REGULATORY COMMISSION IN 2014

Tuzla, December 2014

Content

"…competition rules contain certain aspects that are not compatible with the system.

...even where full competition is achieved... there is a need for certain 'regulating' principles to be used to ensure that the competitive system functions well."

Walter EUCKEN (1891 – 1950) from the book *Principles of Economic Policy*
(Grundsätze der Wirtschaftspolitik, Tübingen: Mohr 1952)

1. INTRODUCTION

On its path towards the Euro-Atlantic integration, Bosnia and Herzegovina (BIH) has undertaken the obligation to harmonise its legislation with the legal framework of the European Union, accepting market economy principles, the promotion of sustainable development and security of energy supply. Unfortunately, delay in transposition of the legally binding Energy Community, that is, EU, *acquis* postpones the necessary sector reform making the liberalisation and integration of BIH energy market with the European Union market more difficult.

Nevertheless, the implementation of institutional reforms announced at the end of 2014 and the establishment of functional and effective coordination mechanisms at all governmental levels looks promising in terms of expediting BIH's progress towards the EU. The coherence of energy policies development in BIH is imposed as an important issue along this path, all the more so as the European Union conducts reform and reorganisation of its energy policy by developing the Energy Union of which the Energy Community is an important element. The future and further development of the Energy Community has been the subject of a number of analyses and public consultation with the aim of choosing optimal options for its strengthening and enlargement.

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 the 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.

Bosnia and Herzegovina has to get involved in all reform processes much more actively in order to use the energy sector as its major potential for the future economic growth and strengthening of cooperation with the neighbouring countries and European Union.

In 2014 some important steps were made to overcome long-lasting problems with management and operation of the Elektroprenos BIH (Company for Transmission of Electric Power of BIH, hereinafter: the Transmission Company). In cooperation with the Independent System Operator in BIH, the Company adopted several planning documents and following SERC approval, the realisation of necessary investments in the transmission system commenced. The past year was marked by the commencement of operation of the Coordinated Auction Office in South East Europe which organised annual auctions on the BIH – Montenegro and BIH – Croatia borders, while organisation of auctions on all borders in South East Europe is expected soon.

The BIH power system operated steadily throughout 2014 enabling the functional operation for all system users in line with the defined quality standards. The system stability was not seriously endangered even during the disastrous floods in May or by occurrence of numerous landslides caused by extremely heavy rainfall when seven substations 110/x kV and twelve transmission lines were disconnected.

Total electricity generation in 2014 amounted to 15,030 GWh which is 7.8 % less in comparison to the previous year which was very favourable in hydrological terms. Hydro power plants produced 5,821 GWh, that is, 18.3 % less than in 2013. In hydrological terms, however, the past 2014 was conducive to achieving higher production. Generation by thermal power plants amounted to 8,921 GWh which is 0.2 % less in comparison to the previous year. Generation by small hydro, solar and wind power plants amounted to 264.1 GWh, while industrial power plants produced 24.6 GWh.

Total electricity consumption in BIH amounted to 12,210 GWh, which is 349 GWh or 2.8 % less compared to the previous year. Consumption of customers connected to the transmission and distribution networks decreased by 8.1 % and 0.9 % respectively. With this, as the consequence of decreased consumption by industrial customers, the trend of decreasing electricity consumption, which started in 2013, continued.

The maximum load of the power system in 2014 was recorded on 31 December 2014 at 18:00 hrs amounting to 2,207 MW. With this the historic maximum of 2,173 MW, recorded on the same day and at the same hour in 2010, was exceeded.

Total electricity in the transmission network amounted to 17,681.5 GWh, which is significantly less than 18,936.8 GWh reached in 2013. Consequently, transmission losses decreased by 11.3 % compared to the previous year amounting to 304 GWh, that is, 1.7 % in relation to the total energy in the transmission network. The trend of reducing distribution losses had continued and they amounted to 1,018 GWh or 10.74 % in relation to gross distribution consumption, which was at the lowest level in the history of the BIH power sector.

A total of 3,716 GWh was exported, which is 28 % or 1,446 GWh less than in the previous year and mostly a direct consequence of reduced electricity consumption. Electricity export amounted to 953 GWh, that is, 31 % or 429 GWh less than in 2013. Registered electricity transit through the BIH transmission network amounted to 1,448 GWh, which is a 26% increase in comparison to 2013.

The SERC Report on Activities in 2014 gives an overview of the objectives of several programs and projects of different institutions, in particular, the European Commission and the Energy Community, which support the fulfilment of obligations by the BIH energy sector.

The auditing report for yet another business year indicates that SERC uses its assets rationally following the recommendations and requirements of the relevant working bodies of both Houses of the Parliamentary Assembly of BIH, presenting their use and status in an objective and transparent manner.

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 Law on Transmission of Electric Power, Regulator and System Operator of BIH, and by appointment of the Commissioners.

Commissioners from the Federation of Bosnia and Herzegovina are:

- Mr. Mirsad Salkić, with his second five-year term (from 30 December 2009 to 29 December 2014) and
- Mr. Nikola Pejić, with a five-year term (from 24 September 2007 to 23 September 2012).

The Commissioner from Republika Srpska is

- Mr. Milorad Tuševljak, with a five-year term (from 10 August 2011 to 9 August 2016).

It is obvious that the first five-year term of one Commissioner from the Federation of Bosnia and Herzegovina expired on 23 September 2012 and that the second five-year term of the other Commissioner from the Federation expired on 29 December 2014. Having in mind that the *Law on Transmission of Electric Power, Regulator and System Operator of BIH* sets forth that the Commission can only operate with all three commissioners and make decisions by a unanimous vote, and taking into consideration the existing practice, Mr. Nikola Pejić and Mr. Mirsad Salkić continue to perform this function until the completion of the procedure for (re)appointment of Commissioners from the Federation of Bosnia and Herzegovina.[1]

Since the establishment of State Electricity Regulatory Commission, the Commissioners rotate in the position of the Chairman equally on an annual basis. Until 30 June 2014, this function was performed by Mr. Mirsad Salkić. Mr. Nikola Pejić is the current Chairman of the Commission until 30 June 2015.

The work of SERC is organised within four departments:

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

Thematic working teams are formed on a needs basis at SERC in the work of which employees from different sectors participate with the aim of achieving higher performance.

The Report on Activities of the State Electricity Regulatory Commission in 2013 was considered and adopted at the sessions of both Houses of the Parliamentary Assembly of Bosnia and Herzegovina,

- *at the 68th session of the House of Representatives, held on 12 June 2014, with a majority vote in favour, without no votes and with six abstentions,*
- *at the 39th session of the House of Peoples, held on 10 July 2014, with a majority vote in favour, without no votes and with three abstentions.*

[1] At the time of the creation of this report, the procedures for appointment of two Commissioners from the Federation of Bosnia and Herzegovina have been in process before the Government of this Entity. After the Government's proposals are confirmed by the Parliament of the Federation BIH, the nominations will be submitted to the Council of Ministers of Bosnia and Herzegovina, which will propose the appointments to the Parliamentary Assembly of Bosnia and Herzegovina.

SERC follows the requirements of regulatory practice by using different ways to improve its knowledge and experience 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, which is becoming ever more dominant in the practice of the Commission. Systematic training aimed at continuous harmonisation of knowledge, skills and practice with needs and expectations of the institution is also provided by specialised workshops of the Energy Community Secretariat, training programs of the Energy Regulators Regional Association and the Florence School of Regulation, and seminars of the Directorate for European Integration aimed at the process of accession and integration of BIH into the European Union.

SERC will remain dedicated to ensuring continuous professionalism of human resources through well-established as well as new training methods using modern communication tools. The justification of this approach has been confirmed by information, communication and presentation competence of a high number of individual employees who successfully present their knowledge and experience at regional international professional gatherings.

In addition to professional training of its employees, the State Electricity Regulatory Commission also informed about and shared experiences on regulatory practice with regulated companies' employees, and participated in professional training of staff of other regulatory authorities in the region. Furthermore, SERC provided quality professional information on the energy sector and its reform not only to specialists in the sector but also to the general public.

This was essential and evident in particular during the public campaign on full electricity market opening as of 1 January 2015. In that framework, in a simple and informative manner, through notices tailored for the general public, SERC informed household customers of their rights as electricity consumers and the opportunity to freely choose their suppliers, that is, companies from which they want to buy electricity and to choose the supply offer that suits them best. Various thematic conferences, seminars and workshops, in which the representatives of the State regulator had a prominent role, were organised to disseminate information to other customer categories.

"The Delegation of the European Union in Bosnia and Herzegovina welcomes the ongoing public campaign carried out by the State Electricity Regulatory Commission and Entity regulators on upcoming full electricity market opening."

From the press release
Sarajevo, 28 November 2014

Large volumes of different documents have been created as a result of SERC activities. The number of documents and information is constantly increasing. SERC, as the creator, organises keeping, evaluation, extraction and protection of the registry office material under the professional supervision of the Archive of Bosnia and Herzegovina. This cooperation enables these processes to develop in line with professional principles, experiences and recommendations and through mutual familiarisation of the two institutions.

In the reporting period only technically defective or written-off and functionally obsolete equipment was replaced.

3. KEY ACTIVITIES

In 2014, the State Electricity Regulatory Commission held 25 regular sessions, 31 internal meetings and organised 12 public hearings, three of them having a formal character.

In the reporting period, in a transparent manner and by holding relevant public hearings in which interested members of the public were allowed to give their comment besides the power sector stakeholders, the Commission conducted the activities with regard to adoption and approval of a range of documents, tariff setting, granting of licenses, and carried out other activities of which the most important ones are grouped in clusters as provided below.

Documents under regulatory competences are reviewed and determined in regular sessions, in accordance with the authorities prescribed by the law; issues and documents of an organisational and administrative nature are reviewed and adopted in internal meetings.

Transparency toward the public through consultation and communication with all interested professionals, as well as the general 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 the mutual exchange of collected public comments in the same or similar procedures is applied by all three regulatory authorities in the power sector of Bosnia and Herzegovina.

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

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

3.1 SERC Rules and Documents

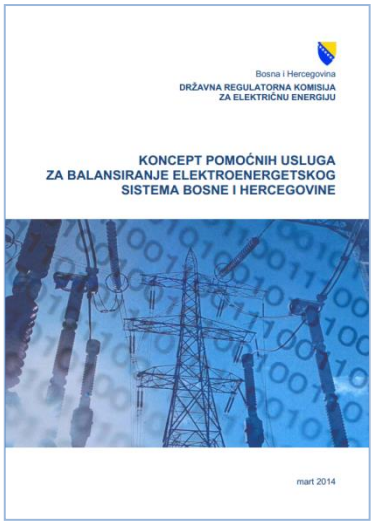
A New Method of Providing Ancillary Services and Balancing of the BIH Power System

Aware of the importance of ancillary services and balancing of the power system in BIH, in 2013 the State Electricity Regulatory Commission initiated a range of activities aimed to establish a new method of balancing the BIH power system, which, unlike the previous fully regulated approach, would be market based.

An approach presented in a document titled *Proposed Solutions for Improving Ancillary Services Provision and Balancing Mechanism in BIH* (document prepared by DNV KEMA Energy & Sustainability/KEMA Consulting GmbH) had a positive impact on the whole BIH power sector and encouraged a SERC's idea of translating the basic solutions by further elaboration into practically applicable rules regulating these issues based on new principles.

In this context, SERC hired the same consultant in September 2013. A joint team comprising Consultants, SERC and the ISO BIH, using the documents previously developed within the USAID *Regulatory and Energy Assistance Project* (REAP) prepared the *Concept of Ancillary Services for the Balancing of the Power System of Bosnia and Herzegovina* (hereinafter: the

Concept of Ancillary Services or the Concept). SERC defined the final text of the Concept in March 2014, with the opinion that the document ensures stable and reliable operation of the power system and the fulfilment of BIH's international obligations, primarily under the Treaty establishing the Energy Community and towards the European Network of Transmission System Operators for Electricity (ENTSO-E) and its Regional Group of Continental Europe, that is, the SHB Control Block (Slovenia – Croatia – BIH). At the same time, a Plan of Activities on the implementation of the Concept was defined while also activities on adoption of new Market Rules were initiated as well as preparation of additional procedures and rules required for the implementation thereof to enable the commencement of the effective application of solutions provided for by the Concept as of 1 January 2015.



The provision of ancillary services using the fully regulated method does not meet the needs of the BIH power system, in particular when it comes to secondary control. In its current role, the ISO BIH cannot purchase the missing reserves and balancing energy. Due to irresponsibility of the power utilities and lack of possibility to impose sanctions for such behaviour through market-based mechanisms, the current model based on a strictly regulated mechanism does not provide an adequate response to the permanent lack of reserve and frequent substantial deviations towards the SHB Control Block to which the Transmission System Operator of Slovenia (ELES), as its leader, points.

The Concept of Ancillary Services with illustrations of a considerable number of procedures which had to be developed paved the way for further trends in urgent completion of the existing regulatory framework for the provision of ancillary services for balancing of the BIH power system and the commencement of its operational functioning.

In this context, in July 2014, following the public hearing procedure, SERC amended the *Tariff Pricing Methodology for services of electricity transmission, operation of ISO and ancillary services*. SERC expected that the ISO BIH would harmonise the existing Market Rules and Grid Code pursuant to the SERC Decision from March 2014 and made them compatible with the solutions provided in the Concept, together with additional procedures required to implement the rules.

A Draft of new Market Rules, in the preparation of which market participants were given an opportunity to provide their comments through the relevant Technical Committee, was submitted to the ISO BIH Management Board for consideration on 1 August 2014. However, it was followed by several unsuccessful attempts by the members of the ISO BIH Management Board to meet and adopt the Market Rules before final approval by SERC.

Following adoption of the Concept, the dynamics of planned activities was seriously disturbed. Although amendments to the *Tariff Pricing Methodology for services of electricity transmission, operation of ISO and ancillary services* were made in a timely manner (16 July 2014), significant slowing down of the dynamics, even a total stalemate in other activities, made the realisation of subsequent phases impossible, such as practical testing of the Concept through the dry-run, procurement of secondary and tertiary reserves, adoption of a decision on system services etc.

With a view to overcoming the total stalemate in the implementation of the Plan of activities, SERC regulated the method of providing ancillary services and balancing of the BIH power system on a temporary basis by the Decision of 18 November 2014. By this Decision SERC required of the ISO BIH to develop a range of necessary implementing procedures and test them before 31 December 2014.

By a new *Decision on dry-run period for application of implementing rules and procedures for the provision of ancillary services and balancing of the power system of BIH,* SERC subsequently accepted the opinion of the ISO BIH and other power entities to define 1 June 2015 as the more realistic and optimal deadline for the effective application of rules and procedures.

SERC is determined to ensure the improvement of the regulatory framework, establish a new content and method of providing ancillary services and power system balancing with the aim of achieving more functional operation of the wholesale and retail electricity markets in Bosnia and Herzegovina.

Activities on the Retail Electricity Market Design in Brčko District BIH

Since the beginning of 2010, the State Electricity Regulatory Commission also acts as the regulatory authority in the area of Brčko District BIH performing the required regulation of electricity generation, distribution and supply activities. In 2014, SERC continued to act in line with its legal obligations and powers to create conditions for unlimited and free trade and uninterrupted electricity supply and enable and expedite the creation of the electricity market in Bosnia and Herzegovina, governed by international practice and the relevant regulations and directives of the European Union.

Consistent with its *Decision on scope, conditions and time schedule of electricity market opening in Bosnia and Herzegovina* of June 2006 to fully open the electricity market as of 1 January 2015, SERC adjusted the tariff rules of the District to the conditions of fully opened electricity market in BIH prescribing by a

new methodology the method of tariff setting for supply of customers within the public service through two forms of its implementation: as the universal service and last resort supply service.

Households and small customers (customers whose facilities are connected to the distribution system at the voltage level lower than 1 kV and that have less than 50 employees with total annual revenue not exceeding €5.1 million) are entitled to supply within the universal service, while all other customers are entitled to last resort supply. Last resort supply is time-limited and applies to those customers that are not entitled to supply within the universal service and lost their supplier on the market under specific circumstances.

The procedure for the adoption of *Methodology for setting tariffs for electricity supply within public service in Brčko District BIH* was finalised in November 2014.

Amendments to the *Rules on supply of customers in Brčko District BIH with electricity* and *Methodology for development of tariffs for services of electricity distribution in Brčko District BIH* were amended with the same purpose and through the parallel procedure. This ensured the compatibility and uniformity of solutions from all three mentioned documents.

Even in a fully liberalised environment, electricity distribution remains regulated, i.e., the regulator continues to set tariffs for the use of the distribution network for all customer categories. The regulated company is obligated to provide third party access and electricity distribution services to all customers as well as other distribution system users under the same conditions and in a non-discriminatory manner.

Rules on amendments to the Rules on supply of customers in Brčko District BIH with electricity, *Decision on amendments to Methodology for development of tariffs for services of electricity distribution in Brčko District BIH* and *Methodology for setting tariffs for electricity supply within public service in Brčko District BIH* were adopted on 6 November 2014.

3.2 Documents Approved by SERC

Indicative Generation Development Plan for Period 2015 – 2024

An *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 the construction of new generation capacities. At the same time, this plan is used as one of the bases for the development of a *Long-Term Transmission Network Development Plan in BIH*, which is also developed every year covering a ten-year period including the issue of new cross-border lines.

The main objective of the Indicative Generation Development Plan is to analyse the balance of capacity and energy in the transmission network for the following ten years. The development of this document is also in the function of fulfilling obligations towards the European Network of Transmission System Operators for Electricity (ENTSO-E). The Independent System operator in BIH, as all other system operators within ENTSO-E, is obligated to provide its contribution to the development of the European Ten-Year Network Development Plan (TYNDP), which is prepared on a biannual basis pursuant to Regulation (EC) No 714/2009 on conditions for access to the network for cross-border exchanges in electricity.[2] In this context, the ISO BIH is obligated to submit BIH power system development plans, which are based on consumption, generation including new sources, and planned reinforcements of the internal transmission network and interconnections. These activities presume and imply full coordination at the regional level with the analysis of potential congestion in the internal network and cross-border lines.

An electricity consumption forecast for the period from 2015 to 2024 was developed using the previous eight-year experience in preparation of this type of plans, taking into consideration the existing trends as well as assessments of various international and national institutions. Furthermore, the trend in gross domestic product was an important factor while forecasting electricity consumption, for which data and estimates of international financial institutions were used. For development of the *Indicative Generation Development Plan for the period 2015 – 2024*, qualitative input data were provided, while the Plan was not only expanded with one more year, but also updated and improved. The public hearing on the document confirmed the forecasts of consumption, new generation capacities and capacity and energy balances in the transmission network.

The balances of capacity and energy for the following ten years lead to the necessity of restoring the existing generation capacities and constructing the new ones with particular focus on the improvement and protection of the environment.

The State Electricity Regulatory Commission adopted a *Decision on Approval of the Indicative Generation Development Plan for the period 2015 – 2024* in May 2014.

[2] After a two-year effort, the first official TYNDP was published by ENTSO-E on 5 July 2012. The Agency for the Cooperation of Energy Regulators (ACER) published its opinion of this TYNDP on 5 September 2012. Following public consultation, the second TYNDP was submitted to ACER on 31 October 2014. ACER's opinion on the proposed document is expected at the beginning of 2015.

Long-Term Transmission Network Development Plan for Period 2014 – 2023

In November 2014, the State Electricity Regulatory Commission approved the *Long-Term Transmission Network Development Plan for the period 2014 – 2023*, i.e., the first document of this kind.

This planning document, which was prepared by the Transmission Company and subsequently revised by the Independent System Operator in Bosnia and Herzegovina, defines the required reinforcement of the existing transmission network facilities and construction of the new ones to ensure timely commencement of activities with regard to designing, constructing and putting into operation of infrastructure necessary for a continuous supply and stable operation of the system. The total value of investments as foreseen by the Long-Term Plan amounts to €402.81 million.

The Long-Term Plan envisages the construction of 29 substations 110/x kV, 50 transmission lines 110 kV, two transmission lines 220 kV, three transmission lines 400 kV and 37 transmission line bays within the existing substations. The Plan also includes the expansion and installation of the second transformer in 34 substations 110/x, installation of one transformer 400/220/110 kV and reconstruction and rehabilitation of 112 high- and medium voltage facilities. Furthermore, it envisages the reconstruction and rehabilitation of 76 transmission lines 110 kV, 20 transmission lines 220 kV and one transmission line 400 kV as well as replacement of 52 transformers 110/x kV, one transformer 220/x kV and two transformers 400/x kV. Construction of four interconnectors is planned at the 400 kV voltage level.

Approval of the Long-Term Plan ensures qualitative preparations of annual investment plans of Elektroprenos BIH while creating conditions to more adequately meet obligations towards the European Network of Transmission System Operators for Electricity (ENTSO-E) concerning contributions to the development of the European Ten Year Network Development Plan.

Pursuant to applicable laws, a long-term transmission network development plan is developed on an annual basis and covers the forthcoming ten-year period.

Investment Plans of the Transmission Company

In 2014, the Transmission Company prepared two annual investment plans and one investment plan covering a three-year period.

The *Investment Plan for the period 2014 – 2016* and the *Investment Plan for 2014* were adopted at the session of the Company's Steering Board held on 26 March 2014 and approved at the meeting of the Assembly of Shareholders held on 31 March 2014. The Plans were developed in line with planning principles

and frameworks as adopted by the Assembly and established criteria and relations in the investment structure. The documents were prepared in the function of realising the power balance on an annual basis, applying the basic standard security criterion.

The three-year Plan envisages the construction of 15 new substations 110/x kV; expansion of the existing 16 substations 110/x kV and construction of 11 new transmission lines with nominal voltage of 110 kV; reconstruction of the existing 27 substations 110/x kV as well as 14 transmission lines, including the reconstruction of one 400 kV and five 220 kV transmission lines; the replacement of one transformer 400/110 kV, one transformer 220/110 kV and 24 transformers 110/x kV.

The *Investment Plan for 2014*, *inter alia*, envisages the construction of 13 new substations 110/x kV; expansion of the existing nine substations 110/x kV; construction of five new transmission lines with nominal voltage of 110 kV; reconstruction of the existing 19 substations 110/x kV as well as five transmission lines, including one 400 kV and two 220 kV transmission lines; the replacement of one transformer 220/110 kV and 13 transformers 110/x kV.

After an analysis of the submitted documents, the State Electricity Regulatory Commission approved the *Investment Plan for the period 2014 – 2016* and the *Investment Plan for 2014* in April 2014.

The Transmission Company adopted the *Investment Plan for 2015* at the session of the Company's Steering Board held on 11 December 2014. Furthermore, at the meeting held on 22 December 2014, the Assembly of Stakeholders approved a Decision on investments in Transmission Company's facilities exceeding amounts of €1 million which was adopted on 11 December 2014.

In addition to including technical and economic planning criteria, the *Investment Plan for 2015* also included decisions and conclusions of the Company's Board of Directors, Steering Board and Assembly of Stakeholders of the Company defining in that way criteria and relationships in the very investment structure. This Plan was also prepared in the function of realising the power balance on an annual basis, applying the basic standard security criterion while for its drafting the *Investment Plan for the period 2014 – 2016* and the *Long-Term Transmission Network Development Plan for the period 2014 – 2023* were used.

The Plan includes activities on solving rigid points in the system, rehabilitation of transmission network facilities that are not operational and putting them into operation, completing 110 kV transmission line bays and replacement of network transformers in accordance with defined criteria.

After analyses made at the end of December 2014, the State Electricity Regulatory Commission approved the *Investment Plan for 2015.*

Price List of Services for Connection of Users to the Transmission Network

Price list of services for connection of users to the transmission network and the forms specified by the *Connection Rules* adopted by SERC in October 2008, were adopted at the session of the Transmission Company's Steering Board held on 21 March 2014. After several years of waiting for submission of the Price List for approval, on 10 April 2014 the State Electricity Regulatory Commission was given an opportunity to adopt a *Decision approving Price list of services for connection of users to the transmission network.*

While adopting this Decision, the Transmission Company was requested by a SERC's Conclusion to begin concluding Connection Contracts with all entities with which the connection procedure was initiated but was not finalised.

Rules for Allocation of Cross-Border Transmission Capacities

After several years of preparations, the *Coordinated Auction Office in South East Europe* (SEE CAO) was formally established on 27 March 2014. With the aim of commencing its operational work, SEE CAO prepared *Auction Rules for Capacity Allocation* and sent them to the relevant regulatory authorities for approval through its members from Albania, Bosnia and Herzegovina, Montenegro, Greece, Croatia, Kosovo* and Turkey. In this context, the Independent System Operator in Bosnia and Herzegovina submitted the SEE CAO Auction Rules to SERC for approval.

Taking into consideration the common position of the Energy Community Regulatory Board (ECRB) on the SEE CAO Auction Rules, in September 2014 SERC adopted a *Decision on Approval of the Auction Rules for Capacity Allocation in SEE CAO*. At the same time, by its Conclusion SERC imposed the obligation on the ISO BIH to, jointly with other national transmission system operators included in SEE CAO, adjust the Auction Rules to the common position to the maximum extent possible, that is, to the recommendations of the Energy Community Regulatory Board of 3 September 2014.

The Coordinated Auction Office in South East Europe, seated in Podgorica, commenced its operations on 27 November 2014, when the approved rules were applied by organising annual auctions on the BIH – Montenegro and BIH – Croatia borders.

On several occasions at national and international gatherings, SERC welcomed the commencement of SEE CAO operations, but also expressed its concerns over reducing its geographic scope only to two borders of Bosnia and Herzegovina and emphasised its expectations that the Coordinated Auction Office in South East

Europe would start operating during 2015 in accordance with its name, that is, in the whole South East Europe.

Due to non-participation of Serbia in activities of this Office, there was a need to regulate rules for allocation of cross-border capacities on the joint border between BIH and Serbia on an annual, monthly and daily basis. Consequently, on 18 November 2014, at the request of the Independent System Operator in Bosnia and Herzegovina, SERC approved:

- *Rules for annual and monthly auctions for allocation of transmission capacities on the border between regulation areas of the Public Utility Elektromreža Srbije (EMS) and the Independent System Operator in Bosnia and Herzegovina (ISO BIH) in 2015*, and
- *Rules for daily auctions for allocation of transmission capacities on the border between regulation areas of the Public Utility Elektromreža Srbije (EMS) and the Independent System Operator in Bosnia and Herzegovina (ISO BIH) in 2015*.

As the Coordinated Auction Office in South East Europe does not cover intraday allocation of cross-border transmission capacities, at the request of the ISO BIH the following documents were also approved by same SERC decision:

- *Rules for intraday allocation of transmission capacities on the border between regulation areas of the Independent System Operator in Bosnia and Herzegovina (ISO BIH) and the Public Utility Elektromreža Srbije (EMS)in 2015*,
- *Rules for intraday allocation of transmission capacities on the border between regulation areas of the Independent System Operator in Bosnia and Herzegovina (ISO BIH) and the Montenegrin Electric Transmission System (CGES) in 2015*, and
- *Rules for intraday allocation of transmission capacities on the border between regulation areas of the Croatian Transmission System Operator (HOPS) and the Independent System Operator in Bosnia and Herzegovina (ISO BIH) in 2015*.

In 2015, allocation of transmission capacities on the border with Serbia through annual and monthly auctions is conducted by EMS while daily and intraday auctions are conducted by the ISO BIH. Intraday auctions on the borders with Croatia and Montenegro are conducted by HOPS and the ISO BIH respectively.

Decision on Approval of Amendments to General Conditions for Electricity Supply in Brčko District BIH

With the aim of harmonising the provisions of General Conditions for Electricity Supply in Brčko District BIH with changes to the legal framework pertaining to spatial planning and personal

data protection, on 20 June 2014 the Steering Board of the Public Utility *Komunalno Brčko* adopted a Decision on Amendments to General Conditions for Electricity Supply in Brčko District BIH and submitted it to SERC for approval.

In line with its powers, the State Electricity Regulatory Commission adopted a *Decision on approval of amendments to General Conditions for Electricity Supply in Brčko District BIH* in July 2014.

3.3 Licensing Proceedings

In 2014, SERC granted six licenses for the international electricity trading activity, while at the time of writing this Report, it worked intensively on solving two additional applications for the same activity filed by Proenergy d.o.o. Mostar and Petrol BH Oil Company d.o.o. Sarajevo.

Due to the expiration of the term of the previously issued license for the international electricity trading activity, proceedings were conducted and the licenses were renewed with a five-year term to the following entities:

- EZPADA d.o.o. Mostar (March 2014),
- Comsar Energy Trading d.o.o. Banja Luka (October 2014),
- Axpo BH d.o.o. Sarajevo (October 2014),
- EL-EN Solutions d.o.o. Banja Luka (November 2014).

The Company KTG Zenica d.o.o. Zenica was again granted a temporary license (April 2014), while the Company B.S.I. d.o.o. Jajce renewed the license for the international electricity trading for self-consumption (November 2014).

Taking into consideration the changes introduced with full market opening as of 1 January 2015, in December 2014 SERC amended the Decision granting the license for the activity of supplying non-eligible customers with electricity to the Public Utility Komunalno Brčko. The title of the license was amended to read: *License for performance of electricity trading and supply activities in the territory of BIH*.

Due to the change of address, that is, the seat, decisions extending the use of licenses were adopted for the following companies: HSE BH d.o.o. Sarajevo (January 2014), Energy Financing Team d.o.o. Bileća (April 2014), as well as extending the use of the temporary license for Petrol BH Oil Company d.o.o. Sarajevo (February 2014).

At the request of Aluminij d.d. Mostar, the initiated license renewal proceedings for international electricity trading activity for self-consumption were discontinued for an indefinite period of time.

As licensees for the international electricity trading activity, the following entities also were registered in the previous period: Rudnap d.o.o. Banja Luka, GEN-I d.o.o. Sarajevo, Interenergo d.o.o. Sarajevo, Alpiq Energija BH d.o.o. Sarajevo, Repower Adria d.o.o. Sarajevo, HSE BH d.o.o. Sarajevo, MH Elektroprivreda Republike Srpske Parent Company, a.d. Trebinje, JP Elektroprivreda Hrvatske zajednice Herceg Bosne d.d. Mostar, JP Elektroprivreda Bosne i Hercegovine d.d. Sarajevo, while as holders of temporary licences were registered: Proenergy d.o.o. Mostar, Elektro energija BH d.o.o. Banja Luka, HEP-Trade d.o.o. Mostar, Danske Comodities BH d.o.o. Sarajevo and Steelmin BH d.o.o. Jajce for the import of electricity for self-consumption.

The Independent System Operator in Bosnia and Herzegovina Sarajevo and Elektroprenos Bosne i Hercegovine a.d. Banja Luka are holders of the license for performance of the activity of independent system operator and the license for the electricity transmission activity respectively. The Public Utility Komunalno Brčko d.o.o. Brčko holds the license for electricity distribution and the license for electricity trading and supply in the territory of BIH.

Every year, including this one, the Company Elektroprenos Bosne i Hercegovine a.d. Banja Luka updated and reported changes in *Overviews of facilities used by the Company for performance of the activity of electricity transmission* as well as *Overviews of transmission lines which are not owned by the Transmission Company and are not in the function of electricity transmission,* on which SERC reached relevant conclusions in March 2014.

In 2014, for the first time the State Electricity Regulatory Commission revoked a license within its competence. It is a case of Korlea d.o.o. Mostar, whose international electricity trading licence was first suspended in November 2014. Namely, a proposal to initiate bankruptcy procedures submitted by the licensee seriously challenged the licensee's stability and solvency which was also demonstrated through non-payment of regulatory fee. Apart from this behaviour being in its own right the reason for suspension of a license pursuant to SERC rules and regulations, the same goes for the indication of the licensee's lack of economic and financial capability to meet other obligetions as defined by the Licensing Conditions.

Taking into account that licensee's economic and financial incapability may have a negative impact on other entities in the electricity sector, electricity market functioning and quality of supply, after the general public hearing in December 2014, SERC adopted the Decision on revocation of license to the Korlea Company.

3.4 Monitoring of Activities of Licensed Entities

As part of its regular activities, throughout the year SERC monitors operations of licensed entities and their compliance with the licensing conditions, primarily by monitoring regulated companies – the ISO BIH, Elektroprenos BIH and JP Komunalno Brčko. Monitoring is performed by the analysis of regular and special reports submitted by the licensed entities as well as by announced or unannounced visits to licensees. Licensees submit annual, semi-annual, monthly and daily reports on individual activities of a financial, technical and organisational character. Licensees' reports on contingency events in the system are also available.

Visits of SERC experts to the regulated entities enable direct insight into their documents and activities which is of great relevance in particular when analysing the financial position of the entity from the aspect of application of approved tariffs.

In October and November 2014, the following regulated entities were visited in the function of regulatory monitoring:

- JP Komunalno Brčko,
- Independent System Operator in Bosnia and Herzegovina, and
- Elektroprenos Bosne i Hercegovine.

JP Komunalno Brčko was again requested by the State Electricity Regulatory Commission to conduct unbundling of accounts for non-energy activities and fulfil the obligation to adequately register any income received on the basis of operation of the Work Unit *Elektrodistribucija*, separately from incomes that the Company receives on the basis of other activities (water production and distribution, maintenance of public areas and transport and disposal of waste materials). Furthermore, SERC reminded the regulated entity of the obligation to regulate ownership relations over the fixed assets in the function of electricity distribution and supply while the Government of Brčko District BIH was asked again to participate more actively in finding a solution to this issue. In addition, the licensee's attention was brought to the necessity of developing and adopting a long-term investment plan which would include necessary funding as well as a method to ensure it. The regulated Company was asked to submit investment decisions with reasoning behind them.

Komunalno Brčko was instructed to provide the state regulator with more complete indicators of continuity of supply and commercial quality of electricity supply in accordance with *General Conditions for Electricity Supply in Brčko District BIH* and provide reporting on electricity prices in accordance with the standard *Eurostat* methodology.

SERC conclusions imposed an obligation on Members of both the ISO BIH Board of Directors and Steering Committee to strictly comply with the scope of approved costs and expenditures as approved by regulatory decisions and to improve cost and expenditure management, in particular labour costs. Furthermore, the ISO BIH was instructed to start monitoring voltage quality pursuant to EN 50160 standard and reduce unintended deviations in the BIH control area within the SHB block in cooperation with BIH power utilities. In addition, the ISO BIH was asked to report in a timely and adequate manner on all international activities that may have repercussions in any possible way on the power system or any part thereof, as well as to fully implement the provisions as defined by the Grid Code with regard to connection of new generation facilities, in particular with regard to frequency and active energy regulation.

In accordance with conclusions adopted after regulatory monitoring of Elektroprenos BIH, the Company was instructed to comply with a framework for labour costs and employ new staff on the principle of filling vacant positions to the maximum possible. Furthermore, it was suggested to solve the issue of outstanding debts of other business entities in the country towards the Company as soon as possible and in compliance with the relevant laws. Pursuant to the same Conclusions, the Company will have to intensify activities with regard to the full and consistent application of the Connection Rules and other accompanying documents as well as solve technical issues among which the problem of high voltage draws most attention (Please see Section 3.5).

After a number of years in which the operation of the Company was accompanied by many problems and attempts to solve them, since December 2013 there had been significant breakthroughs in the Company's operations and management. Following the adoption of financial reports from 2007 to 2011, election of the new general director and appointment of five new members of the Company's Steering Board, in March 2014 the *Law on Amendments to the Law Establishing the Company for Transmission of Electric Power in BIH* was adopted, which created legal preconditions for distribution of a part of accumulated profit of the Company even before the lapse of a ten-year period after its registration.

Pursuant to decisions of the Assembly of Shareholders, distribution of a part of accumulated profit from the previous period amounting to €50.1 million was conducted. New members of the Board of Directors were appointed. Finally, from March to December 2014, the Steering Board of Elektroprenos BIH adopted a range of documents approved by SERC (Please see Section 3.2).

However, while the problems in operation of Elektroprenos BIH were being removed, inefficiency in functioning of the Indepen-

dent System Operator occurred, primarily its Steering Committee. Namely, during 2014, this body was either late in deciding on major issues of the power sector or failed to do so. This is the reason, for example, for delayed approval of the *Long-Term Transmission Network Development Plan for Period 2014 – 2023*, which was developed by Elektroprenos BIH and revised in line with the ISO BIH requirements.

Furthermore, obstructions in the work and passivity of the Steering Committee impose a very serious threat in terms of consequences after the failure to adopt and develop new Market Rules, which are of primary importance for full electricity market opening as of 1 January 2015. The proposal of Market Rules which was submitted to the Steering Committee as early as 1 August 2014, was not discussed, defined or submitted to SERC for approval. This outcome makes full electricity market opening in BIH even more difficult, as the Market Rules from the long-past year of 2006 are not compatible with requirements of the reform to develop new market designs. Concerned about the aforementioned facts and possible consequences, SERC called on the BIH Council of Minister and, in particular, the entity governments that exercise their ownership rights in the ISO BIH through the Steering Committee, as the entities that are interested in successful operation of the power sector and directly involved in the procedures for appointment of Steering Committee's members, to require more active and responsible behaviour of the ISO BIH's managerial body in order for this institution to efficiently exercise its powers enabling in this way the market development and realisation of required investments. For its part, SERC does its best to continue activities on market liberalisation and electricity infrastructure development.

3.5 Technical Aspect of Transmission System Operation

Operation of the BIH power system was stable and without bigger problems throughout the year. Functional operation was enabled for all system users in accordance with the defined quality standards. The planned works as well as those additionally requested on the transmission network were completed in the function of the current and investment maintenance.

The system stability was not disturbed even in the period from 15 to 19 May 2014 during the unrecorded floods in the whole region caused by exceptionally heavy rainfall, which exceeded multian-nual averages in a short period. In some parts of Bosnia and Herzegovina the level of rainfall exceeded 250 l/m^2, which is four times higher than the average for the month of May. In this period, the flooding of significant parts of the land occurred along the river basins of the Sava, Drina, Bosnia, Vrbas, Una, Sana and other watercourses in most of Bosnia and Herzegovina.

During the floods, coordinated operation of the ISO BIH, Elektroprenos BIH and public power utilities was demonstrated enabling safe and stable operation of the BIH power system. Furthermore, a possibility of larger disturbances in the regional power systems was avoided through the exchange of information and coordinated operations of the ISO BIH and system operators in the neighbouring countries which also enabled all additional deliveries of electricity to Serbia.

Due to flooding of the facilities, seven substations 110/x kV were disconnected: Prijedor 3, Čelinac, Šamac, Gračanica, Janja, Bijeljina and Doboj 2. Due to the heavy rainfall and floods a number of landslides occurred, that is, were activated, causing disconnection and grounding of several transmission lines: TL 400 kV Tuzla 4 – Banja Luka 6, DV 400 kV Tuzla 4 – Ugljevik and DV 220 kV Tuzla 4 – Kakanj, as well as nine transmission lines at the voltage level of 110 kV. According to the estimates of Elektroprenos BIH direct damage caused on assets, facilities and network owned by the Company amounted to approximately €1.64 million, excluding funds required for landslide repairs.

During various time intervals more than 150,000 customers were not supplied with electricity due to the fact that the mentioned substations were not operational, while some distribution feeders were disconnected for preventive reasons.

Data on both energy not supplied (ENS) due to unplanned interruptions of energy supply (ENS_{unpl}) and energy not supplied due to planned interruptions of energy supply (ENS_{pl}) in the BIH power system in the past five years are provided in Table 1. It is evident that total energy not supplied in 2014, in spite of disturbances caused by the floods and landslides is lower than in the previous years.

Table 2 contains data on continuity of supply, that is, the average interrupted time (AIT) in the high-voltage transmission network.

Table 1. Energy not supplied due to interruptions in the transmission network

	2010		*2011*		*2012*		*2013*		*2014*	
	MWh	*min*	*MWh*	*min*	*MWh*	*min*	*MWh*	*min*	*MWh*	*min*
ENS_{unpl}	1,340.79	22,865	906.80	14,593	2,499.08	110,506	494.74	17,484	420.75	35,458
ENS_{pl}	2,042.28	33,842	2,106.92	36,032	1,081.15	47,807	1,362.40	29,940	1,328.79	25,646
Total	3,383.07	56,707	3,013.72	50,625	3,580.23	158,313	1,857.14	47,424	1,749.54	61,104

Table 2. Average interrupted time in the transmission network by month (min)

Month	*I*	*II*	*III*	*IV*	*V*	*VI*	*VII*	*VIII*	*IX*	*X*	*XI*	*XII*
AIT_{2011}	0.7698	0.6631	1.9833	10.9127	8.3742	10.6196	13.6533	4.2118	17.9519	15.3561	5.7561	6.4662
AIT_{2012}	1.7559	66.6730	0.9586	10.4317	11.5640	5.8708	5.6832	4.4618	13.2911	11.3357	12.6825	3.4717
AIT_{2013}	4.4568	9.4367	6.2339	10.8451	3.5897	9.4802	8.9578	3.8633	10.8216	9.1419	3.4251	3.8644
AIT_{2014}	4.0226	0.9460	7.6195	7.8256	1.4890	21.1840	4.1355	5.0214	14.1595	5.8988	7.6719	2.8193

During the previous year, 466 outages occurred in the transmission system, of which 64 in 400 kV network, 174 and 210 in 220 kV and 110 kV networks respectively and 18 at high-voltage transformers. Failures occurred most frequently, that is, ten times, on transformer 400/220 kV while one failure on 400/110 kV and seven on 220/110 kV transformers were recorded. However, there were no outages that could have significantly endangered the stability of the system operation.

Similar to the previous years, in 2014 voltage levels in the power system often exceeded the regular scopes. The continuation of the negative trend caused concerns – already too high voltage levels became even higher. The problems with voltage levels, that is, deviations from allowed values are increasingly higher and last longer, which means that these are not seasonal variations (spring and autumn) as it was the case in the previous years. The highest deviations occurred in the 400 kV network followed by deviations in the 220 kV network while voltage levels in the 110 kV network were within allowed limits primarily due to successful regulation of transformers 110/x kV. The main cause of occurrence and duration of high voltage levels are under loaded 400 kV transmission lines as well as unfavourable impact of the neighbouring power systems, which was particularly increased at the Trebinje substation by putting transmission line 400 kV Podgorica (Montenegro) – Tirana – Elbasan (Albania) into operation. The occurrence of high voltage levels can have as a consequence the reduction of life span of equipment and facilities, thus increasing maintenance costs, and in some cases investments costs as well.

In 2014, various measures were applied to lower high voltage levels. In addition to regulation of transformers, power plants were instructed to operate in sub-exciter mode, while 400 kV and 220 kV transmission lines were disconnected as a measure of last resort, taking into account the security of supply criterion, that is, meeting the so-called $n-1$ criterion. In 2014, 103 orders for disconnection of transmission lines were issued with the transmission lines 400 kV Tuzla – Banja Luka 6 and 220 kV Prijedor – Mraclin (Croatia) being disconnected most frequently.

The status of the transmission network in 2014 slightly changed compared to the previous year.[3] In July 2014, transmission line 400 kV Tuzla 4 – Banja Luka 6 was rerouted and an entry-exit connection to the Stanari power plant was made. In November, a mobile substation 110/10(20) kV with capacity of 10 MVA was put into operation at the planned location for substation Sarajevo 12, taking into consideration approval granted in 2012 by Elektroprenos BIH to Elektroprivreda BIH. The connection of

[3] A map of the power system of Bosnia and Herzegovina is provided in Attachment C of this Report.

Table 3. SAIFI and SAIDI for the transmission network

		2010	*2011*	*2012*	*2013*	*2014*
SAIFI	Planned interruptions	2.06	0.90	0.87	0.83	0.72
	Unplanned interruptions	1.00	0.94	1.16	1.01	0.80
	Total	3.06	1.84	2.03	1.84	1.52
SAIDI	Planned interruptions (min/customer)	213.07	142.69	146.62	124.36	143.84
	Unplanned interruptions (min/customer)	94.17	52.00	142.24	55.69	277.15
	Total (min/customer)	307.24	194.69	288.87	180.05	421.01

Table 4. SAIFI and SAIDI for the transmission network including outages of middle voltage feeders caused by interruptions in the distribution network

		2010	*2011*	*2012*	*2013*	*2014*
SAIFI	Planned interruptions	7.08	4.93	4.27	4.52	3.99
	Unplanned interruptions	10.04	9.07	8.53	9.35	7.61
	Total	17.12	14.00	12.80	13.87	11.60
SAIDI	Planned interruptions (min/customer)	533.78	516.17	393.93	404.33	671.60
	Unplanned interruptions (min/customer)	742.87	459.32	729.96	474.87	678.42
	Total (min/customer)	1,276.65	975.49	1,123.89	879.20	1,350.02

mobile substation was made permanent by splitting the existing cable line 110 kV Sarajevo 7 – Sarajevo 13.

In 2014, the PHP Čapljina did not operate in the pumping mode.

The quality of the power system operation is monitored by analysing the Transmission Company's data on technical aspects of the transmission system operation, which, in addition to indices of continuity of customer supply ENS and AIT, are also presented, by SAIFI and SAIDI indices.

SAIFI and SAIDI indices are obtained by monitoring the number and duration of interruptions in the Transmission Company'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 3 and 4 show the SAFI and SAID indices for the past five years. Table 3 includes only interruptions caused by events in the transmission network, while Table 4 also includes interruptions in middle voltage feeders in the Transmission Company's substations caused by events in the distribution network. The indices are significantly less favourable in Table 4, taking into consideration outspread connections and length of the distribution network which is in practice more prone to different types of failures.

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

3.6 Tariff Proceedings

Tariffs for Electricity Transmission Services

In April 2014, Elektroprenos Bosne i Hercegovine filed the application for modification of electricity transmission tariff by which the Company presented requests for revenues and expenditures as well as costs that the Company plans to include in the tariffs for its services. Elektroprenos BIH planned the revenue requirement for 2014 amounting to €60,180,223 which in comparison to the planned electricity in the transmission network (11,891,802.395 MWh) gives an average tariff for the transmission services amounting to 5.056 €/MWh.

SERC made decisions upon the tariff application pursuant to the criteria as laid down in the *Law on Transmission of Electric Power, Regulator and System Operator of BIH* and the *Tariff Pricing Methodology for services of electricity transmission, operation of ISO and ancillary services*.

On 12 May 2014, a formal hearing was held in order to define facts in the tariff proceedings. SERC applied the basic principles prescribing that the tariff will be fair, reasonable, and non-discriminatory, based on the objective criteria and justified costs and set in a transparent manner, and, subsequently, on 30 July 2014, it adopted a Decision on approved revenue requirement for 2014 and the tariff for electricity transmission services.

Pursuant to the adopted Decision, which has be applicable since 1 August 2014, part of the transmission network charges pertaining to energy and capacity amounting to 2.95 €/MWh and 776 €/MW respectively, will be paid for taking over electricity from the transmission network.

Tariffs for Electricity Customers in Brčko District BIH

Following amendments to the documents required for full market opening also in Brčko District BIH, at the end of 2014 SERC finalised the tariff proceedings upon the application of JP Komunalno Brčko.

The *Decision on tariffs for distribution services* fully takes into account real costs for each customer category with the aim of contributing to full electricity market opening. The *Decision on tariffs for electricity supply* defines total electricity prices which include distribution and supply services and costs of energy purchase. These tariffs are applied only to the households and commercial customers (other consumers at 0.4 kV) that have not used their right to choose suppliers in the market.

When passing its decision, SERC took into consideration a Brčko District Government's Program for subsidising with an amount of

€358 thousand a share of energy consumption costs of vulnerable customers, which includes over 30 % of the households.

An average supply price for commercial customers was reduced by 1.5 % while the price for households was increased by 10 %. This adjustment occurred due to the regulator's obligation to gradually allocate supply related costs to each consumption category. In this phase, the inherited cross-subsidies between commercial and household customers were reduced from the existing 37 % to 22.7 %.

The price adjustment also occurred due to a 12.9 % increase in electricity purchase costs by Elektroprivreda RS compared to the purchase cost in 2011 when SERC set the tariffs applicable by the end of 2014.

Tariff Proceedings for Operation of Independent System Operator and Ancillary Services

Pursuant to the legal obligation to submit for consideration applications for revenues and expenditures in the following year as well as costs that the Company plans to include in the tariffs for system operation, the ISO BIH filed a tariff application in November 2014, in which it presented and reasoned planned revenues, expenditures and costs in 2015.

Stagnation and mild decrease in consumption, that is, withdrawal of electricity from the transmission network in the previous two years, caused poorer realisation of the ISO BIH financial plan in 2014 as well as corrections of the revenue requirement in 2015 with a mild rise in tariff. To maintain the ISO BIH liquidity, funds for the creation of necessary financial reserves were approved to this regulated entity.

The applicability of the existing *Decision on determination of tariffs for ancillary services* was extended in the same tariff proceedings.

3.7 Electricity Market

Power Indicators

In 2014 total electricity generation amounted to 15,030 GWh or 7.8 % less in comparison to the previous year, which was marked by exceptionally favourable hydrological conditions.

Hydro power plants produced 5,821 GWh, that is, 18.3 % less than in 2013. Notwithstanding this, the previous year may also be described as favourable in hydrological terms, in which the realised generation by hydro power plants was slightly higher than the planned one. Thermal power plants produced 8.921 GWh which is by 0.2 % less in comparison to the previous year. Generation from renewable sources (small hydro, solar and wind power plants) and industrial power plants amounted to 264.1 GWh and 24.6 GWh respectively.

Generation from renewable sources increased by 12.7 % in comparison to 2013, with particular increase in generation by solar, that is, photovoltaic power plants, thus increasing the share in generation by small hydro, solar and wind power plants from 1.5 % to 1.9 %.

Figure 1. Balance volumes realised in 2014 (GWh)

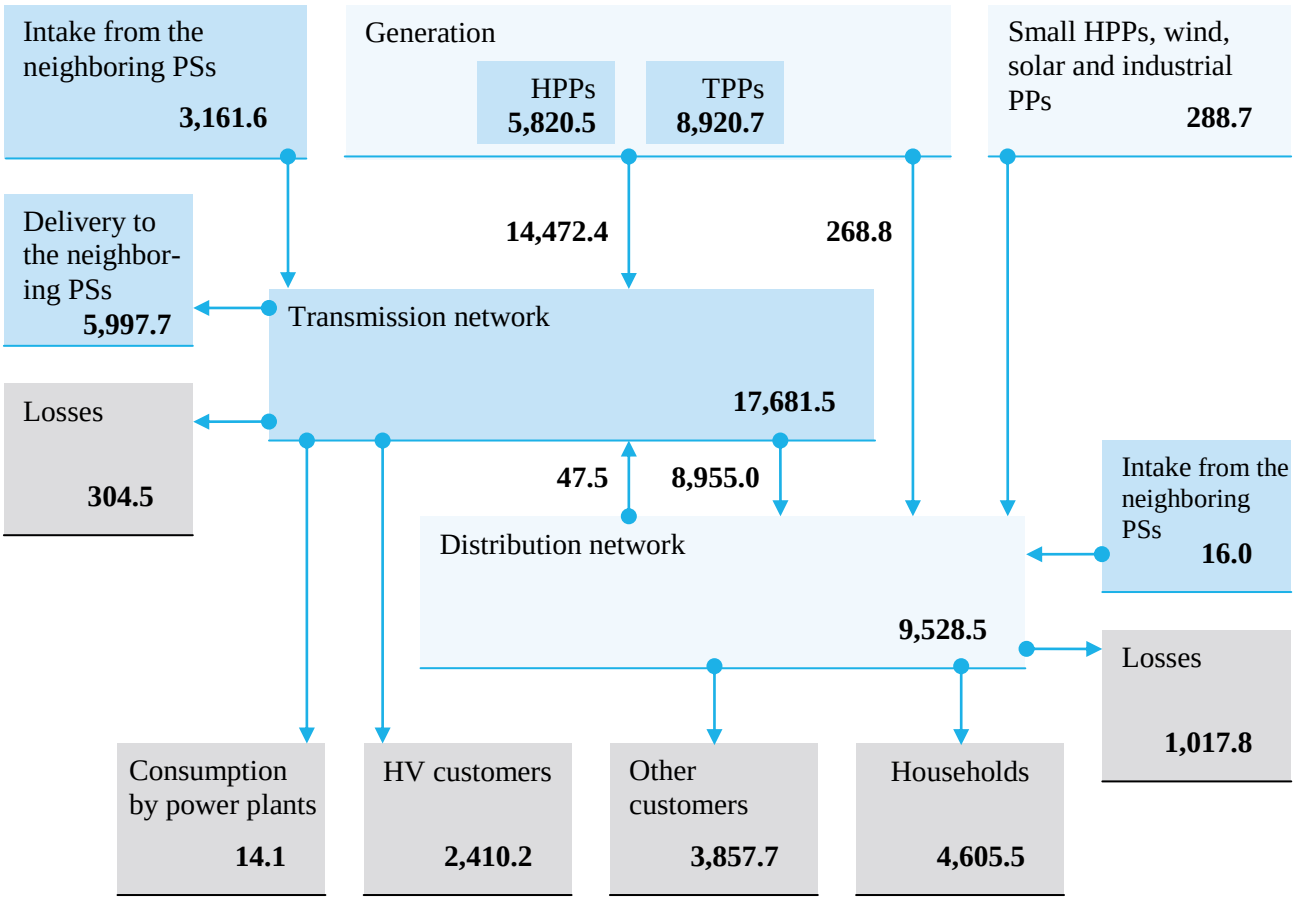
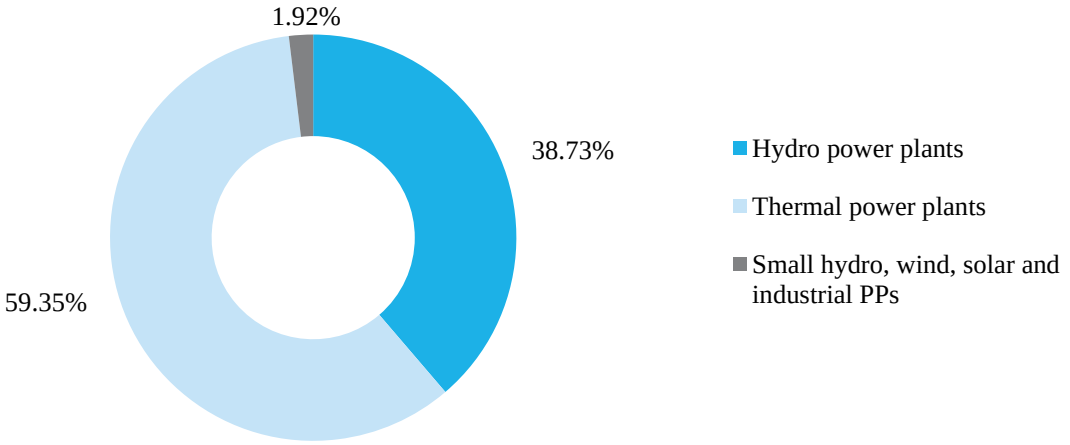


Figure 2. Break-down of electricity generation in BIH in 2014



A balance surplus of 2,820 GWh was reached as the difference between total generation and total consumption in BIH. An overview of power balance volumes realised in 2014 and the percentage share, that is, break-down of electricity generation, are provided in Figure 1 and Figure 2 respectively.

Total electricity consumption decreased by 349 GWh or 2,8 %, with consumption of customers connected to the transmission

Figure 3. Energy taken in BIH from the transmission network – monthly data (GWh)

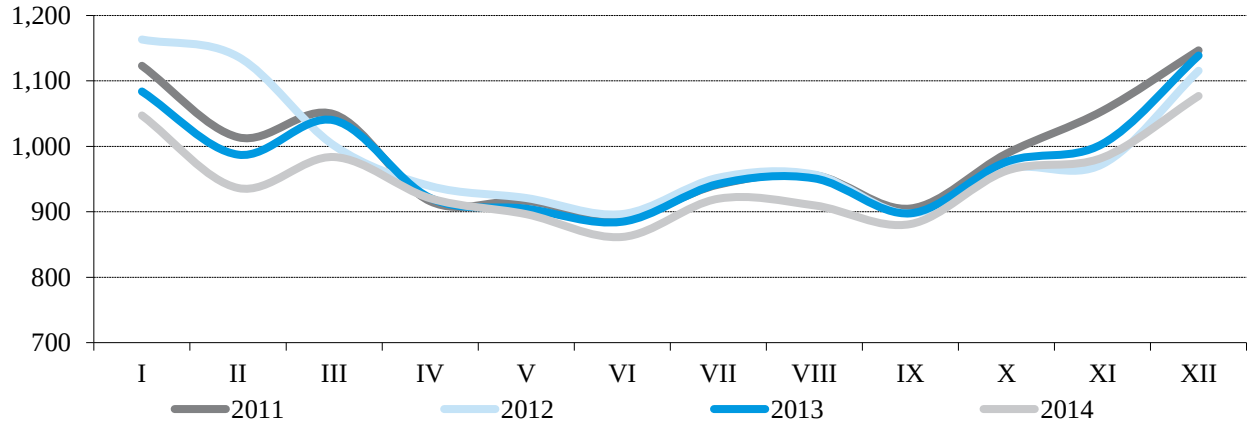
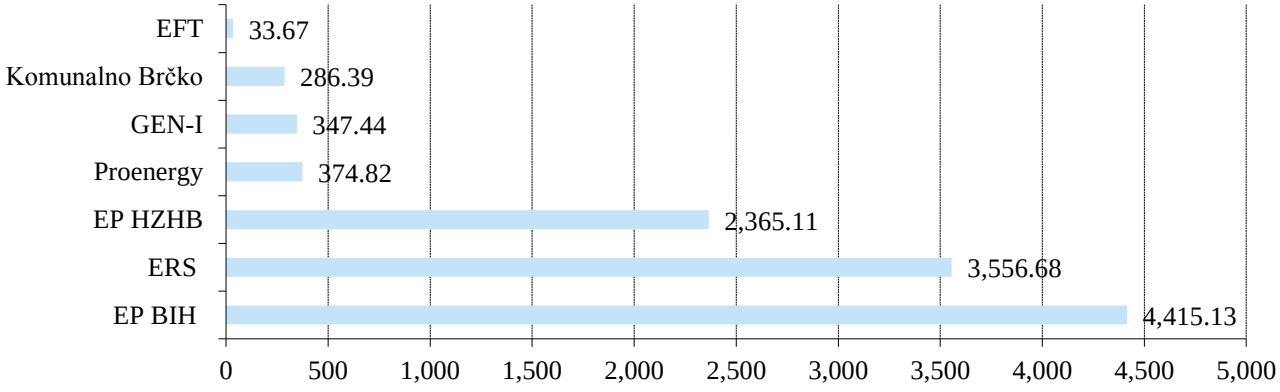


Figure 4. Energy taken in BIH from the transmission network per supplier (GWh)



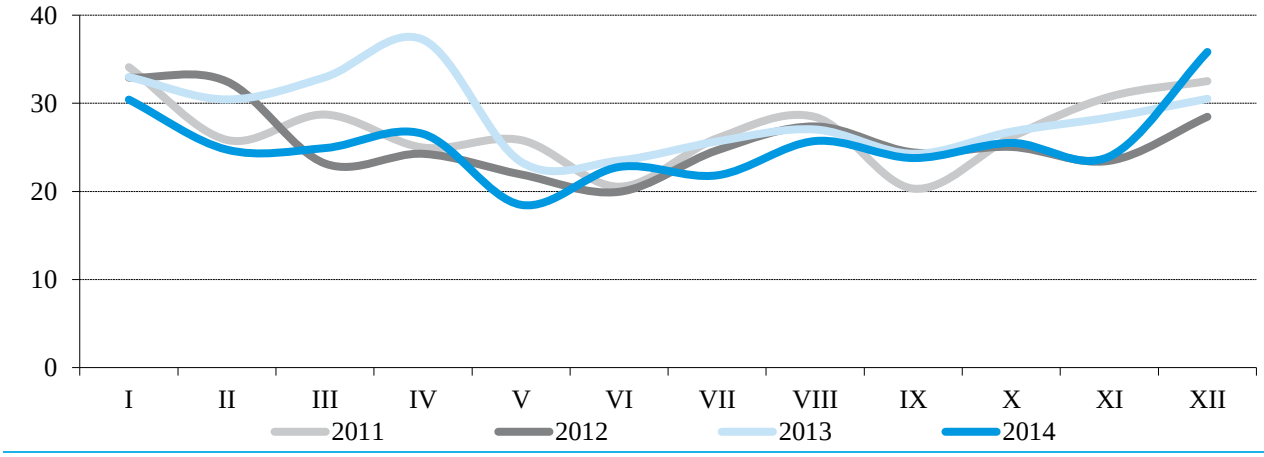
network being lower by 8.1 %, while distribution consumption was 0.9 % lower in comparison to the previous year. Thus, the downward trend in electricity consumption, which started in 2013, continued as the consequence of reduced consumption by industrial customers. The largest electricity customer in BIH – Aluminij Mostar consumed 236 GWh less than in 2013.

Electricity taken from the transmission network amounted to 11,379 GWh which is a 3.0 % decrease in comparison to 2013. Data on energy taken from the transmission network by months and suppliers are presented in Figures 3 and 4 respectively.

A maximum load of the power system in 2014 was recorded on 31 December at 18:00 hrs amounting to 2,207 MW. With this, the historic maximum of 2,173 MW, recorded on the same day and at the same hour in 2010, was exceeded.

Transmission losses amounted to 304 GWh, which is 11.3 % less in comparison to the previous year, which is the consequence of reduced electricity volumes in the transmission network caused, among other things, by the decrease in generation and consumption in comparison to the previous year. Data on monthly losses in the transmission network are provided in Figure 5. The trend of reducing distribution losses continued and they amounted to 1,018 GWh or 10.74 % in relation to gross distribution consumption, which was the lowest level recorded in the history of the BIH power sector.

Figure 5. Monthly losses in the transmission network (GWh)



Regional Electricity Market

The regional electricity market in 2014 was characterised by a moderate decrease in prices. The prolonged favourable hydrological conditions in the region as well as the whole continent resulted in further decrease in prices in the wholesale market. For most part of the year prices ranged between 40 and 45 €/MWh, except during the middle of the year when prices dropped even below 40 €/MWh, and October and November

when they exceeded 45 €/MWh. The reasons for the relatively low electricity price primarily may be found in the economic crisis lasting since 2008, which resulted in stagnation and reduction of consumption in this region, plentiful supply in the market by the countries where nuclear and thermal power plants have a significant share in generation (Ukraine, Bulgaria), and the increasing share of energy from renewable sources, in particular wind power plants (Romania).

Electricity Market in BIH

In 2014, total electricity consumption in BIH amounted to 12,210 GWh, that is, 2.8 % less than in the previous year, which continued the decreasing trend from 2013 when annual consumption was 0.5% lower. Customers connected to the transmission took over 2,410 GWh or 8.1 % less. 9,481 GWh was taken in the distribution network, which is 0.9 % less than in the previous year, of which 8,463 GWh pertains to take-over by end customers and 1,018 GWh to distribution losses. Total sale to customers in BIH decreased by 1.9 % amounting to 10,873 GWh.

The average selling price for tariff customers and customers supplied by public suppliers amounted to 0.0688 €/kWh which is a 0.3 % reduction. Total value of sale to these customers amounted to €696.38 million, which is €7.52 million, or 1.1 %, less than in 2013.

Although tariff rates for households in 2014 remained unchanged, the average selling price for this customer category increased by 0.2 % amounting to 0.069 €/kWh, which is a consequence of changes in consumption patterns. Trends of average electricity prices for end customers in Bosnia and Herzegovina are presented in Figure 6, while Figure 7 gives an overview of average electricity prices of the power utilities per customer category in 2014.

Figure 6. Average electricity prices by customer category, excluding VAT (€/kWh)

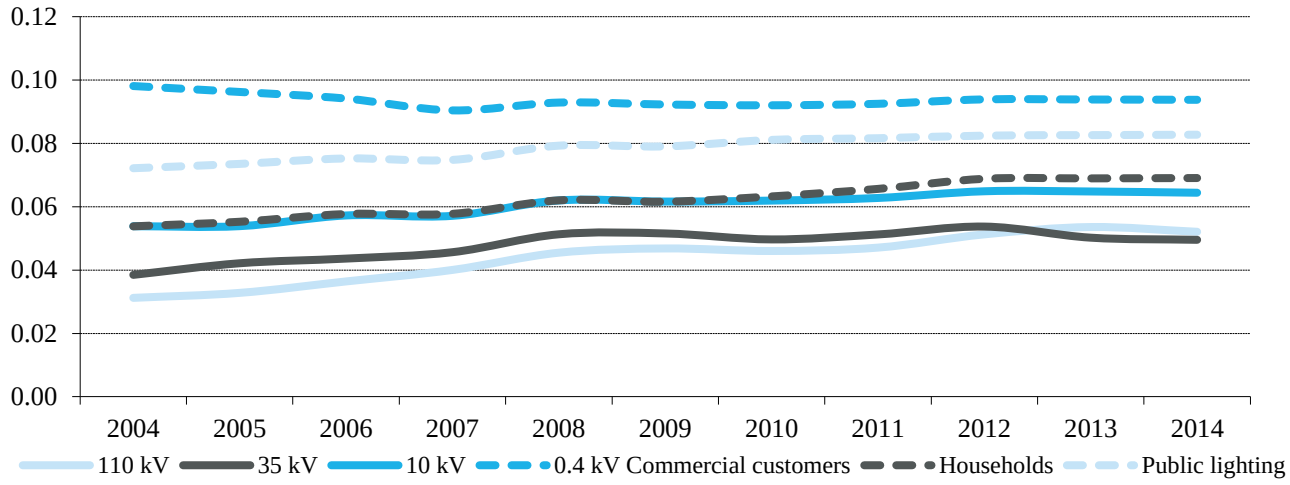
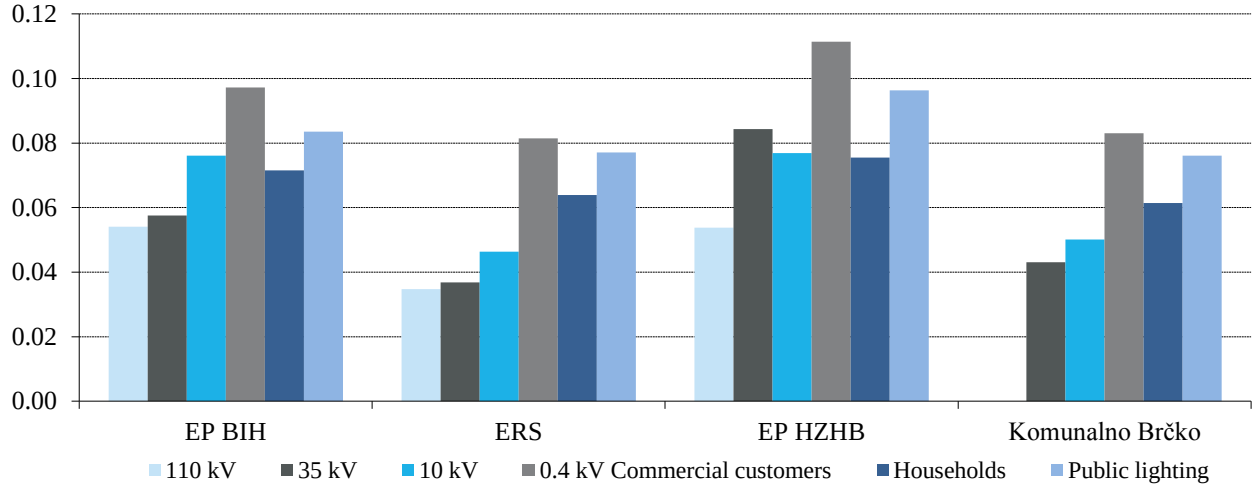


Figure 7. Average electricity prices by public utility excluding VAT (€/kWh)



Total business results of the companies in the sector are more modest in comparison to the previous year considering reduced generation by hydropower plants which is most cost-effective. This situation had a positive impact on business performance of Elektroprivreda HZHB in particular which reported a record profit, while Elektroprivreda RS encountered a sales decrease in the regional market due to reduced generation by thermal power plants. Eventually, total sale of electricity to domestic customers and those in the region amounted approximately to €870 million, which is €51 million less than in the previous year. Notwithstanding this, it is estimated that the profit of the power entities in BIH amounted to approximately €17.9 million.

Deregulation processes continued in the retail market. Changes were reflected in decisions of the competent regulatory commissions not to issue tariff rates for those consumption categories which cannot be regulated any longer pursuant to the adopted and applicable legislation on market opening. With the end of 2014, regulation of supply tariffs for all customers was abolished except for households and small customers (commercial customers, that is, other consumers at 0.4 kV), while the practice of regulating tariffs for distribution services was kept. Since 1 January 2015, all customers in BIH have the possibility to choose their suppliers on the market. Customers that do not chose their supplier on the market, may be supplied by public suppliers at public supply prices, while households and small customers may be supplied within the universal service.

The number of electricity customers in BIH was steadily increasing, and exceeded 1.5 million at the end of 2014. In the process, a total number of customers during the year increased by 15,146, with 14,739 customers belonging to the category of households (Table 5). The BIH retail electricity market is still characterised by the domination of public power utilities, which traditionally supply 1,505,015 customers, each in its own (*de facto* but not *de jure*) exclusive geographic area.

Table 5. Number of electricity customers by supplier in BIH

	110 kV	*35 kV*	*10 kV*	*0.4 kV (Commercial)*	*Households*	*Public lighting*	*Total*
Elektroprivreda BIH	5	63	790	60,467	668,503	3,777	733,605
Elektroprivreda RS	8	33	892	34,837	508,473	1,088	545,331
Elektroprivreda HZHB	3	1	170	14,432	174,391	1,862	190,859
Komunalno Brčko		1	24	3,769	31,007	419	35,220
Total	16	98	1,876	113,505	1,382,374	7,146	1,505,015

In 2014, Aluminij Mostar was supplied on the market as in the previous period, purchasing 722.26 GWh for self-consumption from suppliers on the market (GEN-I Sarajevo and Proenergy Mostar), which is 45.4 % of its consumption. Since November 2014, B.S.I. Jajce meets the major share of its energy needs on the market (EFT Bileća) and purchased 33.67 GWh for two months. To sum up purchase in 2014, 7.0 % of total energy taken over by end-customers in Bosnia and Herzegovina was purchased on the market.

Cross-Border Trade

Good connections of the BIH system with the neighbouring power systems enable sale of electricity to the countries in the region which have significant shortages.

In 2014, 3,716 GWh was exported, which is 28 % or 1,446 GWh less than in the previous year, and mostly a direct consequence of reduced electricity consumption. Sixteen entities exported electricity, among which EFT with 761 GWh of exported electricity was the leader in terms of the export scope, followed by Elektroprivreda RS, GEN-I and Elektroprivreda BIH with 477 GWh, 459 GWh and 406 GWh respectively.

The largest scope of cross-border exchange is traditionally achieved with Croatia and Montenegro respectively, and the smallest with Serbia (Table 6). Croatia and Montenegro still have significant balance deficits and are the leading importers at the regional level. Electricity export amounted to 953 GWh. Among 17 entities that imported electricity to BIH, the highest import was achieved by Rudnap (323 GWh) and Ezpada (303 GWh).

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

Country	*Export*	*Import*
Croatia	1,616.4	1,340.8
Serbia	1,476.9	834.9
Montenegro	2,125.9	228.8
Total	5,219.2	2,404.5

Figure 8. Overview of trading in BIH by entities in 2014 (MWh)

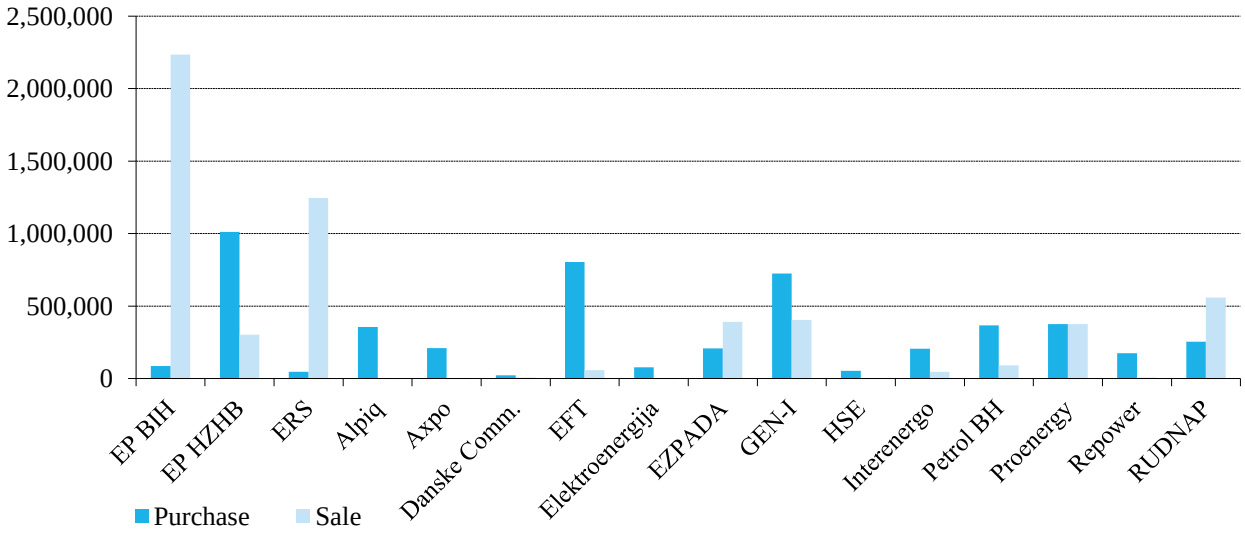
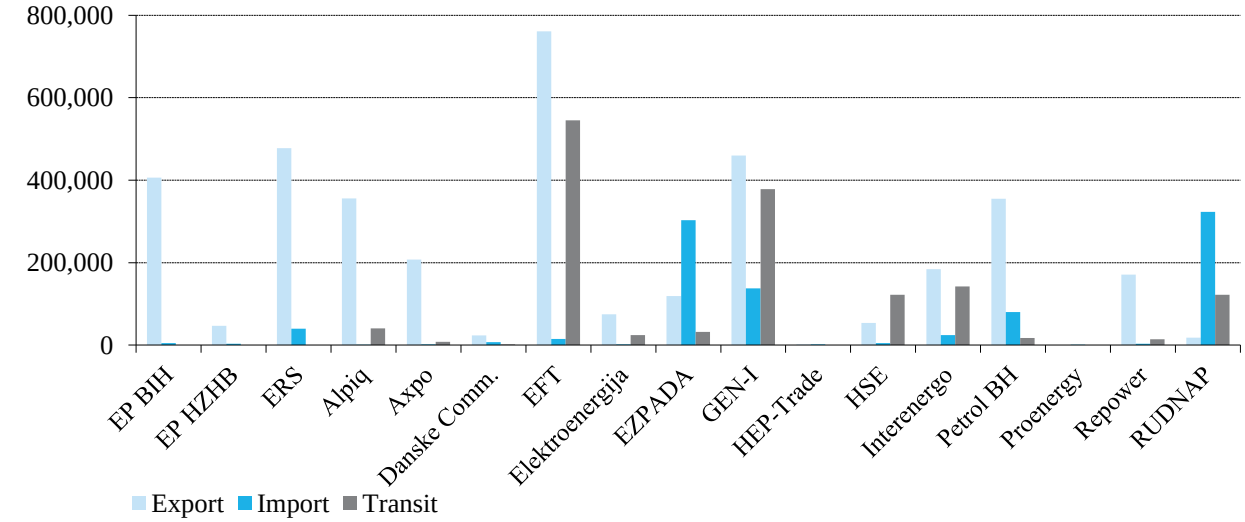


Figure 9. Overview of cross-border transactions by entities in 2014 (MWh)



In 2014, registered electricity transit through the BIH transmission network amounted to 1,448 GWh, which is a 26 % increase in comparison to 2013. Transit flows are important because their scope is used as the basis for determining revenues of every country participating in the *Inter-TSO Compensation Mechanism* (ITC mechanism), which is described in more detail in earlier SERC Reports on Activities. Total revenue achieved by BIH in the first eight months of 2014 amounted to €599,929.27, while for the whole year of 2013, it amounted to €1,017,519.30. It is evident that the decrease in transit flows and increase in export had a negative impact on the revenue on the basis of ITC mechanism during the previous two years.

From 2010 to the end of 2014, the ISO BIH applied the *Rules of Allocation of the Right to Use Cross-Border Transmission*

The user of all revenues from auctions for allocation of the right to use cross-border capacities as well as revenues achieved by the application of the ITC mechanism is Elektroprenos BIH.

Table 7. Revenues based on allocated annual capacities

Year	*Revenue (€)*
2011	2,448,730
2012	2,541,571
2013	1,041,054
2014	1,485,638
2015	558,187
Total	8,075,180

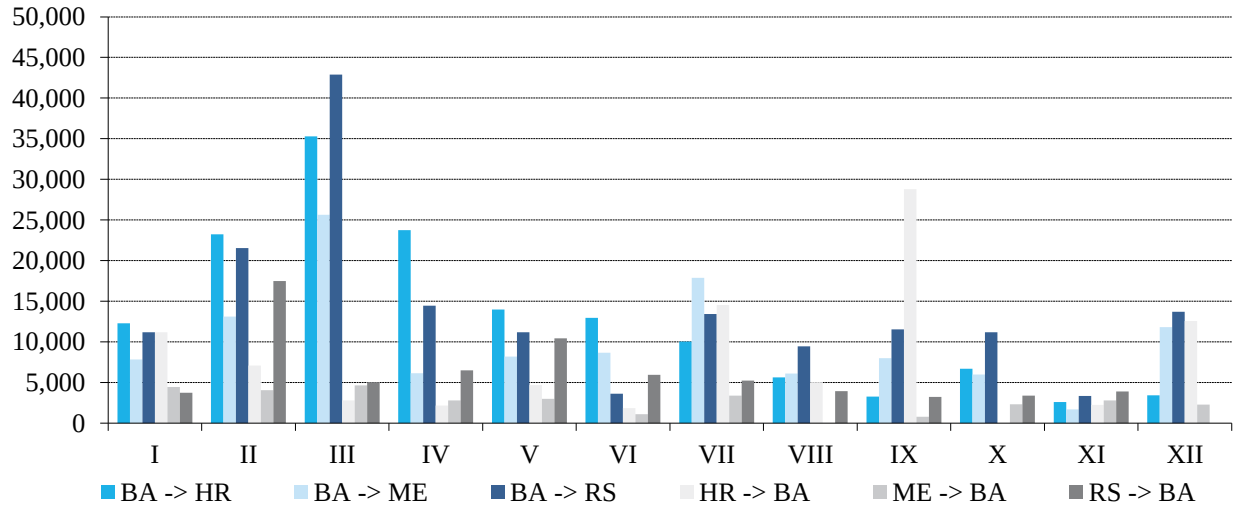
Capacities, organising auctions on a daily, monthly and annual basis.

On 27 November 2014, *the Coordinated Auction Office in South East Europe* (SEE CAO) commenced its operation when annual auctions on the BIH – Montenegro and BIH – Croatia borders were organised. The joint auctions of two operators were organised on the BIH – Serbia border (Please see Sections 3.2 and 4.1). The total revenue on the basis of cross-border transmission capacity annual auctions for the next year amounts to €558,187.06. The highest price was reached on the border with Serbia in the direction from BIH to Serbia amounting to 1,489 €/MW. Revenues realised to date on the basis of auctions for allocation of cross-border transmission capacities on an annual basis are provided in Table 7.

The total revenue on the basis of monthly auctions in 2014 amounted to €634,093 (Figure 10). The highest price at a monthly auction for allocation of cross-border capacities amounting to 28 €/MW was reached on the border with Croatia in the direction of BIH at the auction for September 2014.

In 2014, auctions of cross-border capacities on a daily basis were also conducted, with the resulting revenue of €14,738.

Figure 10. Income on the basis of monthly auctions, per borders and directions (€)

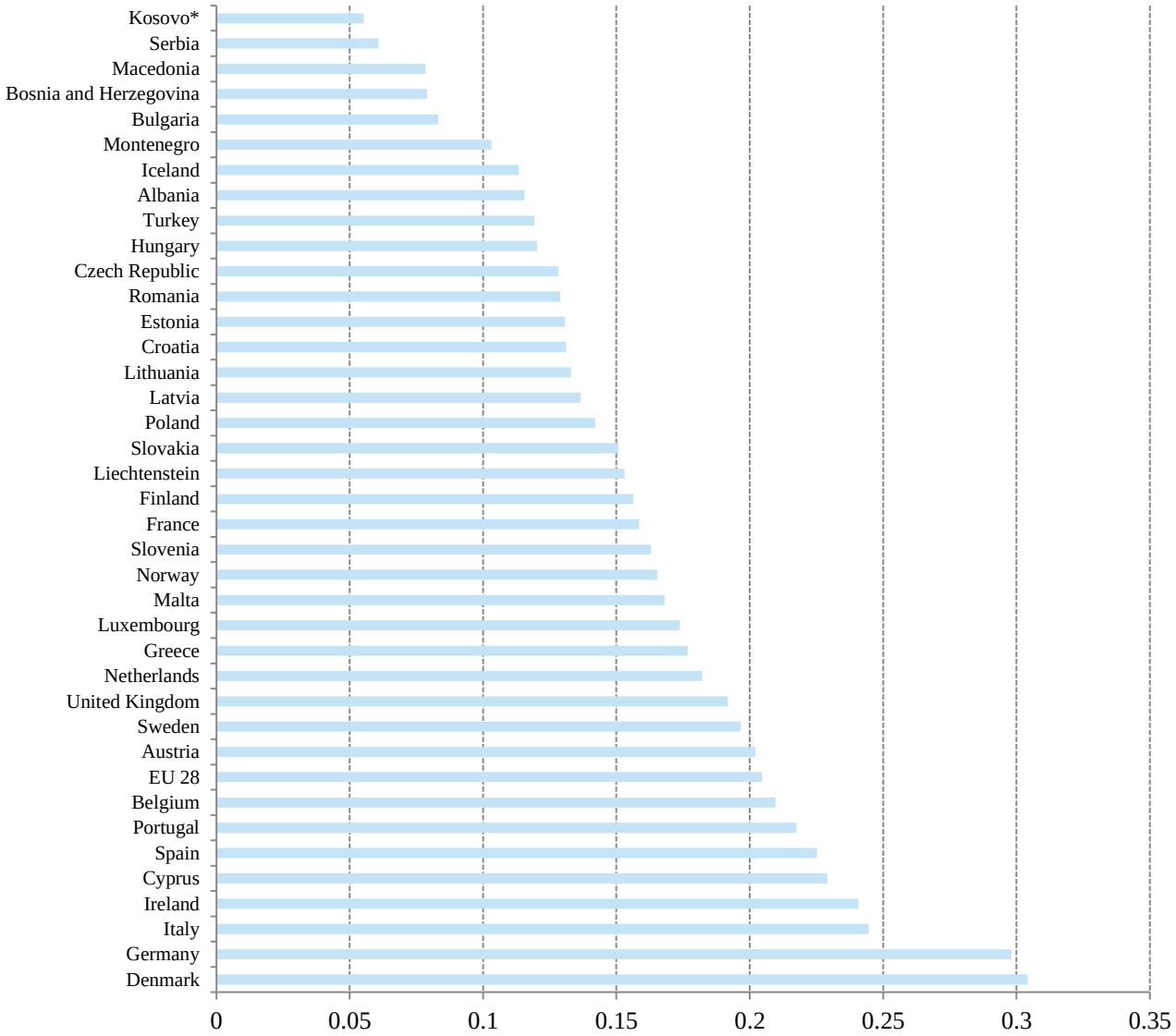


3.8 Energy Statistics

Meeting the needs of not only regulatory authorities but also a number of other institutions and economic stakeholders for quality and reliable statistical data, on 19 April 2011, the State Electricity Regulatory Commission and the Agency for Statistics BIH signed a Memorandum establishing the basis for mutual cooperation in the field of collecting statistics of relevance for activities of both institutions and the whole BIH energy sector.

The cooperation between the two institutions contributes to energy statistics development and harmonisation of the BIH official system of statistics with statistics of the European Union countries in all fields, in particular in the field of energy statistics.

Figure 11. Electricity prices expressed in €/kWh for households (annual consumption from 2,500 to 5,000 kWh) in 2014, using Eurostat methodology



Note: The given amounts include VAT

Figure 12. A geographic overview of electricity prices for households (in €/kWh) in 2014, using Eurostat methodology

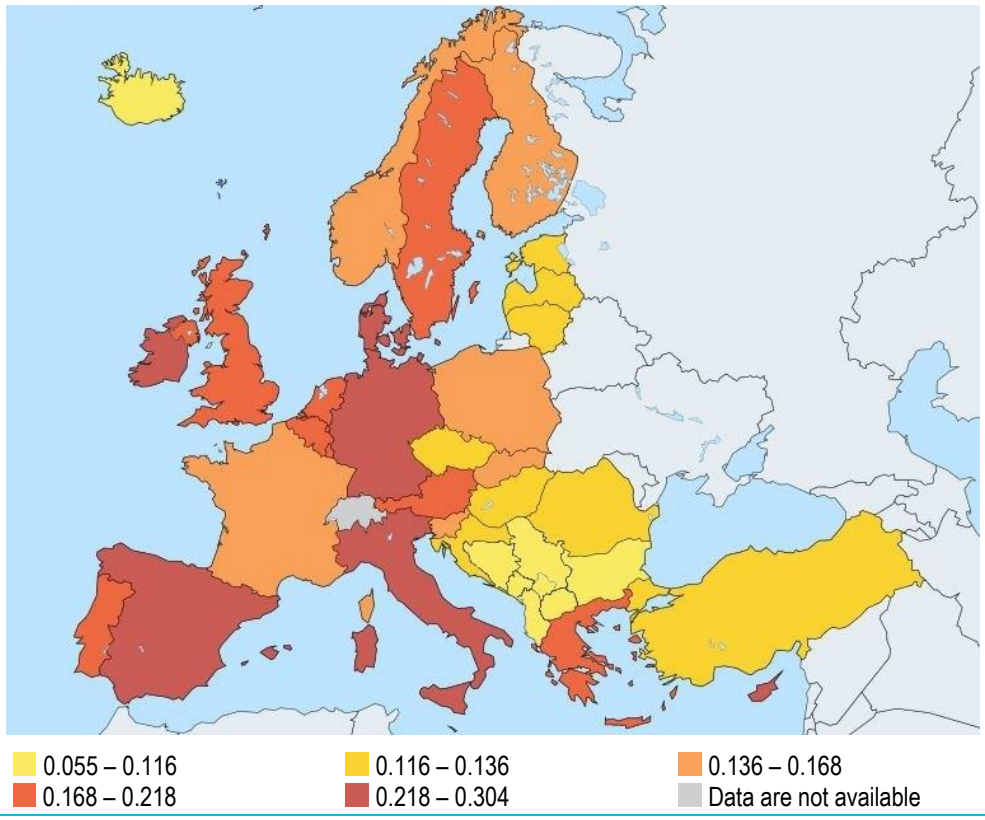
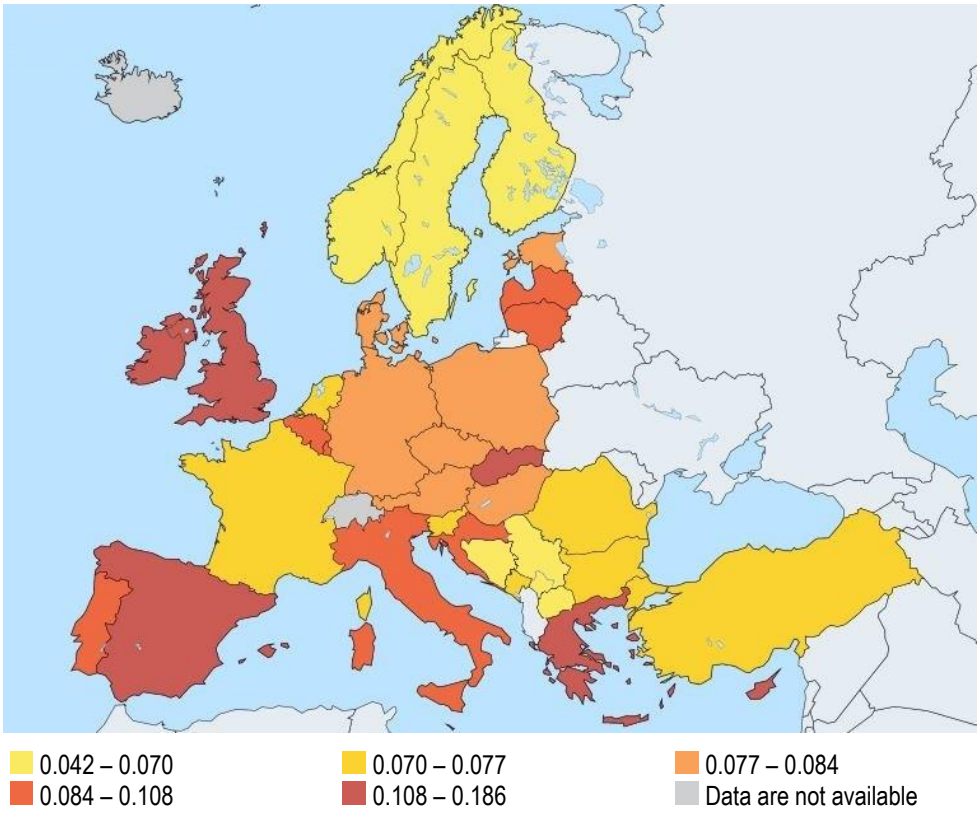


Figure 13. A geographic overview of electricity prices for industrial customers (in €/kWh) in 2014, using Eurostat methodology

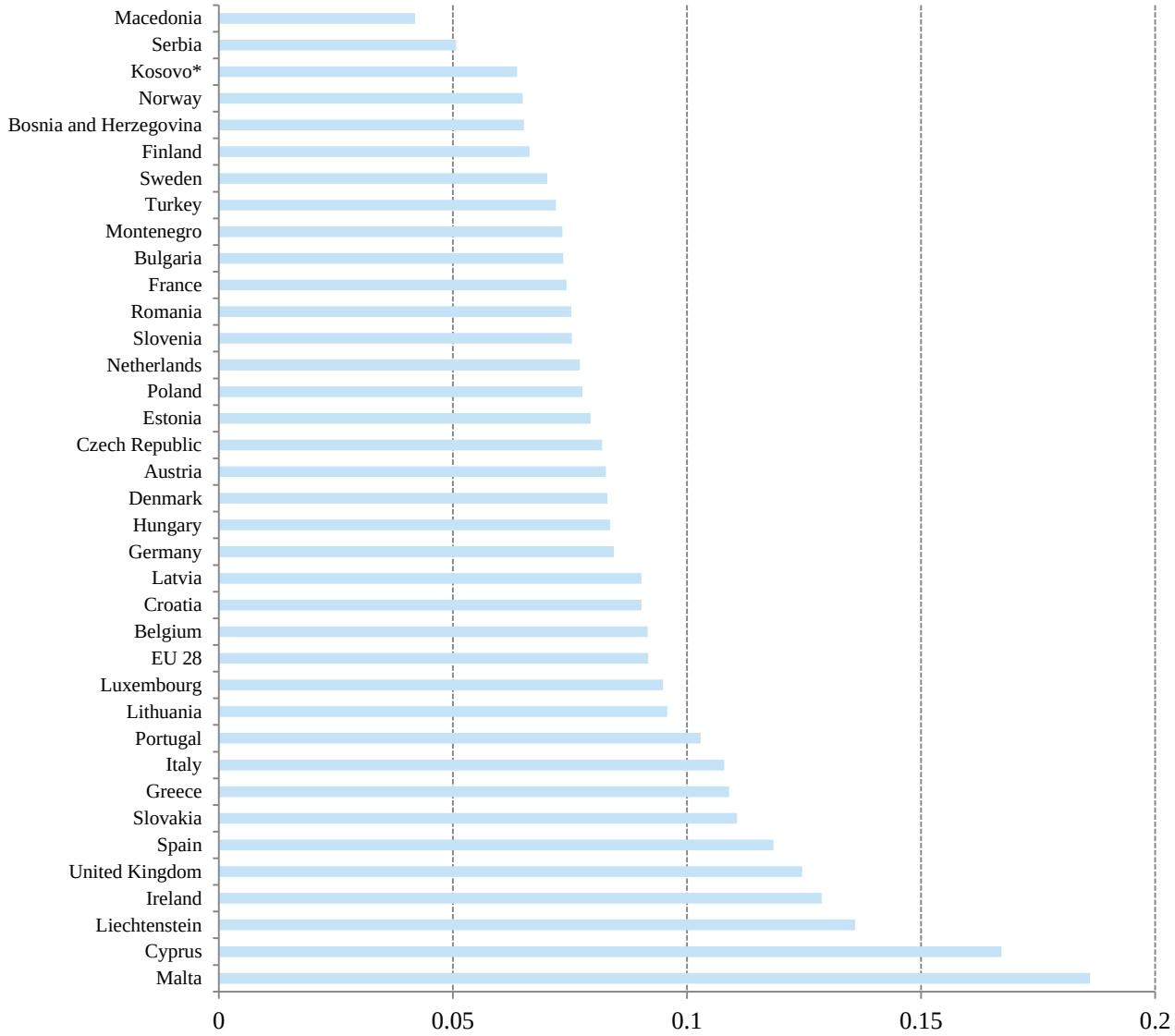


The relevance of cooperation between the State Electricity Regulatory Commission and the Agency for Statistics BIH increased especially after the extension of the Energy Community *acquis*, which, after the adoption of the October 2012 decisions of the Ministerial Council in the field of energy statistics, included Regulation (EC) No 1099/2008 on energy statistics and Directive 2008/92/EC concerning a procedure to improve the transparency of gas and electricity prices.

The results of the cooperation between the two institutions are recognisable in Eurostat's reports, which include data on electricity and gas prices in Bosnia and Herzegovina since 2011 (http://epp.eurostat.ec.europa.eu/portal/page/portal/energy/data), thus enabling their comparison with EU countries and some countries that are in the EU accession process (Figures 11,12, 13 and 14).

Eurostat is the statistical office of the European Union situated in Luxembourg. Its task is to provide the European Union with statistics at European level that enable comparisons between countries and regions.

Figure 14. Electricity prices expressed in €/kWh for industrial customers (annual consumption from 500 to 2,000 MWh) in 2014, using Eurostat methodology



Note: The given amounts do not include VAT

3.9 Other Activities

In addition to the aforementioned activities, in 2014 SERC also exchanged data with a number of state institutions including the BIH Council of Ministers, Directorate for Economic Planning of BIH Council of Ministers, Council of Competition of BIH, Foreign Investments Promotion Agency in BIH, Agency for Statistics BIH, and prepared different types of information they needed. SERC gave a particular contribution to activities of a temporary Subcommittee on Transportation, Environment, Energy and Regional Development. In line with its legal powers to act in the area of Brčko District of Bosnia and Herzegovina as a regulatory authority, through its activities SERC cooperates with the Government of Brčko District BIH.

Since their establishment, the State Electricity Regulatory Commission, the Regulatory Commission for Energy in the Federation of BIH (FERK) and the Regulatory Commission for Energy of Republika Srpska (RERS) cooperate and harmonise their activities.

Following positions and recommendations from international gatherings of several associations which bring together representatives of regulatory authorities in the energy sector and the field of protection of market competition, in May 2014 SERC signed a Memorandum of Cooperation with the Competition Council of Bosnia and Herzegovina. The Memorandum was signed with the aim of improving coordination of activities and use of complementary knowledge of the two institutions in order to facilitate the electricity market development, foster liberalisation and open competition with the aim of ensuring legal certainty and creating a level playing field for market participants, which is in the function of electricity customers' welfare.

Development of an EU-Acquis-Compliant Legislative Framework in the Field of Electricity in BIH

From the end of 2012 to January 2014, the project *Development of an EU-acquis-compliant legislative framework in the field of electricity in BIH* was implemented through a technical assistance project of the European Commission with the aim of harmonising national legislation with EU legislation in the field of electricity with a focus on the content of the Third Energy Package (Please see Table 8).

The final result of the project is a harmonised set of proposals for new laws, and in some cases proposals for amendments to the existing laws at the national, entity and Brčko District level. Transposition of the applicable EU legislation is organised in such a way as to enable full harmonisation of legislation at all administrative levels in BIH (taking into account their separate competences and regulatory powers) with the EU *acquis* on electricity.

In a nutshell, the Third Energy Package requirements, through a set of directives and regulations, are as follows:

- Establishing one regulatory authority at the national, that is, state level for electricity and natural gas, which should have all powers necessary for functioning of a single market, with the possibility to establish regional regulators with limited powers,
- Enhancing powers and independence of regulators, in particular regarding market monitoring and sanctioning non-competitive conduct,
- Unbundling, that is, establishing transmission system operators (with possible models being ownership unbundling, independent system operator and independent transmission operator model), with a complex certification process for operators,
- Effective unbundling of supply and generation activities from network activities (unbundling market activities from activeities that are seen as natural monopolies),
- Establishing mechanisms for cooperation of national regulators and decision making practice with regard to cross-border cooperation,
- Establishing mechanisms for cooperation among system operators (participation in activities of European transmission operators and implementation of European network codes),
- Customer protection – simple and efficient complaint handling procedures, alternative dispute resolution mechanisms, in particular protection and identification of vulnerable categories),
- An efficient supplier switching mechanism,
- A stable and predictable regulatory framework, increased transparency, non-discriminatory access to information, and
- Introducing smart metering systems.

Unfortunately, even 12 months after *a Draft Law on Transmission of Electric Power, Regulator and Electricity Market in BIH* and other laws from this set were submitted, the Ministry of Foreign Trade and Economic Relations of BIH did not initiate any activities on the adoption of these documents, so initiation of new infringement procedures against BIH by the Energy Community may be expected.

The deadline for transposition of the 'Third Package' into BIH legislation and practical implementation in the energy sector practice was 1 January 2015.

It is obvious that BIH is the last country in the region in terms of harmonising its legislation with the 'Third Package,' while some countries in the region had already finalised these activities. BIH, which had the most advanced legislation in the region some ten years ago, is convincingly last in this context today.

With the aim of avoiding any further delay in the energy sector reforms, it is necessary to immediately initiate activities by the Ministry of Foreign Trade and Economic Relation of BIH with participation of and coordination with the competent entity ministries and the Brčko District Government, that will result in referral of the draft laws to the parliamentary procedure and adoption of mutually harmonised laws in all jurisdictions in BIH.

Any further delay deviates BIH from the objectives of the Stabilisation and Association Agreement and Treaty establishing the Energy Community, and at the same time from the whole process of integrating the BIH energy sector with the regional and European Union markets.

Regulatory Partnership

In 2014, the *United States Agency for International Development* (USAID) commenced practical activities on the project facilitating partnership of BIH energy regulators with the National Association of Regulatory Utility Commissioners (NARUC) and several regulatory commissions thereof, with the Public Utilities Commission of Ohio (PUCO) serving as the lead commission. The project contributes to the regulatory reform process aimed at gradual integration with the European Union institutions. A Memorandum of Understanding between the project parties was signed in January 2014.

The project is designed to enable exchange of information and experience, and introduce the best practices enabling the regulators to continue to create and implement non-discriminatory and independent regulation with the aim of ensuring efficient, transparent and stable functioning of the power sector and, at the same time, protecting interests of customers and investors.

Energy Investment Activity

Activities on yet another comprehensive project funded by USAID commenced in October 2014. The *Energy Investment Activity* Project (EIA), with the term until June 2019, foresees cooperation with and support to all key actors in the energy sector (ministries, regulators, companies etc.) and is organised through the following components:

- Addressing impediments to investment in the energy sector,
- Addressing retail market deficiencies in BIH (retail market opening),
- Achieving energy savings in BIH, using regulatory incentives,
- Expediting progress towards EU integration, and
- Public outreach.

The aforementioned components include a number of sub-components and activities. The Energy Summit scheduled for the beginning of spring 2015 within the Project will be an opportunity to present the Project in more detail to all interested parties and the public.

Representatives of the State Regulatory Commission will follow activities organised within the Project and participate in the implementation of some components, in particular those relating to the regulatory activities.

Security of Supply at the Distribution Level in South-East Europe

In 2014, cooperation with the United States Agency for International Development (USAID) and the United States Energy Association (USEA) continued within the project for assistance to distribution companies, that is, distribution system operators in South-East Europe regarding the security of supply. Representatives of companies and regulatory authorities from Albania, Bosnia and Herzegovina, Montenegro, Croatia, Macedonia and Serbia participate in the project which was launched at the beginning of 2013.

The project includes the following issues:

- Optimisation of distribution system development planning,
- Extension of life span of equipment and infrastructure,
- Reduction of losses,
- Introduction of smart grid technologies,
- Integration of renewable sources into the distribution system,
- Safety at work and safety standards,
- Operation of distribution system operators in emergencies,
- Regional cooperation and mutual assistance,
- Benchmarking and latest practice and experience.

The aim of the project is to present its concrete results through analytical studies, benchmarking, handbooks and recommendations.

Results of Resolved Court Disputes

All five court rulings of the Court of Bosnia and Herzegovina confirmed the lawfulness of the SERC decisions that were disputed before court by legal persons whose applications were decided upon after the completion of the tariff proceedings. No new applications for revision of any decision from the SERC regulatory practice were filed in 2014 by any person that has standing to commence an action.

4. ACTIVITIES IN INTERNATIONAL INSTITUTIONS

4.1 Energy Community

The *Treaty establishing the Energy Community*, which was signed in Athens on 25 October 2005, and came into effect on 1 July 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, and the following eight Contracting Parties: Albania, Bosnia and Herzegovina, Kosovo*, Macedonia, Moldova, Montenegro, Serbia and Ukraine.[4]

In accordance with their expressions of interest, the following countries participate in the work of the Energy Community bodies: Austria, Bulgaria, the Czech Republic, Croatia, Cyprus, Finland, France, Germany, Greece, Hungary, Italy, Latvia, the Netherlands, Poland, Romania, Slovakia, Slovenia, Sweden and the United Kingdom. These nineteen countries have the status of Participants and directly participate in the work of the Energy Community bodies; in the voting procedure their positions are expressed by votes of the European Commission.

Armenia, Georgia, Norway and Turkey have observer status in the Energy Community bodies. Negotiations with Georgia on acquiring status of a Contracting Party are at the final stage.

The main goals of the Energy Community 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 utilisation of renewable sources.

By signing the Treaty, the contracting parties from the region are obligated to establish a common electricity and gas market that will operate in accordance with the standards of the EU energy market into which it will integrate. It is to be achieved by gradual transposition of the EU *acquis*, which means the implementation of the relevant EU directives and regulations pertaining to electricity, gas, environment, renewable energy sources, energy efficiency, oil and statistics (Please see Table 8).

The Treaty establishing the Energy Community is valid until July 2026.

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* This designation is without prejudice to positions on status, and is in line with United Nations Security Council Resolution 1244 and the International Court of Justice Opinion on the Kosovo declaration of independence.

[4] The list shows the Contracting Parties on December 31, 2014. Moldova and Ukraine have Contracting Party status as of 1 May 2010 and 1 February 2011 respectively.

Table 8. Energy Community Acquis

The *acquis*, that is, the legal framework of the Energy Community, focuses on directives and regulations from the Third Energy Package foreseeing common rules for internal electricity and gas markets and regulating cross-border trade. On several occasions, the initial set of rules from 2005 was innovated by new directives and regulations and supplemented by rules on cross-border trade, as well as rules in the areas of environment, competition and renewable energy sources. In 2007, the *acquis* was expanded to include the EU directives on security of supply, while as of 2008 the term 'network energy,' which initially included electricity and gas, includes the oil sector as well. In 2009 and 2010, the *acquis* was further expanded to include directives on energy efficiency, while in 2011, by the Ministerial Council decision rules comprising the 'Third Package,' excluding Regulation (EC) No 713/2009, became legally binding also for the Energy Community Contracting Parties. In 2012, the *acquis* was significantly expanded by directives in the field of renewable sources, minimum oil stocks and statistics and in 2013 by a part of directive on pollution prevention and control and Regulation (EU) No 838/2010 relating to the ITC mechanism and transmission charging.

The Energy Community *acquis* follows the development of the European Union legal framework and at present it includes its key energy legislation in the fields of electricity, gas, environment, competition, renewable energy sources, energy efficiency, oil and statistics.

Acquis on Electricity

- Regulation (EU) No 838/2010 of the European Commission of 23 September 2010 on laying down guidelines relating to the inter-transmission system operator compensation mechanism and a common regulatory approach to transmission charging,
- Directive 2009/72/EC of the European Parliament and of the Council of 13 July 2008 concerning common rules for the internal electricity market and repealing Directive 2003/54/EC,
- Regulation (EC) No 714/2009 of the European Parliament and of the Council of 13 July 2009 on conditions for access to the network for cross-border exchanges in electricity and repealing Regulation (EC) No 1228/2003.

The deadline for transposition into national legislation and the implementation of Directive 2009/72/EC and Regulation (EC) No 714/2009 from the 'Third Package' is 1 January 2015. Exceptionally, the implementation deadline for Article 11 of Directive 2009/72/EC is 1 January 2017.

Acquis on Gas

- Directive 2009/73/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal natural gas market and repealing Directive 2003/55/EC,
- Regulation (EC) No 715/2009 of the European Parliament and of the Council of 13 July 2009 on conditions for access to the natural gas transmission network and repealing Regulation (EC) No 1775/2005.

The deadline for transposition into national legislation and the implementation of Directive 2009/73/EC and Regulation (EC) No 715/2009 from the 'Third Package' is 1 January 2015. Exceptionally, the implementation deadline for Article 11 of Directive 2009/73/EC is 1 January 2017.

Acquis on Security of Supply

- Directive 2005/89/EC of the European Parliament and of the Council of 18 January 2006 concerning measures to safeguard security of electricity supply and infrastructure investment,
- Council Directive 2004/67/EC of 26 April 2004 concerning measures to safeguard security of natural gas supply.

Acquis on Environment

- Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control) – only Chapter III, Annex V, and Article 72(3)-(4),
- Directive 2001/80/EC of the European Parliament and of the Council of 23 October 2001 on limitation of emissions of certain air pollutants by large combustion plants,
- Council Directive 1999/32/EC of 26 April 1999 relating to a reduction in the sulphur content of certain liquid fuels and amending Directive 93/12/EEC,
- European Community Council Directive 85/337/EEC of 27 June 27 1985 on assessment of the effects of certain public and private projects on environment, with subsequent amendments of 3 March 1997 (Directive 97/11/EC), and Directive 2003/35/EC of the European Parliament and the Council of 26 May 2003 providing for public participation in respect of the drawing up of certain plans and programmes relating to the environment,
- Article 4(2) of the European Community Council Directive 79/409/EEC of 2 April 1979 on conservation of wild birds.

The *acquis* on environment shall be implemented insofar as they affect network energy. The deadline for implementation of Directive 2001/80/EEC and Directive 2010/75/EU shall be 31 December 2017 and 1 January 2018 respectively. According to Article 13 of the Treaty, the Contracting Parties recognise the importance of the Kyoto Protocol and shall endeavour to accede to it.

Continued on the next page ⇨

⇨ *Continuation of Table 8 from the previous page*

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 European 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, provisions of the Treaty establishing the European Community, in particular Article 86, shall be upheld.

Acquis on Renewable Energy Sources

- Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC, and 2003/30/EC,
- Directive 2003/30/EC of the European Parliament and of the Council of 8 May 2003 on promotion of use of bio-fuels or other renewable fuels in transportation,
- Directive 2001/77/EC of the European Parliament and of the Council of 27 September 2001 on promotion of electricity generated by using renewable sources in the internal market.

The deadline for submission of an implementation plan on the Directives 2001/77/EC and 2003/30/EC was 1 July 2007, while the deadline for transposition into national legislation and the implementation of Directive 2009/28/EC was 1 January 2014.

Acquis on Energy Efficiency

- Directive 2010/31/EU of the European Parliament and of the Council of 19 May 2010 on the energy performance of buildings,
- Directive 2010/30/EU of the European Parliament and of the Council of 19 May 2010 on the indication by labelling and standard product information of the consumption of energy and other resources by energy-related products.
- Directive 2006/32/EC of the European Parliament and of the Council of 9 April 2006 on energy end-use efficiency and energy services and repealing Council Directive 93/76/EEC.

The implementation deadlines for the aforementioned Directives vary from December 2011 to January 2017.

Acquis on Oil

- Directive 2009/119/EC of the European Parliament and of the Council of 14 September 2009 imposing an obligation on Member States to maintain minimum stocks of crude oil and/or petroleum products.

The implementation deadline for this Directive is set for 1 January 2023.

Acquis on Statistics

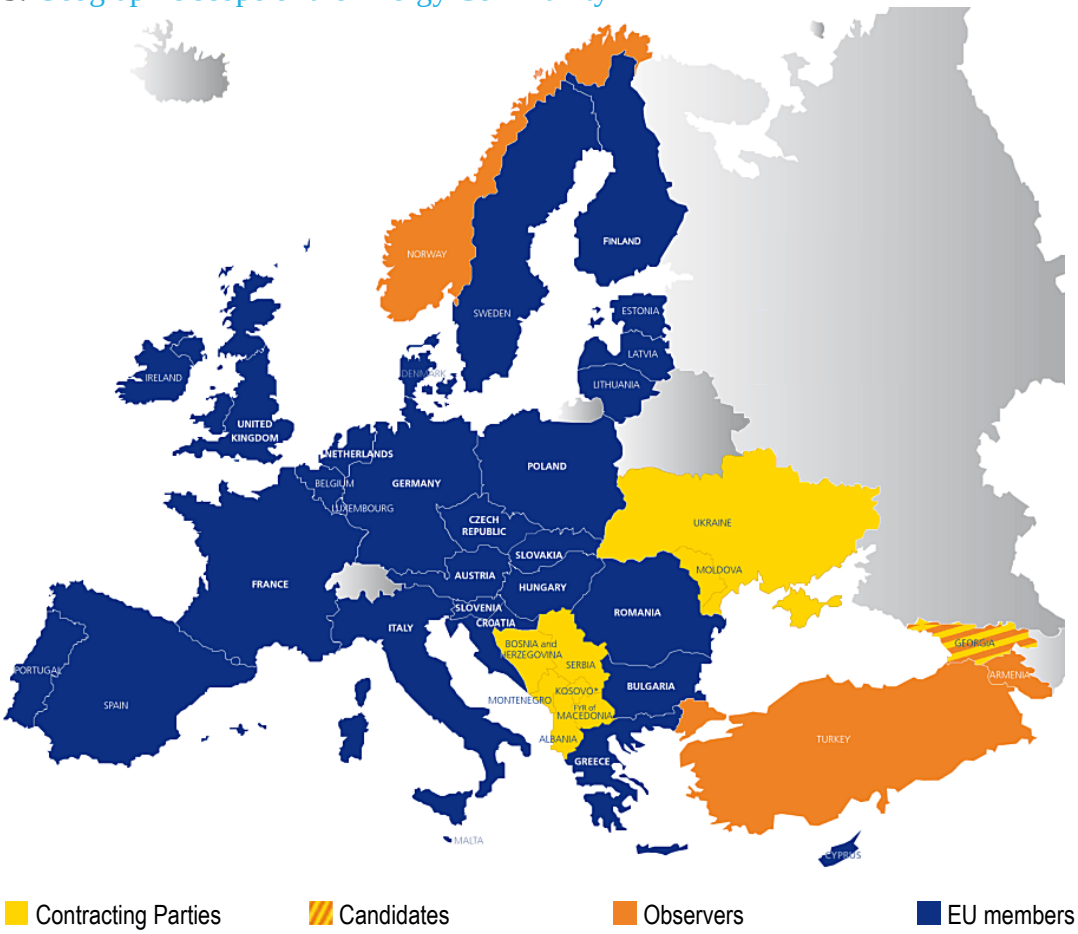
- Directive 2008/92/EC of the European Parliament and of the Council of 22 October 2008 concerning a Community procedure to improve the transparency of gas and electricity prices charged to industrial end-users,
- Regulation (EC) No 1099/2008 of the European Parliament and of the Council of 22 October 2008 on energy statistics.

When defining the *Acquis*, the Ministerial Council makes certain adjustments of EU rules to the institutional framework of the Energy Community, taking into account time limits in the region. The Ministerial Council also adopted several independent measures pertaining to dispute resolution, establishment of the '8th Region' aimed at facilitation of cross-border electricity trade and measures for coordination of security of supply.

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

To ensure an adequate process of establishing and functioning of the Energy Community, the Treaty establishes a 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.

Figure 15. Geographic scope of the Energy Community



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** (PHLG) 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.

The **Energy Community Regulatory Board** (ECRB), seated in Athens, is composed of representatives of the regional national regulatory bodies, while the European Union is represented by the European Commission, with the assistance of one regulator of each EU participants and one representative of the Agency for the Cooperation of Energy Regulators (ACER). 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 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, including representatives of governments, regulators, industry, customers and international financial institutions.

The **Energy Community Secretariat**, seated in Vienna, represents the key administrative actor and, together with the European Commission, ensures the necessary coordination and provides support for the work of 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 Treaty establishing the Energy Community, while the European Commission plays a general coordinator role.

2014 was one of the most dynamic years in the history of the Energy Community. It was marked by interruptions in gas supplies caused by the dramatic events in Ukraine, which was the presiding country of the Energy Community in 2014, and the tragic floods in Bosnia and Herzegovina and Serbia which endangered electricity generation and supply for thousands of people. Most countries conducted a number of activities on transposition of the Third Energy Packet provisions. Intensive negotiations were held regarding the accession of Georgia to the Energy Community. The previous year was also marked by successful negotiations on long-lasting disputes between the Transmission System Operators of Serbia and Kosovo* as well as Albania and ČEZ, which accelerated the progress of the mentioned countries in the EU accession process.

Mr. Günther Oettinger, EU Commissioner for Energy: "A crucial factor for ensuring security of supply is a well-functioning energy market. This is why we need to ensure that utmost efforts are taken to ensure the full implementation of the Third Energy Package and sufficient investments are made in infrastructure, including the Projects of Energy Community Interest adopted last year. These are the key elements for bolstering security of energy supply."

From the speech at the 12th meeting of the Energy Community Ministerial Council,
Kiev, 23 September 2014

In the past period, the Energy Community has established an institutional framework for cooperation, mutual support and exchange of experiences and, therefore, serves as a model for regional cooperation on energy matters. However, recognising the need for strengthening the institutions and instruments for the achievement of the objectives of the Energy Community, the Ministerial Council set up a High Level Reflection Group mandated to make an independent assessment of the adequacy of the institutional set up and working methods of the Energy Community to the achievement of the objectives of the Treaty. In this context, a report entitled *An Energy Community for the Future* was presented in 2014 which recommended the adoption of additional measures to establish a single European energy market, reduce investment risks and increase financial support, strengthen implementing measures, have more flexible membership structure in enlargement of the geographic scope, and increase transparency by promoting the role of civil society and business entities in the Energy Community institutions.

The identification of possible options and selection of the best ones in implementation of proposals for further Energy Community development will be subject to public consultation and other Energy Community's activities planned for 2015.

The *Coordinated Auction Office in South East Europe* (SEE CAO) commenced its operations in the past year after several years of work on legal, regulatory, technical, organisational and financial issues. The Office was officially established on 27 March 2014 by seven transmission system operators from Albania, Bosnia and Herzegovina, Croatia, Greece, Kosovo, Montenegro and Turkey, while it commenced its operations on 27 November 2014 when the first annual auctions were organised on the BIH – Montenegro and BIH – Croatia borders. A number of international financial institutions, the Energy Community Secretariat, ECRB etc., supported the formation of the Office. Following the annual auctions, the first monthly and daily auctions were organised successfully on 17 December and 30 December 2014 respectively.

In 2014, the work of a joint Energy Community Competition Network continued as well as close cooperation among competition authorities, including their cooperation with energy regulators. It was confirmed that the use of potential in competition law enforcement would give an additional impetus to market reforms and the fulfilment of obligations by the Contracting Parties.

At its session held in September 2014, the Ministerial Council adopted a Recommendation inviting the Contracting Parties to implement *Regulation (EU) No 347/2013 on guidelines for trans-European energy infrastructure*, announcing that a legally binding decision on the implementation thereof would be adopted in 2015.

The priorities of the Energy Community in 2015, under the Albanian Presidency, will be the Community reforms in line with recommendations from the Report *An Energy Community for the Future*, consistent implementation of the 'Third Package' by all Contracting Parties, expansion of the *acquis*, that is, the Energy Community legal framework by the regulations concerning security of gas supply, energy infrastructure, electricity market transparency, directives concerning energy efficiency and adoption and implementation of the first set of EU grid codes.

Bosnia and Herzegovina and the Energy Community

By active participation in the Energy Community, Bosnia and Herzegovina confirms its commitment to the energy sector reforms, liberalisation of the energy market and harmonisation of its policies with those of EU member states. However, it is obvious that additional efforts should be made at different BIH levels to transpose and implement the Energy Community *acquis*. Deadlines for the fulfilment of numerous obligations of Bosnia and Herzegovina have already expired, with a relatively short period of time left for the remaining obligations (please see Table 8). This is also indicated by infringement cases initiated by the Energy Community Secretariat:

- Case ECS-1/10, initiated by an *Opening Letter* of 21 September 2010 concerning state aid. Although in February 2012, the *Law on System of State Aid in BIH* was adopted and the State Aid Council established at the end of the same year, its effective implementation was still missing. The Secretariat announced that the case would be closed upon the Council becoming fully operational.
- On 20 January 2011, the Secretariat sent *Opening Letters* to Albania, Bosnia and Herzegovina, Croatia, Macedonia, Montenegro and Serbia in accordance with Cases ECS-1-6/11 for failure to adopt a common coordinated congestion management method and procedure for the allocation of capacity to the market. As the *Coordinated Auction Office in South East Europe* commenced its operations on 27 November 2014 when the first annual auctions were organised on the BIH – Montenegro and BIH – Croatia borders, the Secretariat announced the closure of cases against BIH and Montenegro in January 2015.
- Case ECS-8/11, initiated by an *Opening Letter* on 7 October 2011 for non-compliance of obligations by BIH concerning the adoption of relevant legislation in the gas sector. Having taken into account the reply of the BIH Council of Ministers to the Opening Letter, the Secretariat sent a *Reasoned Opinion* on 24 January 2013, and submitted the case to the Ministerial Council for decision by way of a *Reasoned Request* on 21 May 2013. Lack of a regulatory authority at the national level, failure to establish a separate transmission system operator for gas, lack of adequate network tariffs, failure to open the market are just some of the shortcomings that were highlighted. On 23 September 2014, the Ministerial Council of the Energy Community emphasised that breaches by BIH in implementing the binding EU directives were serious and persistent and tasked the Energy Community Secretariat to assist BIH in preparing the required legislation. Adoption of possible sanctions was postponed for 2015, which is the deadline for BIH to present its 'Third Package'-compliant Gas Law. On 21 October 2014, the Energy Community Secretariat submitted a *Draft Law on Transmission of Natural Gas, Regulator and Internal Market in BIH* to the Ministry of Foreign Trade and Economic Relations of BIH (copied to the Ministry of Foreign Affairs of BIH and entity ministries of energy) which is in compliance with the 'Third Package.' The Ministry did not commence any activity on adoption of this Law.
- On 11 February 2013, in cases ECS-1-5/13 the Secretariat sent *Opening Letters* to Albania, Bosnia and Herzegovina, Macedonia, Serbia and Ukraine for failure to transpose and implement requirements concerning the reduction of emissions of sulphur dioxide (SO_2) resulting from the combustion of heavy fuel oils and gas oils.

- Case ECS-1/14, initiated by an *Opening Letter* on 3 March 2014 for non-compliance of obligations by BIH concerning transposition and implementation of Directive 2006/32/EC on energy end-use and energy services. The deadline for transposition and implementation of this Directive expired at the end of 2011.
- On 11 February 2014, in cases ECS-3-7/14 the Secretariat sent *Opening Letters* to Albania, Bosnia and Herzegovina, Macedonia, Montenegro and Ukraine for failure to comply with the Energy Community *acquis* on renewable energy, that is, for failure to adopt national action plans for renewable energy, for which the deadline expired on 30 June 2013. As Ukraine adopted its national plan and submitted it to the Secretariat, the case against Ukraine was closed on 6 November 2014.

SERC Activities in the Energy Community Bodies

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

SERC activities in the Energy Community continue to focus on the Regulatory Board, which was established on 11 December 2006 in Athens. Since then SERC actively participates in its activities, representing the interests of Bosnia and Herzegovina. Mr. Edin Zametica, M.Sc., Advisor to the Commission, contributes to the affirmation of the Regulatory Commission in the ECRB, in particular in the capacity of the Chairman of the Customers and Retail Markets Working Group since 2007.

In 2014, during which the Regulatory Board held three meetings, it gave a significant contribution to the creation of Energy Community policies in the field of regulatory initiatives in promoting network investments, treating interconnections between the Energy Community Contracting Parties and European Community Member States and enhancing regulatory independence. In the previous year, the ECRB expanded its joint activities in which the Agency for the Cooperation of Energy Regulators (ACER) and the Council of European Energy Regulators (CEER) had been involved before, to the Mediterranean Energy Regulators (MEDREG).

The ECRB organises a considerable part of its activities through several working groups, with the support of the relevant Energy Community Secretariat Section.

During 2014, the **Electricity Working Group** (EWG) was dedicated to the wholesale market development, using *the Regional Action Plan for Wholesale Market Opening in South East Europe*, which is the result of joint effort by the PHLG, ECRB and ENTSO-E. Therefore, the Group focused on the process of establishing a common mechanism for the allocation of cross-border capacities, establishment of the balancing mechanism, the issue of market opening, market design and monitoring, including day-ahead and intraday markets.

By establishing a few sub-groups in the operational organisation of its work, the EWG prepared several important documents, reports and benchmarking reports, among which of special importance are *Recommendation on Common Position of the ECRB on the SEE CAO Auction Rules*, *Recommendation to the ECRB on Position on Network Code Implementation, Regulatory Market Monitoring Guidelines*, Development of a Market Coupling Simulator and a quarterly 8th region progress report.

The **Gas Working Group** (GWG) has been committed to 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.

The lack of gas infrastructure, including interconnections among the Contracting Parties, remains an obstacle to the creation of regional market. Provision of and support to necessary investments fall within the scope of national legislation and regulatory practice, but the construction of gas infrastructure calls for a common regulatory approach in the region. In this context, activities aimed at gas infrastructure development were continued also during 2014. The issues of storage and balancing in gas transportation networks were the topic of several workshops.

The GWG focused on comparing experiences of countries with organised gas markets while a particular emphasis was put on gas quality and activities conducted by the Agency for the Cooperation of Energy Regulators (ACER) and the European Network of Transmission System Operators for Gas (ENTSO-G) on preparing framework guidelines and EU network rules on interoperability, capacity allocation and gas balancing.

The **Customers and Retail Markets Working Group** (CRM WG) is continuously committed to the development of customer protection mechanisms that do not impede the process of liberalisation and competition in the energy market. The Group gives contribution to a number of activities conducted by the Energy Community, in particular those related to the vulnerable customer protection.

During 2014, the CRM WG contributed significantly to the development of a regulatory framework which is gradually adjusted also to the needs of customers. An overview of practice regarding contracts was finalised and the *Status Review of Customer Contracts* was published. The *Retail Market Development in the Energy Community – Status Review* was prepared and published. Activities on customer protection and education were continued and, in this context, the Group prepared recommendations on possible ways of informing customers, supported a public campaign aimed at full energy market opening as of 1 January 2015, and organised a joint seminar with CEER. The ECRB's cooperation with the Council of European Energy Regulators will also be continued through participation in preparing the *6th CEER Benchmarking Report on Quality of Electricity Supply*.

4.2 Energy Regulators Regional Association – ERRA

The Energy Regulators Regional Association (ERRA) is an organisation composed of independent energy regulatory bodies primarily from the Central European and Eurasian region. ERRA has 24 full and five associate members. In addition, seven affiliate members are engaged in ERRA activities including the National Association of Regulatory Utility Commissioners (NARUC) and regulatory authorities and associations from Africa and Asia (Figure 16).

The goals of ERRA are improvement of energy regulation in the member countries, facilitating the 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 19 May 2004. At the General Assembly meeting held in May 2010, the two entity regulatory commissions, the Regulatory Commission for Energy in the Federation of BIH and the Regulatory Commission for Energy of Republika Srpska, became ERRA associate members.

SERC representatives actively participate in the work of the General Assembly, Investment Conference and the ERRA Presidium in which Mr. Mirsad Salkić, SERC Commissioner, was elected a member for a two-year term in March 2014. Commitment of the representatives of the State Electricity Regulatory Commission was observed also in the work of standing committees and working groups with particular emphasis on the Standing Tariff/Pricing Committee and the Standing Licensing/Competition Committee in which Mr. Saša Šćekić, Head of Licensing and Technical Affairs Department, in the capacity of Chairman

contributes to the affirmation of the Regulatory Commission since 2010. In 2014, the Legal Regulation Working Group ceased its operation while a new Customers and Retail Markets Working Group was established.

A number of topics were elaborated in 2014 by the ERRA institutions, in particular structure and operational models of wholesale market, retail market opening, access to networks and network charges, regulated and market prices in the liberalisation process, regulatory measures in the function of investment, efficiency of distribution companies, cross-border capacity trading and its impact on the internal EU energy market, renewables, complaint handling, dispute management, identification of and support to vulnerable customers etc.

In addition to active participation in ERRA bodies, the State Electricity Regulatory Commission fulfils the role as a member of this Association by providing relevant information on the power sector and the applicable regulatory practice in BIH.

Figure 16. ERRA membership

4.3 Mediterranean Energy Regulators – MEDREG

The Mediterranean Energy Regulators (MEDREG) started in May 2006 as a voluntary working group to establish cooperation among Mediterranean Energy Regulators and became a permanent regional organisation established in Rome in November 2007.

MEDREG is an Association that brings together energy regulators in order to promote a clear, stable and harmonised regulatory framework through a continuous cooperation among the Northern, Southern and Eastern shores of the Mediterranean basin. It gathers regulatory authorities from Albania, Algeria, Bosnia and Herzegovina, Croatia, Cyprus, Egypt, France, Greece, Italy, Israel, Jordan, Libya, Malta, Montenegro, Morocco, the Palestinian Authority, Portugal, Slovenia, Spain, Tunisia and Turkey.

Its organisation is structured around a biannual General Assembly, as well as around five Working Groups: (1) on Institutional Issues, (2) on Electricity, (3) on Gas and (4) on Environment, Renewable Energy Sources and Energy Efficiency. In June 2015, due to the increased focus on consumer protection issues, the Task Force on Consumers Issues established in June 2012 became the fifth MEDREG Working Group. The Secretariat seated in Milan as part of the MEDREG structure implements the General Assembly's strategy enhancing MEDREG's accountability and institutional cooperation in the Mediterranean energy sector. Moreover, MEDREG Secretariat strongly fosters information exchange among its members through a Communication Officers network that promotes the Association's message in each member country.

The main objective of the Association is the promotion of clear, stable and harmonised legal and regulatory frameworks in the Mediterranean region with the aim of facilitating investments in energy infrastructures and supporting market integration. Toward this goal, MEDREG promotes a permanent exchange of know-how, data collection and diffusion of expertise through comprehensive studies, recommendation reports and specialised training sessions in the field of energy regulation.

MEDREG activities benefit from the active commitment of all Member Regulators, and have been supported since 2007 by the European Union and the Council of European Energy Regulators (CEER). In 2012, MEDREG was acknowledged by the Committee on Industry, Research and Energy (ITRE) of the European Parliament as the reference institution for energy regulation in the Mediterranean region, while the European Commission refers repeatedly to MEDREG as a key actor for energy cooperation in the Mediterranean region and a relevant stakeholder in the establishment of the Mediterranean Energy

Mr. Michel Thiollière, MEDREG President: "MEDREG has made a meaningful step forward to lay down the foundations of our future work. We are developing an ambitious and concrete strategy, focused on a sound institutional regulatory framework, the creation of optimal conditions for infrastructure investments, the intensification of regional cooperation, and the support to competitive and transparent electricity and gas markets. All these long term objectives will help improve consumer protection."

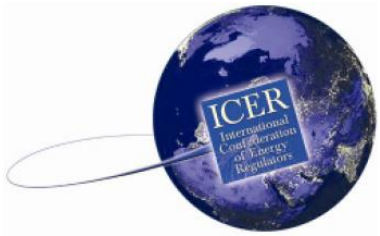
From the address speech at the 17th General Assembly meeting of MEDREG, with regard to preparation of the 2020 – 2030 Strategy Amman, 4 June 2014

Community. In 2014, MEDREG adopted its comprehensive strategy for the period 2020 – 2030.

The representatives of SERC directly participate in the work of the General Assembly, while the contribution to the activities of Working Groups is provided by their participation in meetings via various communication tools and provision of required information and comments on draft documents. In the course of 2014, SERC staff provided the relevant data on electricity market, transparency status in the gas sector, regulatory principles and practice and updated information for the MEDREG annual benchmarking assessment document. Mr. Almir Imamović, Head of Tariff and Market Department, who was Vice-President of the Electricity Working Group in the past two-year period, until November 2014, gave a significant contribution to the affirmation of the Regulatory Commission within MEDREG.

As the result of MEDREG's intensified institutional cooperation with international organisations, regional and international associations, in 2014 the first ECRB – MEDREG roundtable was held in Athens, Greece with a strong focus on investment promotion and customer protection, which are key priorities for both regions. Furthermore, in Milan, Italy, the first joint MEDREG – ERRA workshop on natural gas regulation was held providing the platform for a comprehensive discussion on tariffs, performance standards for public services and third party access to the gas market.

4.4 International Confederation of Energy Regulators – ICER



The International Confederation of Energy Regulators (ICER), established in October 2009, is a voluntary framework for cooperation between energy regulators from around the globe. ICER's aim is to improve public and policy-maker awareness and understanding of energy regulation and its role in addressing a wide spectrum of socio-economic, environmental and market issues.

Over 250 regulatory authorities on six continents are included in the ICER's membership through 11 regional regulatory associations and two national energy regulatory authorities (Figure 17) and participate in its activities. SERC is an ICER member through ERRA and MEDREG.

ICER's work is focused around four key areas: (*i*) reliability and security of supply, (*ii*) the role of regulators in responding to climate change, (*iii*) competitiveness and affordability and (*iv*) the independence, powers, responsibilities, best practices and training of regulators. During the 2012 – 2015 period, ICER's work will be organised through the following virtual working groups:

Figure 17. ICER Members

VWG1 – the Virtual Working Group on the Opening and Integration of Regional Markets, VWG2 – Virtual Working Group on Technology Change, VWG3 – Virtual Working Group on Consumers and VWG4 – Virtual Working Group on Education, Training and Best Practice. In this way, ICER continues its efforts to build up solid links between regional regulatory associations around the world.

The present results of this global cooperation among energy regulators are presented in six factsheets, eight case studies and best practice reports, including international case studies, on: (1) guaranteeing reliability and security of supply, (2) renewables and distributed generation, (3) smart metering, and (4) competitiveness and affordability.

ICER continues its activities in its *Women in Energy* initiative launched in October 2013. The goal of this global initiative of energy regulators is to help the advancement of women in energy, through practical tools.

SERC actively follows ICER's activities and provides support in different ways, including the provision of responses regarding different activities and surveys, thus enabling an insight into and exchange of practice in the area of interest for regulatory activities.

In 2013, ICER's Virtual Working Group on Education, Training and Best Practice launched the ICER Chronicle as a means to further promote ICER goals of enhanced exchange of regulatory

research and expertise. Since then Mr. Edin Zametica, M.Sc., Advisor to the Commission, contributes to the quality of this professional magazine as a member of the Editorial Board.

The ICER Chronicle is a publication issued twice a year in electronic format, gathering articles on regulatory topics. It was launched by VWG4 as a means to further promote ICER goals of enhanced exchange of regulatory research and expertise.

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In May 2012, the ICER and the International Energy Regulation Network (IERN) – a web platform established in 2003 by the 2nd World Forum on Energy Regulation – merged with into a single organisation under the ICER umbrella. Now IERN and its database are part of the ICER wider framework.

5. AUDITING REPORT

SERC provides funding for its operation and realisation of activities pursuant to the *Law on Transmission of Electric Power, Regulator and System Operator of BIH*. The basic revenue of SERC is the regulatory fee paid by holders of licenses for performance of the activity of electricity transmission, independent system operator, distribution and supply of non-eligible customers and international electricity trading. The regulatory fee is determined in a manner so as to cover SERC's costs, while the obligation to pay the regulatory fee in the forthcoming period is reduced by an excess of revenues over expenditures. In this manner, all realised revenues are earmarked exclusively for covering basic costs planned in detail.

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,
- monitoring of the Financial Plan realisation in the current year,
- an analysis and estimate of future cash flows 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, authorised institutions and the public.

The final result of all aforementioned activities and adopted decisions are financial reports presenting business results at the end of a business year. Pursuant to the obligations as defined in the Law based on which SERC was established, SERC is obligated to enable auditing of its financial reports every year in order to have an independent and impartial verification of the stated business results as well as to check the compliance of these procedures with the applicable regulations.

Based on a published public invitation for auditing services, in 2014 the audit of SERC financial reports for the previous year was performed by the Auditing, Accounting and Consulting Company REVIFORM d.o.o. Sarajevo.

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

"In our opinion, the financial reports show objectively the financial standing of the State Electricity Regulatory Commission on 31 December 2013 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."

(REVIFORM, 28 March 2014)

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

With the mentioned opinion, SERC maintained the highest audit opinion both for compliance of its financial reports with the international accounting standards, legal regulations, principles and policies as well as the stated business results which were audited in previous periods also 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, enabling the well-organised and efficient work with the simultaneous prevention or identification of possible mistakes in order to protect the property from loss caused by negligence or poor management. This is the reason why every recommendation by auditors enhancing business performance and increasing success and responsibility is applied unreservedly.

Lead by the commitment to and principles of objectivity and transparency in its work, with the aim of providing information on its financial standing and business results to the interested persons and the general public, SERC publishes revised annual financial reports every year. Audited financial reports for 2013 were published in the “Official Gazette of BIH”, 41/14 and on the SERC internet site.

6. MAIN ACTIVITIES IN 2015

The State Electricity Regulatory Commission will continue its activities on providing the conditions for free trade and unhindered electricity supply in accordance with the previously defined quality standard to the benefit of citizens of Bosnia and Herzegovina, and in compliance with international agreements, national laws, the relevant European regulations and directives as well as other internal electricity market rules.

In 2015, SERC will continue to cooperate with the Parliamentary Assembly of Bosnia and Herzegovina (PA BIH), in particular with the Committee on Traffic and Communications of the House of Representatives of PA BIH and the Committee on Foreign and Trade Policy, Customs, Traffic and Communications of the House of Peoples of PA BIH. In addition, the focus of interest will primarily remain on the information exchange and harmonisation 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 BIH*.

All existing modalities of mutual follow up and harmonisation of activities will be used also in 2015 with the Regulatory Commission for Energy in the Federation of BIH and the Regulatory Commission for Energy of Republika Srpska as well as with other regulatory bodies established at national level, primarily the Council of Competition of BIH.

In order to meet the need of different decision-making levels for quality and reliable statistical data in the energy field, SERC will remain a reference source and an active generator of these data. To this end, it will continue to cooperate with the BIH Agency for Statistics.

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

Through its activities SERC will be focused on:

- Setting tariffs in line with SERC competencies,
- Issuance of licenses,
- Regulatory monitoring of licensed entities,
- Creation of new regulatory rules and an analysis of the previously adopted regulatory rules and the existing practice with a review and revision of SERC rules,
- Development and implementation of new models for provision of ancillary service and balancing of the BIH power system,

- Fostering a higher degree of integration of the national electricity market with a particular emphasis on the efficient wholesale and retail market functioning,
- Capacity building in terms of the fulfilment of international obligations with regard to regulatory reporting,
- Approving and monitoring rules developed by the Independent System Operator in Bosnia and Herzegovina, Elektroprenos BIH and Komunalno Brčko,
- Approving the *Indicative Generation Development Plan for the period 2016 – 2025* and approving the *Long-Term Transmission Network Development Plan* for a ten-year period as well as an *Investment Plan of Elektroprenos BIH*,
- Monitoring the implementation of the Inter-TSO Compensation Mechanism (ITC mechanism) and operation of the Coordinated Auction Office in South East Europe (SEE CAO),
- Monitoring activities related to preparation of EU grid codes,
- Sharing information on regulatory practice with the regulated entities and the public,
- Social aspect in the field of regulatory practice, and
- Performing other tasks within competences vested in SERC.

While conducting its activities SERC will take into account the protection of customers and give its full contribution to the creation of best applicable solutions in the forthcoming period, in accordance with competences vested in SERC under law.

Taking into account the fact that under the *Treaty establishing the Energy Community* Bosnia and Herzegovina is obligated to transpose the new rules of the European Union on the internal energy market ('Third Package') into national legislation and apply them in practice, SERC will contribute to the legal framework development in line with its competences and through optimal coordination with other stakeholders.

The implementation of the power sector reform in Bosnia and Herzegovina, harmonisation of secondary legislation and efficient coordination among the bodies participating in its drafting and development is in the interest of all stakeholders. The aim is to create a clear and stable legal framework based on the European directives and rules on the internal electricity market.

In this context, SERC is planning to actively participate in the development of an EU-*acquis*-compliant legislative framework in the field of electricity in Bosnia and Herzegovina, and removal of shortcomings in the power sector specified in the *BIH 2014 Progress Report of the European Commission*.

SERC will also participate in supporting and implementing regional priorities and Energy Community projects but also in the priorities identified for the BIH power sector within the Energy Community, that is, those specified in the *Annual Implementation Report 2013/2014.*

In 2015, the project of the *United States Agency for International Development* (USAID) will be continued facilitating partnership of BIH energy regulators with the National Association of Regulatory Utility Commissioners (NARUC) and several regulatory commissions thereof, with the Public Utilities Commission of Ohio (PUCO) serving as the lead commission.

The State Electricity Regulatory Commission will follow implementation of a new multiannual USAID project *Energy Investment Activity* (EIA), which started at the end of 2014, and participate in implementation of some components relating to the regulatory activities.

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 and Customers and Retail Markets Working Group),
- ERRA – the Energy Regulators Regional Association (including the Standing Licensing/Competition Committee, Standing Tariff/Pricing Committee and the Customers and Retail Markets Working Group),
- MEDREG – the Mediterranean Energy Regulators (including Working Groups on institutional issues; electricity; gas; customers and environment, renewable energy sources and energy efficiency),
- ICER – International Confederation of Energy Regulators (including the 6th World Forum on Energy Regulation held every three year).

Furthermore, SERC will continue to follow up the work of the Council of European Energy Regulators (CEER) and Agency for the Cooperation of Energy Regulators (ACER).

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 SERC seat in Tuzla, M. Jovanovića Street 4/II.

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

(Source: ISO BIH, the Company for Transmission of Electric Power of BIH and public power utilities)

Basic data on installed capacity of generation units

Total installed capacity of generation units in Bosnia and Herzegovina amounts to 3,988.58 MW, with 2,048.60 MW and 1,765 MW installed in major hydro power plants and thermal power plants respectively. Installed capacity of small hydro, wind and solar power plants amounts to 83.75 MW while installed capacity of industrial powers plants in BIH is 91.23 MW.

Hydro power plants	Capacity of power unit (MW)	Total installed capacity (MW)
Trebinje I	2×54+1×63	171
Trebinje II	8	8
Dubrovnik (BIH+CRO)	2×108	216
Čapljina	2×210	420
Rama	2×80	160
Jablanica	6×30	180
Grabovica	2×57	114
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	300	279

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	3,888.63
110 kV – cable line	31.78

interconnections

Nominal voltage of transmission lines	Number of inter-connectors
400 kV	4
220 kV	10
110 kV	22
Total	*36*

transmission substations

Type of substation	Number 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	128	4,855.0

transformers

Transmission ratio of transformers	Number of transformers	Installed capacity (MVA)
TR 400/x kV	14	4,900.0
TR 220/x kV	14	2,100.0
TR 110/x kV	222	5,376.5

ATTACHMENT B: Basic Power Indicators of Bosnia and Herzegovina

(GWh)

Year 2014	EP BIH	ERS	EP HZHB	Komunalno Brčko	BIH
Generation in hydro power plants	1,542.61	2,522.09	1,755.81		5,820.52
Generation in thermal power plants	5,786.99	3,133.66			8,920.65
Generation in small and industrial PPs	188.97	82.39	17.31		288.67
Generation	7,518.57	5,738.14	1,773.12		**15,029.84**
Distribution consumption	4,392.55	3,526.02	1,310.79	251.65	9,481.01
Transmission losses					304.46
Large customers	442.76	155.87	1,811.57*		2,410.20
PPs self-consumption		14.12			14.12
Consumption	4,835.31	3,696.01	3,122.37	251.65	**12,209.79**

* Including the amount of 755.93 GWh which Aluminij and B.S.I. purchased as eligible customers

Year 2013	EP BIH	ERS	EP HZHB	Komunalno Brčko	BIH
Generation in hydro power plants	1,854.43	2,920.91	2,348.28		7,123.62
Generation in thermal power plants	5,549.53	3,390.12			8,939.65
Generation in small and industrial PPs	150.59	73.98	14.71		239.28
Generation	7,554.55	6,385.01	2,362.99		**16,302.55**
Distribution consumption	4,401.52	3,567.50	1,343.83	258.14	9,570.99
Transmission losses					343.10
Large customers	448.20	126.21	2,048.14*		2,622.55
PPs self-consumption		13.26	8.74		22.00
Consumption	4,849.72	3,706.97	3,400.71	258.14	**12,558.64**

*Including the amount of 884.94 GWh, which Aluminij purchased as an eligible customer

Year 2012	EP BIH	ERS	EP HZHB	Komunalno Brčko	BIH
Generation in hydro power plants	1,086.63	1,832.77	1,229.30		4,148.70
Generation in thermal power plants	5,367.80	3,251.70			8,619.50
Generation in small and industrial PPs	115.40	43.04	7.89		166.33
Generation	6,569.83	5,127.51	1,237.19		**12,934.54**
Distribution consumption	4,340.28	3,551.14	1,379.43	262.54	9,533.39
Transmission losses					308.14
Large customers	446.23	119.18	2,136.41*		2,701.83
PPs self-consumption and pumping		13.62	67.26		80.88
Consumption	4,786.52	3,683.94	3,583.10	262.54	**12,624.24**

*Including the amount of 910.54 GWh, which Aluminij purchased as an eligible customer

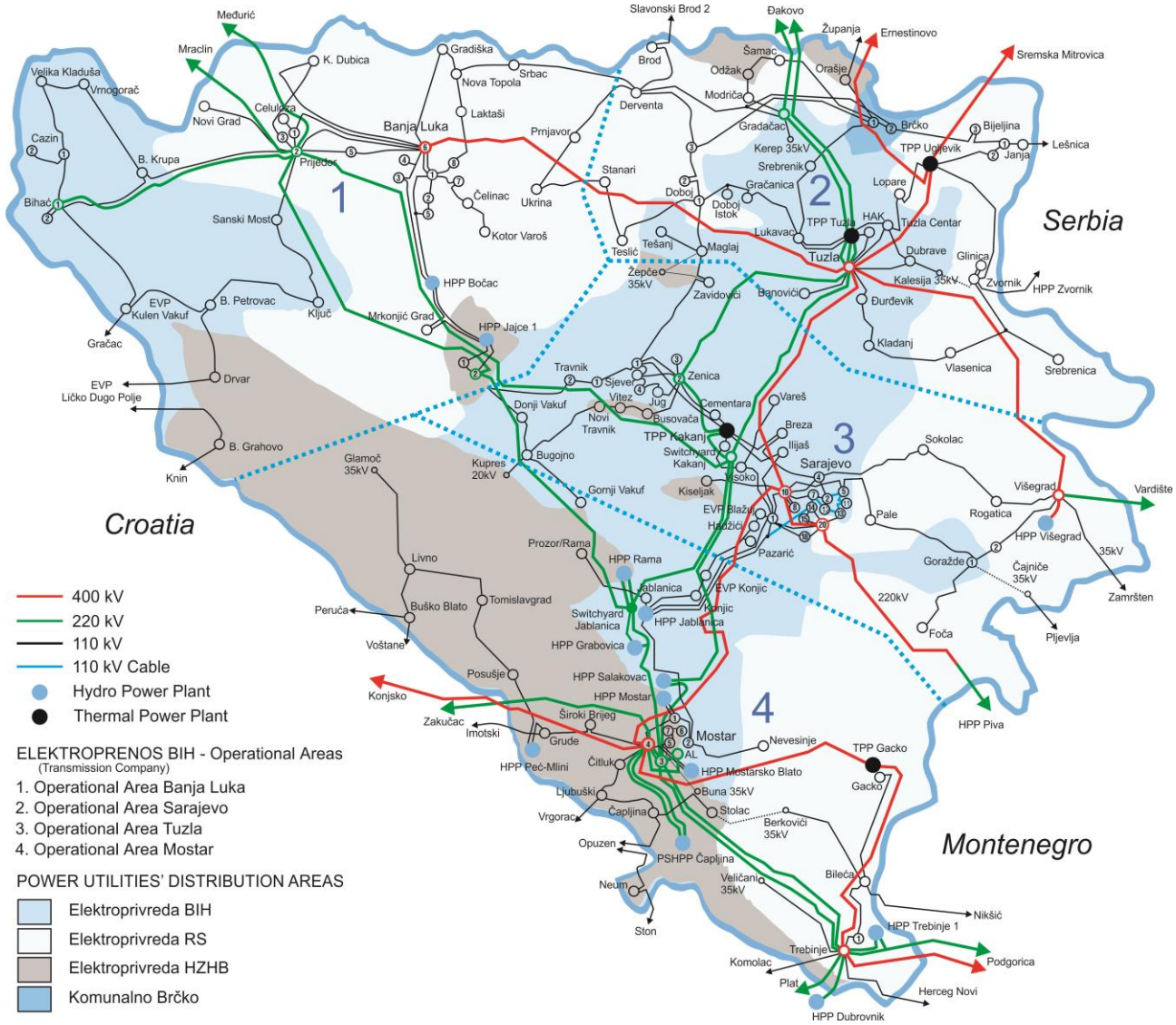
Year 2011	EP BIH	ERS	EP HZHB	Komunalno Brčko	BIH
Generation in hydro power plants	1,113.63	1,817.09	1,395.40		4,326.12
Generation in thermal power plants	6,138.01	3,449.76			9,587.77
Generation in small and industrial PPs	100.82	28.61	6.60		136.04
Generation	7,352.47	5,295.46	1,402.00		**14,049.93**
Distribution consumption	4,284.17	3,556.16	1,363.04	271.71	9,475.08
Transmission losses					324.17
Large customers	417.17	124.08	2,216.62*		2,757.87
PPs self-consumption		14.23	21.22		35.45
Consumption	4,701.34	3,694.47	3,600.88	271.71	**12,592.57**

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

Year 2010	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
PPs self-consumption and pumping		12.96	2.21		15.17
Consumption	4,604.35	3,645.41	3,400.76	277.35	**12,265.82**

* Including the amount of 1068.48 GWh, which Aluminij and B.S.I. purchased as eligible customers

ATTACHMENT C: Map of the Power System of Bosnia and Herzegovina with Operational Areas of Elektroprenos BIH and Distribution Areas of Public Power Utilities (December 2014)



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0128*WGRADC2 220.00 3WNDTR       WND 1 1 CASE   3 150.0 111.3  71.7
10137 WTREBI5 110.00 10983*XTR_HN51 110.00 1 CASE   4  89.0  67.1  73.3
10137 WTREBI5 110.00 10983*XTR_HN51 110.00 1 CASE  38  89.0  66.8  72.8
10137*WTREBI5 110.00 10994 XTR_KO51 110.00 1 CASE  41  89.5  81.1  87.4
10137 WTREBI5 110.00 10983*XTR_HN51 110.00 1 CASE  73  89.0  66.8  72.5
10137 WTREBI5 110.00 10983*XTR_HN51 110.00 1 CASE  76  89.0  69.9  75.9
14106*WBLUK15 110.00 14110 WBLUK65  110.00 2 CASE  81 121.9  92.0  71.7
14106*WBLUK15 110.00 14110 WBLUK65  110.00 1 CASE  82  89.0  86.9  93.3
10137 WTREBI5 110.00 10983*XTR_HN51 110.00 1 CASE 161  89.0  65.3  71.0
10137 WTREBI5 110.00 10983*XTR_HN51 110.00 1 CASE 162  89.0  68.1  74.0
10128*WGRADC2 220.00 3WNDTR         WND 1 1 CASE 164 150.0 115.2  74.1
16127*WLUKA15 110.00 16149 WTTUZL5  110.00 2 CASE 215 121.9  95.9  77.4
16127*WLUKA15 110.00 16149 WTTUZL5  110.00 1 CASE 216 121.9  90.6  73.3
11003XCA_OP51 110.00 18112 WCAPLJ5  110.00 1 CASE 266  89.5  67.5  77.7
10137 WTREBI5 110.00 10983*XTR_HN51 110.00 1 CASE 292  89.0  81.1  88.2
10137 WTREBI5 110.00 10983*XTR_HN51 110.00 1 CASE 293  89.0  71.3  77.6
10137 WTREBI5 110.00 10983*XTR_HN51 110.00 1 CASE 305  89.0  65.3  71.0
10137 WTREBI5 110.00 10983*XTR_HN51 110.00 1 CASE 314  89.0  65.8  71.2
10137 WTREBI5 110.00 10983*XTR_HN51 110.00 1 CASE 315  89.0  65.8  71.3

10137 WTREBI5 110.00 10983*XTR_HN51 110.00 1 CASE   4  89.0  92.3 100.4
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10137 WTREBI5 110.00 10983*XTR_HN51 110.00 1 CASE  12  89.0  88.5  96.6
10137 WTREBI5 110.00 10983*XTR_HN51 110.00 1 CASE  13  89.0 103.8 112.8
10137 WTREBI5 110.00 10983*XTR_HN51 110.00 1 CASE  18  89.0  82.6  90.2
10137 WTREBI5 110.00 10983*XTR_HN51 110.00 1 CASE  23  89.0  86.6  94.8
10137 WTREBI5 110.00 10983*XTR_HN51 110.00 1 CASE  26  89.0  84.1  92.1
10137 WTREBI5 110.00 10983*XTR_HN51 110.00 1 CASE  27  89.0  87.1  95.5
10137 WTREBI5 110.00 10983*XTR_HN51 110.00 1 CASE  29  89.0  87.0  95.5
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10137 WTREBI5 110.00 10983*XTR_HN51 110.00 1 CASE  50  89.0  82.7  90.2
10137 WTREBI5 110.00 10983*XTR_HN51 110.00 1 CASE  51  89.0  82.8  90.3
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10137 WTREBI5 110.00 10983*XTR_HN51 110.00 1 CASE  55  89.0  83.8  91.6
10137 WTREBI5 110.00 10983*XTR_HN51 110.00 1 CASE  56  89.0  83.9  91.7

10137 WTREBI5 110.00 10994*XTR_KO51 110.00 1 CASE   1  89.5  76.9  78.5
10137 WTREBI5 110.00 10994*XTR_KO51 110.00 1 CASE   6  89.5  77.9  79.6
10137 WTREBI5 110.00 10994*XTR_KO51 110.00 1 CASE  19  89.5  76.5  78.1
10137 WTREBI5 110.00 10994*XTR_KO51 110.00 1 CASE  20  89.5  76.5  78.2
10137 WTREBI5 110.00 10994*XTR_KO51 110.00 1 CASE  32  89.5  77.3  79.1
10137 WTREBI5 110.00 10994*XTR_KO51 110.00 1 CASE  45  89.5  76.4  78.1
10137 WTREBI5 110.00 10994*XTR_KO51 110.00 1 CASE  73  89.5  78.4  80.0
10137 WTREBI5 110.00 10994*XTR_KO51 110.00 1 CASE  74  89.5  76.4  78.1
10137 WTREBI5 110.00 10994*XTR_KO51 110.00 1 CASE  75  89.5  76.4  78.1
10137 WTREBI5 110.00 10994*XTR_KO51 110.00 1 CASE  76  89.5  78.4  80.1
10137 WTREBI5 110.00 10994*XTR_KO51 110.00 1 CASE 162  89.5  78.3  80.0
10137 WTREBI5 110.00 10994*XTR_KO51 110.00 1 CASE 282  89.5  76.5  78.2
10137 WTREBI5 110.00 10994*XTR_KO51 110.00 1 CASE 293  89.5  77.2  78.8
10137 WTREBI5 110.00 10994*XTR_KO51 110.00 1 CASE 305  89.5  78.8  80.5


CASE   3 [WUGLJE1 400.00] 14149 [WTUGLJ5  110.00] 2
CASE   4 [WGACKO1 400.00] 10115 [WTREBI5  400.00] 1
CASE  38 [WTREBI1 400.00] 10116 [WTREBI5  220.00] 2
CASE  41 [WTREBI2 220.00] 10137 [WTREBI5  110.00] 2
CASE  73 [WMOST32 220.00] 10136 [WEALMO5  110.00] 1
CASE  76 [WTREBI5 110.00] 14175 [WTREBI5  110.00] 1
CASE  81 [WBLUK15 110.00] 14110 [WBLUK65  110.00] 1
CASE  82 [WBLUK15 110.00] 14110 [WBLUK65  110.00] 2
CASE 161 [WGACKO5 110.00] 14176 [WBILEC5  110.00] 1
CASE 162 [WTREB15 110.00] 14176 [WBILEC5  110.00] 1
CASE 164 [WBJEL15 110.00] 14195 [WBJEL35  110.00] 1
CASE 215 [WLUKA15 110.00] 16149 [WTTUZL5  110.00] 1
CASE 216 [WLUKA15 110.00] 16149 [WTTUZL5  110.00] 2
CASE 266 [WMOST45 110.00] 18111 [WCITLU5  110.00] 1
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CASE 305 [WBILEC5 110.00] 10990 [XBI_NI51 110.00] 1
CASE 314 [WNEUM*5 110.00] 10995 [XNE_OP51 110.00] 1
CASE 315 [WNEUM*5 110.00] 10996 [XNE_ST51 110.00] 1

CASE   4 [0PLJE211 400.00]  811 [0RIBAR11 400.00] 1
CASE   5 [0PODG211 400.00]  811 [0RIBAR11 400.00] 1
CASE   8 [JBBAST21 220.00]  751 [XPL_BB21 220.00] 1
CASE  10 [XPL_BB21 220.00]  813 [0TPLJE21 220.00] 1
CASE  12 [0HPERU21 220.00]  804 [0PODG121 220.00] 1
CASE  13 [0HPERU21 220.00]1 982 [XTR_PE21 220.00] 1
CASE  18 [0MOJKO21 220.00]  813 [0TPLJE21 220.00] 1
CASE  23 [0BAR**51 110.00]  815 [0VIRPA51 110.00] 1
CASE  26 [0BUDVA51 110.00]  790 [0CETIN51 110.00] 1
CASE  27 [0BUDVA51 110.00]  807 [0PODG251 110.00] 1
CASE  29 [0CETIN51 110.00]  807 [0PODG251 110.00] 1
CASE  45 [0PODG251 110.00]  815 [0VIRPA51 110.00] 1
CASE  48 [0HPERU21 220.00]  795 [0HPERU51 110.00] 1
CASE  50 [0PLJE211 400.00]  813 [0TPLJE21 220.00] 1
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CASE  54 [0PODG121 220.00]  805 [0PODG151 110.00] 21
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