



**REGULATORY COMMISSION FOR ENERGY OF REPUBLIC OF SRPSKA**

**ANNUAL REPORT  
FOR 2010**

Trebinje, May 2011

## **PREFACE**

The Annual Report of the Regulatory Commission for Energy of Republic of Srpska, which is in front of you, contains a detailed overview of operations of Regulatory Commission in 2010.

The activities of Regulatory Commission in 2010, were done following the plan of business activities and approved budget, always taking into account the basic mission of Regulatory Commission which is meant by establishment and improvement of the regulatory framework required for functioning of the energy sector in Republic of Srpska in a way which will, in market circumstances, provide safety of supply of customers with energy and sustainable development through protection of environment, energy efficiency and use of renewable energy sources.

Doing activities within competences and obligations prescribed by laws, compliance with, made in advance, and published rules, procedure and methodology, transparency of work which includes consultations with the public while making decisions - are the basic principles of work of the Regulatory Commission.

In the sixth year of operations, Regulatory Commission expanded its activities to the sector of oil and oil derivatives, by issuing first licenses for doing activities to the companies in this sector.

In the electric power sector, the activities related to issuance of licenses for electric power activities and construction of the electric power structures continued as well as monitoring of compliance with application of the requirements prescribed by the issued licenses.

The natural gas sector in Republic of Srpska has not been sufficiently developed taking into account the capacities of the gas infrastructure and number of customers; and is concurrently burdened with numerous problems. The problems are firstly related to insufficient capability, namely non-satisfactory progress in improvement of capabilities of some companies from the natural gas sector to respond to the requirements prescribed by the issued licenses. The complexity of this problem is considerably emphasized by external factors such as unsolved functioning of the gas sector at the level of Bosnia and Herzegovina and unsolved property-legal conditions with structures outside of Bosnia and Herzegovina.

Within the scope of competences related to protection of customers, Regulatory Commission directed its activities in 2010 to prevention or limitation of the monopolistic and non-transparent behavior of distribution companies and to settlement of disputes following individual application of the electricity customers.

In cooperation with Ministry of industry, energy and mining, Regulatory Commission prepared Decree on generation and consumption of energy from renewable energy sources and co-generation and continued with activities on preparation and making regulation on usage of the renewable energy sources with the aim to establish clear and well-known in advance regulatory framework for investments in renewable energy sources in Republic of Srpska.

When it is about activities related to cooperation with other institutions, it should be mentioned participation of Regulatory Commission in implementation of the Treaty on establishment of the Energy Community and development of the Strategy of the Energy development of Republic of Srpska.

Taking into account importance and need for permanent professional education of employees and publication of their results for improvement of the institution capacity, Regulatory Commission paid due attention to this issue.

The report also contains Report of independent auditor with revised financial reports of the Regulatory Commission for 2010.

The second part of this report, entitled Regulatory Report, which contains basic indicators of the market of electricity, natural gas and oil and oil derivatives in Republic of Srpska, prepared in a way to be harmonized with the reporting template applicable in the European Union countries and countries signatories of the Treaty on establishment of the Energy Community and being like that it is appropriate for the benchmarking.

We think that presenting information in way as it is done in this report, Regulatory Commission provides reporting on its operations pursuant to the Article 26 of the Energy Law of Republic of Srpska.

Milenko Cokorilo  
President

## INTRODUCTION

Regulatory Commission for Energy of Republic of Srpska as independent, specialized, and non-profitable organization prepared this Annual report for 2010 as an integrated text which comprises information on activities of the Regulatory Commission which marked the past year as well as the situation in the energy sector in Republic of Srpska. The scope of activities and competences of the Regulatory Commission were prescribed by the Law on energy, Law on electricity, Law on gas and Law on oil and oil derivatives. The Law on energy, in its Article 26, prescribed the obligation of the Regulatory Commission, as independent authority, to submit its Report on activities to the National Assembly of Republic of Srpska, for adoption.

The first part of the report is divided in several parts, in which the most important activities of the Regulatory Commission are presented, as follows:

- indicators on the number of regular sessions, internal meetings and public hearings held as well as the number and type of the documents made,
- activities in the electricity sector,
- activities in the natural gas sector,
- activities in the sector of oil and oil derivatives,
- cooperation,
- employees in the Regulatory Commission and
- financing and financial indicators of operations;

In the second of the report, there is a regulatory report on the functioning of the energy sector and sector of electricity, natural gas and oil and oil derivatives in Republic of Srpska, harmonized with the reporting template for the European Union countries and countries signatories of the Treaty on establishment of the Energy Community.

## A. ACTIVITIES OF THE REGULATORY COMMISSION RELATED TO REGULATION OF THE ENERGY SECTOR IN REPUBLIC OF SPRSKA

### 1. Legal basis for regulation of the energy sector and competences of the Regulatory Commission

Legal basis for regulation of the energy sector based on which Regulatory Commission does its activities are as follows:

- laws

- Law on energy (Official Gazette of Republic of Srpska, number 49/09),
- Law on electricity - cleaned text (Official Gazette of Republic of Srpska, number 8/08, 34/09, 92/09 and 1/11),
- Law on gas of Republic of Srpska (Official Gazette of Republic of Srpska, number 86/07) and
- Law on oil and oil derivatives (Official Gazette of Republic of Srpska, number 36/09) and

- secondary legislation:

- Decision on appointment of the president and Decision on appointment of members of the Regulatory Commission for energy of Republic of Srpska (Official Gazette of Republic of Srpska, number 128/06 and 116/09),
- Decision of the National Assembly of Republic of Srpska on adoption of the Budget of the Regulatory Commission for energy of Republic of Srpska for 2010 (Official Gazette of RS, number 16/10),
- Statute of the Regulatory Commission for energy of Republic of Srpska - cleaned text (Official Gazette of RS, number 6/10),
- Code of Ethics for members and staff of the Regulatory Commission for energy of RS (Official Gazette of RS, number 49/04),
- Procedural Rules of the Regulatory Commission for energy of RS (Official Gazette of RS, number 59/10),
- Decision on the regulatory fee for 2010 (Official Gazette of RS, number 18/10),
- Decision on the one-off regulatory fee (Official Gazette of RS, number 16/09),
- General Conditions for delivery and supply of electricity (Official Gazette of RS, number 85/08 and 79/10),
- Rule book on licensing (Official Gazette of RS, number 39/10),
- Rule book on tariff methodology and tariff proceedings for electricity (Official Gazette of RS, number 61/05),
- Decision on the tariff system for sale of electricity in RS (Official Gazette of RS, number 28/06, 40/06, 59/07 and 114/07),
- Rule book on methodology for determination of the fee for connection to the distribution network (Official Gazette of RS, number 123/08),
- Rule book on tariff methodology in the system of transmission, distribution, storage and supply with natural gas (Official Gazette of RS, number 9/09),
- Decision on the content and template in the tariff proceedings (Official Gazette of RS, number 65/05),

- Decision on determination of the application form for approval of prices and tariffs and form for technical and financial data (Official Gazette of RS, number 88/06 and number 29/10),
- Rule book on public hearing and settlement of disputes and complaints (Official Gazette of RS, number 70/10),
- Rule book on confidential information (Official Gazette of RS, number 10/07),
- Rule book on reporting (Official Gazette of RS, number 70/10),
- Decision on the Uniform Regulatory Chart of Accounts (Official Gazette of RS, number 39/10) and
- Rule book on work, internal organization and systematization of the workplaces of the Regulatory Commission for energy of RS - cleaned text, number 01-126-4/9 dated 9 December 2012;

Basic competences of Regulatory Commission in the electricity sector were prescribed by the Law on electricity - cleaned text, and are related to the following:

- Monitoring and regulation of relationships between generation, distribution and customers of electricity including traders of electricity,
- Prescription of the methodology and criteria for determination of price of use of the distribution network and the supply price of electricity for non-eligible customers and methodology for determination of the fee for connection to the distribution network,
- Making of the tariff system for sale of electricity and use of distribution network,
- Determination of the tariff rates for distribution system users and tariff rates for non-eligible customers,
- Issuance or revocation of the licenses for generation, distribution and trade of electricity,
- Making of general conditions for delivery and supply of electricity,
- Determination of the electricity price at the plant outlet.

Basic competences of the Regulatory Commission in the natural gas sector are as follows:

- Determination of the methodology for calculation of costs of generation, transport, distribution, storage and supply with natural gas,
- Determination of the methodology for calculation of costs of connection to the network,
- Making of the tariff system for calculation of prices for use of the system for generation, transport, distribution, storage of natural gas and tariff system for calculation of the price of natural gas for the tariff customers supply,
- Determination of the criteria and prescription of the conditions for getting, amendment and revocation of the license for realization of the activities as well as deciding upon, in the proceeding for getting, amendment and revocation of the license for realization of the activity in the natural gas sector,
- Deciding upon the complaint of the decisions of the transport and distribution system operators in the proceedings for giving consent to the network use and consent for connection to the network,

- Determination of the minimum annual consumption of the natural gas which is to be used for getting a status of the eligible customer and the status is determined and keeping of the register of eligible customers of natural gas,
- Giving consent to the rules of operation of the system operator and to the general conditions for supply with natural gas,
- Giving consent to the energy undertakings for the prices of services and the price of the natural gas supply,

In the sector of oil and oil derivatives, Regulatory Commission for Energy of Republic of Srpska is in charge of:

- Determination of the methodology for calculation of costs of oil transport through oil pipelines and oil derivatives through the product-pipelines,
- Development of the tariff system for calculation of the price utilization of the oil pipeline, i.e. product-pipeline,
- Approval of prices for utilization of the oil pipelines, i.e. product-pipelines,
- Determination of criteria and prescription of terms and conditions for granting, amendment and revocation of the licenses, making decisions in the process for granting, amendment and revocation of licenses for carrying out activities in the oil field and oil derivatives; keeping register of the issued licenses and of temporarily or permanently revoked licenses for carrying out activities in the oil field and oil derivatives field;
- Resolving in the second instance per the complaint,
- Monitoring of the activities which the license is issued for in the oil field and oil derivatives field pursuant to this law and principles as stipulated by this law, including monitoring of application of tariff systems and methodology for access and use of the oil pipeline, i.e. product-pipeline and
- Other activities pursuant to the law;

## 2. Key activities of the Regulatory Commission

### 2.1. Sessions, meetings and public hearings

In 2010, Regulatory Commission held 18 regular sessions and 24 internal meetings. The issues and documents within the regulatory competence were analyzed and made in the regular session pursuant to the Law on energy, Law on electricity, Law on gas and Law on oil and oil derivatives, while the issues and documents of the organizational-administration nature were analyzed and made at the internal meetings. The structure and number of the documents adopted in the regular sessions and internal meetings is presented in the table as follows:

<b>Regular sessions - 18</b>		<b>Internal meetings - 24</b>	
Document type	Number	Document type	Number
Adopted decisions	10	Adopted decisions	68
Adopted rulings	51	Adopted rulings	16
Adopted conclusions	55	Adopted conclusions	15
General documents	8	Adopted rules	1

from the scope of regulatory competences adopted			
Press release	42	Guidelines	1
Minutes	18	Minutes	24

**Table 1 -Structure and number of the documents made**

Regulatory Commission, complying with the principle of transparency of work, held several public hearings pursuant to the Rule on public hearings and settlement of disputes and complaints. In 2010, RERS held 21 public hearings related to:

- the proceedings related to making general administrative documents and
- the proceedings for the license issuance for:
  - doing electric power activities,
  - doing activities within the natural gas sector,
  - doing activities within the sector of oil and oil derivatives and
  - construction of the electric power facilities,
- the tariff proceedings

The number of public hearings is as follows, in table 2:

Public hearing type	Rules and regulations	Issuance of licenses	Tariffs and market	Settlement of disputes	Total number of the hearings held
General public hearings	8	12	-	-	20
Technical hearings	1	-	-	-	1
Formal hearings	-	-	-	-	
<b>TOTAL</b>	<b>9</b>	<b>12</b>			<b>21</b>

**Table 2 - Structure and number of public hearings**

## 2.2. Regulation of the electricity sector

### 2.2.1. Making and approval of rules and regulations

Regulatory Commission for energy of Republic of Srpska, within its competences, in 2010 made several normative documents in the electricity sector.

Also, Regulatory Commission, pursuant to its competences, prescribed by law, gives its consent to several documents from the electricity sector.

#### 2.2.1.1 Rule book on amendment to the Rule book on getting a status of eligible customer



Article 48 of the Law on electricity assigned Regulatory Commission with the obligation to prescribe criteria for getting a status of eligible customer. In September 2006, it made the Rule book on getting a status of eligible customer which prescribed the terms and conditions, criteria and procedure for getting a status of eligible customer. The rule book, also, prescribed rights and obligation of the eligible customer and supplier of eligible customers; as well as the dynamics of the market opening. The aim of making this Rule is gradual opening of the electricity market in Republic of Srpska and BiH.

The basic reason for making Rule on amendment to the Rule on getting a status of eligible customer is amendment to the Law on electricity, as well as the necessity to modify some provisions of this Rule for the purposes of shortening of the period for switching. Having completed the procedure, Regulatory Commission made Rule on amendment to the Rule on getting a status of eligible customer in the 6th regular session which was held on 25 March 2010.

#### 2.2.1.2 Decision on the Uniform Regulatory Chart of Accounts and Guidelines for application of the Uniform Regulatory Chart of Accounts

Regulatory Commission, pursuant to its competences referred to in the Law on electricity made, in February 2007, Decision on the Uniform Regulatory Chart of Accounts and Guidelines for application of the Uniform Regulatory Chart of Accounts which are, for the purposes of reporting to the Regulatory Commission, were binding for the companies in the electric power sector which price of the product or service is determined by the Regulatory Commission.

The reason for repeated development of the documents is enforcements of the new Law on accounting and auditing of Republic of Srpska (Official Gazette of Republic of Srpska, number 36/09) which comprises the solution harmonized with requests contained in the European Union Directive and application of the International Accounting Standards and International Accounting Standards and International Standard of Financial Reporting and harmonization with a new balancing accounting framework of Republic of Srpska and extension of competences of the Regulatory Commission to the natural gas sector. Regulatory Commission, having completed the procedure for making documents, in its 7th regular session held on 13 April 2010, adopted Decision on the uniform regulatory chart of accounts and Guidelines for application of the uniform regulatory chart of accounts.

#### 2.2.1.3 Rule book on the licensing

Regulatory Commission made new Rule book on licenses in its 7th regular session held on 13 April 2010.

The basic reason for making new Rule book is extension of competences of Regulatory Commission to other field of energy - natural gas and oil. When it is about the electricity sector, in the new Rule book, there is some streamlining and changes of some provisions compared to the previous version of the Rule book.

#### 2.2.1.4 Rule book on reporting

Regulatory Commission, pursuant to its competences referred to in the Law on electricity in February 2007 made Rule book on reporting which determine in details obligations of the licensees for doing electric power activities to submit reports, data, information and other documents to Regulatory Commission, as well as the content, method and terms of reporting.

Reasons for development of new Rule book on reporting is amendment and extension of the existing templates on reporting pursuant to the requests arose from the reporting obligation of the Energy Community and application of EUROSTAT<sup>1</sup> methodology, and extension of the Regulatory Commission competences to the natural gas sector. Having completed the procedure for making documents, Regulatory Commission in its 12th regular session which was held on 30 June 2010, adopted the Rule book on reporting.

#### 2.2.1.5 General Conditions for delivery and supply of electricity

Having amended provisions of the Law on electricity and having developed some pieces of secondary legislation, it was necessary to amend General conditions for delivery and supply of electricity (hereinafter: General Conditions) for the harmonization purposes with provisions of the Law on electricity and clarification of some provisions based on the past experience in application of General Conditions. Having conducted the prescribed procedures related to drafting and development of the secondary legislation, commencing with the draft documents development, public hearing procedures and the deadline left for submission of the public comments, Regulatory Commission in its 14 regular session, held on 14 August 2010, made Decision on amendment to the General Conditions.

#### 2.2.1.6 Rule book on issuance of certificates for generation facility which generates electricity using renewable energy sources or in efficient co-generation

The Law on energy prescribes in details the method of regulation and use of renewable energy source and efficient co-generation. This law defines competences of Regulatory Commission as well as the ones of the Republic of Srpska Government regarding development of secondary legislation within the scope of this activity. Apart from the above mentioned, the law anticipated development of several separate pieces of secondary legislation, which should be interconnected. Accordingly, Regulatory Commission, with its Conclusion number R-15-602-97/10 in its 15th regular session held on 10 September 2010 terminated the procedure related to development of the Rule on eligible generator and incentives for generation of electricity from renewable sources and co-generation of heat and electricity and the procedure of making Decision on the amount of the premium and feed-in tariffs of electricity generated in the eligible facilities and efficient co-generation facilities which drafts were adopted on 18th April 2008. In the same session, draft Rule on issuance of certificates for generation facility which generates electricity using renewable energy sources of in efficient co-generation

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<sup>1</sup> EUROSTAT is Institution for statistics of the European Union

was determined. During the public hearing process, general public session was held on 28 September 2010. The process related to development of the Rule was continued in 2011. Final making of this Rule and other documents related to stimulation of generation of electricity from renewable sources and efficient co-generation is expected in 2011.

#### 2.2.1.7 Rule book on public hearing and settlement of disputes and complaints

Regulatory Commission made its new Rule book on public hearing and settlement of disputes and complaints in its 12th regular session held on 30 June 2010.

The aim of making this Rule is to provide transparent, efficient and cost-effective public consideration in the procedures related to making general documents, issuance and revocation of licenses for doing energy activities, tariff proceedings and settlement of disputes and complaints in the energy market and making fair decision.

The reason for making new Rule on public hearing and settlement of disputes and complaints was conditioned by provisions of the Energy law and amendment to the Law on electricity which imposed the name and structure of the Regulatory Commission - namely expansion of competences of the Regulatory Commission to other power fields - natural gas and oil. With this Rule, Regulatory Commission prescribes the transparency of its work, settlement of disputes and complaints of participants in the electricity market and settlement of complaints in the market of natural gas and oil and oil derivatives pursuant to provisions of the energy related laws.

#### 2.2.2. Issuance of licenses

One of the key activities of the Regulatory Commission is also the issuance of licenses for doing power activities which it is in charge of, issuance of the license for construction of the electric power facilities of the installed capacity of more than 1 MW, as well as monitoring of the license requirements. Out of total 49 licenses, which are currently effective, there are 37 in the electricity sector; out of them 11 licenses were issued in 2010 while one license was amended as requested by the licensee. Type of the license, license requirements, decision on the license issuance as well as the validity period are published in the Collective register of the issued licenses at the website, [www.reers.ba](http://www.reers.ba).

The table 3 presents the procedures for issuance of licenses for doing activities in the electricity sector and for construction of the electric power facilities, capacity of more than 1 MW which, in 2010, was led by the Regulatory Commission based on the received applications.

Licensee/applicant	Type of the license	Status and Validity period	Remark
"Energolinija" d.o.o. Zvornik	License for generation of electricity	The license issued on 29 January 2010 for the period of two years	
	License for trade and supply with electricity on the territory of BiH	License issued on 30 June 2019 for the period of two years	
ERS d.o.o male hidroelektrane Banja Luka	License for generation of electricity in SHPP "Suceska R-S-1"	License issued on 10 September 2010 for the period of two years	
	License for construction of SHPP "Suceska R-S-2"	License issued on 26 November 2010 for the period of two years	
"Bobar Taubinger Elektrik" d.o.o. Brod na Drini, Foca	License for construction of SHPP "Bistrica B-5a"	Procedure suspended	The application was rejected as incomplete by Conclusion number 01-560-7/10 dated 18 February 2010
	License for generation of electricity in "SHPP Bistrica B-5a"	Ongoing procedure	
"LTS" d.o.o. Banja Luka	License for trade and supply with electricity on the territory of BiH	License issued on 25 March 2010 for the period of two years	
"TECHNOR ENERGY AS" d.o.o. Banja Luka	License for construction of "HPP Cijevna 1" on the Bosna river	Ongoing procedure	
	License for construction of "HPP Cijevna 2" on the Bosna river		
	License for construction of "HPP Cijevna 4" on the Bosna river		

Licensee/applicant	Type of the license	Status and Validity period	Remark
Hidroelektrane "Bistrica" d.o.o. Foca	License for construction of MHPP "Bistrica B-1"	License issued on 23 December 2010 for the period of six years	
	License for construction of MHPP "Bistrica B-2a"	License issued on 23 December 2010 for the period of six years	
	License for construction of MHPP "Bistrica B-3"	License issued on 23 December 2010 for the period of six years	
	License for construction of MHPP "Janjina J-1"	License issued on 23 December 2010 for the period of four years	
MH "ERS" ZEPD "Elektro-Bijeljina" a.d. Bijeljina	License for construction of the substation 35/10 kV Caparde	License issued on 13 April 2010 for the period of three years	
MH "ERS" ZP "Elektro Doboj" a.d. Doboj	License for construction of the HPP "Cijevna 3" on the Bosna river	License issued on 4 August 2010 for the period of five years	
"EFT - Rudnik i Termoelektrana Stanari" d.o.o. Stanari	License for construction of the TPP Stanari - license amendment	License amendment on 26 November 2010	

Table 3 - Overview of procedures following the applications for the license issuance in the electricity sector in 2010

It is necessary to emphasize that procedures of Regulatory Commission are clear and precise and ask for submission of the prescribed documents (evidences) and fulfillment of criteria required for the license issuance. Possible prolongation of the procedure is usually caused by submission of the incomplete documents by the applicant.

### 2.2.3. Monitoring of business activities of the licensees

Monitoring of business activities include monitoring activities carried out in the head office of the licensee and analysis of data and information submitted through the procedure of regular or emergency reporting, and making decisions for

removal of irregularities related to compliance with the issued license requirements.

#### 2.2.3.1. Monitoring

Pursuant to provisions of the Law, Rule book on issuance of licenses and issued licenses, Regulatory Commission in 2010 kept on carrying out monitoring activities of the licensees for doing energy activities and license for construction of the electric power facilities. The plans for monitoring activities were developed on the basis of the determined operational plan of the Regulatory Commission.

Monitoring activities were carried out in order to follow compliance of operation of the licensed companies with the issued license requirements and for the purposes of determination of the level of the conducted measures by the licensees following decisions made during the previous monitoring activities and readiness of some companies for the market opening process. The monitoring activity report contains the situation found regarding compliance of the license requirements and irregularities of the license usage found. Regulatory Commission used to submit the monitoring activity reports with the proposals of the corrective measures for removal of irregularities, being the integral part of the reports, to the licensees to make comments. Having analyzed the submitted reports from the monitoring activities and comments received, Regulatory Commission prescribed in Decision the measures for removal of the failures found with the deadline for doing it as well as reporting on completeness of the prescribed measure for the purposes of compliance with the issued license requirements. The monitoring activities were carried out with the following licensees:

- "Rudnap" d.o.o. Banja Luka, regular monitoring activity of the license for trade and supply with electricity on the territory of BiH;
- Mixed Holding "Elektroprivreda Republike Srpske", parent company a.d. Trebinje, regular monitoring activity of the license for trade and supply with electricity on the territory of BiH;
- MH "ERS" ZEDP "Elektro-Bijeljina" a.d. Bijeljina, regular monitoring activity, licenses for:
  - supply of tariff customers with electricity,
  - distribution of electricity and
  - generation of electricity;
- MH ERS ZP "Hidroelektrane na Trebisnjici" a.d. Trebinje, regular monitoring activity of the license for generation of electricity;
- "ENERGY FINANCING TEAM" d.o.o. Trebinje, regular monitoring activity of hte license for trade and supply with electricity on the territory of BiH and
- MH ERS ZP "Hidroelektrane na Vrbasu" AD Mrkonjic Grad, regular monitoring activity of the license for generation of electricity;

The monitoring reports were made for the following licensees monitored in the fourth quarter of 2009:

- ZP "RiTE Ugljevik", AD Ugljevik, licensee for generation of electricity; the monitoring report and Decision on the measures undertaking submitted to the licensee on 18 February 2010,
- MH "ERS" ZP "Elektro Doboј" AD Doboј, licensee for:
  - supply of tariff customers with electricity and
  - distribution of electricity;
 The monitoring report and Decision on the measures undertaking submitted to the licensee on 1 February 2010,
- "EFT - Rudnik i termoelektrana Stanari" (Mine and TPP Stanari) d.o.o. Stanari, licensee for construction of the electric power facility; the monitoring report and Decision on the measures undertaking submitted to the licensee on 11 March 2010;

#### 2.2.3.2 Reporting

Monitoring of the business activities of the licensee is carried out, apart from the monitoring activities themselves, also through the process of regular reporting. The license requirements prescribe the obligation for the licensees to, during the license validity period, provide Regulatory Commission with the reporting, pursuant to the Rule book on reporting.

During the monitoring activities in the electric power companies, carried out in 2010, the attention was particularly paid and it was insisted on improvement of the reporting process for the purposes of more efficient collection and use of the reliable data which are particularly important during the tariff proceedings, and the monitoring decisions contained the measures related to reporting. It can be noted that there is progress made in reporting, although there should be a lot of work for its complete fulfillment.

#### 2.2.4 Regulation of prices and opening of the electricity market

##### 2.2.4.1 Tariff proceedings

In 2010, there have not been any applications for the prices and tariffs' changing in the electric power sector, so that Regulatory Commission did not conduct any tariff proceedings, while the tariff rates, determined in the tariff proceedings conducted end of 2009, have been applicable as of 1 January 2010.

##### 2.2.4.2 Electricity market

The activities done in the electricity sector may be divided into monopolistic (network activities - control of the transmission and distribution electricity network) and activities that may be done under market circumstances (generation, trade and supply of customers with electricity). Monopolistic activities are subject to the complete regulation of the regulatory authority, while the "market" activities ask for the liberalization process of conditions for their realization, namely introduction of the market mechanisms which will enable realization of their market nature.

Article 1 of the Electricity law prescribes the law objective in a sense that it "tends to promote gradual liberalization of the national electricity market following the principles of non-discrimination and equal treatment of persons and property", while Regulatory Commission, determining the prices for using distribution network and prescribing conditions for the market opening contributes to the realization of this objective.

When it is about the market opening process, one of which aim is to establish the rights to customers to choose the electricity supplier and vice versa, providing equal, transparent and impartial conditions to suppliers to supply the customers with electricity, it is necessary to point out that, regardless of the fact that making Rule on getting a status of eligible customer in 2006 created the basic assumptions for eligible customers (all non-household customers that get such a right on 1 January 2015) to enter the market, so far no customer in Republic of Srpska has exercised such a right.

The Rule on getting a status of eligible customer prescribed that, during the transitional period, which lasts till 1 January 2012, all eligible customers are entitled to choose a supplying method (as eligible or as tariff) and to the supplier of last resort. The Rule also prescribed that the Regulatory Commission would timely, before expiry of the transitional period, define the right of the end user to the universal supplying service with electricity, including the right to the supplier of last resort, as well as the conditions for end users to exercise such a right.

In 2010, Regulatory Commission kept on doing harmonizing activities related to the electricity market opening with other regulatory authorities in Bosnia and Herzegovina, and was analyzing basic preconditions and obstacles for successful functioning of the market in BiH<sup>2</sup> and was following also development of the World Bank Study on the wholesale market opening in Southeastern Europe<sup>3</sup>, and was analyzing its recommendations. Apart from that, the markets in other European countries were analyzed, first of all in the region of Southeast Europe for the purposes of improvement of possibilities for the market opening in RS and BiH and its efficient functioning.

These activities were intensified also during 2011, everything for the purposes of making timely amendments to the Rule book on eligible customer and prescribing the rights of eligible customers after 1 January 2012, when the transitional period expires for eligible customers during which they were entitled to, at their own discretion, be supplied as tariff customers.

## 2.2.5 Protection of electricity customers

### 2.2.5.1 Regulatory framework of the customers' protection

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<sup>2</sup> Document made "Obstacles, preconditions and solutions for successful functioning of the market in BiH"

<sup>3</sup> Poyry Management Consulting, Nord pool Consulting: "South East Europe Wholesale Market Opening", July 2010



Competences of the Regulatory Commission regarding protection of customers were defined by provisions of the Law on electricity. These provisions prescribed that Regulatory Commission was in charge of:

- regulation of quality of services and tariffs, taking into account the interests of customers and needs for company to deliver electricity and natural gas,
- providing transparent and non-discriminatory behavior in the electricity and natural gas markets,
- making measures for prevention of misuse of the monopolistic behavior of the licensees, the licenses for which were issued by Regulatory Commission,
- participation in the settlement of disputes and making agreements between customers and distributors and suppliers of electricity, and between customers and transporters, distributors and suppliers with natural gas,
- providing other indirect objectives of protection of customers while prescribing license requirements for doing certain electric power activities;

The issue of protection of electricity customers was analyzed in Directive 2003/54/EZ. in Annex A of this Directive there are measures for protection of customers including: the right to the contract which contains, inter alia, predefined conditions of supplying, quality of the offered service, obligation of the timely informing customers on conditions and method of the price change, obligation of providing information on prices and tariffs at the standard conditions, the right to choose the payment method, information on the right to universal service for electricity customers.

Regulatory Commission has provided, through provisions of General Conditions for delivery and supply of electricity, a special form of protection of end users of electricity, particularly, vulnerable customers, regarding the assistance measures to avoid disconnection and protection measures of end users in remote areas. These provisions prescribed conditions to disconnect end users from the network, disconnection procedure, and it was particularly prescribed prohibition of disconnection during public holidays, weekend or days when the call center of licensee does not work. It is also prohibited to disconnect end users that use electrical medical equipment for the health purposes. In case of extremely cold days, termination of delivery may be applied only as the emergency case.

Regulatory Commission enabled equal treatment and non-discrimination of end users regarding conditions for connection of structures to the distribution network by making Rule book on methodology for determination of the fee for connection to the distribution network as well as by approving types of connection and fee for connection to the distribution network.

Tariff rates for distribution system users and tariff rates for non-eligible customers of electricity pursuant to provisions of the Rule book on tariff methodology and tariff proceeding, determined by Regulatory Commission, provided that prices of electricity should be determined on the basis of the predefined methodology, based on the objective criteria, published before application and applied without discrimination, as prescribed by provision of Article 3 of Directive 2003/54/EZ.

Provisions of this Rule book did not anticipate determination of tariff rates for particularly vulnerable categories of electricity customers. Subsidizing these customers in 2010, was made pursuant to the Program of protection of socially vulnerable categories of electricity customers, which was made in December 2007.

#### 2.2.5.2 Settlement of disputes

Pursuant to provisions of Article 28 of the Law on electricity, Regulatory Commission is in charge of settlement of disputes on the electricity market, as requested by the beneficiary, regarding:

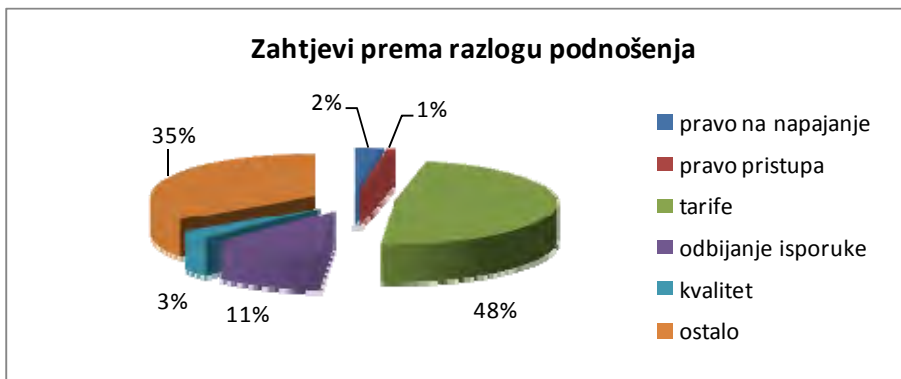
- the right to be supplied with electricity,
- the right of access to the distribution network,
- obligation of delivery of electricity,
- tariffs at which electricity is delivered,
- terminations in electricity supply,
- refusal to deliver electricity and
- quality of electricity supply;

In 2010, Regulatory Commission was submitted 306 requests of end users for settlement of disputes between the participants in the electricity market.

Number of the submitted requests, regarding their reasons for submission is as follows:

- 8 applications regarding the right to be supplied with electricity,
- 2 applications regarding the right of access to the distribution network,
- 147 applications regarding the tariffs at which electricity is delivered,
- 33 applications regarding the refusal to deliver electricity,
- 10 applications regarding the quality of electricity supply,
- 106 applications of other reasons (debt write-off, barred debt, measuring).

Picture 1 presents the applications according to the reason for submission. It is obvious that the most typical reason for submission of application for settlement of disputes related to tariffs at which electricity is delivered.



Picture 1 - Requests for settlement of disputes according to the reason for submission

Out of 306 applications submitted for settlement of disputes in 2010, on 31 December 2011, the level of settled cases was as follows:

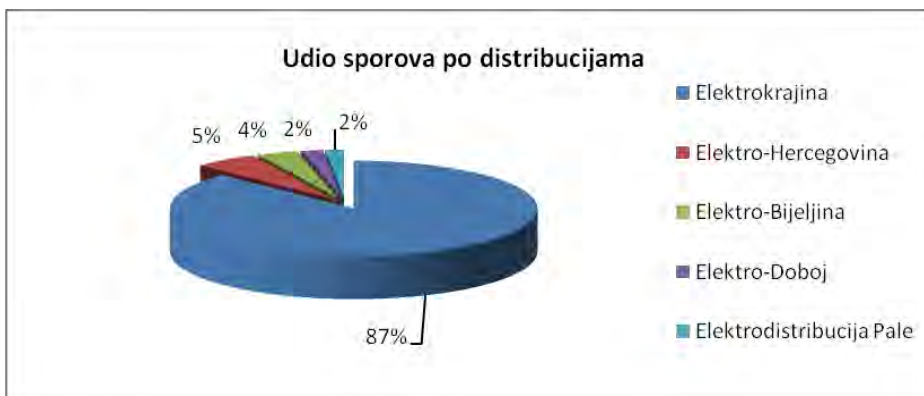
- 292 applications were solved (final decisions or answers to end users) and
- 14 applications were in the process of settlement;

In the moment of preparing this report, all applications for settlement of disputes, submitted in 2010, were solved.

Number of applications for settlement of disputes submitted by end users from distribution areas of some electric power companies in 2010 is as follows:

- 267 applications were submitted by end users from the region covered by MH ERS ZP "Elektrokrajina" a.d. Banja Luka,
- 17 applications were submitted by end users from the region covered by MH ERS ZP "Elektro-Hercegovina" a.d. Trebinje,
- 11 applications were submitted by end users from the region covered by MH ERS ZEDP "Elektro-Bijeljina", a.d. Bijeljina,
- 6 applications were submitted by end users from the region covered by MH "ERS" ZP "Elektro-Doboj", AD Doboj,
- 5 applications were submitted by end users from the region covered by MH ERS ZP "Elektrodistribucija" a.d. Pale

Picture 2 presents the percentage share of disputes per distribution companies of the licensees for distribution and supply with electricity in Republic of Srpska.



Picture 2 - Percentage share of disputes per distribution companies in RS

### 2.2.5.3. Settlement of complaints

Pursuant to provisions of the Article 72 of the Law on electricity, Regulatory Commission is in charge of settlement of complaints following decision of distributor on issuance of the electric power consent for connection and offered contract on connection.

In 2010, Regulatory Commission was addressed and it solved six complaints of end users regarding the issued complaints on the electric power consent and conclusion of the contract on connection, out of which five complaints were from the region covered by MH ERS ZP "Elektro-Herzegovina" a.d. Trebinje and one from the region covered by MH ERS ZP "Elektrokrajina" a.d. Banja Luka.

#### 2.2.5.3 Administrative disputes

The final decisions made by the Regulatory Commission in the dispute settlement procedure, two appeals were lodged for the purposes of estimation of validity of these decisions before the District Court in Trebinje, as the competent court for this field. Deciding upon the lodged appeals in the administrative dispute, the court made valid decisions rejecting the lodged appeals of end users as being non-founded.

### 2.3. Regulation of the natural gas sector

#### 2.3.1. Development and approval of rules and regulations

Decision on the Uniform Regulatory Chart of Accounts and Guidelines for application of the Uniform Regulatory Chart of Accounts as described in 2.2.1.2 as well as the Rule book on issuance of licenses (point 2.2.1.3), Rule book on reporting (point 2.2.1.4) and Rule book on public hearings and settlement of disputes and complaints (point 2.2.1.7) made in 2010 are also related to the activities carried out in the natural gas sector.

In 2010, in the natural gas sector, the consent was given to the "Rules of operation of the natural gas transport network in Republic of Srpska - Joint-stock company for import, supply and transport of natural gas "Gas Promet" a.d. Istocno Sarajevo-Pale. The licensee published the mentioned documents in the Official Gazette of Republic of Srpska and on its website.

#### 2.3.2 Issuance of licenses

Pursuant to the Law on energy and Gas law in Republic of Spska and secondary legislation of Regulatory Commission, in order to keep on conducting competences related to regulation of the natural gas sector, in 2010 there was a procedure conducted related to issuance of the license for trade and supply with natural gas to the company "Gas Promet" a.d. Istocno Sarajevo-Pale, that was issued the license for doing activity on 25 February 2010 for the validity period of five years. Currently, in the natural gas sector, there are 10 valid licenses for doing activity.

#### 2.3.2. Monitoring of business activities of the licensees

##### 2.3.3.1 Monitoring

Monitoring activities in the natural gas sector are carried out for the purposes of following compliance of work of the licensed companies with the license requirements. The monitoring report contains the situation found regarding compliance with the

license requirements and irregularities found while using the license. The monitoring reports, which integral part represents the proposal of the corrective measures for removal of irregularities are submitted by the Regulatory Commission to the licensees for commenting. Having analyzed the submitted reports from the monitoring visits and comments received, Regulatory Commission prescribes with Decision the measures for removal of the irregularities found which also contain the deadline for removal of failures.

In 2010, the monitoring activity was carried out in the company AD "Zvornik-stan" Zvornik, the licensee for doing the following activities:

- distribution and control of the system for the natural gas distribution,
- supply of tariff customers with natural gas and
- trade and supply with natural gas;

Decision on undertaking measures was made in the 19th regular session of the Regulatory Commission held on 23 December 2010.

#### 2.3.3.2 Reporting

The Rule book on reporting which was made in the 12th regular session, held on 30 June 2010, prescribed the methods and forms for reporting which the licensees from the natural gas sector are obliged to submit to the Regulatory Commission within the prescribed deadlines. Since the second half of 2010, the companies have been submitting reports to the Regulatory Commission.

#### 2.3.4 Regulation of prices and opening of the natural gas market

##### 2.3.4.1 Tariff proceedings

In 2010, Regulatory Commission gave its consent to the change of tariff rates for supply of tariff customers of the company "Sarajevo-gas" a.d. Istocno Sarajevo.

The application for approval of tariff rates for supply of tariff customers with natural gas was submitted on 6 May 2010 pursuant to the provision of the Article 44 paragraph 2 of the Rule book on tariff methodology in the system of transport, distribution, storage and supply with natural gas prescribing that the supplier may correct the price of natural gas in case the natural gas procurement price changes. Namely, as the procurement price of natural gas was changed from 0.55 BAM/Sm<sup>3</sup> to 0.68 BAM/Sm<sup>3</sup>, Regulatory Commission, with its decision dated 13 May 2010, gave its consent to the tariff rates for supply of tariff customers which the company "Sarajevo-gas" a.d. Istocno Sarajevo submitted in its application. Tariff rates have been applicable since the date Decision made by the Regulatory Commission became effective, although the applicants asked for application as of 1 April 2010. The requested date is the commencement of application of new procurement gas price which was determined by the Bosnia and Herzegovina Government retroactively, as requested by the company "BH-Gas" d.o.o. Sarajevo.

The tariff rate for consumption of natural gas which has applicable for tariff customers of the company "Sarajevo-gas" a.d. Istocno Sarajevo was changed from 0.66604 BAM/m<sup>3</sup> to 0.79604 BAM/m<sup>3</sup> while the fee for the metering point remained unchanged and it amounts to 3.00 BAM/metering point.

#### 2.3.4.2 Natural gas market

The activities of transport and distribution of natural gas and storage of natural gas are, as monopolistic activities, the subject of full regulation by the competent authority, while generation, trade and supply of customers with natural gas are activities which may be conducted within market circumstances and require the process of liberalization of conditions for their realization, namely introduction of such market mechanisms in which their market nature may be achieved.

For the purposes of better organization, regulation and functioning of the natural gas sector and providing safety of supply and natural gas system development, the Law on gas prescribes that the Regulatory Commission determines methodology for calculation of costs of generation, transport, distribution, storage and supply with natural gas and methodology for calculation of costs of connection to the network, and in order to prevent misuse of the monopolistic position it gives its consent to the energy undertakings for the price of supply tariff customers with natural gas and prices of access and use of transport and distribution system or storage.

Having made the Law on gas in Republic of Srpska, Regulatory Commission has, pursuant to its competences, initiated the conduct of activities related to the natural gas market. According to the Law on gas, all non-household customers are eligible customers, so accordingly Regulatory Commission made the tariff methodology in 2008, according to which it gives the consent to the tariff rates for supply only for tariff customers (households). However, regardless of a possibility of a part of customers to be supplied as eligible, the fact that "BH-Gas" d.o.o. Sarajevo is the only supplier of natural gas in BiH Federation, where there is neither appropriate regulatory framework nor transparent access to determination of the natural gas transport and procurement price) is a serious obstacle for the market opening.

#### 2.3.5 Protection of the natural gas customers

##### 2.3.5.1 Regulatory framework for protection of the natural gas customers

Competences of the Regulatory Commission related to the protection of customers have been defined by the Gas law. These provisions prescribe that Regulatory Commission is in charge of:

- regulation of quality of services and tariffs, taking into account the interests of customers and needs for company to deliver electricity and natural gas,
- direction of development of the natural gas market following the principle of non-discrimination, competition, transparency and confidentiality of commercial secrets of the participants in the natural gas market and
- settlement in the second instance following the appeal (complaint) for decisions of the transport or distribution system operator in the procedure of giving consent to the access and use of transport or distribution network or

storage, as well as in the procedure of giving consent for connection to the transport or distribution network.

The issue of the protection of the natural gas customers was regulated also in Directive 2003/55/EZ. In Annex A of this Directive, there are measures for protection of customers which include: the right to the contract which contains, inter alia, previously defined conditions for supply, quality of the offered service, obligation of providing timely information for customers, the right to the fee and indemnification, settlement of disputes and other issues, the obligation of timely providing information on conditions and method of change of the price, obligation to provide information on prices and tariffs at standard conditions, the right to choose the method of payment.

Regulatory Commission, having adopted the Rule on licenses and Rule on tariff methodology in the system of transport, distribution, storage and supply with natural gas and having given the consent to the General conditions for supply with natural gas, has created the initial conditions for following and enabling protection of natural gas end users within the scope of its competences arising from the Law on gas.

#### 2.3.5.2 Settlement of disputes and complaints

Pursuant to the provision of the Article 4 point d) of the Law on gas, Regulatory Commission is in charge of solving in the second instance per the complaint on decision of the transport or distribution system operator in the approval procedure for access and use of transport or distribution network or storage and in the procedure for approval for connection to the transport or distribution network. In 2010, there were not any appeals lodged against operator's decisions.

### 2.4 Regulation of the sector of oil and oil derivatives

#### 2.4.1 Making and approval of rules and regulations

In order to carry out regulatory competences in the sector of oil and oil derivatives, pursuant to the Law on energy and Law on oil and oil derivatives in Republic of Srpska, Regulatory Commission made new Rule book on issuance of licenses (points 2.2.1.3), Rule book on public hearing and settlement of disputes and complaints (point 2.2.1.7) which was made in 2010 is also related to the activities carried out in the sector of oil and oil derivatives.

The rule book on licenses includes the expansion to the sector of oil and oil derivatives, prescribes the procedure for issuance, extension, amendment, transfer, cancellation and revocation of licenses, as well as the license requirements.

#### 2.4.2. Issuance of licenses

Pursuant to the Law on energy and Law on oil and oil derivatives, the energy undertaking is in charge to be the licensee for the following activities: generation of oil derivatives, transport of oil through the oil pipelines, transport of oil derivatives

through the oil derivatives pipelines and storage of oil and oil derivatives. Pursuant to the Law on energy and Law on oil and oil derivatives and secondary legislation of Regulatory Commission, in order to conduct the competences regarding the regulation of sector of oil and oil derivatives, in 2010 the proceedings were conducted and three licenses were issued as presented in the Table 4.

Licensee/applicant	The license type	Status and validity period	Remark
"Rafinerija nafte" a.d. Brod	License for production of oil derivatives	License issued on 26.11.2010. validity period is 5 years	
	License for storage of oil and oil derivatives	License issued on 26.11.2010. Validity period is 5 years	
"OPTIMA GRUPA" d.o.o Banja Luka	License for generation of oil derivatives	Procedure terminated	Conclusion number. 01-575-5/10 dated 26.11.2010. terminated the procedures related to the license issue as requested by the applicant
	License for storage of oil and oil derivatives	Procedure terminated	
"Rafinerija ulja Modriča" a.d. Modriča	License for generation of oil derivatives	Procedure suspended	Conclusion number R-19-817-142/10 dated 23.12. 2010. rejected the application for the license issue due to the absence of competence
	License for storage of oil and oil derivatives	License issued on 23.12.2010 - 5 years of validity period	

**Table 1** - Issued licenses and procedures in the sector of oil and oil derivatives

### 2.4.3. Monitoring of business activities of the licensees

#### 2.4.3.1 Monitoring

In 2010, there were not monitoring activities with the licensees in the sector of oil and oil derivatives since the licenses in this sector were issued end of 2010. Pursuant to its competences, Regulatory Commission will be doing monitoring activities in the license validity period with all licensees.

#### 2.4.3.2 Reporting

Licenses for doing activities in the sector of oil and oil derivatives prescribe the deadlines for submission of financial and technical data to the Regulatory Commission.



## 2.4.4 Regulation of prices and opening of the oil and oil derivatives market

### 2.4.4.1 Tariff proceedings

In 2010, there were not any tariff proceedings, namely Regulatory Commission did not approve the prices for using the oil pipelines, namely oil derivatives pipelines.

### 2.4.4.2 Oil and oil derivatives market

Pursuant to the Law on oil and oil derivatives, the prices of oil derivatives are created pursuant to the market conditions.

For the purposes of regulation and functioning of the sector of oil and oil derivatives, Law on oil and oil derivatives prescribes that the Regulatory Commission determines methodologies for calculation of costs of the oil transport through the oil pipelines and oil derivatives transport through the oil derivatives pipelines, makes tariff system for calculation of prices for using the oil pipelines namely oil derivatives pipelines and approves prices for using oil pipelines, namely oil derivatives pipelines.

Also, Regulatory Commission is in charge of following application of tariff system and methodologies for access and use the oil pipelines, namely oil derivatives pipelines.

## 2.4.5. Protection of customers

### 2.4.5.1 Regulatory framework of protection of customers

Pursuant to provisions of Article 9 point d) of the Law on oil and oil derivatives, it is prescribed that the Regulatory Commission is in charge of settlement of disputes in the second instance on the complaint.

### 2.4.5.2 Settlement of disputes and complaints

In 2010, there were not any submitted complaints from the sector of oil and oil derivatives in a sense of provisions of the Article 9 of the Law on oil and oil derivatives.

## 2.5. Cooperation

### 2.5.1 Energy Community

Bosnia and Herzegovina is a party to the Treaty on establishment of the Energy Community. The aim of this Treaty is to create a stable regulatory and market framework which may attract investments in the sectors of electricity and natural gas in the region and provide for long term safety of supply with these energy items.

Having signed the Treaty, Bosnia and Herzegovina has accepted the EU acquis in the fields of energy and committed itself to harmonize its legislations with EU acquis following the deadlines prescribed by the Treaty.

Employees and members of the Regulatory Commission took part in the following events, organized by the Energy Community Secretariat:

- Seminar on improvement of quality of service of supply with electricity,
- RES Task Force meetings (one member of the TF, representative of BiH/RS is employed by the Regulatory Commission),
- Investment Conference on energy efficiency and RES,
- Seminar on the Third package of EU regulations on internal energy market,
- Seminar on energy statistics,
- Seminar on methods of improvement of share of customers in the regulatory process,
- Seminar on market monitoring,
- Seminar on reduction of the harmful emissions in the energy sector,,
- The fifth gas forum,
- 16th electricity forum,
- 2nd oil forum and
- Seminar on natural gas market models;

Costs of participations in the events organized by the EcS, for representatives of the Regulatory Commission are partly borne by organized. Also, the costs of participation in some other seminars are partly covered by the organizer.

#### 2.5.2. ERRA - Regional Energy Regulatory Authorities Association

ERRA is a voluntary association of the energy regulatory authorities consisted of the independent regulatory authorities firstly from the central Europe and EuroAsia, and authorities from Asia and Middle East and USA.

ERRA has got 24 full and 6 associate members. Association was officially registered in Hungary in April 2011. Aims of ERRA are improvement of regulation of the energy activities in the parties, strengthening of development of stable and independent regulatory authorities for the purposes of improvement of their mutual cooperation. Apart from that, the Association tends to improve exchange of information, research and experiences among the members, better access to information and experiences in the world regarding regulation of energy and organization of the continued education.

At the general assembly which was held within the scope of the Ninth conference on energy investment and regulation in Budapest on 21 April 2010, Regulatory Commission for energy of RS got the status of the associate ERRA member.

As the associate ERRA member, employees of RC take part in the work of two permanent committees (for the licenses and tariffs) and one working group (for legal issues). Meetings of the permanent committees and working groups are held three times a year. In the past year, employees of RC took part in: the meeting of the permanent committee for licenses and working group for legal issues, in September 2010 in Sarajevo and in the meeting of the permanent committee for tariffs in October 2010 in Istanbul.

#### 2.5.2 Cooperation with other regulatory commissions

Regulatory Commission for energy of Republic of Srpska cooperates with other two commissions operating in BiH: State regulatory commission for electricity (SERC) and

Regulatory Commission for electric energy in BiH Federation (FERC) regarding making of rules and regulations within the scope of its competences, as well as regarding exchange of experiences and know-how from some particular fields of the regulatory competences.

End of 2009, regulatory commissions acting in BiH created a working group for the market opening. The work of the mentioned working group was continued in 2010, whereby the attention was paid to the analysis of obstacles, preconditions and decisions for successful functioning and opening of the electricity market in BiH.

#### 2.5.4 Cooperation with the Ministry of industry, energy and mining of RS]

Regulatory Commission in 2010 was actively cooperating with the Ministry of industry, energy and mining of RS in order to meet common objectives related to functioning of the energy sector of RS and BiH. Cooperation with the ministry included, among other things, exchange of the opinions within the following activities:

- Following development of the Strategy of development of energy of RS and giving comments,
- Amendments to the law on electricity as well as the problem solving of electricity supply in Brcko District,
- Development of Decree of the RS Government on RES,
- Development of Decree on safety of supply and delivery of natural gas,
- Participation in work of the working group for development of the map road for energy efficiency and
- consultations regarding Energy community activities

#### 2.5.5. Cooperation with other institutions

In 2010, within EBRD program of direct financing of the sustainable energy projects for the West Balkans entitled Construction of the institutional capacities, for the region of BiH, the support project for the regulatory authorities in BiH was developed such as: Overview of procedures and fee for access to the network for the RES projects and Review of the existing system of the incentive tariffs.

In 2010, Regulatory Commission was successfully cooperating also with the Ministry of foreign trade and economic affairs of BiH, in order to meet obligations arising from signing international contracts.

Representatives of USAID project entitled Assistance to the regulation and reform of the energy sector (REAP project), which has been effective since 2007 take part in work of the working group for the market. Within the scope of comprehensive activities, with their assistance, several seminars on the market opening were held.

#### 2.5.6. Participation in the work of workshops, conferences and seminars

In 2010, members and employees of the Regulatory Commission took part in the work of workshops, conferences and seminars related to the regulation of the energy sector and which aim was improvement of work of this sector. Presence and participation of

members and employees in the work of these seminars is firstly for the purposes of better capacity building and improvement, related to, inter alia:

- monitoring of the energy market,
- regulation of prices and tariffs,
- renewable energy sources,
- regulation of the natural gas sector,
- regulation of the oil sector,
- investment in the energy sector,
- international accounting standards,
- protection of the environment and challenges of the climate changes,
- energy efficiency,
- energy future of the Balkans,

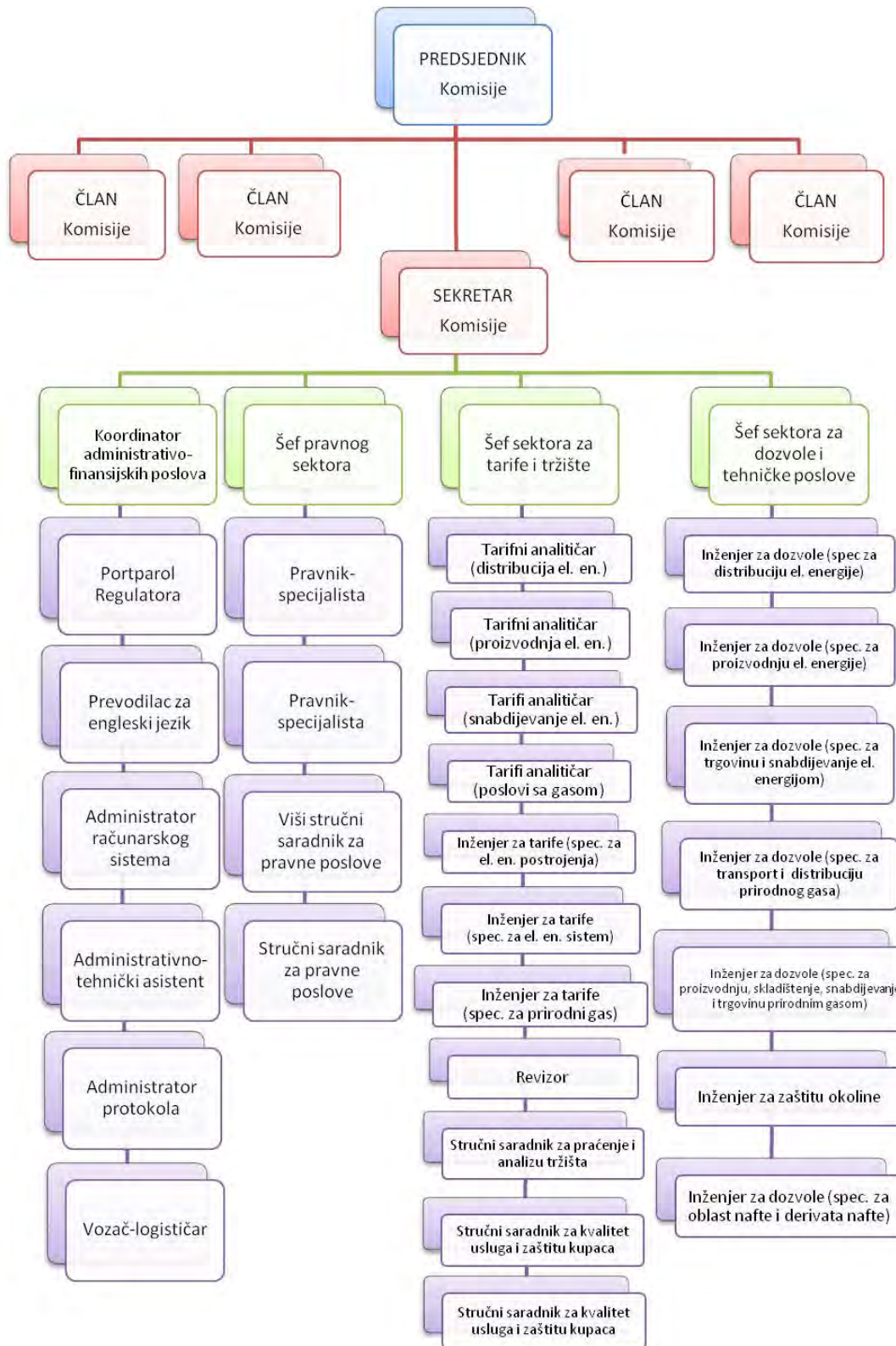
Providing presence and active work in the mentioned events, representatives of the Regulatory Commission give support to better formulation of measures and directions of acting, and representation of interests of the energy sector from Republic of Srpska in an appropriate way.

### 3. Employees, organization and transparency of work

#### 3.1. Employees and organization of work of the Regulatory Commission

There are 32 employees in the RC, including its members. The work of the employees in the RC is organized in four sectors and all employees meet the prescribed conditions and are professionally qualified for the works they do.

According to the Project of employment of the trainees in RS, Regulatory Commission provide employment for one trainee in the process of the public competition.



Picture 3 - Organizational chart

### 3.2. Transparency of work of the Regulatory Commission

The scope of work of the Regulatory Commission is full open to the public, namely it is accessible to the public.

All decisions and rulings within the scope of the regulatory competence made by the Regulatory Commission for energy of RS are published in the Official Gazette of RS and its website.

In the proceedings related to the approval of tariffs, issuance of licenses, protection of customers namely settlement of disputes and while creating documents which define doing activities from the regulatory competences, Regulatory Commission organizes public hearings such as: general, technical and formal hearings open for the public. Information on the holding public hearings is published in the newspapers, website of RC as well as its notice board. Interested parties, while submitting written comments, are entitled to take part in the proceedings lead before the Regulatory Commission. Accordingly, one helps checking the correctness of the proposed decisions before their final adoption.

Regulatory Commission for energy is also open for issues, either oral or written form, of the representatives of media regarding its work. In that way, the public is properly directed and informed about the directions of activities and clear pictures is created on the role of the Regulatory Commission in the energy sector.

## 4. FINANCING OF THE REGULATORY COMMISSION

### 4.1. Financing

Article 24 paragraph 1 of the Law on energy and Article 25 of the Statute of the Regulatory Commission for energy of RS prescribes that the financing of work of the Regulatory Commission for energy of RS is provided from the annual fees from the energy undertakings, licenses for doing one or more energy activities and one-off fees for licenses they issue.

Article 26 of the Statute of the Regulatory Commission prescribes that the activity of the RC may be financed also from donations on non-returnable basis by the government and non-government organizations.

Regulatory Commission in its 79 internal meeting held on 9 November 2009, determined the Budget proposal for 2010 which was adopted in the 35 session of the National Assembly of RS which was held on 17 February 2010.

This analysis of the Budget realization for 2010 is adapted to the form according to which the Budget was adopted.

## BUDGET REALIZATION FOR 2010

SINTETIČKI PRIKAZ

Stanje na dan 31.12.2010.

I PRIHODI					
R. br.	OPIS	Budžet za 2010.	Ostvarenje do 31.12. 2010	Učešće u ostv. prihodima	% ostvarenja prihoda
1	2	3	4	5	6
1.	Prihodi od regulatornih naknada od licenciranih korisnika koji obavljaju elektroenergetsku i gasnu djelatnost	2.292.970	2.314.626	110,59	100,94
2.	Uplaćena jednokratna naknada u 2010. godini	0	30.680	1,47	
3.	Ostali prihodi	3.430	8.942	0,43	260,70
	<b>UKUPNI PRIHODI</b>	<b>2.296.400</b>	<b>2.354.248</b>	<b>112,48</b>	<b>102,52</b>
	Povrat regulatorne naknade	0	261.244	12,48	
	<b>Ukupni prihodi po izvršenom povratu reg. naknade</b>	<b>2.296.400</b>	<b>2.093.004</b>	<b>100,00</b>	<b>91,14</b>
I RASHODI					
R. br.	OPIS	Budžet za 2010.	Ostvarenje do 31.12. 2010	Učešće u ostv. rashodima	% ostvarenja rashoda
1	2	3	4	5	6
<b>A</b>	<b>TEKUĆI TROŠKOVI</b>	<b>2.228.400</b>	<b>2.058.704</b>	<b>98,36</b>	<b>92,38</b>
1.	Troškovi materijala, goriva, energije i grijanja	82.000	76.756	3,67	93,60
1.1.	Troškovi materijala	28.000	27.936	1,33	99,77
1.2.	Troškovi goriva energije i grijanja	54.000	48.820	2,33	90,41
2.	Troškovi bruto zarada i naknada i ost. ličnih pr.	1.712.000	1.658.593	79,24	96,88
2.1.	Troškovi bruto zarada i naknada	1.599.000	1.595.948	76,25	99,81
2.2.	Troškovi dnevnica na službenom putu	48.000	24.372	1,16	50,78
2.3.	Troškovi prevoza i smještaja na službenom putu	65.000	38.273	1,83	58,88
3.	Troškovi proizvodnih usluga	179.900	175.063	8,36	97,31
3.1.	Troškovi komunalnih usluga	37.500	37.409	1,79	99,76
3.2.	Troškovi održavanja	15.400	12.956	0,62	84,13
3.3.	Zakupnina imovine i opreme	127.000	124.698	5,96	98,19
4.	Nematerijalni troškovi	164.500	82.251	3,93	50,00
4.1.	Troškovi osiguranja	13.000	6.559	0,31	50,45
4.2.	Troškovi bankarskih usluga	2.000	652	0,03	32,60
4.3.	Ugovorene i ostale usluge	149.500	75.040	3,59	50,19
5.	Rashodi po osnovu ispravke potraživanja	0	34.300	1,64	
6.	Amortizacija	90.000	66.041	3,16	73,38
<b>B</b>	<b>KAPITALNI RASHODI</b>	<b>0</b>	<b>0</b>	<b>0,00</b>	
1.	<b>NABAVKA OPREME</b>	<b>248.000</b>	<b>186.669</b>	<b>8,92</b>	<b>75,27</b>
1.1.	Nematerijalna ulaganja (DMS)	140.000	82.684	3,95	59,06
1.2.	Računarska oprema	25.000	23.205	1,11	92,82
1.3.	Fiksni telefoni	3.000	2.185	0,10	72,83
1.4.	Namještaj-	8.000	7.769	0,37	97,11
1.5.	Automobili	70.000	69.913	3,34	99,88
1.6.	Ostalo	2.000	913	0,04	45,63
1.7.	<b>UKUPNI RASHODI</b>	<b>2.296.400</b>	<b>2.093.004</b>	<b>100,00</b>	<b>91,14</b>
A+B	<b>Razlika (prihodi - rashodi)</b>		0		

Table 5 - Budget realization

The calculated means in 2010, per all bases amount to 2,354,248 BAM which is 2,52% more than compared to the planned amount of 2,296,400. The difference is related to payment of the regulatory fees for licences issued in 2010, one-off regulatory fees for issuance of licenses, financial and other revenues.

Out of total calculation, the revenue was made of 2,093,004 BAM such as:

- based on the regular regulatory fee	2,053,382 BAM
- based on the one-off regulatory fee	30,680 BAM
- based on the financial revenues	892 and
- from other sources	8,050 BAM

In 2010, total expenditures amounted to 2,093,004 BAM and they are less compared to the adopted budget for 8,86%.

While realizing certain costs, Regulatory Commission was carefully planning its needs, taking into account the adopted budget and not to exceed it as it can be seen from the table overview.

Regulatory Commission approved the licenses and transferred to the next year the amount of 261,244 BAM which is the difference between the calculated and spent means in 2010.

#### 4.2. Audit report

Statute of the RC for Energy of RS anticipates the obligatorily annual audit of financial reports.

While preparing for making final statement for 2010, on 11 October 2010, invitation for selection of the independent auditor was made pursuant to the Law on procurement of goods, services and works.

Upon the conducted procedure, on 25 November 2010, an independent auditor "EF Revizor" Banja Luka was chosen that made audit of the financial reports, expressed its audit report and submitted report on 28 March 2010 from which we give the Report of the independent auditor, Balance sheet - short version and Profit and loss statement - short version.





**Predsjedniku i članovima Regulatorne komisije za energetiku Republike Srpske Trebinje****IZVJEŠTAJ NEZAVISNOG REVIZORA**

Obavili smo reviziju priloženih finansijskih izvještaja Regulatorne komisije za energetiku Republike Srpske Trebinje (u daljem tekstu „Regulatorna komisija“), Revizijom su obuhvaćeni bilans stanja, na dan 31. decembra 2010. godine, bilans uspjeha za godinu koja se završava na taj dan, kao i pregled značajnih računovodstvenih politika i napomena uz finansijske izvještaje.

*Odgovornost rukovodstva za finansijske izvještaje*

Rukovodstvo je odgovorno za sastavljanje i objektivnu prezentaciju finansijskih izvještaja, u skladu sa Računovodstvenim propisima Republike Srpske, kao i za interne kontrole koje su relevantne za pripremu finansijskih izvještaja koji ne sadrže pogrešne informacije od materijalnog značaja, nastale usljed neregularnosti ili greške.

*Odgovornost revizora*

Naša odgovornost je da izrazimo mišljenje o priloženim finansijskim izvještajima na osnovu obavljene revizije. Reviziju smo obavili u skladu sa Međunarodnim standardima revizije i Zakonom o računovodstvu i reviziji Republike Srpske. Ti standardi nalažu usaglašenost sa etičkim principima, kao i da reviziju planiramo i obavimo na način koji omogućava da se, u razumnoj mjeri, uvjerimo da finansijski izvještaji ne sadrže pogrešne informacije od materijalnog značaja.

Revizija uključuje sprovođenje postupaka u cilju pribavljanja revizijskih dokaza o iznosima i informacijama objelodanjenim u finansijskim izvještajima. Odabrani postupci su zasnovani na prosuđivanju revizora, uključujući procjenu rizika materijalno značajnih grešaka sadržanih u finansijskim izvještajima, nastalih usljed neregularnosti ili greške. Prilikom procjene tih rizika, revizor razmatra interne kontrole koje su relevantne za sastavljanje i objektivnu prezentaciju finansijskih izvještaja, u cilju osmišljavanja najboljih mogućih revizorskih procedura, ali ne u cilju izražavanja mišljenja o efikasnosti sistema internih kontrola pravnog lica. Revizija, takode, uključuje ocjenu primijenjenih računovodstvenih politika i vrednovanje značajnih procesa koje je izvršilo rukovodstvo, kao i ocjenu opšte prezentacije finansijskih izvještaja.

Smatramo da su revizijski dokazi koje smo pribavili dovoljni i odgovarajući, te da obezbjeđuju razumnu osnovu za izražavanje našeg mišljenja.

*Mišljenje bez rezerve*

Po našem mišljenju, finansijski izvještaji istinito i objektivno, po svim materijalno značajnim pitanjima, prikazuju finansijski položaj Regulatorne komisija, na dan 31. decembra 2010. godine, kao i rezultate njegovog poslovanja za godinu koja se završava na taj dan.

**EF REVIZOR d.o.o.**

Banja Luka Gajeba brj 12

Datum: 28.03.2011. godine

Ovlašćeni revizor

Milo Rosić



**BALANCE SHEET - short versions  
on 31.12.2010**

u

KM

POZICIJA	Broj note	Iznos tekuće godine			Iznos prethodne godine (početno stanje)
		Bruto	Ispr. vrijed.	Neto (3-4)	
1	2	3	4	5	6
<b>A. AKTIVA</b>		<b>1.076.598</b>	<b>368.852</b>	<b>707.746</b>	<b>618.099</b>
<b>I STALNA SREDSTVA</b>		<b>639.186</b>	<b>337.310</b>	<b>301.876</b>	<b>184.007</b>
Goodwill		0	0	0	0
Ostala nematerijalna sredstva		84.455	10.313	74.142	1.502
Nekretnine, postrojenja i oprema		554.731	326.997	227.734	182.505
Biološka imovina i sredstva kulture		0	0	0	0
Učesća u kapitalu		0	0	0	0
Ostali dugoročni plasmani		0	0	0	0
<b>II TEKUĆA SREDSTVA</b>		<b>437.412</b>	<b>31.542</b>	<b>405.870</b>	<b>434.092</b>
Zalihe i dati avansi		0	0	0	0
Sredstva klasifikovana kao sredstva namijenjena za prodaju		0	0	0	0
Potraživanja od prodaje i druga potraživanja		137.058	31.542	105.516	39.767
Kratkoročni finansijski plasmani		0	0	0	0
Gotovina i ekvivalenti gotovine		300.354	0	300.354	394.325
Aktivna vremenska razgraničenja		0	0	0	0
<b>III ODLOŽENA PORESKA SREDSTVA</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>IV GUBITAK IZNAD KAPITALA</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>B. IZVORI SREDSTAVA</b>		<b>707.746</b>	<b>0</b>	<b>707.746</b>	<b>618.099</b>
<b>I KAPITAL KOJI PRIPADA VLASNICIMA MATIČNOG PREDUZEĆA</b>		<b>276.046</b>	<b>0</b>	<b>276.046</b>	<b>276.046</b>
<b>II MANJINSKI INTERES</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>III DUGOROČNE OBAVEZE</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Dugoročna rezervisanja		0	0	0	0
Dugoročne finansijske obaveze		0	0	0	0
<b>IV KRATKOROČNE OBAVEZE</b>		<b>431.700</b>	<b>0</b>	<b>431.700</b>	<b>342.053</b>
Kratkoročne finansijske obaveze		0	0	0	0
Kratkoročne obaveze klasifikovane u grupu sa sredstvima namijenjenim za prodaju ili otuđenje		0	0	0	0
Obaveze prema dobavljačima i druge obaveze		431.700	0	431.700	342.053
Tekuće obaveze za porez na dobit		0	0	0	0
Pasivna vremenska razgraničenja		0	0	0	0
<b>V ODLOŽENE PORESKE OBAVEZE</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

Table 6 - Balance sheet

**PROFIT AND LOSS STATEMENT - short verion**  
**From 01.01. to 31.12.2010.**

u KM

POZICIJA	Broj note	IZNOS	
		Tekuća godina	Prethodna godina
1	2	3	4
<b>POSLOVNI PRIHODI</b>		<b>2.084.062</b>	<b>1.779.783</b>
Prihodi od prodaje		0	0
Ostali poslovni prihodi		2.084.062	1.779.783
<b>POSLOVNI RASHODI</b>		<b>2.058.615</b>	<b>1.781.687</b>
Nabavna vrijednost prodane robe		0	0
Troškovi materijala		76.756	64.698
Troškovi bruto zarada, naknada zarada i ostali lični rashodi		1.658.593	1.344.776
Troškovi amortizacije		66.041	73.855
Ostali poslovni rashodi		257.225	298.358
<b>POSLOVNI DOBITAK (GUBITAK)</b>		<b>25.447</b>	<b>827</b>
Finansijski prihodi		892	827
Finansijski rashodi		89	0
Ostali prihodi		8.050	1077
Ostali rashodi		34.300	0
<b>NETO DOBITAK (GUBITAK) PRIJE OPOREZIVANJA</b>		<b>(0)</b>	<b>0</b>
Porez na dobit		0	0
<b>NETO DOBIT (GUBITAK) PERIODA</b>		<b>(0)</b>	<b>0</b>
Dobici utvrđeni direktno u kapitalu		0	0
Gubici utvrđeni direktno u kapitalu		0	0
Porez na dobitak koji se odnosi na ostale dobitke i gubitke		0	0
<b>UKUPAN NETO REZULTAT U OBRAČUNSKOM PERIODU</b>		<b>(0)</b>	<b>0</b>
Dio koji pripada vlasnicima matičnog preduzeća		0	0
Dio koji pripada manjinskim vlasnicima		0	0

**Table 2 – Profit and loss statement**

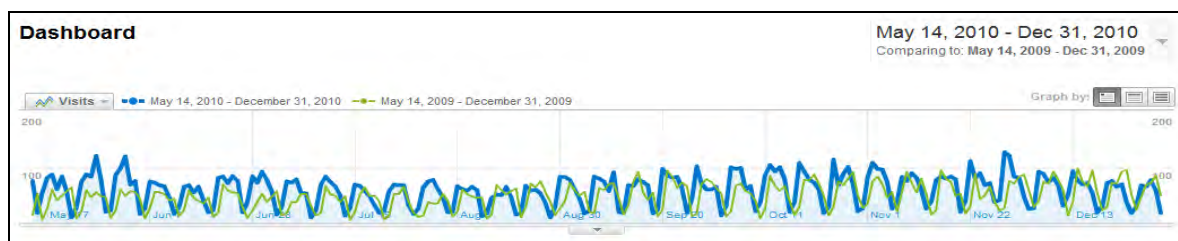
## 5. Information system of the Regulatory Commission

In 2010, in the information system of the Regulatory Commission, the planned modifications of the key hardware units were made which functioning was not reliable any more or was completely impossible due to damages that could not be prevented. The internal server for the electronic mail, which is also a proxy server was replaced by a new more reliable computer, of better characteristics and better performances, while the server which was served a primary controller of domain was replaced by a server of new generation, and new version of the operational system. A new server was promoted and became a primary domain controller, while the previous server was assigned the function of the back up server.

CRT monitors, in all working stations which have been in use since 2004 and 2005 have been replaced by the LCD monitors. The processing units which were in use also in 2004 and 2005 are still used, whereby taking into account the time of use, it is necessary to make more investment in their maintenance. During the next period, it is necessary to plan the selective exchange of the used and old computer equipment, which includes some working stations, network printers and similar.

There were not significant changes in the structure of the IT system in 2010. Internet flow is filtered by the hardware devices and software components, while the internal network is additionally protected also by the local anti-virus software with regularly updated anti-virus definitions. The proxy server is located in a special network segment so that in that way it is made safety separation of the public and local computer network.

The website of the Regulatory Commission is regularly updated with new contents so that the public is timely informed about all current issues. The realized number of visits to the website of the Regulatory Commission compared to the previous year (for the same period: from 14 May to 31 December) has increase for 23,95 % which is obvious from the attached diagram. (Comparison did not include the whole year due to the lack of data for comparison for 2009, due to resetting of meters after the website re-design).



Picture 4 - Benchmarking overview of visits to the website of Regulatory Commission, 14.05 - 31.12 in 2009 and 2010

Picture 5 - Statistics of visits to the RERS website



Total number of visits for the above stated period in 2010 was 14 071, while total number of viewed pages in the same period was 51.745 (5,19% more than compared to the same period in 2009).

Document management system of the Regulatory Commission

In September 2010, it was made Invitation for submission of bids for procurement of the integrated system for the document management of the RC, while in December, upon the conducted procedure of procurement and selection of the most favorable bidder, it was signed the contract with the "M and I Systems" d.o.o. Banja Luka. Pursuant to the conditions referred to in the accepted offer, it was agreed the timetable for conduct of all activities related to introduction of the system: delivery of equipment, software, implementation, system testing, training of employees and maintenance. Pursuant to this, until 2010 there war: a) a meeting with the project team of contractors was held during which the analysis of the business process was made in order to initiate development of the detailed project task; b) equipment and software licenses were delivered.

Introduction of the document management system will enable organized control of documents of the Regulatory Commission as a valid source of information which may serve as support for activities in the next period. Thanks to this system, it is possible to have the activities done in a defined, efficient and appropriate way to support and document formulation of policies and decision making, to realize consistence, continuity and productivity in control and administration and also to satisfy legal and normative requests.

B. REGULATORY REPORT ON THE MARKET OF ELECTRICITY, NATURAL GAS AND OIL AND OIL DERIVATIVES IN REPUBLIC OF SRPSKA

1. ELECTRIC ENERGY SECTOR

1.1. Generation of electricity

1.1.1. Generation of electricity – installed capacities, balance and realization

Generation of electricity in Republic of Srpska is done in five plants which basic (licensed) activity, as well as in four small hydro power plants operating within the electric power distribution companies, whereby three small hydro power plants have the licenses for generation, everything within the Mixed Holding “Elektroprivreda Republike Srpska” – Parent company a.d. Trebinje. Electricity is generated also in small hydro power plants: “SHPP Divic”, “SHPP Strpci” and “SHPP Suceska R-S-1” and “SHPP Bistrica B-5” which are privately owned, whereby “SHPP Divic” delivers the electricity generated to the distribution network of MH ERS ZP “Elektrokrajina” a.d. Banja Luka, and “SHPP Strpci”, “SHPP Suceska R-S-1” and SHPP Bistrica B-5a delivers generated electricity to the distribution network of MH ERS ZP “Elektrodistribucija Pale” a.d. Pale. Small hydro power plant “SHPP Bistrica B-5a” was put into testing operation end of 2010. Generation of electricity is done in the company “Energolinija” d.o.o. Zvornik which used to generate energy only for its own purposes.

Naziv elektrane	Instalisana snaga MW
HE na Trebišnjici	2x54 + 1x63
	2 x 108 <sup>4</sup>
	1x8
HE na Drini	3x105
HE na Vrbasu	2x55
RiTE Gacko	1x300
RiTE Ugljevik	1x300
MHE Mesići	3
MHE Bogatići	8
MHE Tišča	2
MHE Vlasenica	0,9
MHE Štrpci	0,08
MHE Sućeska	1,08
MHE Divič	2,28
MHE Bistrica	3,93
Energolinija	2 h 12

Table 3 - Installed capacity of generation capacities in RS

<sup>4</sup> Trenutno samo jedan agregat HE Dubrovnik (G2) je vezan u EES RS.

All plants referred to in Table 8, apart from sapphire Vlasenica, sapphire Strpci, SHPP Divic, SHPP Sućeska R-S-1, SHPP Bistrica B-5a and Energolinija are obliged, according to the license requirements, to render public services for the purposes of supply tariff customers with electricity in RS.

Realized generation of all plants in Republic of Srpska which delivered electricity to the network In 2010 amounted to 6,173.92 GWh. Apart from this generation, the company of "Energolinija" d.o.o. Zvornik in 2010 generated 31,1 GWh of electricity for its own needs. Table 9 presents the planned and realized generation of electricity delivered to the network.

Table 9 – Planned and realized generation in 2010

Naziv elektrane	Bilans 2010. (GWh)	Rebalans 2010. (GWh)	Ostvarenje 2010. (GWh)	Ostvarenje/ Bilans	Ostvarenje/ Rebalans
	(1)	(2)	(3)	(4)=(3)/(1)	(5)=(3)/(2)
HE na Trebišnjici	1.040,41	1.131,26	1.610,01	154,75%	142,32%
HE na Drini	909,20	981,60	1.283,05	141,12%	130,71%
HE na Vrbasu	273,88	273,88	353,85	129,20%	129,20%
<b>Ukupno hidroelektrane</b>	<b>2.223,49</b>	<b>2.386,74</b>	<b>3.246,91</b>	<b>146,03%</b>	<b>136,04%</b>
RiTE Gacko	1.542,00	1.550,00	1.540,28	99,89%	99,37%
RiTE Ugljevik	1.262,00	1.319,00	1.315,72	104,26%	99,75%
<b>Ukupno termoelektrane</b>	<b>2.804,00</b>	<b>2.869,00</b>	<b>2.856,00</b>	<b>101,85%</b>	<b>99,55%</b>
MHE Mesići	17,89	17,89	19,97	111,63%	111,63%
MHE Bogatići <sup>5</sup>	32,23	32,23	32,17	99,82%	99,82%
MHE Vlasenica	4,95	4,95	4,00	80,81%	80,81%
MHE Tišča	6,26	6,26	5,78	92,33%	92,33%
MHE Štrpci (ED Pale)	0,25	0,25	0,20	80,00%	80,00%
MHE Sućeska (ED Pale)	1,68	1,68	1,82	108,33%	108,33%
MHE Divič (ED Krajina)	4,32	4,32	6,23	144,21%	144,21%
MHE Bistrica			0,83		
<b>Ukupno MHE</b>	<b>67,58</b>	<b>67,58</b>	<b>71,00</b>	<b>105,06%</b>	<b>105,06%</b>
UKUPNO PROIZVODNJA RS	<b>5.095,07</b>	<b>5.323,32</b>	<b>6.173,92</b>	<b>121,17%</b>	<b>115,98%</b>

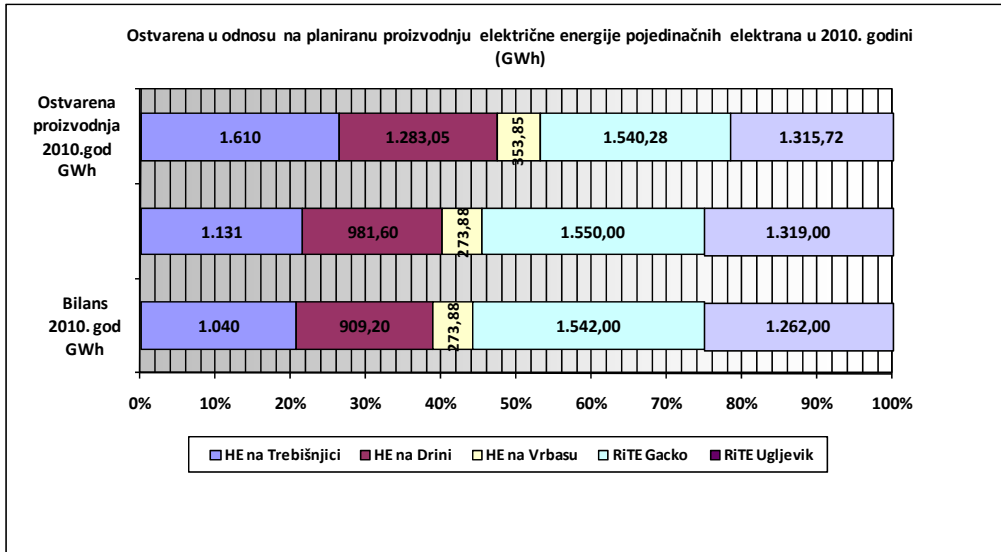
Table 4 - Planned and realized generation in 2010

<sup>5</sup> 72% proizvodnje HE Bogatići, tj. u 2010. godini 23,16 GWh pripada Republici Srpskoj



Realized generation of electricity in the companies obliged to render public service amounted to 6,160.84 GWh, while according to the Power balance of RS for 2010 the planned generation was 5,083.87 GWh and according to the Re-balance it is 5,312.12 GWh.

The amount of the realized generation of electricity in the companies obliged to render public service, compared to the Power balance of RS for 2010 and compared to the adopted re-balance is presented in the picture 6.



Picture 6 – Planned and realized generation in 2010

In the Table 10 there is realization of generation in the period 2005 – 2010 presenting considerable differences in realization, which are to the great extent the result of the changeable hydrological circumstances.

Table 10 – Generation of electricity in the period 2005 – 2010

Naziv elektrane	Proizvodnja ostvarena po godinama (GWh)					
	2005.	2006.	2007.	2008.	2009.	2010.
HE na Trebišnjici	1.252,56	1.150,40	769,42	863,91	1.236,64	1.610,01
HE na Drini	1.167,95	1.103,33	815,22	788,97	1.054,13	1.283,05
HE na Vrbasu	326,59	297,27	211,31	251,28	286,58	353,85
<b>Ukupno hidroelektrane</b>	<b>2.747,10</b>	<b>2.551,00</b>	<b>1.795,95</b>	<b>1.904,16</b>	<b>2.577,35</b>	<b>3.246,91</b>
RiTE Gacko	1.423,87	1.527,39	1.149,42	1.532,07	1.434,02	1.540,28
RiTE Ugljevik	960,57	1.275,11	1.441,50	1.523,36	1.559,00	1.315,72
<b>Ukupno termoelektrane</b>	<b>2.384,44</b>	<b>2.802,50</b>	<b>2.590,92</b>	<b>3.055,43</b>	<b>2.993,02</b>	<b>2.856,00</b>
<b>MHE</b>	<b>69,10</b>	<b>51,69</b>	<b>56,53</b>	<b>41,88</b>	<b>44,30</b>	<b>71,00</b>
<b>UKUPNO PROIZVODNJA</b>	<b>5.200,64</b>	<b>5.405,19</b>	<b>4.443,40</b>	<b>5.001,47</b>	<b>5.614,67</b>	<b>6.173,92</b>

According to the submitted monthly reports in the table 11 there is an overview of the sale and realized revenue from the sale of electricity of generators from RS, which are obliged to render public service for the purposes of supply tariff customers with electricity.

Table 11 – Sale and revenue from the sale of electricity

Elektrana	Prodaja električne energije u 2010. god (kWh)			Prihod od prodaje električne energije u 2010. godini (KM)		
	Tarifni kupci	Izvoz i ostali kupci	Ukupno	Prihod od tarifnih kupaca	Prihod od izvoza i ostalih kupaca	Ukupan prihod
HE na Trebišnjici	798.470.468	811.543.747	1.610.014.215	32.018.666	33.385.914	65.404.580
HE na Drini	643.068.144	639.979.856	1.283.048.000	9.195.874	33.362.221	42.558.095
HE na Vrbasu	185.767.031	168.084.709	353.851.740	12.336.145	5.959.806	18.295.951
RiTE Gacko	1.103.974.489	436.307.511	1.540.282.000	76.505.432	40.576.862	117.082.295
RiTE Ugljevik	899.460.753	416.259.247	1.315.720.000	69.055.416	41.282.732	110.338.148
<b>Ukupno velike elektrane</b>	<b>3.630.740.885</b>	<b>2.472.175.070</b>	<b>6.102.915.955</b>	<b>199.111.533</b>	<b>154.567.535</b>	<b>353.679.068</b>
MHE Tišča	4.331.213	1.445.481	5.776.694	249.744	148.829	398.573
MHE Mesiči	12.000.062	7.966.162	19.966.224	631.203	580.700	1.211.903
MHE Bogatići	12.639.821	10.523.773	23.163.594	396.890	791.718	1.188.608
<b>UKUPNO</b>	<b>3.659.711.981</b>	<b>2.492.110.486</b>	<b>6.151.822.467</b>	<b>200.389.369</b>	<b>156.088.783</b>	<b>356.478.152</b>

Out of totally realized sale of electricity of the generated companies, that are obliged to render public service, 59.49% is related to the placement for tariff customers in RS, while the realized revenue per that base is 56.21% of total revenue from the sold electricity in 2010. 40.51% of totally generated electricity is related to other customers, while the share of the realized revenue from the sale to other customers is 43.79% of total revenue.

From the Table 11, it is obvious that the average realized price, which the generators operating within the system of MH “Elektroprivreda Republike Srpske” – Maticno preduzece a.d. Trebinje and which are obliged to render public service realized from other customers in 2010 amounted to 0.0626 BAM/kWh which is less than realized average price in 2009 when it amounted to 0.0702 BAM/kWh and 2008 when it amounted to 0.1012 BAM/kWh, which is the result of the increase of the electricity price at the market.

### 1.1.2. Renewable energy sources

Renewable energy sources are the energy of wind, energy of sun, aerothermal energy, geothermal energy, hydrothermal energy, hydro energy, energy of biomass, waste gas energy, energy of gas from the facilities for the waste water treatment and energy of other (agricultural) biogases.

Stimulating generation of electricity from RES is in the interest of safety of supply, protection of environment and prevention of climate changes, safety of constant and

reasonable increase of the energy share from RES in total consumption of energy, enabling cost-effective use of natural resources and for the purposes of sustainable development of the local communities and social cohesion (employment, reduction of migration and similar)

#### 1.1.2.1. Legal framework in RS

Law on energy

Law on electricity

Law on Concessions

Law on protection of environment

In the document entitled “Bases of the energy policy of RS” dated November 2008, taking into account considerable non-used potential in RES, as one of the specific objectives in the energy sector development, it was recognized the need to increase generation of electricity from RES, in order to by providing safety of supply through providing availability of different energy sources give considerable contribution to protection of environment and regional development as well as the contribution to total social cohesion.

Law on energy defined the field of renewable energy sources and particularly prescribes the role of the RS Government and Regulatory Commission in promoting RES:

- RS Government makes Decree to prescribe measures contributing to realization of objectives, which are related to increase of total generation from RES, share of consumption of electricity generated from RES and efficient co-generation in total consumption of electricity in RS and share of consumption of biofuel in total consumption of fuel in transport;
- Government establishes the institutional structure for operational implementation of the incentive system;
- Regulatory Commission with the consent of RS Government, in special Rule book, determines the system of stimulating generation of energy using RES and co-generation, method of providing and using incentive means;
- Regulatory Commission issues the certificate for generation facility and
- Regulatory Commission issues the certificate on origin for electricity generated from RES;

#### 1.1.2.2.Acquies Communautaire of EU

In December 2008, ministers of EU made a deal on the climate-energy-legal package, popularly known as “20-20-20”.

- 20% increase of energy efficiency
- 20% reduction of green-house gases emissions
- 20% share of RES in total EU consumption of energy till 2020 and
- 10% share of bio fuel in transport till 2020

The objective of 20% of RES shares in total consumption is: end consumption of electricity obtained from RES, end consumption of energy for heating and cooling

and end consumption of energy from RES (biofuel) in transport. Members countries freely decide on contribution of each of these three sectors in achievement of the defined national objective.

Old directive on RES which were valid till June 2009

- Directive 2001/77/EC of the European Parliament and Council dated 27 September 2001 on stimulating electricity generated using RES at the internal market
- Directive 2003/30/EC of the European Parliament and Council dated 8 May 2003 on stimulating use of bio-fuel or other renewable fuel in transport

New Directive 2009/28/EC valid since June 2009

- Directive contains amendments to the previously valid Directives 2001/77/EC and 2003/30/EC and compiles them

Directive on RES 2009/28/EC published in the Official Gazette of European Union in June 2009 establishes the joint legal framework and uniformly arranges stimulating use of electricity generated from RES at the internal market and stimulating use of bio-fuel or other renewable fuels in transport. Directive prescribes the establishment of:

- Obligatorily national objectives for total share of energy from RES in gross final consumption of energy and for the share of energy from RES in transport (+10%);
- Flexibility between the countries parties and rules that are related to the statistical transfers between countries members;
- Common projects between countries members and projects with third countries;
- National action plans for RES;
- Guarantees of origin;
- Reduction of administrative and regulatory obstacles and issues regarding the network;
- Sustainability criteria for bio fuel and bio liquid and
- Reporting and transparency

This Directive is still not obligatorily for BiH but within EC Secretariat, with participation of all members countries to EC, there are activities related to defining obligations resulting from this Directive. Also, it is important to mention that the Ministerial Council of the Energy Community at its meeting held on 24 September 2010 made Recommendation number 2010/01/MC-EnC on promoting use of energy from RES. This Recommendation is related to the mentioned Directive on RES 2009/28/EC.

1.1.2.3. Activity of Regulatory Commission related to development of the secondary legislation

Adoption of new Directive 2009/28/EC on promoting use of energy from RES pursuant to the objectives determined in advance on the share of energy from RES in total gross consumption of energy, first of all, adoption of the Law on energy of RS, there was a need to revise the existing, previously determined draft documents, draft Rule book on eligible generator and draft decision on the amount of the feed in tariffs

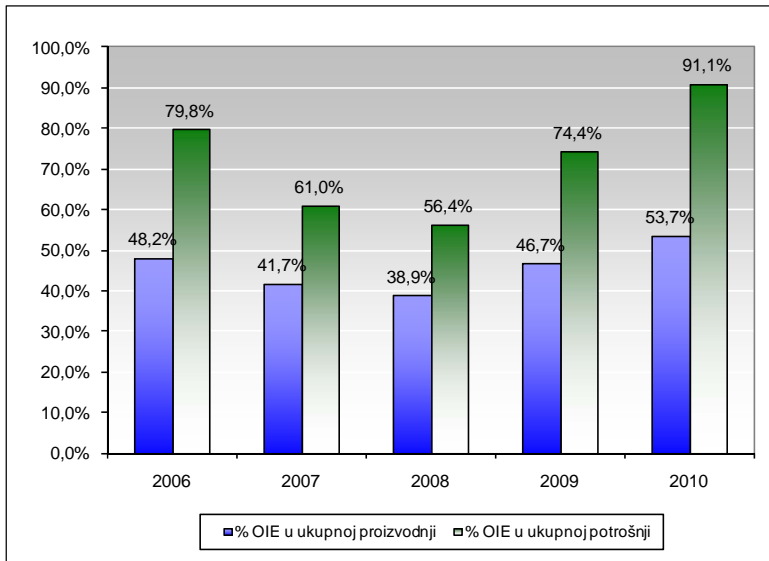
and harmonize them with provision of the Energy law. It is particularly important the obligation of Regulatory Commission to comply with, while determining documents within the scope of its competence, energy policy and objectives on generation and consumption which, pursuant to the Law on energy, should be defined by RS Government. In 2010, activities in Regulatory Commission were to the great extent directed to the analysis of RES potential which use should be stimulated, and activities on defining the system of incentives through making a transparent, qualitative and applicable in practice Rule book which would be used in the procedure related to the settlement of applications of generators for determination of the right to the incentive of generation of electricity from RES and efficient co-generation, and while determining feed in tariffs and premium and unit fee for providing means necessary for functioning of the system of stimulating generation of electricity from RES and efficient co-generation. The aim of making this Rule was to provide, with the prescribed system of stimulating, increase of generation of electricity from RES and in efficient co-generation, namely realization of the indicative objectives of shares of consumption of electricity from RES and efficient co-generation in gross final consumption of electricity in RS which should be determined by the RS Government. Out of documents which were imposed by the law on energy to the Regulatory Commission in its competence, in the 15<sup>th</sup> regular session, on 10 September 2010, Draft Rule on issuance of certificates for generation facility which generates electricity from RES and in efficient co-generation was adopted. The final Rule book was adopted by RC in January 2011. This Rule book prescribes the content of certificates, procedures and criteria for generator of electricity in the generation facility that uses RES in cost-effective way, protecting the environment or in efficient co-generation, to get a certificate for a generation facility. The aim of making this Rule book is to provide efficient and cost-effective procedure for issuance of certificates for generation facility and to make a fair decision per the application based on the criteria known in advance, which simplifies the realization of the right to the incentives for generation of electricity from RES and efficient co-generation and issuance of certificates (guarantees) on the origin of electricity.

As the RES issues are very popular subject in all European countries, and in our country too, in 2010 there were several workshops, seminars and other activities of educational nature, mostly organized by foreign consultants. RC paid particular attention to these workshops in order to collect as up-to-date information on parameters consisted firstly of calculative elements of the feed in prices and to have the experiences of the countries which went far away in this field.

#### 1.1.2.4 RES in generation and consumption in RS

RES in a sense of installed capacities in RS are represented to the extent which enables, in some countries depending on hydrology and operational readiness of all capacities, high share of electricity generated from RES in total gross consumption of electricity in RS. Picture 7 shows that in 2010, the achieved level of 91% share of electricity generated from RES in gross consumption of electricity in RS.

Picture 7 – Share of electricity from RES in generation and gross consumption

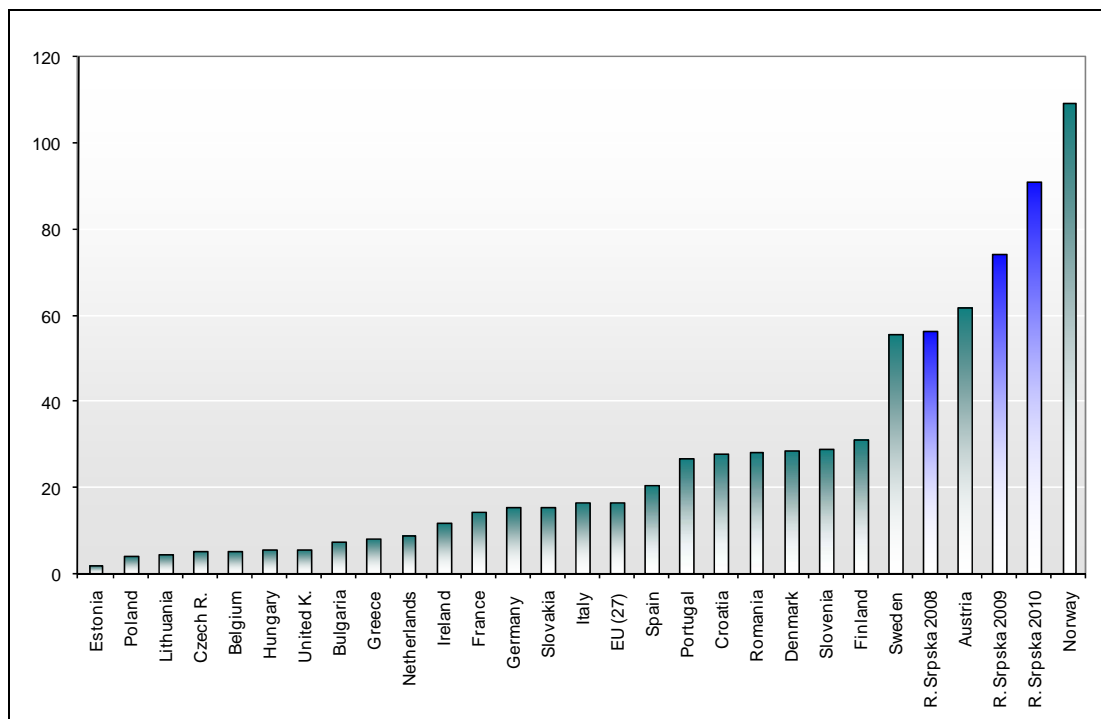


Complete generation is from hydro power plants.

Share (%) of electricity generated from RES in gross final consumption is one of energy indicators which the European institution for statistics Eurostat regularly publishes. Picture 8 shows this indicator for 2008. In the moment of making this report, Eurostat did not

publish the data for 2009 and 2010, for RS, there are data for the latest three years.

Picture 8 – Share of electricity from RES in gross consumption of electricity



### 1.1.3. Generation of electricity – protection of environment

Regulatory Commission for energy of RS, within its competences, monitors fulfillment of conditions related to protection of environment prescribed by the license requirements for doing activity, while monitoring and analyzing reports of the licensees for generation of electricity.

Licensees are imposed the obligations regarding protection of environment, arising from the legal regulations regulating the field of protection of environment and competences of the Regulatory Commission. When it is about the laws, the most important ones are as follows:

- Law on protection of environment (Official Gazette of RS, 28/07 – clean text),
- Law on amendment to the Law on protection of environment (Official Gazette of RS, number 41/08)
- Law on protection of air (Official Gazette of RS, 53/02),
- Law on water (Official Gazette of RS, 50/06),
- Law on water (Official Gazette of RS, 10/98),
- Law on the waste management (Official Gazette of RS, 53/02)
- Law on amendment to the Law on the waste management (Official Gazette of RS, 65/08) and others.

One of the most important obligations which the licensees should meet, is the obligation to obtain the ecological license. To obtain the ecological license is, by legal decisions, conditioned by obtaining a range of other documents and licenses which should round the obligations of each licensee.

When it is about the hydro power plants in RS, all licensees obtained the ecological licenses such as:

1. ZP “Hidroelektrane na Drini” a.d. Visegrad, 31 January 2008,
2. ZP “Hidroelektrane na Trebisnjici” a.d. Trebinje 10 March 2008 and
3. ZP “Hidroelektrane na Vrbasu” a.d. Mrkonjic Grad 12 February 2009

Ecological licenses for each licensee prescribed the measures and procedures which the licensees should meet, in order to bring impacts of their activities on the environment to the least possible measure.

Licensees ZP “Hidroelektrane na Vrbasu” a.d. Mrkonjic Grad, ZP “Hidroelektrane na Drini” a.d. Visegrad and ZP “Hidroelektrane na Trebisnjici” a.d. Trebinje have introduced the certified system of control of the protection of environment according to the standard ISO 14001, namely they have internal plans made and program of control of the protection of environment. Licensees mostly comply with all defined measures of protection and improvement of the environment.

It is important to say that the licensee ZP “Hidroelektrane na Drini” a.d. Visegrad has to meet majority of its obligations regarding protection of environment and arrangement of surrounding area in Visegrad in agreement with other persons, which is some moments prevents from proper fulfillment of all obligations. Namely, protection of environment and arrangement of the surrounding area in Visegrad requires activation of local community and Drinsko-limska hydro power plant from Republic of Srpska in the process. Also, it is clear that protection of environment is a continued process, so these activities of the licensees are continued and require permanent engagement in order to meet all obligations arising from regulations which arrange the protection of environment.

In 2010, there was a regular monitoring activity of the licensee ZP “Hidroelektrane na Trebisnjici” a.d. Trebinje.

Shortly, generators of electricity in the hydro power plants obtained the ecological licenses and generation of electricity in these companies is done with satisfactory

protection of the environment. It is important to say that the mentioned companies are obliged to meet requirements in the next period as prescribed by ecological licenses.

Till the end of 2010, Regulatory Commission issued the licenses for generation of electricity in five small hydro power plants. Licensees for generation of electricity in small HPP obtained the ecological licenses for the following facilities:

1. MH ERS ZEDP ELEKTRO BIJELJINA , a.d. Bijeljina - SHPP Tisca, 29 October 2009
2. "ELING MHE" male hidroelektrane d.o.o. Teslic – SHPP "Divic" 2 February 2010
3. MHE ERS ZP "Elektrodistribucija" a.d. Pale – SHPP Bogatici, December 2009
4. MHE "ERS" d.o.o. Laktasi – MHE "Suceska R-S-1" issued on 28 January 2008
5. HPP on Bistrica, d.o.o. Brod na Drini – SHPP "Bistrica B-5a" issued on 9 August 2009

The impact of these facilities on the environment is of local nature. What we find to be emphasized is the need to determine environmentally acceptable flow, both for the existing structures and those planned for construction based on the uniform methodology which should be easily measured.

When it is about thermal power plants, RC issued two licenses for generation of electricity in the thermal power plants: MH ERS Trebinje ZP "Rudnik and termoelektrana Gacko", a.d. Gacko and ZP "Rudnik I termoelektrana Ugljevik" a.d. Ugljevik.

Both TPPs use lignite as the fuel of low calorific value. Lignite is obtained from the surface pit of coal which are located within the system of the mentioned companies.

Generation of electricity from coal causes numerous impacts on the environment, while the biggest problems appearing in the work of these licensees are the emission of fuel gases, waste water which appears in the technological process, ash laying and occupation of big surfaces of land by the surface coal pits.

Both licensees are obliged to develop and conduct detailed plans of activities for reduction of emissions of the polluting matters in the air and construction of the system for cleaning of waste water, harmonized with the deadlines determined by regulations within the scope of protection of environment, namely to realize certain projects in order to harmonize, within the prescribed deadlines, realization of their activity with regulation within the scope of protection of the environment.

According to legal documents of RS, all structures should harmonize their emissions with margin values prescribed by the Rule book on margin values of emission in the air from the facilities for burning (Official Gazette of RS, 39/05) and according to the Treaty on establishment of the Energy Community, BiH is obliged to apply till 2017 provisions of the Directive 2001/80/EC on the marginal values of emission in air.

In order to follow emission of the fuel gases, licensees should provide continual metering of polluting matters in air. Available results of the continual metering for TPP Gacko and TPP Ugljevik for 2010, as well as data, enable to partly get a picture on emission in air from these facilities and to compare those values with the marginal values of emissions. Values of emissions obtained by the mentioned metering are presented in pictures 9,10 and 11. Due to short period in which the metering was made, namely data collected, the presented values may serve only as the orientation data. When it is about metering of emissions in 2010, unlike

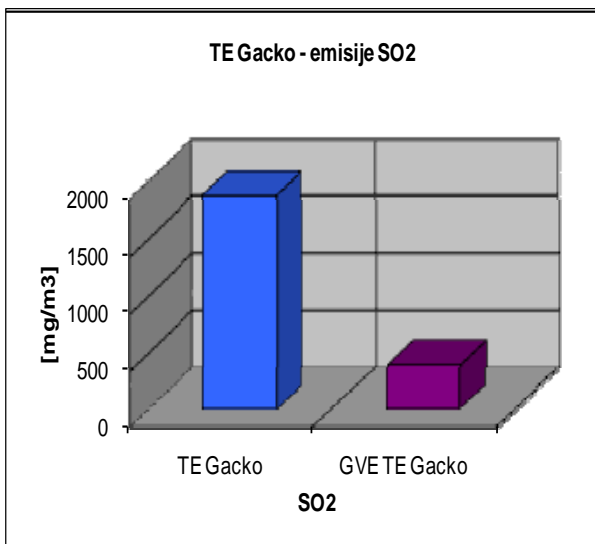
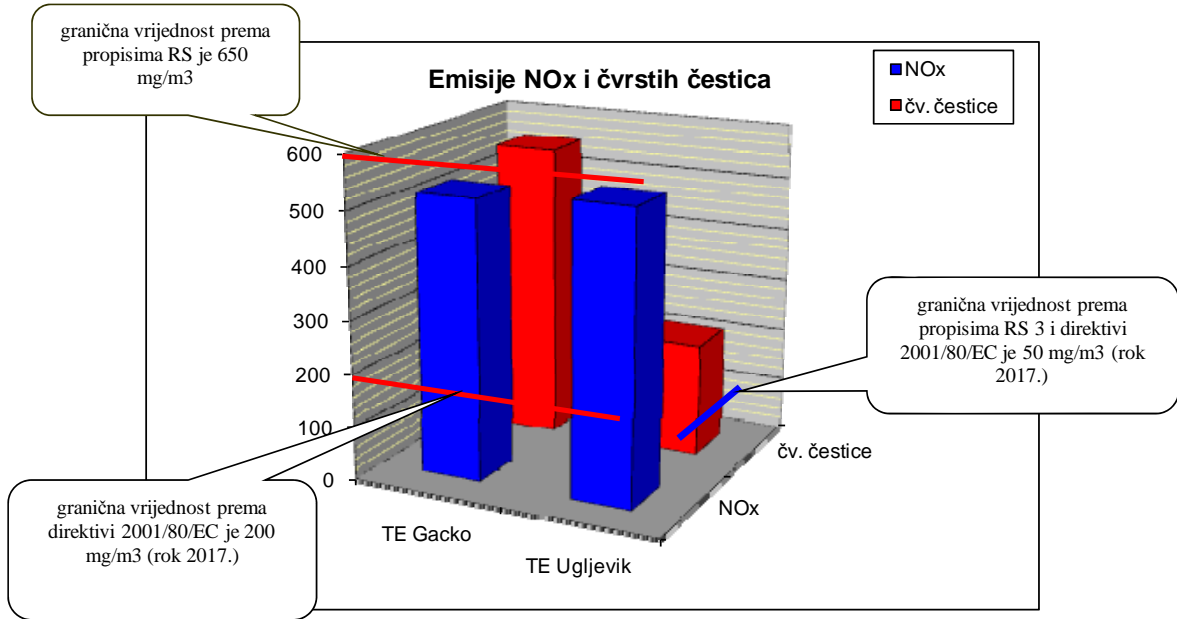


previous year, situation is much better, in 2010 licensees began with metering of emissions as anticipated by the license requirements.

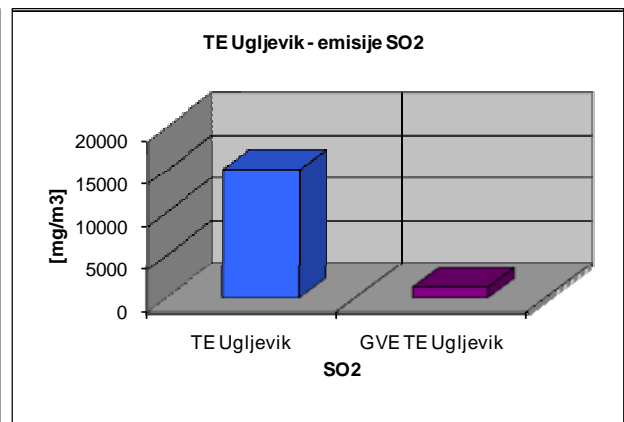
Based on this, we can conclude the following:

1. MH ERS – Trebinje ZP Rudnik I Termoelektra na Gacko, A.d. Gacko
  - Emissions of solid matters are several times higher than the marginal values of the emissions (average monthly values of about 550 mg/m<sup>3</sup>)
  - Emissions sulfur oxide

Picture 9 – Emission of NOX and solid matters



Picture 10 – SO2 emission – TPP Gacko



Picture 11 – SO2 emissions – TPP Ugljevik

Table 12 presents an overview of specific consumption of coal, diesel and masute in TPPs Gacko and Ugljevik.

	proizvodnja električne energije [MWh]	potrošnja	ugalj	dizel [l]	mazut [kg]
R i TE Gacko	1.540.282	ukupna	2.458.678 [t]	7.064.057	4.642.105
		spec. potrošnja	1,596 [kg/kWh]	0,00459 [l/kWh]	0,00301 [kg/kWh]
R i TE Ugljevik	1.315.720	ukupna	1.476.266 [t]	7.474,101	2.165.000
		spec. potrošnja	1,12 [kg/kWh]	0,00568 [l/kWh]	0,00165 [kg/kWh]

Table 12 – Overview of specific consumption of coal, diesel and masute in TPP Gacko and TPP Ugljevik

There is a system for waste water treatment on RiTE Ugljevik, but to old and partly non-functionality of equipment, results of cleaning are not satisfactory. In both TPPs, in 2010, there were activities on realization of the waste water treatment projects. Their realization is expected in the next period.

It has already been mentioned that, within the structure of these licensees, there are also surface pits of coal which occupy large areas of land. It was confirmed that there are the projects of re-cultivation made and activities related to re-cultivation began on those parts of the pit when the coal exploitation was completed. The re-cultivation process is necessary to be intensified in the next years.

Ash laying, which is the result of the coal burning, in both TPPS is done according to the appropriate projects.

ZP “Rudnika and termoelektrana Gacko” a.d. Gacko obtained ecological licenses for the Surface facility Surface pit “Bogutovo selo” Ugljevik (15.09.2008) and for the facility “Termoelektrana” Ugljevik on 10.08.2009.

Ecological licenses prescribed the licensees the measures and activities which they should conduct within the defined deadlines.

Solid matters emissions are one of factors which mostly affect the environment in the vicinity of TPPs, so we think that it is necessary to emphasize the following:

- Inspection into the ecological license for TPP Gacko (Decision of the Ministry for special planning, civil engineering and ecology, number 15-96-112/08 dated 23 June 2008), it can be noticed that in point 3.2.1. it was defined the obligation for TPP Gacko to “for emission of solid matters use baggy filters which shall guarantee the emission of solid matters less than 100 mg/m<sup>3</sup>, pursuant to the Rule on the marginal values of emission in air from the facility for burning (Official Gazette of RS, 39/05); the same obligation is defined in the point 4.4.
- The mentioned Rule book defined the marginal value of the solid matters emissions for the facility of the calorific value of more than 500 MW (calorific value of TPP Gacko is about 900 MW) of 50 mg/m<sup>3</sup>.

- Directive 2001/80/EC on the marginal values of emissions in air defines also the marginal value of the solid matters emissions for the facility of the calorific value of more than 500 MW of 50 mg/m<sup>3</sup>.

Taking into account the mentioned facts on emissions and impact of the solid matters emissions on the environment in the vicinity of TPPs, and obligations taken by signing the Treaty on establishment of the EC, we think that in the ecological licenses it is necessary to make correction of the marginal value of the solid matters emissions to 50 mg/m<sup>3</sup>. The mentioned fact on the correction of the marginal value of the solid matters emissions is also valid for the environmental license issued for TPP Ugljevik.

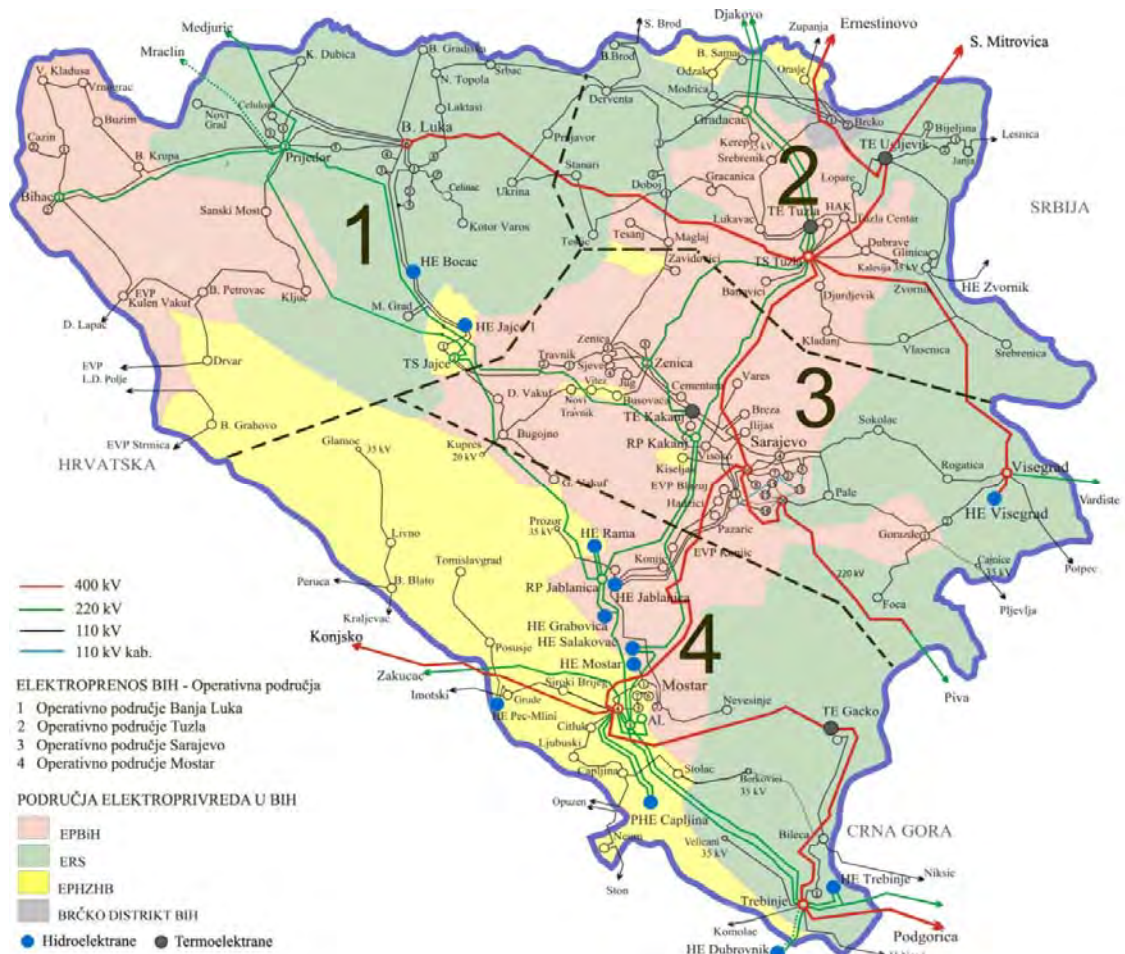
Ecological licenses for TPPs and HPPs prescribe all segments which are related to protection of the environment.

Apart from the mentioned TPPs and HPPs, RC issued also the license for generation to the company "Energolinija" d.o.o. Zvornik which also has the ecological license (for the facility of FG "Birac" AD Zvornik, number 15-96-273/09 dated 4 February 2010).

## 1.2 Transmission of electricity

Transmission activity in RS, namely in BiH, is done in two special companies at the level of BiH and they are: "Elektroprenos BiH" Banja Luka and "Nezavisni operator sistema BiH (Independent System operatora in BiH) Sarajevo. Regulation of transmission activity of RS is in charge of the State Regulatory Commission for electricity.

Picture 12 presents the map of the transmissions network of BiH.



Picture 12 – Transmission network of BiH

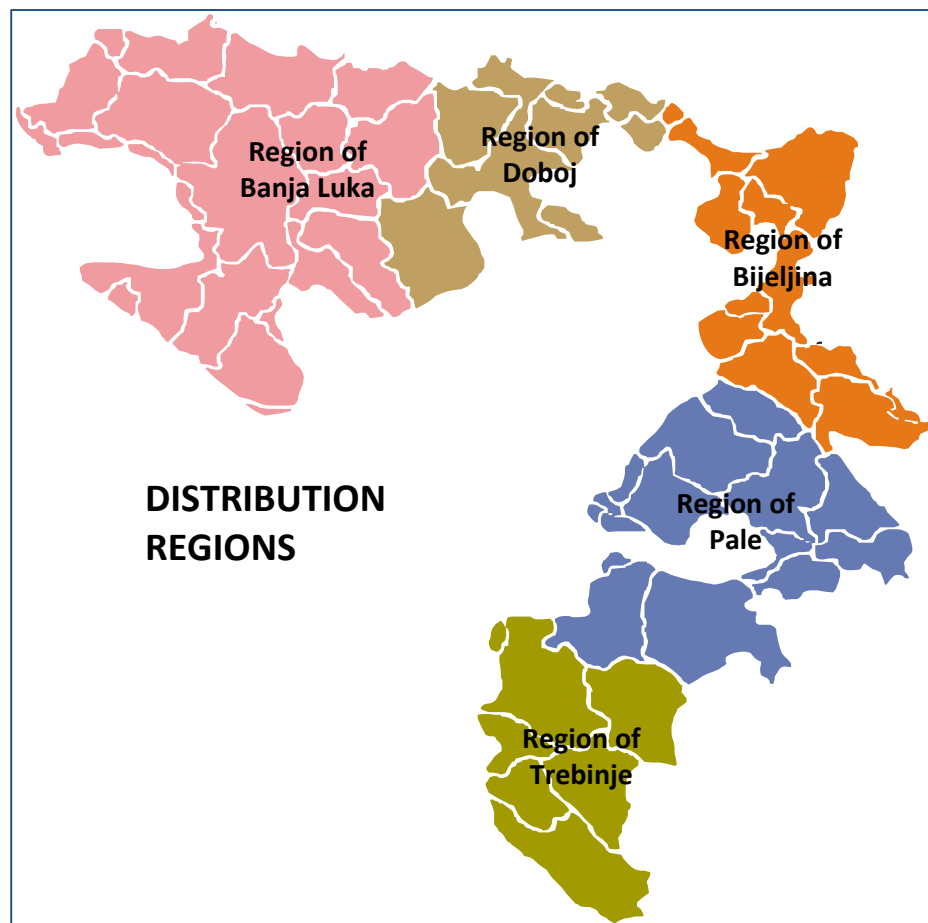
### 1.3. Distribution of electricity

#### 1.3.1 Distribution system operators in RS

Distribution of electricity is transfer of electricity at middle-voltage and low-voltage network for the purposes of delivery to end users, and it is, as transmission at the high-voltage network, a monopolistic activity and being like that, it should be regulated in order not to misuse the monopolistic behavior of distribution companies which are the only ones that possess the capacities for doing these activities at certain area. When it is about unbundling of distribution activity, it is better to say the activity done by the distribution system operator – distributor, from other commercial activities (generation and supply), unbundling is imposed as the condition of impartiality in offering services by distributors to the distribution network users.

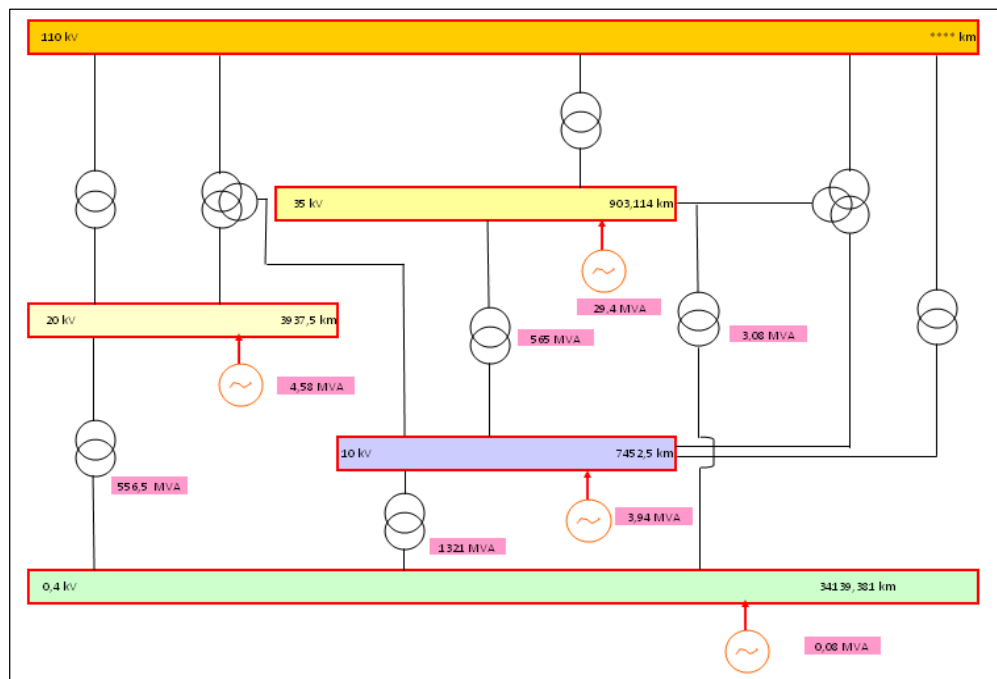
Distribution activity in RS is done in five distribution companies – distribution system operators (distributors) within MH “Elektroprivreda Republike Srpske” Parent company a.d. Trebinje in a way that each distributor is in charge of doing activity at certain geographical area (picture 13). Doing activity, including determination of tariffs for use of distribution network is regulated and monitored by the RERS.

Picture 13 – Distribution regions in Republic of Srpska



Electric distribution companies in RS are within the system of the Mixed Holding of “Elektroprivreda Republike Srpske” – Parent company a.d. Trebinje, namely within the system of vertically integrated company which is the licensee for trade and supply of electricity. Having in mind that the electric distribution companies are separate legal structures, the condition of legal unbundling is met. Functional – management unbundling should be provided in a way that the parent company may affect the control regarding the long term planning, direction of capital and similar, while it is limited the impact o the everyday business activities of the distribution system operator - distributor.

The overview of the distribution system, with the small HPPS connected to the distribution network is given in Picture 14.



Picture 14 – Distribution electric power system with surrounding

Basic technical data on the distribution are available based on the annual reports with the technical forms submitted by the distribution companies in RS. Tables 13 and 14 present the situation end of 2010.

Table 13 – Length of the distribution electric power lines

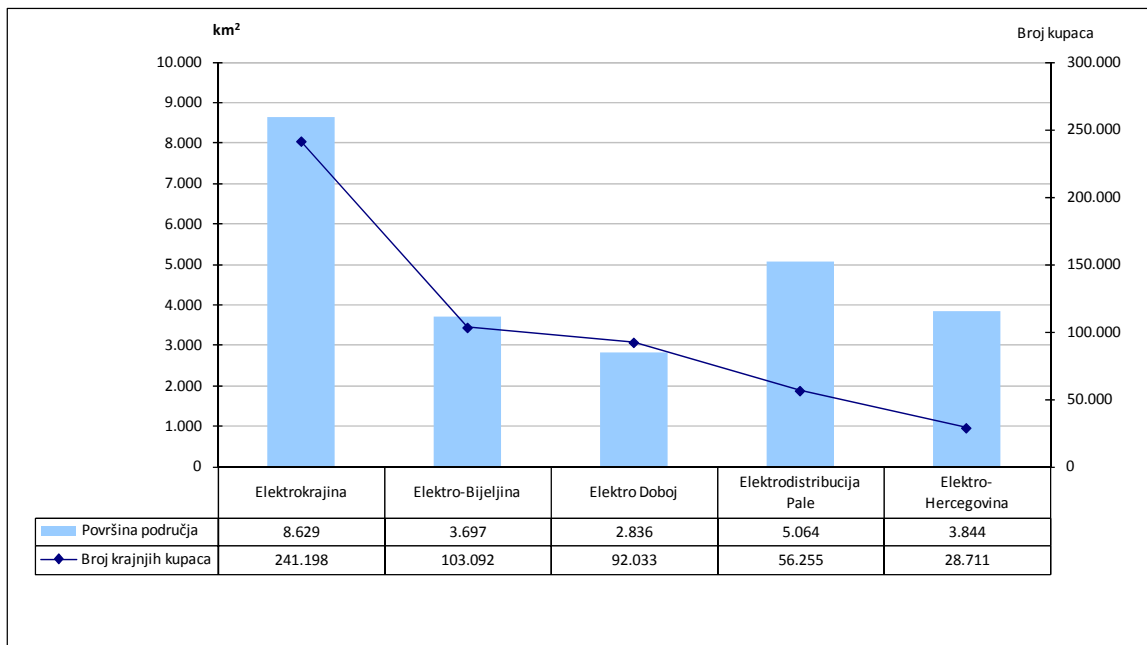
R. br.	Naponski nivo	Tip voda	Dužina (km)
1	35 kV	Nadzemni	886,065
		Podzemni	17,049
		Ukupno	903,114
2	20(10) kV	Nadzemni	10106,366
		Podzemni	1287,105
		Ukupno	11393,471
4	0,4 kV	Nadzemni	31861,99
		Podzemni	2277,391
		Ukupno	34139,381
Ukupno		Nadzemni	42854,421
		Podzemni	3581,545
		Ukupno	46435,966

Table 14 – Number and installed capacity of the distribution substations

R. br.	Naponski nivo	Broj trafostanica/ Instalirana snaga	
1	35/10 kV	kom.	77
		MVA	565
3	20/0,4 kV	kom.	2576
		MVA	556,5
4	10/0,4kV	kom.	5668
		MVA	1321
Ukupno		kom.	8321
		MVA	2442,5

In 2010, distribution companies constructed 162 km of the middle voltage surface network and 28.216 km of the middle voltage surface cable network, concurrently rehabilitated 161.844 km of the middle voltage surface network and 6.839 km of the middle voltage of the underground cable network. Also, it was constructed 114 substations TS 10(20)/0,4 kV with total installed capacity of 22.66 MVA, while 183 TS 10(20)/0,4 kV were rehabilitated with total installed capacity of 19.81 MVA. Apart from the stated data, it is important to note that there are, in the distribution system other substations TS 35/0,4, TS 35/6, TS 10/6, TS 6/04 as well as the lines of 6 kV for the needs of supplying industrial structures (mines), although a considerable number of those electric power structures are used for supplying of end users in local community. Also, there is a certain number of electric power structures which are not owned by the distributor, but serve for supplying end users with electricity. Standard IEC 38 dated 1983 promoted the transfer from the low voltage network 220/380 V to the value of 230/400 V. It is stated in the remark that the transitional period should as short as possible, but no longer than 15 years from the effective date of this standard. During this period, it was necessary to bring voltage within the scope of 230/400 V (+6%/10%) in order to

reach voltage of 230/400 +/- 10% by the end of that period. This is supported by the current standard IEC 60038 as well as EN 50160 which give other characteristics as well. The European norm EN 50160 have been accepted in BiH, by proclaiming in December 2004. RS, having adopted those technical standards at the level of BiH committed itself to remove 6 kV voltage from the distribution network for the use. Data on surface of some distribution areas and number of end users are given in Picture 15.



Picture 15 – Surface of the distribution area and number of customers

### 1.3.2. Methodology for determination of tariff rates for distribution system users in RS

Tariff rates for distribution system users in RS are determined pursuant to the Rule book on tariff methodology and tariff proceedings (Methodology) determined by RC. In this tariff rates, apart from the distribution price which is determined by RS and which covers costs of the distribution network and distribution losses, it is included the price of using transmission network determined by the State Regulatory Commission for electric energy based on its methodology, and which comprises the costs of operation of Elektroprenos BiH, costs of operation of the Independent System operators in BiH and costs of ancillary services.

Methodology of RC prescribed that the following costs of the distribution network are recognized as the justified costs of distribution companies in RS:

- Costs of operation, maintenance and keeping distribution network, including the costs of maintenance of the connection and metering devices, and reading of metering devices,
- Costs of development of the distribution network and
- Costs for reimbursement of justified costs of electricity losses in the distribution network

Tariff methodology is based on the calculation of annual revenue requirement of the electric power companies, for the effects defined by the electric power balance for the year which the tariffs are determined for.

Pursuant to the Methodology, regulated companies – licensees for distribution of electricity, submit an application to RC for approval of prices, namely tariff rates on the basis of the revenue requirement which is consisted of the justified costs increased for the rate on the capital. Justification of application is determined by RC in the tariff proceedings, and based on that it final prices are determined, namely tariff rates. RC makes Decision independently, namely independently from other Governmental agencies, respecting Decisions of the State Regulatory Commission of BiH regarding prices of use of transmission network. Length of the regulatory period is not separately prescribed, while the tariff proceeding is initiated either at the initiative of regulated companies or at the initiative of RC.

For calculation of tariff rates, technical and financial data and used as well as documents submitted by the distribution companies to RC pursuant to the Rule book on reporting within the prescribed periods, but also during the tariff proceeding itself. Based on these data, RC overviews the volume, type and quality of services which distribution companies offer to its users, as well as the costs of their operation, namely their justification. Justification of costs is estimated according to the nature of costs by analysis of usefulness, analysis of amount and price in the benchmarking. In the tariff proceedings which RC has conducted so far, benchmarking analyses between five distribution companies in RS were conducted for the purposes of analyzing costs of operation and maintenance of the network. Tariff methodology prescribes the uniform tariff rates for all distribution system users in RS.

### 1.3.3. Adjustment (leveling) of the distribution network tariff



Level of being populated of the areas with the housing and industrial structures, as well as the amount and structure of distribution facilities and equipment which are included in the regulatory base, as the basic assets for distribution, considerably varies between distribution areas in RS, which causes different average costs of distribution, per the unit of the electricity delivered and capacity. "Density of consumption: is given in the Table 15.

Table 15 – Distance of customers connected to the distribution network

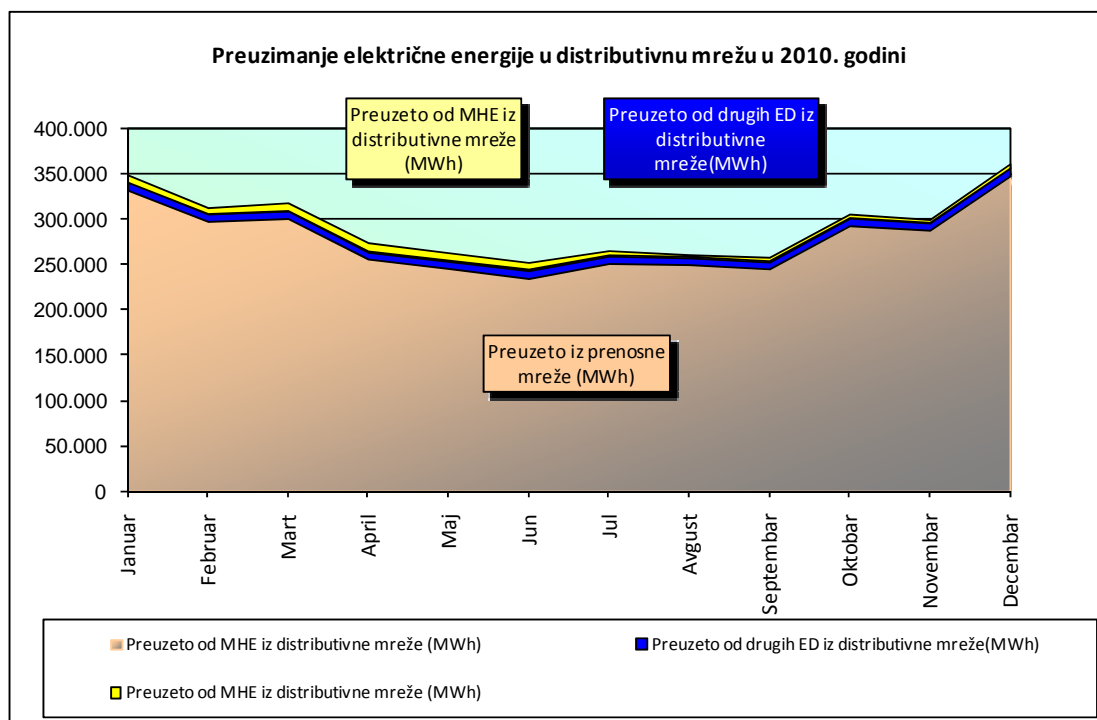
<b>Distributivno područje</b>	<b>Površina područja (km<sup>2</sup>)</b>	<b>Broj krajnjih kupaca</b>	<b>Broj krajnjih kupaca po km<sup>2</sup></b>
Elektrokrajina	8,629	241,198	28
Elektro-Bijeljina	3,697	103,092	28
Elektro Doboј	2,836	92,033	32
Elektrodistribucija Pale	5,064	56,255	11
Elektro-Hercegovina	3,844	28,711	7
<b>Ukupno</b>	<b>24,857</b>	<b>521,289</b>	<b>21</b>

Regulatory Commission, pursuant to the principle of equal treatment of customers and protection of customers in remote and bad populated areas, determined the same tariff rates for all customers throughout the whole territory of RS. Taking into account different "density of consumption" and different costs of doing activity, RC determined coefficients for adjustment of revenues between distribution companies, which put distribution companies in the equal position regarding realization of the revenue and justified costs of doing activity.

#### 1.3.4. Taking and consumption of electricity in the distribution network

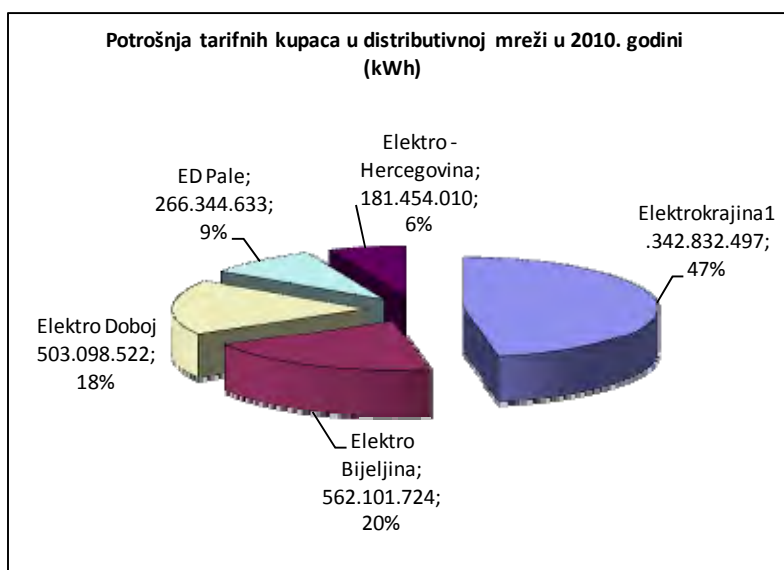
Electric energy in the distribution network in 2010 in RS was taken from the transmission network of Elektroprenos BiH, from the hydro power plants connected to the distribution network and from other distribution systems from BiH and neighboring countries. The structure of the electricity taken in given in the picture 16.

Picture 16 – Electricity taken in the distribution network



Out of totally taken electricity in the distribution network in the amount of 3.522 GWh, end users in 2010 were delivered 2.940 GWh while 582 GWh electricity are losses in the distribution network. Picture 17 gives the structures of the net consumption per distribution companies.

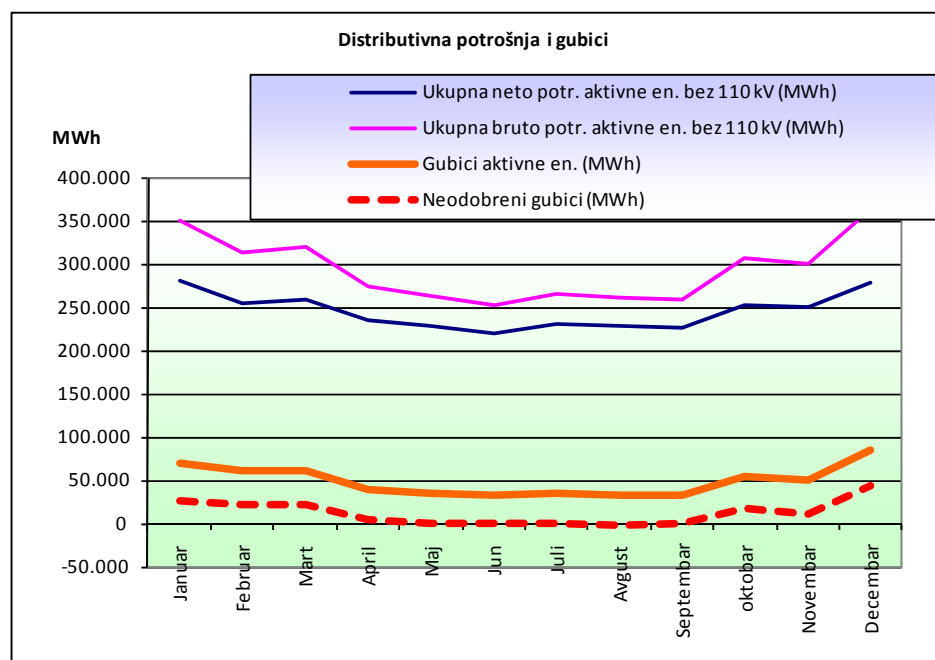
Picture 17 – Net distribution consumption in 2010



### 1.3.5. Losses of electricity in the distribution network

A big problem of the distribution companies in RS is still a level of losses of electricity in the distribution network. RC policy is to motivate licensees to reduce these losses by determining the approved amount of costs in the name of losses of electricity in the tariff proceeding, with the obligation of the distribution licensee to make plans of measures and activities to reduce distribution losses and to submit reports on their implementation.

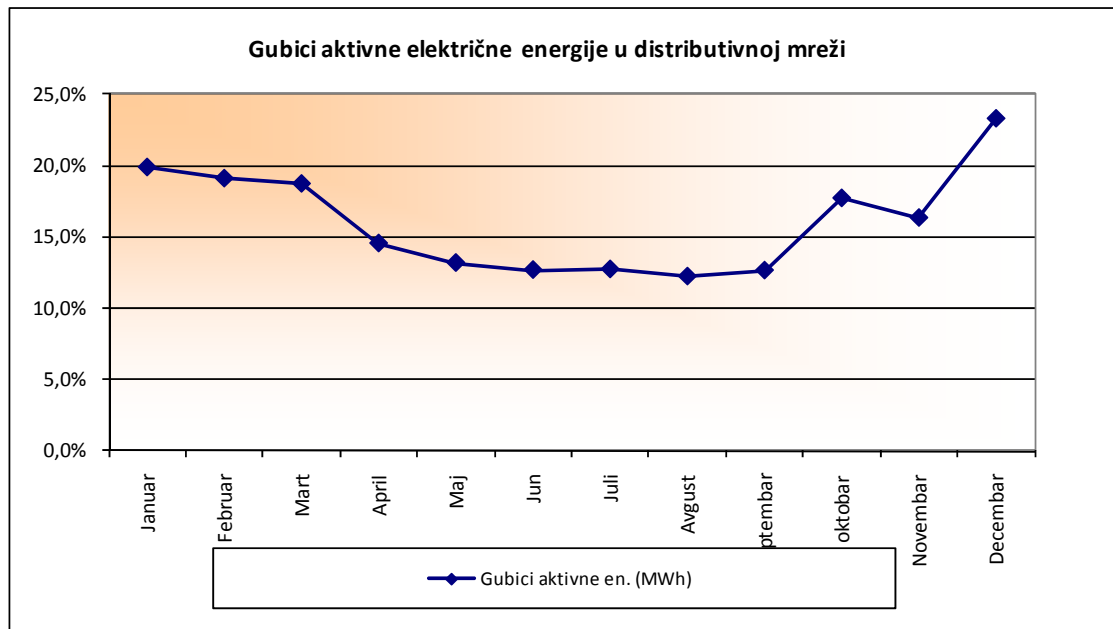
Picture 18 – Realized consumption and losses of electricity in the distribution network in 2010



Regulatory Commission in the tariff proceeding approves the percentage amount of losses for each voltage level and only such approved amount (13.2% on average) is calculated in the tariff rates for use of distribution network, while less or more realization of losses is the benefit or damage of distributor.

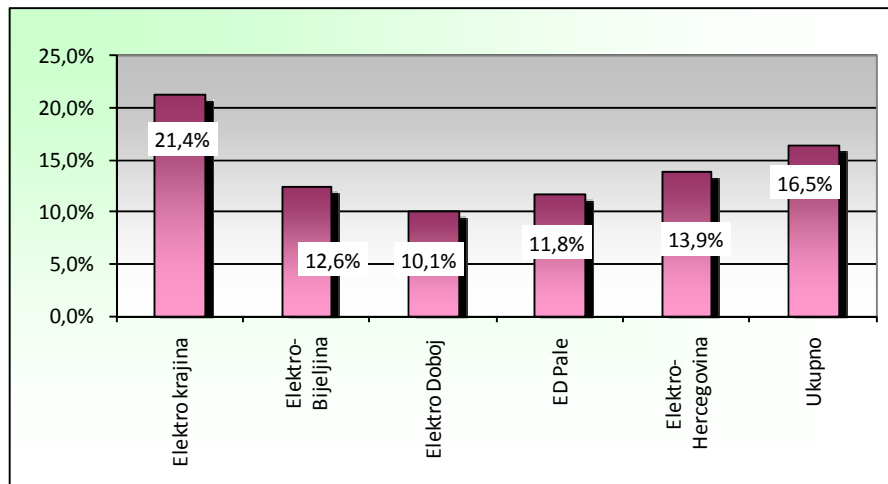
According to the data submitted by the distribution companies, realized losses of electricity in 2010 amounted to 16.53% namely 582,363 MWh i.e. 140,999 MWh more than approved (13.2% on average). Realized consumption and losses of electricity in the distribution network in RS in 2010 are given in picture 18 while the realized losses of electricity in the distribution network per months in picture 19.

Picture 19 – Realized losses of active electricity in the distribution network per months in 2010



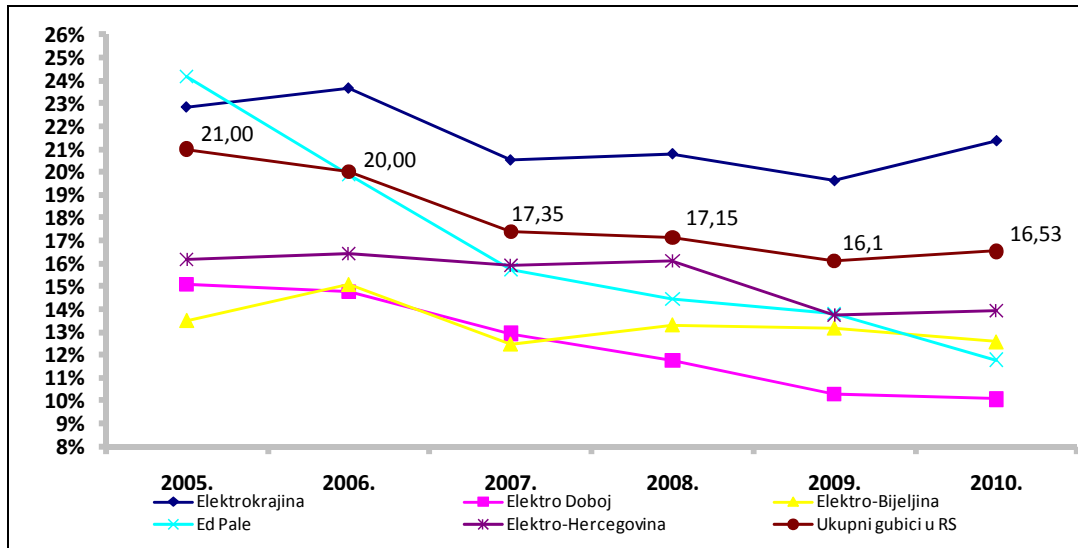
The level of losses of electricity in the distribution network per distribution areas, expressed as percentage of the ratio between the realized losses of electricity and totally taken electricity in the distribution network is from 10.1% in ZP Elektrodoj a.d. Doj to 21.4% in ZP “Elektrokrajina” a.d. Banja Luka, as presented in Picture 20

Picture 20 – Realized losses of electricity in the distribution network in 2010



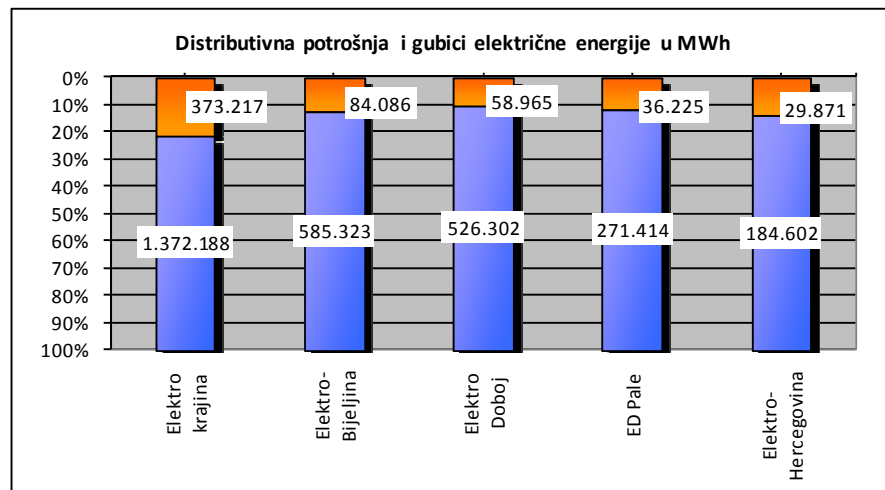
Picture 21 presents the benchmarking overview of the realized distribution losses in the electric distribution companies in the period 2005 – 2010.

Picture 21 – Overview of the realized distribution losses at the level of several years (%)



Total distribution losses in RS from 16,53% in 2010 are more for 0,44% or in the energy value 34,76 GWh compared to 2009 while total taking of electricity in the distribution network in that period is more for 117,41 GWh compared to taking of electricity in 2009.

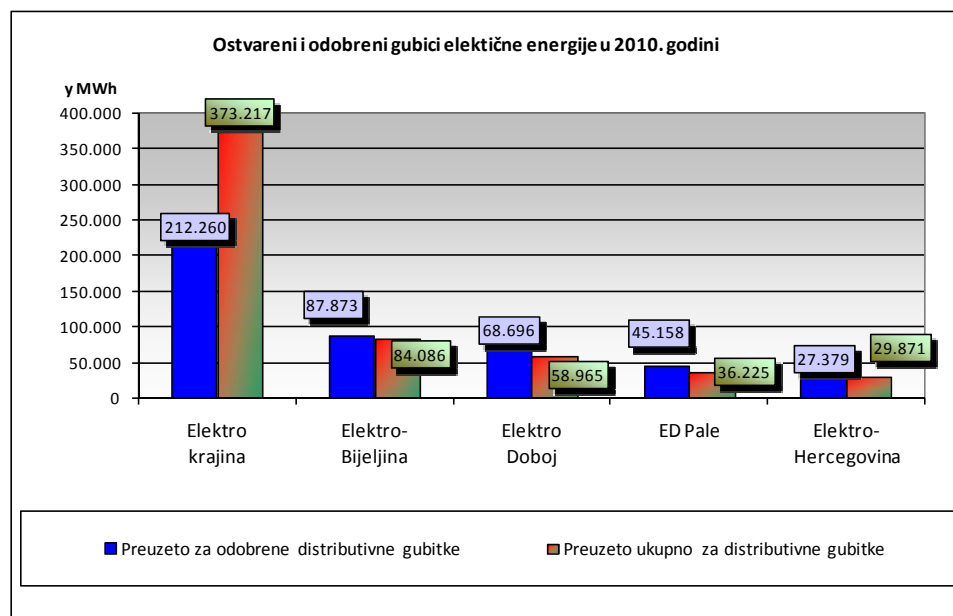
Energy values of distribution losses and totally taken electricity are given in picture 22.



Picture 22 – The ratio between losses and totally taken electricity in 2010

Approved and realized amounts of electricity for distribution losses per companies are given in the picture 23.

Picture 23 – Overview of the realized and approved losses of electricity per distribution companies



#### 1.4. Supply of tariff customers with electricity

Distribution companies in RS supply tariff customers with electricity but the requirements of the issued licenses determined the obligation to provide for accounting unbundling of these activities, in order to enable clear identification of network use costs, namely determination of tariffs for the distribution network use. In order to accomplish these obligations, distribution companies adapt their business-information systems to new organization imposed by the deregulation process.

Distribution and supply of tariff customers in RS is done within the system of the public service obligation.

##### 1.4.1. Consumption of electricity

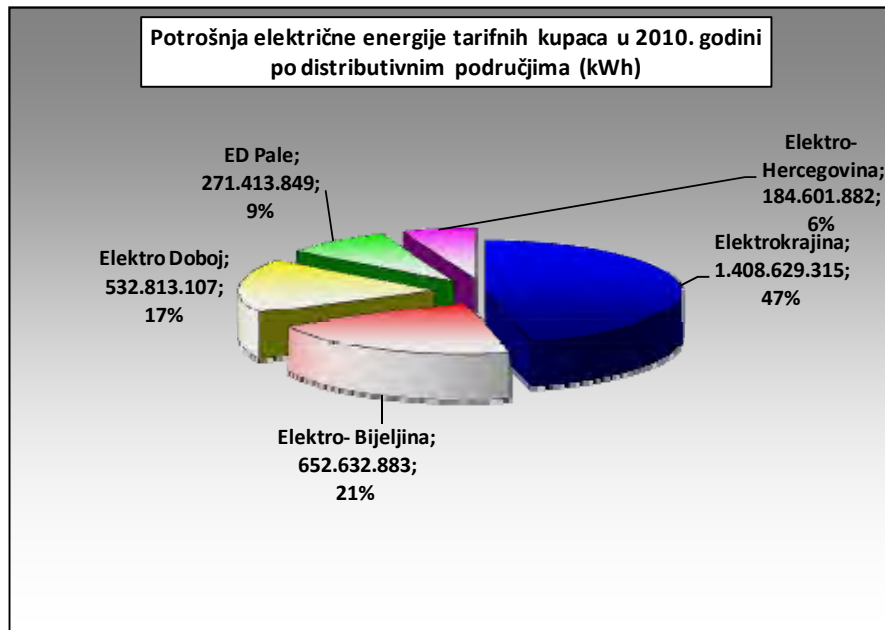
Table 16 gives number of tariff customers in RS in 2010 per categories of consumption.

Table 16 – Number of end users in RS on 31.12.2010

Kategorija potrošnje	Elektro krajina	Elektro-Bijeljina	Elektro Doboј	ED Pale	Elektro-Hercegovina	Ukupno
110 kV	2	1	2	0	0	5
35 kV	3	5	7	5	4	24
10 (20) kV	267	175	100	63	26	631
0.4 kV OP	15.807	5.405	5.054	4.056	2.195	32.517
Domaćinstva	225.032	97.466	86.852	52.096	26.252	487.698
Javna rasvjeta	87	40	18	35	234	414
<b>Ukupno</b>	<b>241.198</b>	<b>103.092</b>	<b>92.033</b>	<b>56.255</b>	<b>28.711</b>	<b>521.289</b>

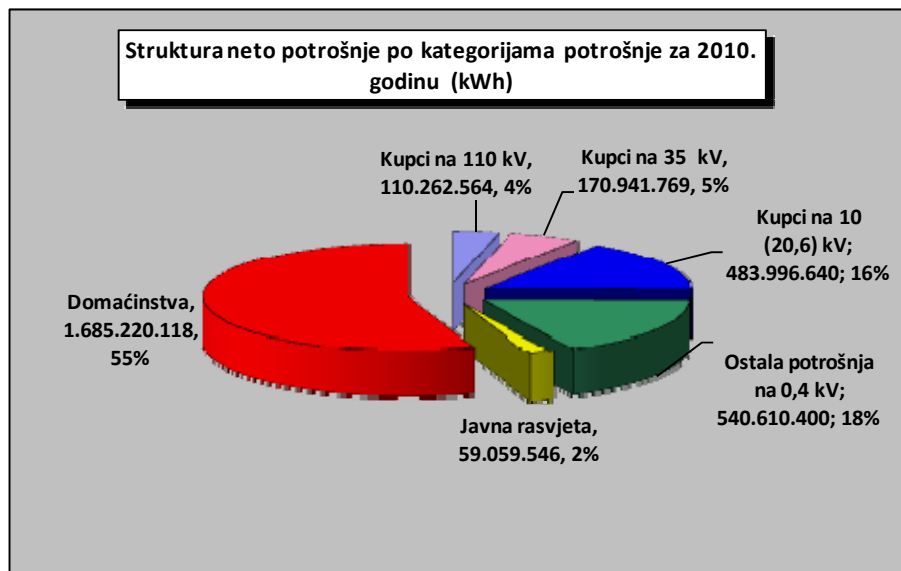
Picture 24 presents net consumption of tariff customers per distribution area, namely per companies – suppliers of tariff customers in RS, in the picture number 25 structure of total consumption of electricity in RS per categories of consumption.

Picture 24 – Consumption of tariff customers in 2010



Out of total consumption of end users in RS in 2010, 4% goes to end users which structures are connected at high voltage (110 kV) namely transmission network. All end users in RS in 2010 were supplied as tariff customers, per tariff rates determined by RS.

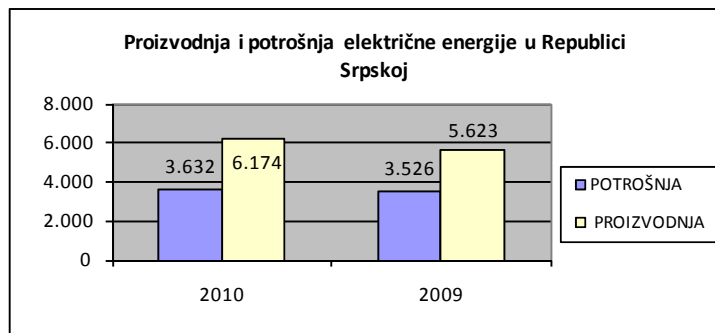
Picture 25 – Structure of net consumption per categories of consumption in 2010



#### 1.4.2. Safety of supply – generation and consumption of electricity

One of indicators of safety of supply is level and availability of generation capacities, analyzed in the ratio to the level of consumption of electricity. Republic of Srpska, which belongs to the group of bigger net exporters of electricity in the region, in 2010 achieved a high coefficient of providing consumption of electricity from own generation, as presented in Picture 26.

Picture 26 – Generation and consumption of electricity in RS in 2009 and 2010



#### 1.4.3. Revenue of distribution and supply of tariff customers

In the Table 17, there is a overview of revenue realized from supply of non-eligible (tariff) customers with electricity, as well as the transferred costs to distribution and supply after the adjustment made (costs of procurement of electricity and costs of use of transmission network). Having in mind that RC was not submitted the revised financial reports for all electric distribution companies, data in Table 17 are given based on data from the regular monthly reporting.

Table 17 – Revenue of distribution and supply of tariff rates for supply of non-eligible customers in 2010

( 000 KM)	Elektro-krajina	Elektro-Bijeljina	Elektro-Doboj	ED Pale	Elektro-Hercegovina	Ukupno RS
Ukupno ostvareni prihod od tarifa	175,762	76,639	62,545	36,013	22,161	373,120
Preneseni troškovi nabavke i korišćenja prenosne mreže	125,374	48,325	40,480	19,060	10,584	243,824
Prihod distribucije i snabdijevanja od tarifa	50,388	28,314	22,065	16,952	11,576	129,296



## 1.5 Quality of electricity supply

Regulation of the service quality and improvement of the system reliability for distribution of electricity arises from the legal competence of Regulatory Commission.

Having made General conditions for delivery and supply with electricity - General Conditions and later on Rule book on reporting, Regulatory Commission prescribed the obligation and reporting form on quality of supply with electricity, and accordingly initiated regulation of the quality supply with electricity in RS.

General Conditions define the quality of supply as follows:

- \* continuity of delivery of electricity (capacity, appropriateness of
  - Number of the long term supply interruptions of end users during the year: The sum includes all long term supply interruptions during the year, separately for the planned and non-planned interruptions and
  - Number of short term supply interruptions of end users during the year: The sum includes all short term supply interruptions during the year

Long term interruptions (interruptions longer than three minutes) are followed per the voltage level and cause of interruptions, while short term interruptions (interruptions shorter than three minutes) are followed only per the voltage level. Short term interruptions in delivery are divided into planned (announced) and non-planned (non-announced) interruptions. Pursuant to General conditions for delivery and supply of electricity, distributor may terminate delivery of electricity in order to do the planned activities of regular and extra maintenance, inspection and overhaul, connection of structures of new customers, testing and control of measuring and the network enlargement. In those cases, distributor is obliged to inform end users on the term of the planned interruption of delivery and expected duration of the interruption, no later than 24 hours before the planned delivery interruption.

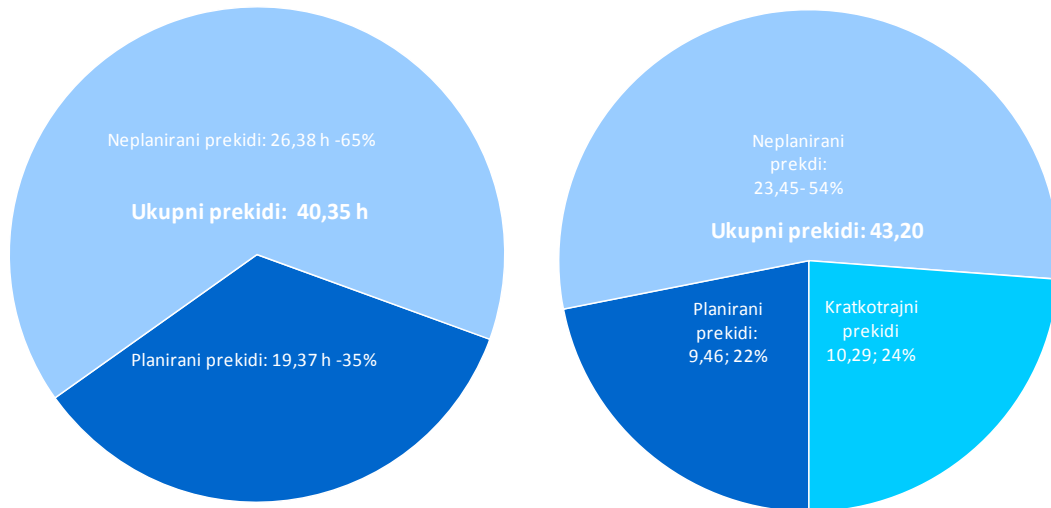
Classification of the non-planned interruption according to the cause is made as follows:

- Force Majeure,
- Third party responsibility and
- Distributor responsibility

Force Majeure is meant by all events which result in the delivery interruptions, but are out of the distributor control: natural disasters (earthquake, fire, flood), extreme weather conditions (atmosphere releases, storm wind, excessive ice, etc), interruptions at the transmission voltage level, reduction of load due to shortage of electricity, under-frequency system charging and orders of the respective authorities.

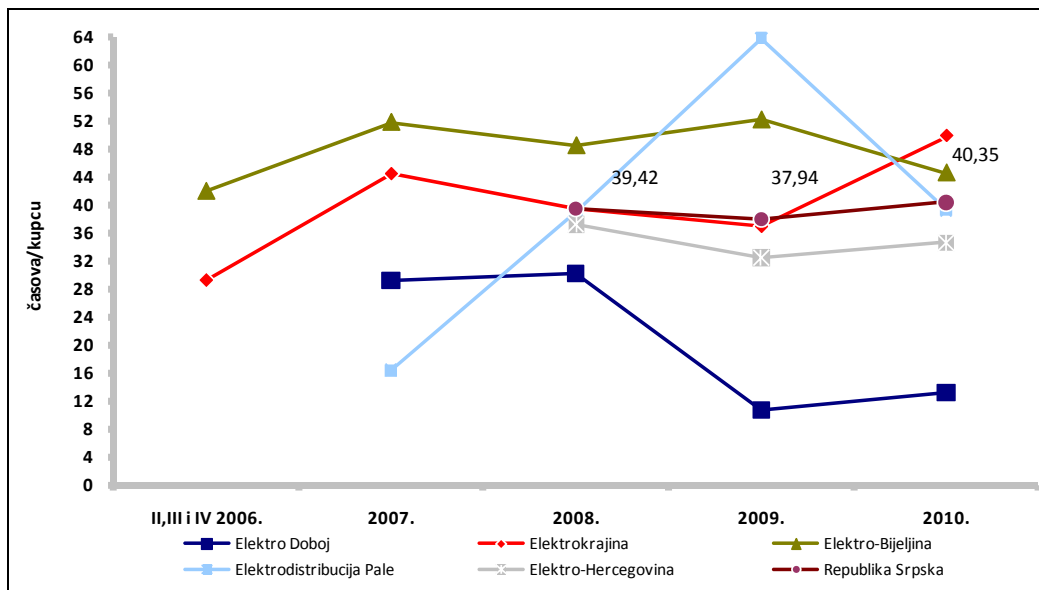
The third party responsibility is meant by interruptions caused by the third party actions such as: interruptions and damages of conductors, damages of the transmission lines, theft, terrorism etc.

Picture 27 – Indicators of continuity of delivery of electricity of RS for 2010

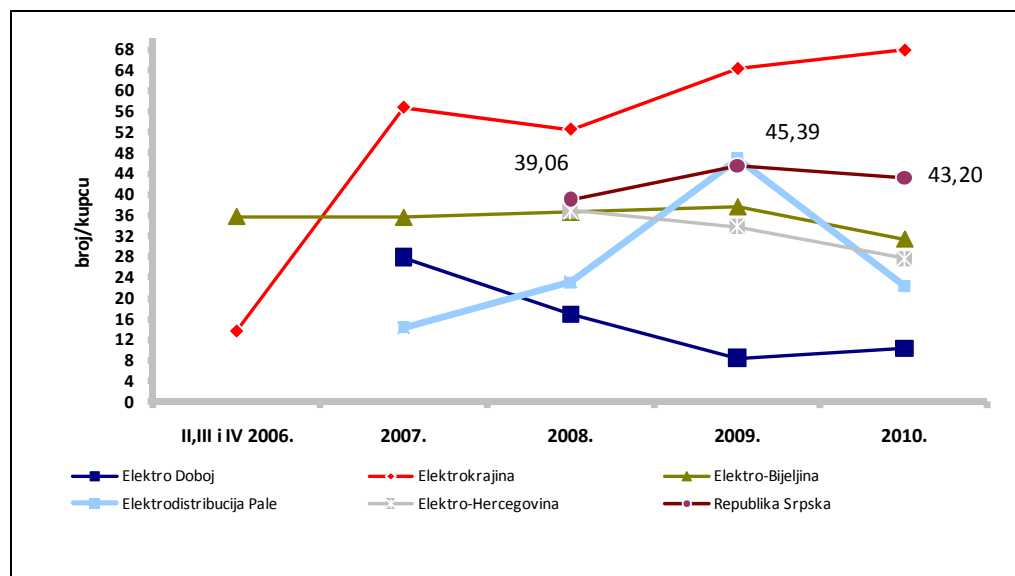


Values of indicators of continuity of delivery of electricity for 2010 are given in Picture 27, while pictures 28 and 29 show the trend of duration and number of total interruptions in the previous years.

Picture 28 – Length of total interruptions in delivery of electricity in Republic of Srpska



Picture 29 – Number of total interruptions in delivery of electricity in Republic of Srpska



Analyzing all data, both graphs and tables, and analyzing interruptions per the cause and voltage level, we can conclude that a considerable share in interruptions represent the interruptions caused by “Force Majeure” events. Interruptions in delivery at the middle voltage network affect most end users, as it can be expected. Length and number of interruptions in delivery have several times more values in the rural than in urban areas. If we analyze interruptions in delivery of electricity at the distribution network in 2010, we can conclude as follows:

- Total (non-planned) interruptions per end user is 1582 (more than 26 hours),
- Out of them non-planned interruptions due to distributor responsibility amount to 469 minutes at the level of RS, while expressed in percentages, 30% of total (non-planned), 509 minutes (26,4%) in the region of Elektrokrajina, 113 minutes (25,3%) in the region of Elektro Doboј, 1056 minutes (59%) in the region of Elektro Bijeljina, 20 minutes (1,3%) in the region of Elektrodistribucija Pale and only two minutes (0,1%) in the region of Elektro-Hercegovina.
- Total (non-planned) interruptions in the rural area amount to 2744 minutes per end user (about 48 hours), at outskirts 1119 minutes (about 19 hours), while in the urban area they amount to 505 minutes (about 8 hours).

So, indicators of continuity of delivery of electricity, as it can be seen in the picture 28 and picture 29, have different values at some distribution areas, depending on a range of factors. Also, values of the share of the non-planned interruptions caused by force majeure, distributor responsibility or third party, according to the submitted data considerably vary between distribution companies, which can indicated a non-uniform method of application of methodology of the interruptions recording. It is important to

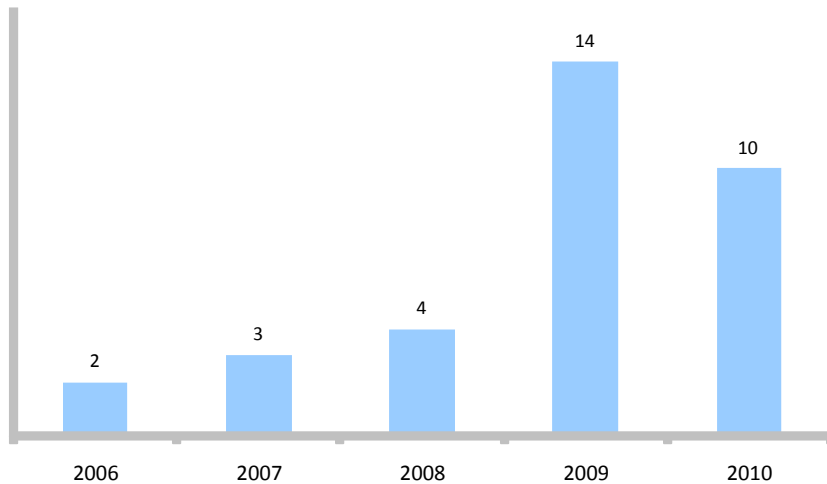
say that the Rule book on reporting and General Conditions did not determine the criteria for classification of distribution areas to the urban, outskirts and rural areas, but distribution companies made this division. Distribution network in the rural areas is of radial nature with other lines, and hill-mountain field configuration at the major part of RS. It is mostly about old network structures of unsatisfactory technical characteristics. Frequent damages in such network are the cause of supply interruptions of electricity in the rural areas, with significant duration. One of the real cause of the higher indicators is a big share of surface lines in the distribution network of RS (about 93%). Which measures to take to improve situation regarding continuity of delivery in RS? In certain cases, decision is to provide spare supplying at the middle voltage level, having in mind that proven certain level of the technical-organizational reserve for improve of the reliability of operation of the distribution system, to plan for more qualitative regular maintenance of distribution network, and definitely improve technical availability and level of automation of the distribution network.

We should take into account that change of the indicators of continuity of electricity supply during the previous years depends on the volume and reliability of the collected data, so they cannot be considered completely representative. Having in mind that completeness and reliability of data is better and better every year, trends of the quality of supply regarding continuity of delivery of electricity could be reliably estimated in the next years.

The next step, as mentioned in the introductory part, in regulation of delivery continuity is determination of target annual values of these indicators, their constant checking regarding documenting causes of some interruptions as well as the reflection to the operations of the distributors themselves.

Apart from continuity of delivery of electricity, the technical aspect of supply also includes the quality of the supplying voltage. The end user is entitled to the free checking of the supplying voltage quality at all takeover points, regardless of the results of metering. The systematic monitoring of the voltage quality is made applying appropriate metering in some points of distribution network, while the newly created form of the Rule on reporting 11.T-D Quality of the supplying voltage will enable regular inspection for RC into results of those metering. Supplying voltage quality is followed also through reporting of distributor on rehabilitation of substations area with bad voltage conditions, number of complaints of end users addressed to distributor regarding quality of the supplying voltage and number of repairs of voltage conditions. In 2010, in RC, it was received 10 complaints on the reduced quality of supply with electricity. Overview of the submitted complaints to the RC for the previous years is given in the picture number 30. Majority of complaints related to the Elektrokrajina region, in most cases justified, so after clarification done by distributor, it is followed reconstruction and rehabilitation of the distribution network during the monitoring process.

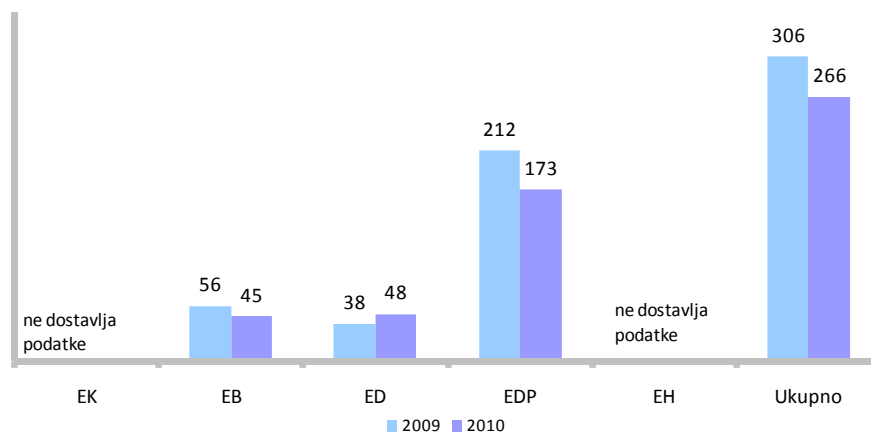
Picture 30 – Number of complaints to RS regarding quality of voltage



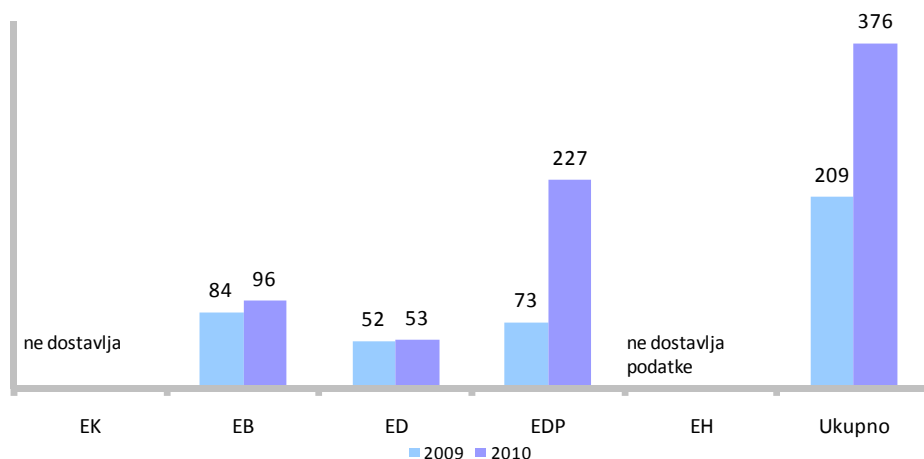
The deadline for complete application of international and European technical standards regarding quality of voltage (IEC 60038 and EN 50160) is according to the General conditions for delivery and supply 1 January 2015.

Overview of number of complaints to distributor regarding quality of the supply voltage and number of repairs of the voltage circumstances, based on the submitted data, is given in the picture 31 and 32.

Picture 31 – Overview of number of complaints per distribution companies regarding the voltage quality



Picture 32 – Overview of number of repair of voltage circumstances



Average time needed for repair of voltage circumstances is from one to five months.

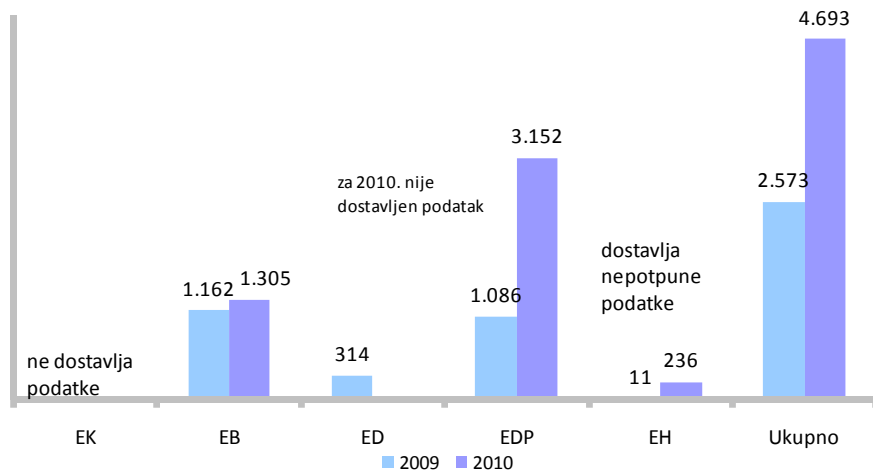
### 1.5.1 Commercial quality of distribution and supply

A part of the supply quality is a quality of the commercial service which is related to the valuation of services which distributor/supplier offers to end users of electricity. These services can be divided in certain parts, accompanied by the appropriate forms for reporting to RC such as:

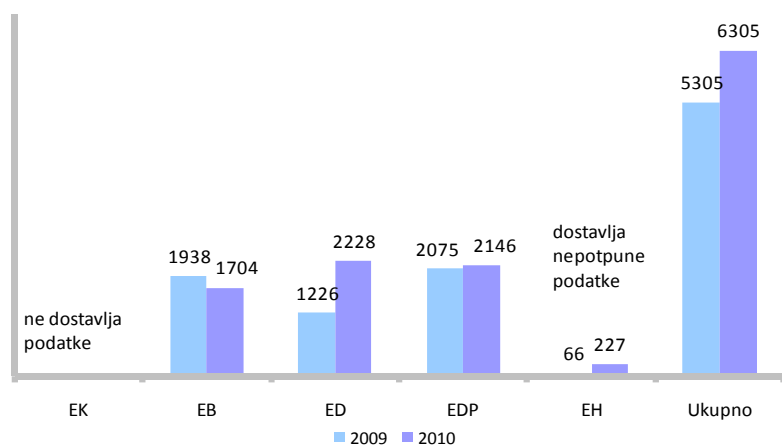
- Issue of the electric power consent and connection of structures to the distribution network,
- The call center and department for settlement of disputes and complaints,
- Technical aspect of commercial quality,
- Maintenance of the metering devices,
- Metering, reading and calculation of electricity and
- Disconnection and termination of delivery.

In the past period, the call centers were established in distribution companies of RS, which function is the contact with end users regarding obtaining necessary information regarding connection, documents, notice on damages and more efficient settlement of disputes and complaints. Monitoring activities in distribution companies are used to check the operation of this center in contact with end users, and regarding other function. Based on the submitted data by distribution companies on commercial quality in 2010, it was made their analyses and achieved values of some indicators were presented.

Overview of number of issued electric power consents for end users at low voltage, and number of connection of structures to the distribution network and concluded contracts on supply is given in Pictures 33, 34 and 35.



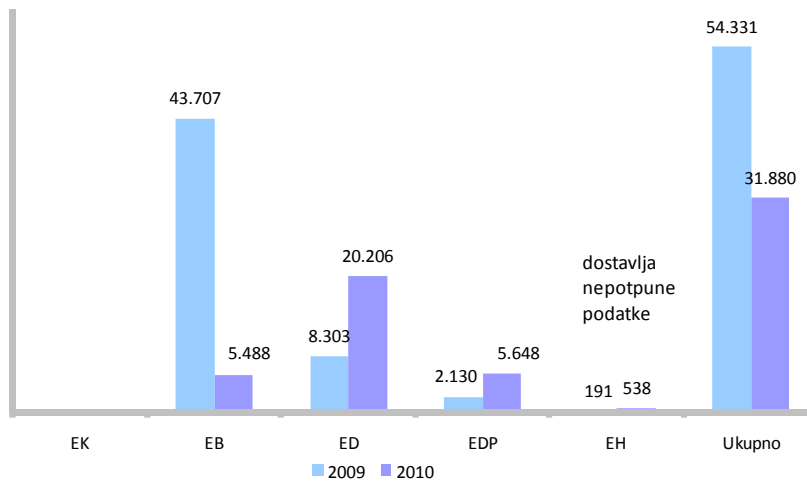
Picture 33 – Number of issued electric power consents at low voltage



Picture 34 – Number of connections of end users' structures

Average time needed for issuance of the electric power consent is from five to eight days from the day a regular application is submitted (the deadline is 30 days according to provisions of the law on electricity and general conditions)

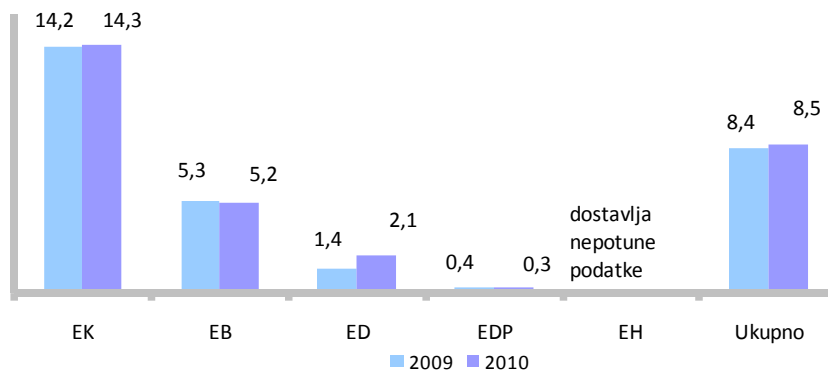
Picture 35 – Number of concluded contracts on supply with electricity



The number of the concluded contracts on supply (medium and low voltage) comprises also the number of “old” end users that did not have the contracts on supply.

Overview of complaints of end users, and number of visits to the call centers and number of calls of end users is given in the pictures 36, 37 and 38. For the benchmarking purposes of indicators in these segments of operation of distribution companies, the number is given in the ratio to 100 end users.

Picture 36 – Number of complaints per 100 end users

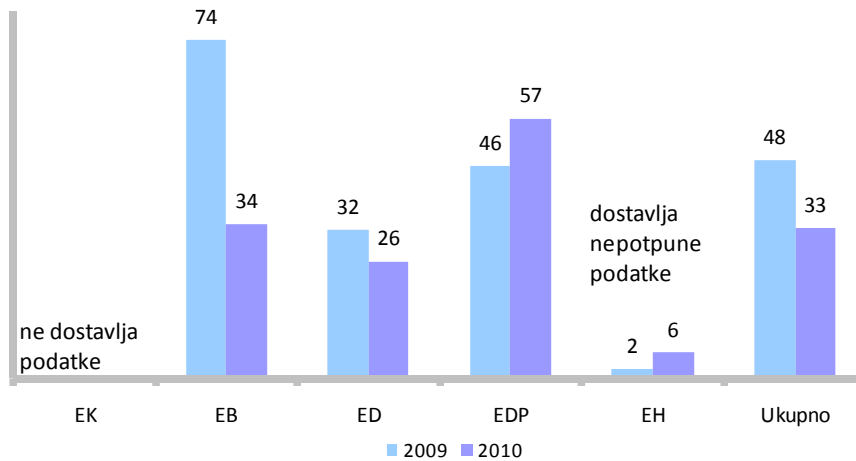


The average time needed to response to the complaint and appeal of end user in writing is from two to ten days (10-15 days is the deadline according to provisions of the Law on electricity and General Conditions).

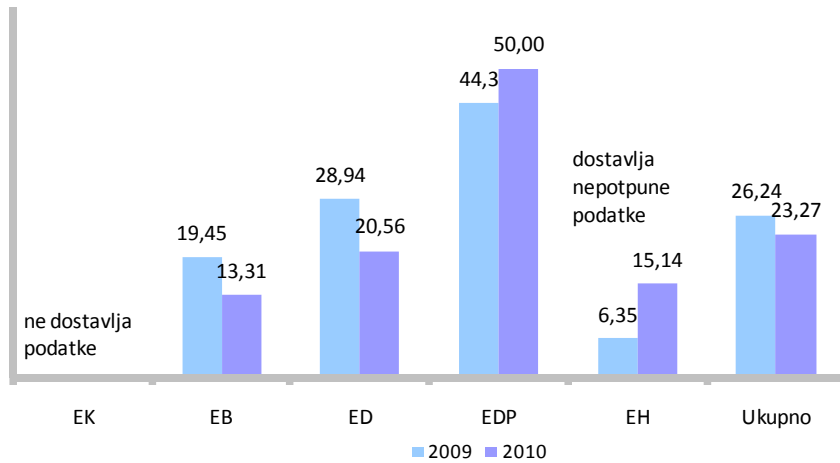
Data from the Elektrokrajina include the also objections, so that is why there is disproportion with other distribution companies, although it is obvious to note an increased number of complaints in the region of Elektrokrajina.



Picture 37 – Number of visits to the call center per 100 end users

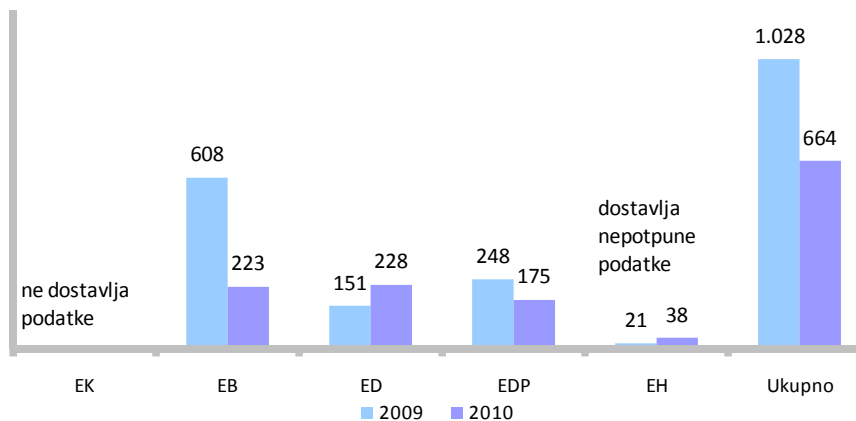


Picture 38 – Number of telephone calls in the call center per 100 end users



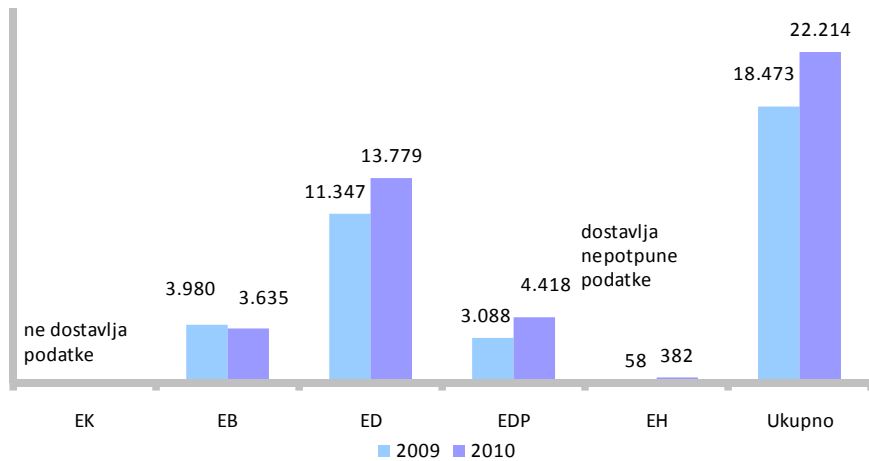
Overview of number of the reported problems with metering and number of the disconnected end users and number of those re-connected after disconnection due to non-payment as presented in pictures 39, 40 and 41.

Picture 39 – Number of the registered problems with metering of electricity

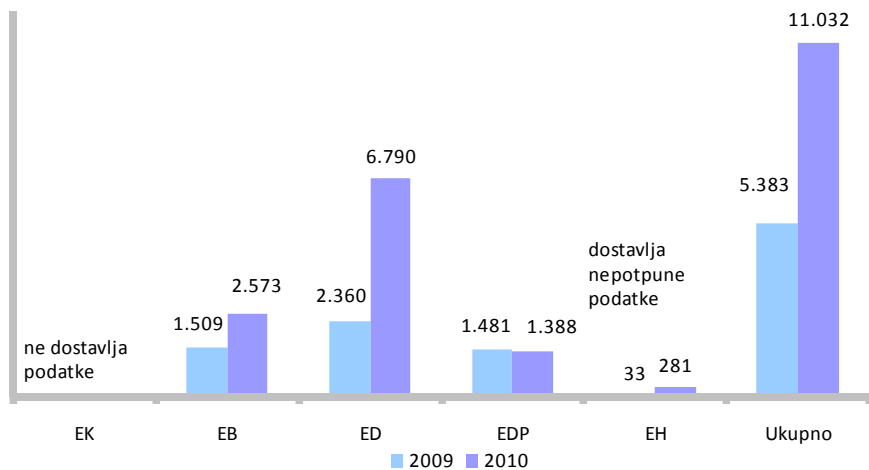


The average time needed for providing proper metering is from two to four days depending on the particular distribution company.

Picture 40 – Number of all disconnections of end users



Picture 41 – Number of the re-connections after disconnection due to non-payment



As a rule, re-connection after disconnection due to non-payment is done by distributor no later than the next working day.

The increased number of visits to the call center and calls of end users is partly a result of the contract conclusion on the electricity supply and issuance of the electric power consent to the existing end users.

These services, by their nature, are mostly public services, sometimes more important than quality of continuation of delivery, particularly for end users from the category of household. The valuation criteria of these services are the required time and quality of completion of some services, which have the deadlines prescribed by General Conditions for delivery and supply of electricity. Based on these indicators, operation of distributor may be estimated and its intention to improve the services to end users, in these segments, but is possibly a signal of

worse and non-qualitative service. For the mentioned reasons, it is very important to monitor and have data on all these parameters as a whole.

## 2. Natural gas sector

### 2.1 Natural gas transport system control

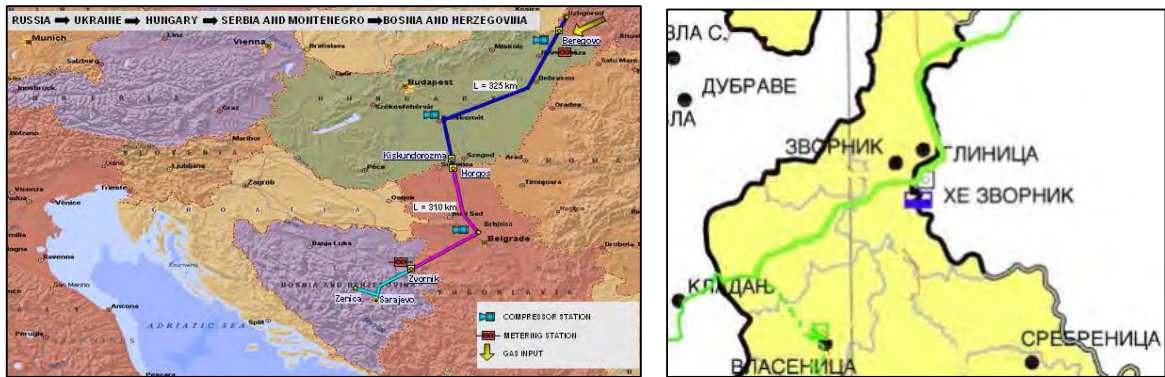
Based on Decision of the RS Government on appointment of the transport system operator (Official Gazette of RS, 114/07), the authorization for natural gas transport system control is granted to the company "Gas Promet" a.d. Istocno Sarajevo – Pale. Also, the mentioned company is the licensee for natural gas transport system control in RS issued by RC. The ownership structure of the company is: Shareholding Fund of RS is 65.2%, the Fund for pension and invalid insurance of RS 10%, Fund for restitution of RS 5%, while 19.8% are the shares of the investment funds and small shareholders. Transport system operator is the owner of a part of the natural gas transport network of RS (24.2 km).

RS has no sources of natural gas of its own. Gas comes from Russia through Ukraine, Hungary and Serbia along direction of Beregovo – Horgos – Zvornik. The transport system of Republic of Srpska was built in the period from 1979 to 1984 and is connected to the transport system of JP "Srbija gas" Serbia and "BH-Gas" d.o.o. Sarajevo. The gas enters the transport system from the direction of Serbia, near Sepka, and gas is taken by the takeover station in Karakaj. The gas exit from the transport system is at the main metering-regulation station Karakaj (for FG "Birac" a.d. Zvornik and customers in the industrial zone Karakaj), at the metering regulation station Zvornik (for customers in Zvornik and Mali Zvornik) and metering station in Kladanj (Staric) owned by "BH Gas" d.o.o. Sarajevo (for customers in FBiH). At the transport system, there are separated sections developed towards Bratunac, Sekovici and Cotovnik (for Tuzla) which are not in function.

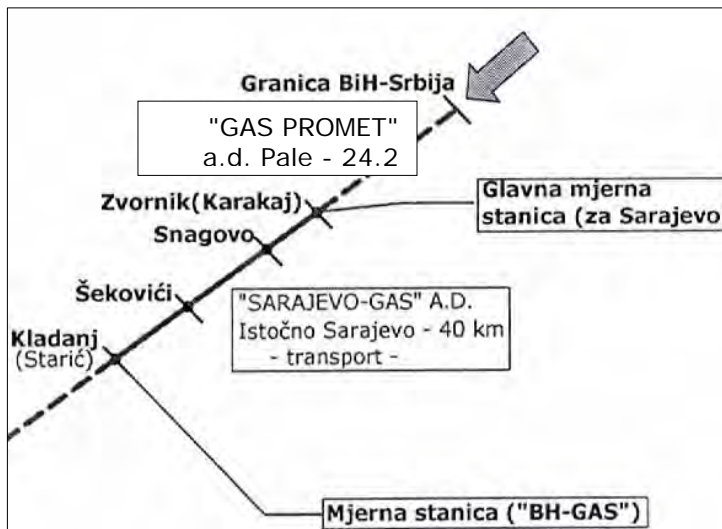
Basic characteristics of the transport system for the natural gas in RS are as follows:

- Length of the gas pipeline – 64,2 km
  - Diameter of the transport gas pipeline – 406,4 mm (16")
  - Maximum projected pressure – 50 bars
  - Maximum projected capacity –  $1,25 \times 10^9$  Sm<sup>3</sup>/year
  - Operational capacity –  $750 \times 10^6$  Sm<sup>3</sup>/year
  - Pressure max/min/operational – 50/25/35 bars
  - Linepack – 250 000 Sm<sup>3</sup>
  - Number of metering devices is 3 (13 meters)
- |   |               |               |               |
|---|---------------|---------------|---------------|
| - Maximum technical capacity            | 0.00105 TWh/h | 0.00105 TWh/h | 0.00105 TWh/h |
| - Maximum hourly gas flow               | 0.00071 TWh/h | 0.00067 TWh/h |               |
| - Percentage of the network utilization |               | 63.8%         | 67.6%         |
| - Free network potential                |               | 36.2%         | 32.4%         |

Picture 42 – Direction of the natural gas supply and existing transport system of natural gas in RS



Regulatory Commission with its Decision dated 11 March 2010 gave its consent to the document Rule of operation of the natural gas transport network in RS to the licensee for the natural gas transport system control in RS, i.e. to the company “Gas Promet” a.d. Istočno Sarajevo – Pale. Rules of operation are published in the “Official Gazette of RS”, 64/10.



Picture 43 – Scheme of the natural gas transport system in RS

## 2.2. Transport of natural gas

The license for transport of natural gas was issued to the energy companies “Gas Promet” d.o.o. Istočno Sarajevo – Pale and “Sarajevo – gas” a.d. Istočno Sarajevo.

Transporter “Gas Promet” a.d. Istočno Sarajevo – Pale transports the gas along the section of 24,2 km long from the border with Serbia till Zvornik. Transporter “Sarajevo – gas” a.d. Istočno Sarajevo transports gas along the section of 40 km of length between Zvornik and Kladanj. According to the data of transporter, total transported amount of natural gas are as follows:

By “Gas Promet” a.d. Istočno Sarajevo – Pale in 2008 /ter “Gas Promet” a.d. Istočno Sarajevo – Pale transports the gas along the section of 24,2 km long from the border with Serbia till Zvornik. Transporter “Sarajevo – gas” a.d. Istočno Sarajevo transports

gas along the section of 40 km of length between Zvornik and Kladanj. According to the data of transporter, total transported amount of natural gas are as follows:

- By "Gas Promet" a.d. Istocno Sarajevo – Pale in 2008 – 312 x 10<sup>6</sup> Sm<sup>3</sup>, in 2009 – 231 x 10<sup>6</sup> Sm<sup>3</sup>, and in 2010 – 241 x 10<sup>6</sup>Sm<sup>3</sup>,
- By "Sarajevo gas" a.d. Istocno Sarajevo in 2008 – 220 x 10<sup>6</sup> Sm<sup>3</sup>, in 2009 – 199 x 10<sup>6</sup>Sm<sup>3</sup> and in 2010 – 206 x 10<sup>6</sup>Sm<sup>3</sup>

### 2.3 Distribution and control of the natural gas distribution system

Licenses for distribution and control of the natural gas distribution system control are issued to the

companies "Sarajevo-gas" a.d. Istocno Sarajevo and a.d. "Zvornik stan" Zvornik.

Both distributors are in charge of doing activity at certain geographic area. Doing activity, as well as issuance of consents to the prices of connection to the distribution network and determination of tariffs for access and use of distribution network is regulated and monitored by the RERS.

Distributor "Sarajevo-gas" a.d. Istocno Sarajevo is distributing gas on the territory of the municipality of Istocno Novo Sarajevo and Istocna Ilidza (with a possibility of development to the municipality of Pale). Distribution system "Sarajevo-gas" a.d. Istocno Sarajevo is connected to the distribution system of the company "Sarajevo gas" Sarajevo from FBiH. The network length is 67 km (PE d32-200 mm and C DN 100-200), operational pressure 0.1/4/8 bars and the network capacity 6678-11.810 Sm<sup>3</sup>/h.

According to the data of the company "Sarajevo-gas" a.d. Istocno Sarajevo in 2008 it was distributed 3.113.031 Sm<sup>3</sup> of natural gas for 2.461 users, in 2009 – 2.877.008 Sm<sup>3</sup> for 2.956 users, and in 2010 – 3.179.445,86 Sm<sup>3</sup> for 3278 users. Distribution losses in 2009 were 138.535 Sm<sup>3</sup> or 4,6% while in 2010 they were 102,654,55 Sm<sup>3</sup> or 3,13%. The mentioned data are in the Table 18.

Table 18 – Total distributed amounts, number of users and losses of natural gas for the company "Sarajevo-gas" a.d. Istocno Sarajevo

"Sarajevo-gas" a.d. Istočno Sarajevo				
Godina	Ukupno distribuirano (Sm <sup>3</sup> )	Broj korisnika	Gubici	
			Sm <sup>3</sup>	%
2009.	2.877.008,00	2.956	138.535,00	4,60%
2010.	3.179.445,86	3.278	102.654,55	3,13%

Distributor A.D. "Zvornik stan" Zvornik distributes gas on the territory of the municipality of Zvornik. The company within its structure has the heat plant to supply users with heat energy. The distribution network of A.D. "Zvornik stan" Zvornik is connected to the transport network of "Gas promet" a.d Istocno Sarajevo – Pale at the main metering and regulation station Karakaj and MRC in Zvornik. Length of the network is 43.254,94 , (PE d63,60,90 mm and C DN 150), operational pressure 0.2/0.5/3 bars while the network capacity is 57005.331 Sm<sup>3</sup>/h.

According to the data of A.D. Zvornik stan, Zvornik in 2008 it was distributed 2.740.965 Sm<sup>3</sup>, in 2009 – 2.213.132 Sm<sup>3</sup> for 564 users and in 2010 – 3.033.274 Sm<sup>3</sup>

for 593 users. Distribution losses in 2009 were 147.020 Sm<sup>3</sup> or 6,2% and in 2010 they were 230.689 Sm<sup>3</sup> or 7,68%.

Table 19 – Total distributed quantities, number of users and losses of natural gas for the company A.D, “Zvornik stan” – Zvornik

A.D. "Zvornik stan" Zvornik				
Godina	Ukupno distribuirano Sm <sup>3</sup>	Broj korisnika	Gubici	
			Sm <sup>3</sup>	(%)
2009.	2.213.132,00	564	147.020,00	6,20%
2010.	3.033.274,00	593	230.689,00	7.68%

According to the data of the company, total length of distribution network in RS is 103,149,94 m.

Both distributors have valid “Rules of operation of the natural gas distribution network” which are adopted by the competent body of the company which have the decisions on giving consents to, issued by RERS.

## 2.5. Supply of natural gas

Licenses for supply of natural gas are issued to the companies “Sarajevo-gas” a.d. Istocno Sarajevo and A.D. “Zvornik stan” Zvornik.

Companies doing distribution and control of the natural gas distribution system, also do the supply of tariff customers with natural gas. The license requirements defined that the companies should make accounting unbundling of distribution from other activities done by the licensee in order to enable clear identification of costs of the access and use of the network.

Table 20 presents the number of end users per categories of consumption and their consumption in 2010

Table 20 – Number of end users per categories of consumption and their consumption in 2010

	Broj krajnjih kupaca	Potrošnja Sm <sup>3</sup>
<b>Sarajevo-gas</b>		
domaćinstva	3.045	1.945.128,07
komercijalni	227	887.647,11
industrija	6	346.670,70
<b>UKUPNO</b>	<b>3.278</b>	<b>3.282.100,43</b>
<b>Zvornik stan</b>		
domaćinstva	486	275.333
komercijalni	96	324.150
industrija	10	
industrija (toplana)	1	2.173.088
<b>UKUPNO</b>	<b>593</b>	<b>3.033.274</b>

## 2.5 Quality of the rendered services within the natural gas sector

Regulation of the service quality and improvement of reliability of transport and distribution system of natural gas will be the subject of further activities of RS in conducting its competences through the monitoring of application of the rules of operation and general conditions for supply adopted by the competent bodies of the company which RERS gave its consent to. The companies, within the reporting requirement defined by licenses for doing activity, submit to RERS reports on quality of supply. Also, the license requirements for transport, distribution and control of the system for natural gas distribution oblige the licensees to ensure and undertake all necessary measures for reliable and qualitative doing activity, to keep updated records of interruptions in supply, system losses and quality of offered services. Information for licensees regarding technical possibilities of the system, costs of connection, access and use of the system as well as possibilities to submit complaints and appeals should be published at the notice board and website of the company. The process of data collection on the quality of the offered services began end of 2010.

## 2.6. Methodology and procedure for determination of tariff rates in the natural gas sector

## 3. Sector of oil and oil derivatives

### 3.1. Generation of oil derivatives

The Law on oil and oil derivatives prescribed the competence of RC to regulate activities in the sector of oil and oil derivatives such as: generation of oil derivatives, transport of oil through the oil pipelines, transport of oil derivatives through their pipelines and storage of oil and oil derivatives.

Licensee for generation of oil derivatives "Rafinerija nafte" a.d. Brod is consisted of two separate primary facilities. A new primary facility was completed in 1990 and it has the capacity of the crude oil processing of 3 million tons annually. The old primary facility is made of the facility built in 1968 while the installed capacity of the crude oil treatment amounts to 1,32 million tons annually. Apart from the mentioned, Rafinerija includes the ancillary out of process capacities such as storage and contracted capacities, base ancillary facilities etc.

Table 21 includes the basic technical data of "Rafinerija nafte" a.d. Brod

Table 21 – Basic technical data of "Rafinerija nafte" a.d. Brod

<b>OSNOVNI TEHNIČKI PODACI: PROIZVODNJA DERIVATA NAFTE</b>				
<i>Lokacija:</i>		<i>Brod</i>		
<i>Tip rafinerije:</i>		<i>Prerada sirove nafte</i>		
<i>Kapaciteti rafinerije :</i>				
<i>Postrojenje</i>	<i>Kapacitet [t/god]</i>	<i>Porjeklo (licenca)</i>	<i>Godina izgradnje/rekonstrukcije</i>	<i>Godina puštanja u rad</i>
<i>Primarna postrojenja</i>				
<i>02-Atmosferska destilacija</i>	1.200.000	SNAM PROGETI	1968	1968
<i>31-Atmosferska destilacija</i>	3.000.000	TEHNIP	1990	1990
Proizvodnja derivata nafte				
<b>Derivat</b>				
TNG				
Lagani benzin				

Benzin BMB 95				
Benzin BMB 98				
Evrodizel 4				
Evrodizel 5				
LUEL				
BUS				
Bitumen				
LUS				
Sumpor				
Obrada i proizvodnja gasova				
<i>07-Pranje suvog gasa</i>	16400	SNAM PROGETI	1968	1968
<i>08-Merox laganog benzina</i>	35720	SNAM PROGETI	1968	1968
<i>09-Merox TNG</i>	14570	SNAM PROGETI	1968	1968
<i>36-Pranje aminom suvog gasa</i>	21450	TEHNIP	1990	1990
<i>37-Tretiranje TNG</i>	60390	TEHNIP	1990	1990
<i>57-Proizvodnja azota</i>	5930	TEHNIP	1990	1990

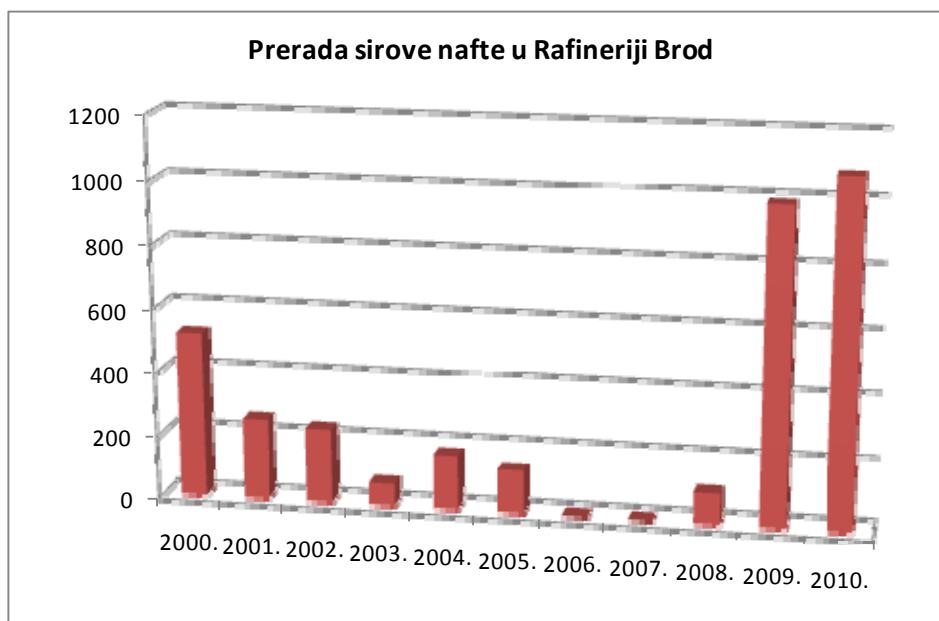
According to data submitted by the "Rafinerija nafte" a.d. Brod, total amount of the processed crude oil in 2009 was 986.894 t while in 2010 It was 1.080.071,033 t. Structure and amounts of the generated oil derivatives in 2009 and 2010 are given in the Table 22.

Table 22 - Structure and amounts of the generated oil derivatives in "Rafinerija nafte" a.d. Brod in 2009 and 2010

Vrsta derivata	Količina (t)	
	2009.	2010.
BMB-95	86.815	72.906
LUS	236.770	189.020
TNG	4.480	18.127
LUEL	53.923	73.566
E. DIZEL D-4 (≤50 ppm)	260.512	264.819
E. DIZEL D-5 (≤ 10 ppm)	17.801	72.419
BMB-98	17.873	21.708
SUMPOR	0.0	2.491
BUS	39.531	54.036
P.PLATFORMAT	17.672	31.547
P.LAGANI BENZIN	13.402	16.857
BITUMENI	110.613	146.304
UKUPNO	859.392	963.801



Picture 44 gives data on the crude oil treatment in Rafinerija Brod in the period from 200 to 2010.



Picture 44 – Realized processing of “Rafinerija nafte” a.d. Brod in the period from 2000 to 2010

### 3.2. Generation of oil derivatives – protection of environment

“Rafinerija nafte” a.d. Brod is a facility which had the license for operation before the Law on protection of environment became effective and it was obliged according to the Rule book on conditions for submission of application for issuance of the ecological licenses for operations and facilities which has the licenses issued before the Law on protection of environment became effective (Official Gazette of RS, number 50/06), to develop the Plan of activities with measure and deadlines for gradual reduction of emissions, namely pollution and for harmonization with the best available technics.

The plan of activities with measures and deadlines for gradual reduction of emission, namely pollution and for harmonization with the best available technics was developed by the authorized institution – Institute for protection, ecology and information systems, scientific-research Institute of Banja Luka.

The mentioned plan was approved by Decision number 15-96-175/09 dated 26.01.2010. by the Ministry for planning, construction and ecology of RS.

For development of the Proves which are submitted along with the application for issuance of ecological license, measuring of the fuel gases emissions was made (O<sub>2</sub>, CO, CO<sub>2</sub>, SO<sub>2</sub>, NO, NO<sub>2</sub>, NOX, H<sub>2</sub>S and CH<sub>4</sub>, May 2010) and two boilers’ waste and 15 stoves and quality of air-mission. Measuring for development of proves was made by the authorized institution – V&Z Zastita d.o.o. Banja Luka.

Measuring of the air quality – imissions were done at five locations and it was proved as follows:

- Average daily and middle values of imission concentrations of sulfur-dioxide at all metering locations (apart from location 5 (the second day)), show that there was no pollution of the air quality, for the purposes of estimating the air quality value, it is

necessary to 1-hour or 24 -hour period of sampling and for the period of a year, as determined by the Rule book on the marginal values of the air quality (Official Gazette of RS, 39/05). For the purposes of estimating air quality, the minimum period of monitoring is 5 years.

- Average daily and middle values of imission concentration of the

#### 4. INFORMATION ON PRICES AND MARKET IN 2010

##### 4.1. Electric energy market

When the Treaty on establishment of the Energy Community became effective, the process of re-organization of the electric power sector in the Balkan countries began and their mutual harmonization. Creation of joint market relies to the EU Directive with the final aim to include this regional market into internal electric energy market of EU.

##### 4.2. Openness of the electric energy market

The level of the market openness is a percentage of total consumption in the electric power system of one country which may be contracted at the competitive market.

The rule book on eligible customer determined by RC, prescribes that all non-household customers as of 1 January 2008 have a possibility to buy electricity at the market from the supplier at their own choice. The realized consumption of customers in RS in 2010, entitled to be supplied at the market is 1,36 TWh which gives a level of the openness of the RS market of 44.7%/

Total net consumption in RS in 2010 was 3.050.09 GWh and for 2.5% is more than realization in 2009. Possible market share bwy the consumption in 2009 was 1.314,9 GWh was increased in 2010 for 3,8% and it amounts to 1,364, 9 GWh. In the Table 23, there is a structure of consumption of electricity in RS per categories of consumption and level of the openness of market and consumption.

Table 23 – Structure of consumption of electricity in RS per categories of consumption and level of openness of market and consumption

Kategorija potrošnje	Broj kupaca na kraju 2010. godine	Neto potrošnja 2008 GWh	Neto potrošnja 2009 GWh	Neto potrošnja 2010 GWh	Zastupljenost u ukupnoj potrošnji u 2010 %	Potrošnja 2010/2008	Potrošnja 2010/2009
110 kV	5	148,23	120,90	<b>110,26</b>	4%	-25,6%	-8,8%
35 kV	24	119,53	145,30	<b>170,94</b>	5%	43,0%	17,6%
10 (20) kV	631	430,73	455,00	<b>484,00</b>	15%	12,4%	6,4%
0.4 kV OP	32.517	532,90	533,40	<b>540,61</b>	18%	1,4%	1,4%
Domaćinstva	487.698	1.598,20	1.661,80	<b>1.685,22</b>	56%	5,4%	1,4%
Javna rasvjeta	414	55,82	60,30	<b>59,06</b>	2%	5,8%	-2,1%
<b>Ukupno</b>	<b>521.289</b>	<b>2.885,41</b>	<b>2.976,70</b>	<b>3.050,09</b>	<b>100%</b>	<b>5,7%</b>	<b>2,5%</b>
Otvoreno za tržište	33.591	1.287,21	1.314,90	1.364,87	45%	6,0%	3,8%
Otvoreno za tržište%	6,4%	44,6%	44,2%	44,7%			

### 4.3 Wholesale electricity market

Electricity is traded at the wholesale market which is not intended for final consumption by for further sale. The wholesale market, also, includes all forms of the cross-border trade with electricity.

As participants at the wholesale electricity market in Bosnia and Herzegovina, there are generators, traders and suppliers provided that they obtained appropriate licenses for doing activity issued by the Regulatory Commissions in BiH pursuant to their competences.

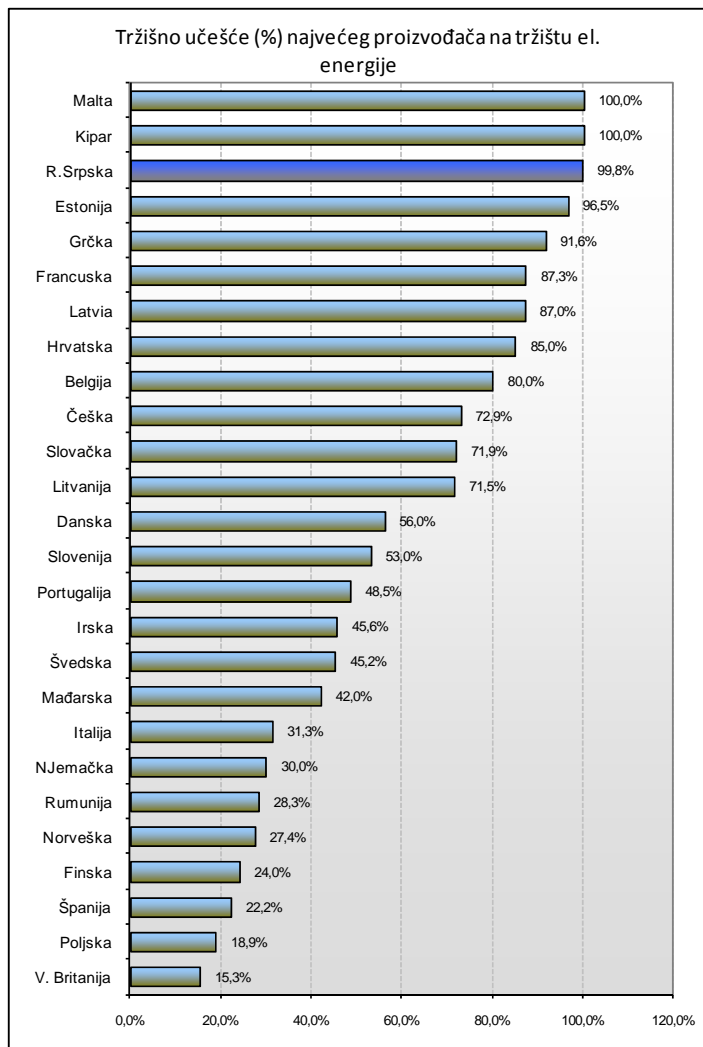
Since in BiH there is no trading at the organized market (exchange), electricity trading is done at the “bilateral market” on the basis of bilateral contract/

#### 4.3.1 Generators

There is one dominant company MH “Elektroprivreda Republike Srpske” – MP a.d. Trebinje within which generators of electricity operate as dependent legal entities.

Part of the energy generated by these companies in the public service system, proportional to the share in total generation is directed to supply of tariff customers, while surplus of generated energy is placed by the company MH Elektroprivreda Republike Srpske – MP a.d. Trebinje at the market based on the bilateral agreements with traders or suppliers with electricity. Generation of electricity is mostly done in five plants: three HPPs of total installed capacity of 715 MW and two TPPs of the installed capacity of 600 MW. Apart from that, within

the system of MH “Elektroprivreda Republike Srpske” – MP a.d. Trebinje, there are four distribution HPPs of total capacity of 13,9 MW



Picture 45 – Market share of the biggest generators at the electricity market

According to the valid regulations in RS, independent generator may conclude a contract on the sale of electricity with supplier of tariff customers or licensee for trade and supply of customers on the territory of BiH.

On the territory of RS in 2010, there were 4 independent generators in small HPPs (SHPP Divic, Strpci, Suceska R-S-1 and Bistrica B-5a). Currently, these companies the sale contracts concluded with suppliers of tariff customers located within the distribution companies in charge of the region where the plants are located. The sale contracts concluded by the distribution companies with this independent generators defined the conditions for sale and price of electricity. Apart from generation in these plants which placed their electricity in the network, the electricity was produced for its own needs by Energolinija, d.o.o. Zvornik.

In 2010, in RS, total realized generation, delivered to the network, was 6.174,02 GWh out of which

#### 4.3.2 TRADERS

#### 4.3.3 Prices of electricity at the wholesale market

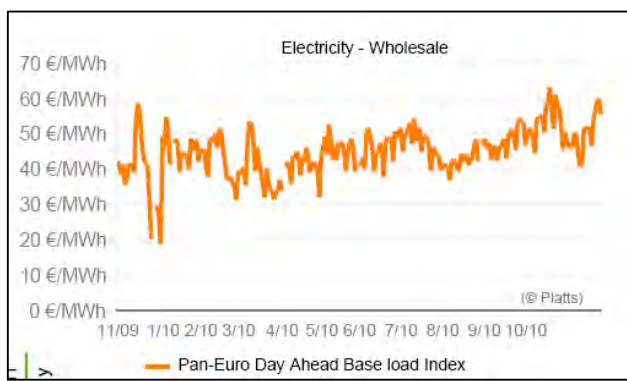
Organized market – exchange  
Bilateral trading contracts

As already mentioned in BiH there is no trading at the “organized market (exchange)” but the electricity trading is done at the “bilateral market” based on the bilateral contracts concluded by traders with generators (mostly with three power utilities) or other traders. According to the information of the ISO BiH, when it is about trading companies, the biggest volume of trading was made by the company “EFT” d.o.o Trebinje.

In 2010, at the retail market at all European exchanges, it is evident relative stability of the electricity prices with the expected oscillation, without drastic disturbances which were for example typical in 2008. The electricity price (of the “Base”) in 2010 was between 40 and 50 Eur/MWh.

Picture 46 which was downloaded from the website of European Commission, as daily published by EMOS, gives the compiled trend of movement of wholesale electricity price at the European exchanges (Day ahead Base Load) from November 2009, finally with beginning of December 2010.

When it is about the electricity price which generators of electricity operating within the system of Mixed Holding “Elektroprivreda Republike Srpska’ – Parent company a.d. Trebinje achieved at the market after fulfillment of needs of tariff customers in RS in 2010, it was 35,4Eur/MWh on average.



Picture 46 – Trend on movement of wholesale electricity prices at the European exchanges

#### 4.4. Retail electricity market

##### 4.4.1 Suppliers

In 2010, as it was case in previous years, supply of tariff customers in RS was completely done within the electric power company Mixed Holding “Elektroprivreda Republike Srpske” – Parent company a.d. Trebinje

Suppliers of electricity are the structures doing supplying activity. Supply of electricity is done pursuant to the General conditions for delivery and supply of electricity, Tariff system for sale of electricity in RS and contract concluded between supplier and customer.

There are two categories of suppliers of electricity in RS:

- Suppliers of non-eligible (tariff) customers and
- Suppliers of eligible customers

Suppliers of non-eligible tariff customers in RS are licensees for supply of tariff customers issued by RERS and which obtain and deliver electricity for end users in a regulated way.

On the territory of RS, there are five companies within the system of Mixed Holding of “Elektroprivreda Republike Srpske” – Parent company a.d. Trebinje who have the license for supply of tariff customers, which are at the same time distribution system operators in that area. Individual share of each of them on the RS market is described in the part B 1.4 of this report.

Suppliers of eligible customers are licensees for trade and supply of electricity on the territory of BiH issued by RC, as well as the licensees for supply of Tier II issued by FERC. These licenses are meant by sale including the re-sale of electricity. Website of RERS, within the register of licenses, has data on the licenses issued for trade and supply of electricity on the territory of BiH.

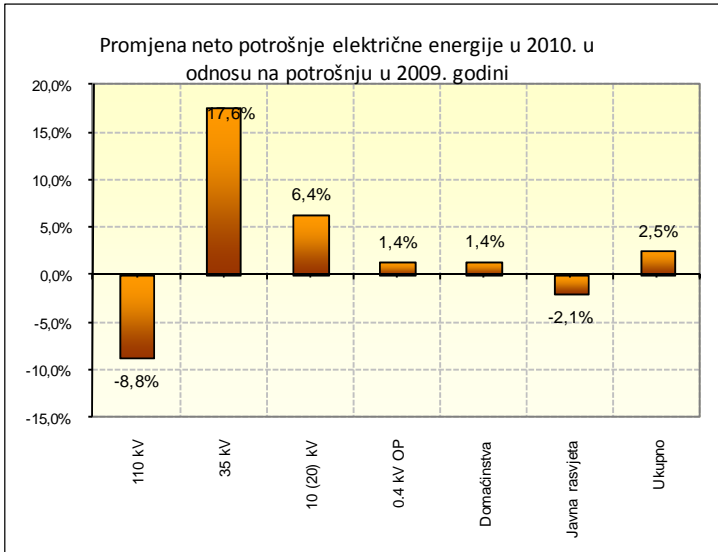
On the territory of RS, licensees are mostly dealing with trade but not supply of eligible customers with electricity. The reason for that is the fact that no customers used its right to be supplied within the transitional period as tariff customers at the regulated prices.

##### 4.4.2 Customers

Regulatory Commission within its competence, in secondary legislation, gradually establishes the regulatory framework for the market opening in RS. The Rule book on getting a status of eligible customer from September 2006 prescribed conditions, criteria and procedure for getting a status of eligible customers, and rights and obligations arranged of eligible customers and suppliers of eligible customers. This Rule book enable activating retail electricity market which has so far, when it is about customers, been based on the sale of electricity exclusively to non-eligible or tariff customers at regulated prices determined by the RC pursuant to the adopted methodology.

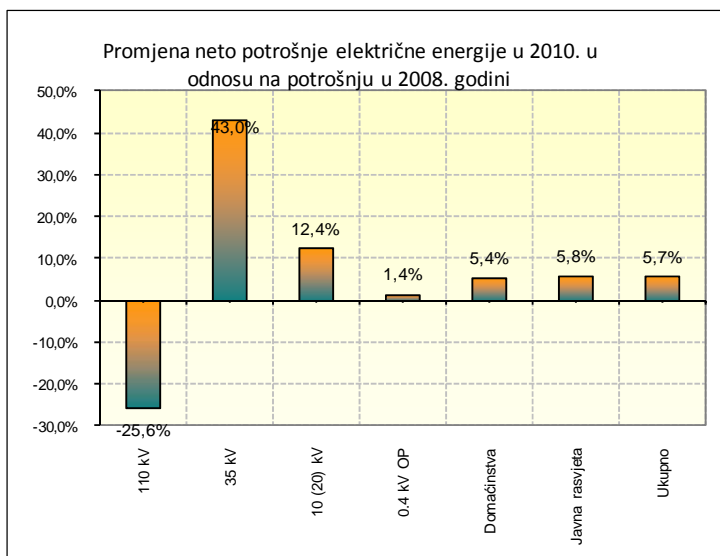
The Rule book on getting a status of eligible customer and prescribed dynamics of the market opening prescribe that all non-household customers have that status as of 1 January 2008. In the transitional period of the market opening, eligible customers are entitled to choose a method of supply and right to be supplied again as tariff customer if it previously used the right of choice and be supplied as eligible customer. The transitional period is till 1 January 2012.

From the moment of the market opening, and in 2010 too, no customer in RS did not use the possibility to buy electricity at the market, so all eligible customers are supplied as tariff pursuant to the provisions of the Rule which provided them with that right during the transitional period.



Picture 47 – Change of net consumption of energy in 2010 compared to consumption in 2009

Picture 47 gives a graph of the change of consumption of electricity in 2010 compared to 2009 per categories of consumption. A considerable fall (-8.8%) of consumption of electricity was further continued with the customers connected to the 110 kV voltage level.



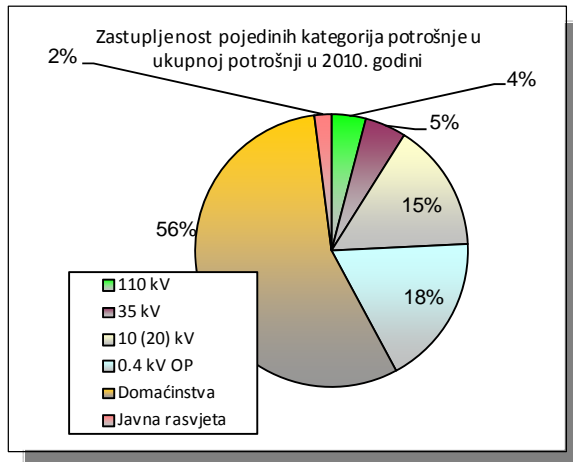
Picture 48 – Change of net consumption of electricity in 2010 compared to consumption in 2009

Picture 48 presents a graph of change of net consumption of

electricity in 2010 compared to 2008 per categories of consumption. Increase of total net consumption in this period amounts to 5,7% and mostly resulted in considerable increase of consumption at 35 kV voltage level.

Picture 49 presents representation of some categories of consumption in total consumption of electricity, whereby it is evident that a share of households in total consumption is still at a very high level compared to the countries developed in an industrial sense.

Picture 49 - Representation of some categories of consumption in total consumption in 2010



#### 4.5 Average price of electricity in Republic of Srpska

##### 4.5.1 Price of using distribution networks following the Eurostat methodology

Pursuant to its competences and determined Methodology, as requested by distribution companies, Regulatory Commission determined tariff rates for distribution system users in Republic of Srpska: in March 2006 for the first time, in December 2007 for the second time and in December 2009 for the third time (and these ones have been applicable since 1 January 2010). Tariff rates for distribution network users, determined on the basis of justified costs and allocated on end users in a way that each customer pays such a price related to the costs which the customer causes to the system are published at the website of Regulatory Commission and are valid to eligible customers of electricity. In the Table 24 there is a price of using distribution network from 2007 to 2010 for end users within the category of "industry", calculated applying old Eurostat methodology.

Prosječna cijena korištenja mreže za krajnjeg kupca iz kategorije "industrija" (Ie-2000 MWh)				
potrošnja kWh	za snagu KM	za energiju KM	ukupno KM	prosječna cijena mreže pf/kWh
2.000.000	40.608	8.250	48.858	<b>2,44</b>
2.000.000	33.342	25.896	59.238	<b>2,96</b>
2.000.000	36.755	26.028	62.783	<b>3,14</b>

Table 24 - Average price of using distribution network for end user within the category of "Industry"

Determined tariff rates for distribution system users are included further in the price for supply of tariff customers with electricity in Republic of Srpska for all categories of consumption, apart from the category of "other consumption" at low voltage which capacity charge is not determined by metering and customers from the category of "households" because there is still cross-subsidizing, which Regulatory Commission makes its efforts to gradually eliminate.

According to the tariff determined for distribution system users, applying Eurostat methodology, the prices that the standard customers within the category of "household" would pay unless being subsidized, are presented in the Table 25.

Table 25 - Average price of using distribution network for the end user within the category of "household"

Prosječna cijena korišćenja mreže za krajnjeg kupca iz kategorije "domaćinstva" (Dc -3500 kWh godišnja potrošnja od čega 1300 kWh noću)						
	godina	kWh	za snagu KM	za energiju KM	ukupno KM	prosječna cijena mreže pf/kWh
jednotarifno	2007	3500	68,71	143,85	212,6	<b>6,07</b>
	2008/2009	3500	73,85	162,75	236,6	<b>6,76</b>
	<b>2010</b>	<b>3500</b>	<b>86,63</b>	<b>167,13</b>	<b>253,8</b>	<b>7,25</b>
dvotarifno	2007	3500	108,26	146,32	254,6	<b>7,27</b>
	2008/2009	3500	116,38	159,67	276,0	<b>7,89</b>
	<b>2010</b>	<b>3500</b>	<b>136,51</b>	<b>200,55</b>	<b>337,1</b>	<b>9,63</b>

#### 4.5.2 Movement of average prices of electricity for end users in Republic of Srpska

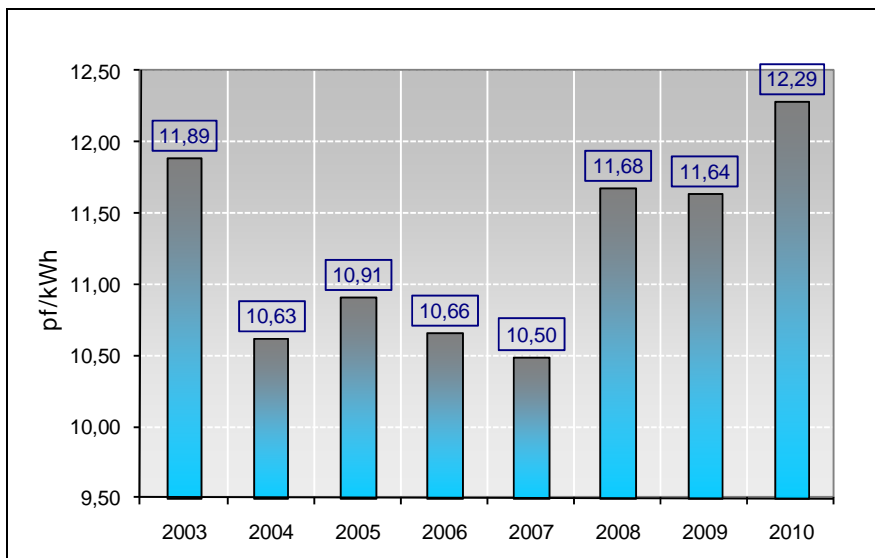
In the Table 26 and pictures 50 and 51 there is a movement of the realized average prices of categories of consumption and tariff groups of end users in Republic of Srpska for the period from 2003 to 2010.

Kategorija - naponski nivo	Prosječna ostvarena cijena (pf/kWh)								
	tarifna grupa	2003	2004	2005	2006	2007	2008	2009	2010
110 kV		5,26	4,39	5,99	6,30	6,44	6,75	6,42	6,54
35 kV		7,04	6,46	6,83	6,55	6,42	7,48	7,83	7,64
10 kV		9,22	8,27	8,57	8,30	8,05	9,05	8,84	9,39
0,4kV-ostala	ITG	13,56	12,48	12,85	12,17	11,59	12,58	12,57	13,35

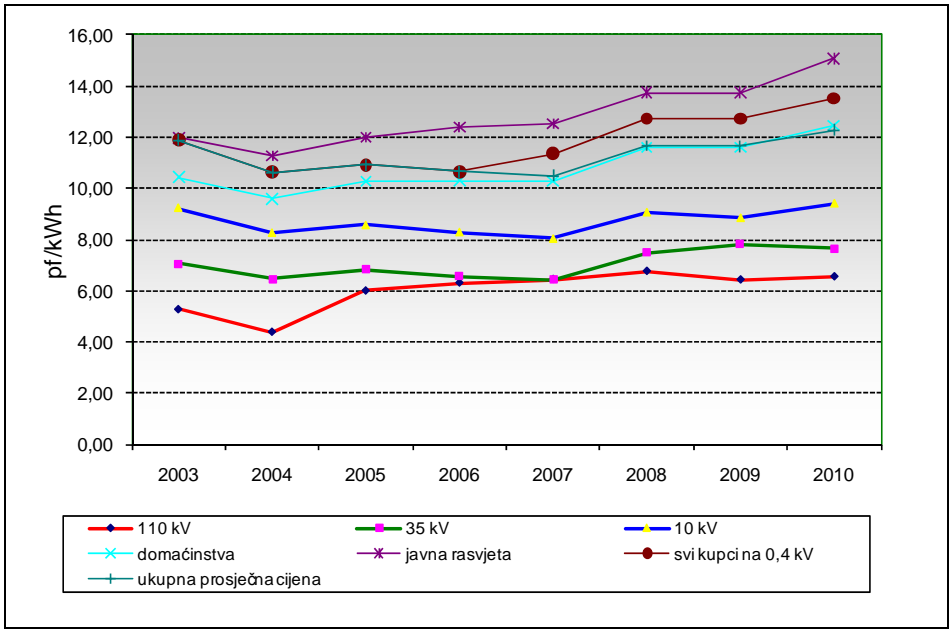


potrošnja	II TG	23,99	22,32	20,53	18,14	16,16	18,78	18,76	18,74
	III TG	23,44	21,67	20,54	18,18	16,93	18,13	18,15	19,29
	VI TG			11,01	10,61	10,97	12,66	12,72	13,46
	VII TG			12,64	9,78	9,84	11,05	10,78	11,57
0,4 kV – domaćinstva	I TG	10,94	9,98	10,49	10,41	10,41	11,80	11,77	12,63
	II TG	8,95	8,82	9,85	10,05	9,95	10,97	11,04	11,91
	III TG	33,79							
domaćinstva		<b>10,43</b>	<b>9,59</b>	<b>10,28</b>	<b>10,31</b>	<b>10,29</b>	<b>11,60</b>	<b>11,61</b>	<b>12,46</b>
domaćinstva -VS		11,90	11,04	12,01	12,09	11,99	12,84	12,77	13,79
domaćinstva -NS		8,65	7,82	8,19	8,26	8,28	10,15	10,18	10,94
javna rasvjeta		11,99	11,27	12,00	12,39	12,53	13,74	13,74	15,08
svi kupci na 0,4 kV		11,89	10,63	10,91	10,66	11,36	12,73	12,73	13,53
<b>ukupna prosječna cijena</b>		<b>11,89</b>	<b>10,63</b>	<b>10,91</b>	<b>10,66</b>	<b>10,50</b>	<b>11,68</b>	<b>11,64</b>	<b>12,29</b>

Table 26 - Trend of change of the average price of electricity 2003 - 2010 in RS



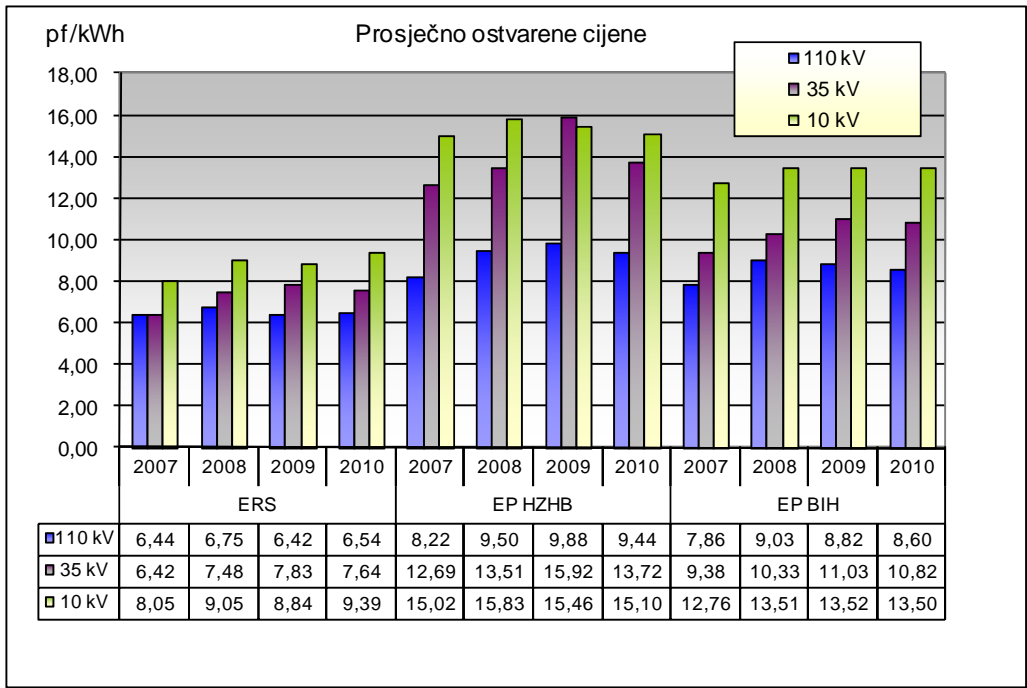
Picture 50  
Average realized total price of electricity in RS



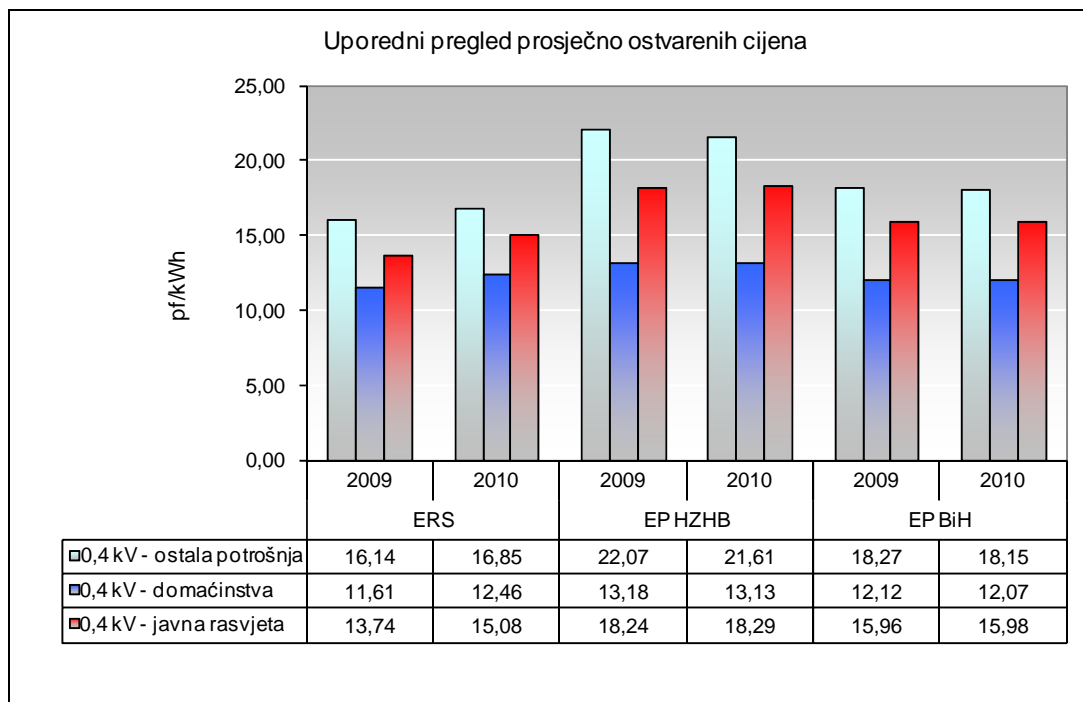
Picture 51 - Movement of prices per years

#### 4.5.3 Average price of electricity for end users in Bosnia and Herzegovina

In the pictures 52 and 53 there are benchmarking realized average prices of electricity in Republic of Srpska and BiH Federation per categories of consumption

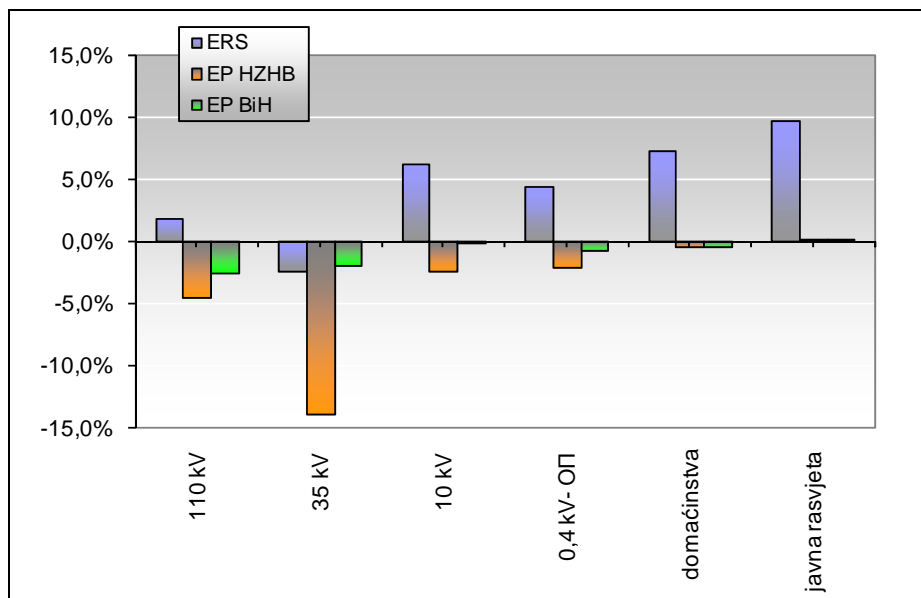


Picture 52 - Benchmarking average prices of electricity in BiH for the period 2007-2010



Picture 53 - Benchmarking overview of average realized prices

Picture 54 presents the benchmarking overview of change of the average realized prices of electricity per categories of consumption in 2010 compared to 2009 for three power utilities in Bosnia and Herzegovina.



Picture 54 - Change of the average realized prices of electricity in 2010 compared to 2009

4.6. Benchmarking data on electricity prices in Republic of Srpska and surrounding for the standard customer

4.6.1. New approach to the data processing and presentation of the electricity prices

Collection and statistical data processing on the electricity prices was defined by Directive 90/377/EEC dated 29 June 1990. The European Commission adopted a uniform methodology of the statistical data processing within the scope of generation, consumption, price and exchange (export-import) of electricity. The electricity market development caused a need to innovate Directive 90/377/EEC, in a way that impact of the market players should be taken into account while reporting on the average prices for some groups of customers. The statistical average electricity prices processing, pursuant to the Eurostat methodology is done for two groups of basic categories of customers both for the household and industry. Within these two groups, customers were divided in several typical groups depending on the annual consumption and maximum capacity. In June 2007, EU Commission adopted the amendment to the methodology for collection of these data. The essence of new methodology is as follows:

- Prices should represent the average for the last half of the year,
- Typical standard customer is replaced by the customer in band,
- The costs of energy and supply should be separately presented included, as well as the network costs, in the electricity price,
- Prices do not contain the tax on added value, and they include the work of agencies, necessarily buy-out of electricity, keeping record on contracts and excises;

Electricity prices - HOUSEHOLDS

Unlike the way of data collection on the prices for industrial customers prescribed by Directive 90/377/EEC and innovated by new methodology, the data grouping on the electricity prices for households was based on the voluntary agreement of the parties to EU, which defined groups of customers in the household, from Da to De according to the annual consumption, as presented in the Table 27.

Da	(<1000 kWh)
Db	(1000 <2500 kWh)
Dc	(2500 <5000 kWh)
Dd	(5000 <15000 kWh)
De	( >= 15000 kWh)

Reporting period:

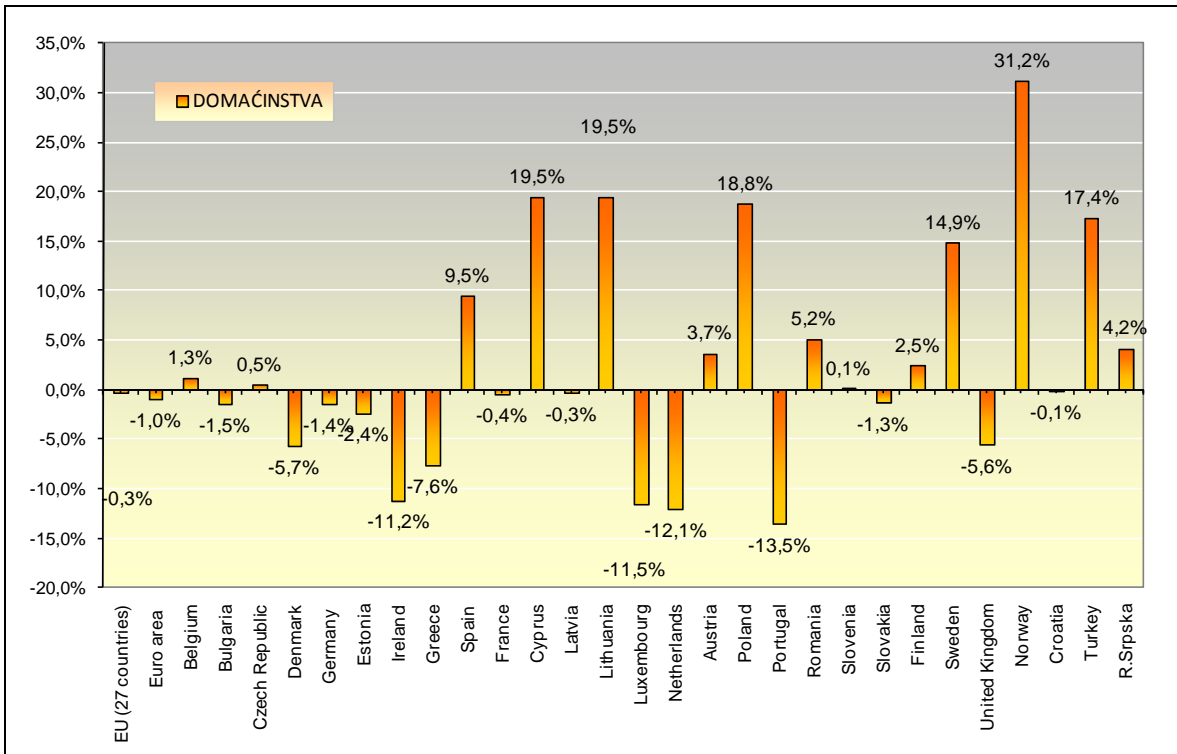
X1 - the first half of the current year (January - June)

X2 - the second half of the current year (July - December)

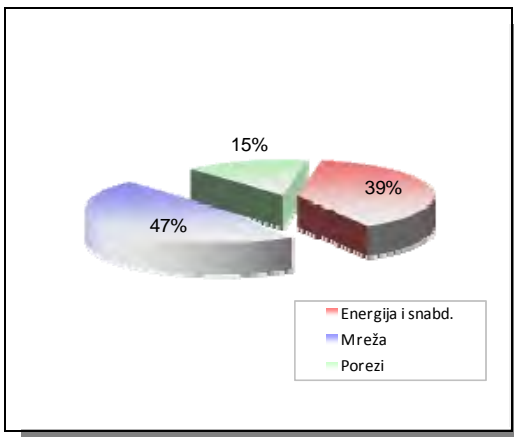
Table 27 - Typical groups of customers of electricity "household"

The prices for household represent total average price, complying with the market share of the electricity supply, at circumstances when the market factor is present when it is about the supply of end users in the household. Since the market in BiH for this category of customers is still not open, the presented calculation and analysis is based on the regulated prices.

Picture 55 presents the change of price for end users within the category of household in the first half of 2010 compared to the same period in 2009. The prices do not contain the tax and they are between 2500 and 5000 kWh<sup>6</sup> for the standard customer in the household (Dc).



Picture 55 - Change of the average price of electricity in the "household" in the first half of 2010 compared to the same period in 2009



Picture 56 - Structure of the average price for the household in RS which consumes between 2500 and 5000 kWh expressed in percentages

<sup>6</sup> Source: Eurostat

## The electricity price - INDUSTRY

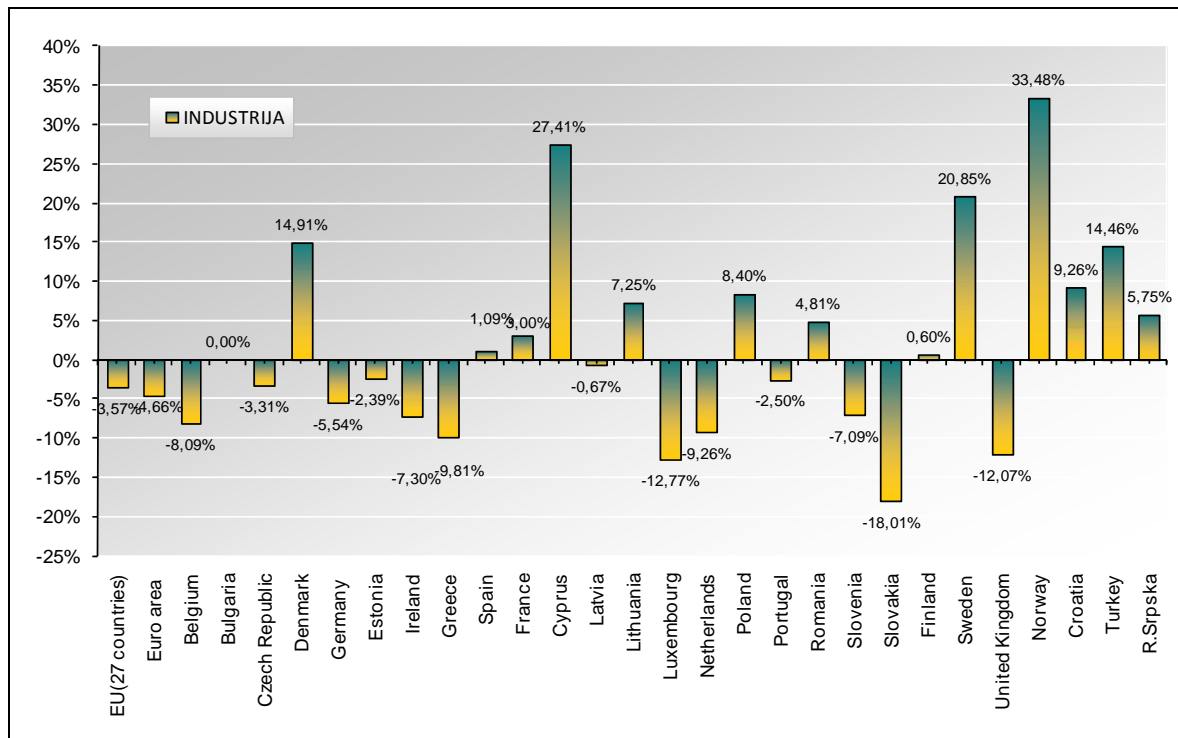
New methodology based on which Eurostat collected data on the prices for end users in the industry and which became effective in June 2007, is based on the data for several categories of industrial customers divided into groups (band) depending on the consumption.

Ia	< 20 MWh
Ib	20 < 500 MWh
Ic	500 < 2000 MWh
Id	2000 < 20.000 MWh
Ie	20.000 < 70.000 MWh
If	70.000 < 150.000 MWh

Table 28 - Typical groups of customers of electricity "industry"

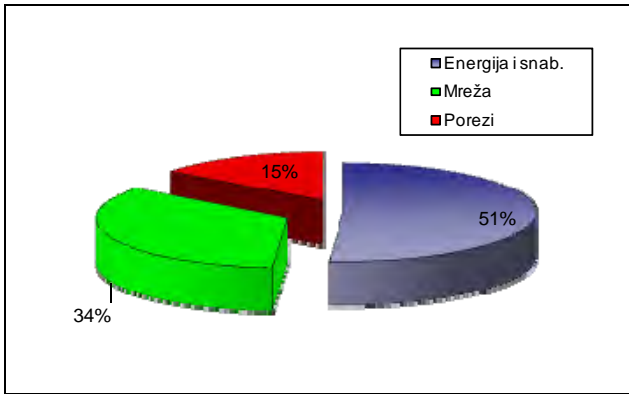
In the picture 57, there is a change of price for end users from the category of "industry" in the second compared to the first half of 2008 for the Ic group of customers between 500 and 2000 MWh annually.

Picture 57 - Change of the average price of electricity in the "Industry" in the first half of 2010 compared to the same period in 2009.



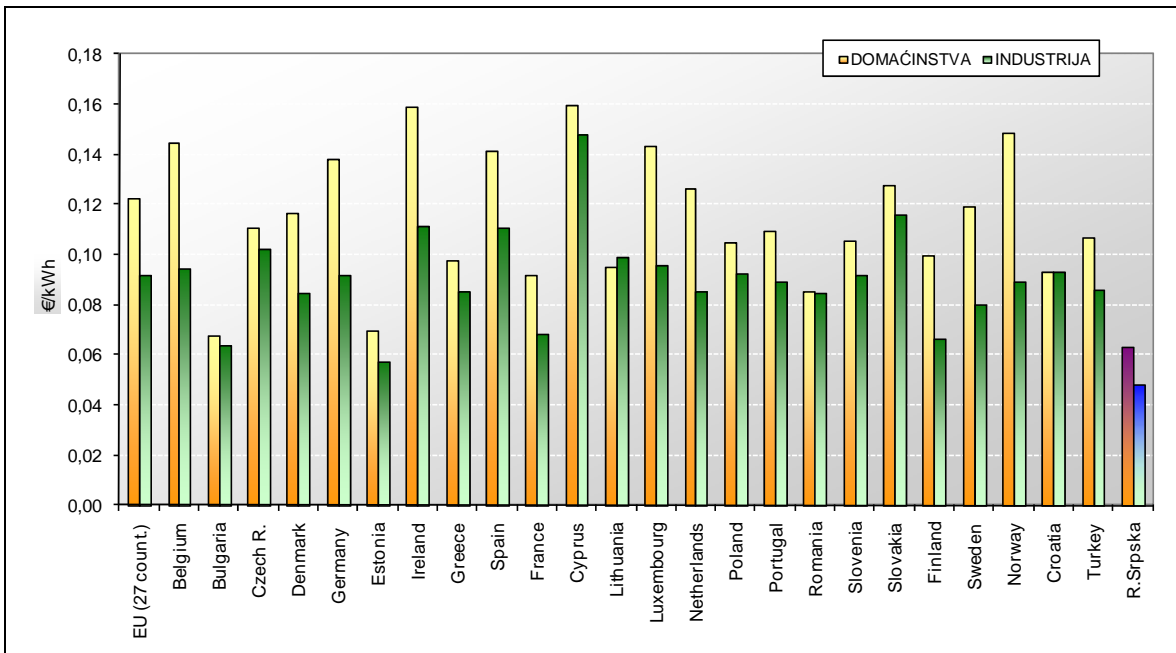
The price structure in Republic of Srpska for the typical customer in the industry which is connected to the 10 kV voltage level is presented in the Picture 58.

Picture 58 - The average price structure for the industrial customer in RS



Picture 59 presents the benchmarking data on the electricity price for the first half of 2010, without VAT, and for the customers in household (Dc) with the annual consumption between 2500 and 5000 kWh and customers in the industry (Ic) with the annual consumption between 500 and 2000 MWh.<sup>7</sup>

Picture 59 - Benchmarking overview of prices for standard industrial customer (Ie) and standard customer in the household (Dc)



#### 4.6.2. The electricity prices in RS and surrounding - old methodology of the data processing

In this part of the report there are data for 2010 processed applying the old Eurostat methodology which was applicable till 31 December 2007. Having in mind that data on the electricity prices were based on the new methodology of data processing are heavily accessible for most countries from the immediate surrounding, and since these countries are more

<sup>7</sup> Source: Eurostat (the price for industrial customer in RS is an average realized price for customers connected to the 10 kV voltage level)

realistic indicator for us due to their specific nature and fact that they belong to the Energy Community as it is the case with BiH, in this part of the report there is an analysis of prices for typical customers in the household and industry following the "old" methodology.

Households - category of the electricity customers

It is typical for old methodology that it defines several groups of customers for the category of household as presented in the Table 29.

Standardan potrošač u domaćinstvu po staroj metodologiji Eurostata	Godišnja potrošnja	
	Ukupno	Od čega noću
<b>Da</b>	600 kWh	
<b>Db</b>	1200 kWh	
<b>Dc</b>	3500 kWh	1300 kWh
<b>Dd</b>	7500 kWh	2500 kWh
<b>De</b>	20000 kWh	15000 kWh

Table 29 - Typical groups of customers of electricity from the category of "household"

In the Table 30 and picture 60, there is a benchmarking overview of average prices of electricity for typical customer from the category of household (Dc) in Republic of Srpska and neighboring countries. For calculation of the average price in Republic of Srpska in neighboring countries for a standard customer of electricity, tariff rates for non-eligible customers from the category of "households" which were applicable on 20 November 2010 were used (tariff rates in the neighboring countries were calculated applying the effective exchange rate on that date).

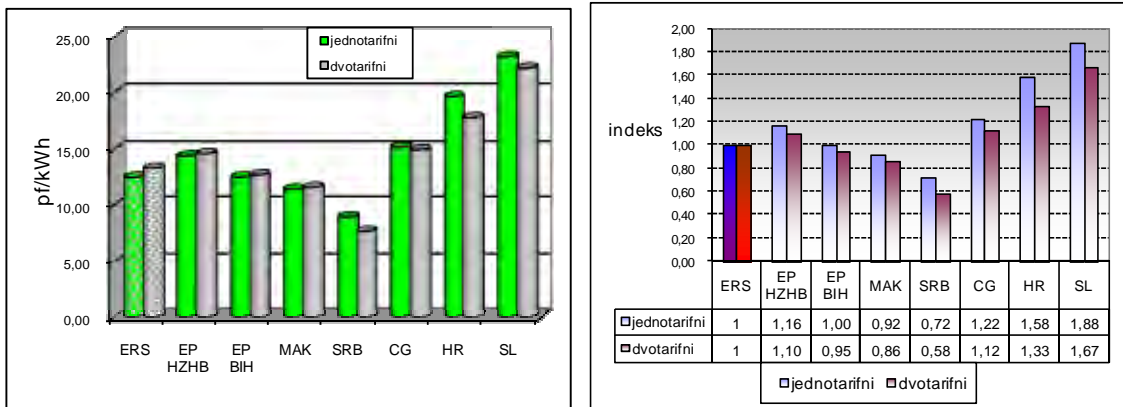
Table 30 - Benchmarking overview of average prices for typical customer Dc applying the old Eurostat methodology

Domaćinstva		ERS	EP HZHB	EP BIH	MAK	SRB	CG	HR	SL
jednotarifni	Cijena pf/kWh	12,41	14,43	12,43	11,36	8,94	15,20	19,62	23,27
	<b>indeks</b>	<b>1</b>	<b>1,16</b>	<b>1,00</b>	<b>0,92</b>	<b>0,72</b>	<b>1,22</b>	<b>1,58</b>	<b>1,88</b>
dvotarifni	Cijena pf/kWh	13,36	14,64	12,63	11,53	7,70	14,99	17,77	22,27
	<b>indeks</b>	<b>1</b>	<b>1,10</b>	<b>0,95</b>	<b>0,86</b>	<b>0,58</b>	<b>1,12</b>	<b>1,33</b>	<b>1,67</b>

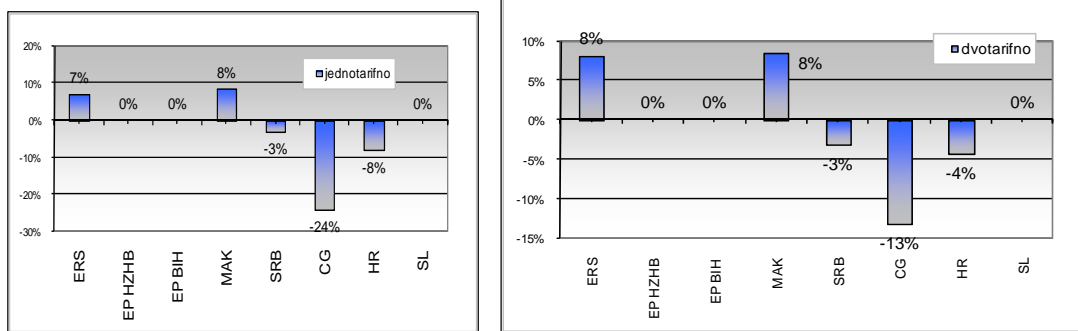
**Tabela 5 – Uporedni pregled prosječnih cijena za karakterističnog kupca Dc po staroj metodologiji Eurostata**



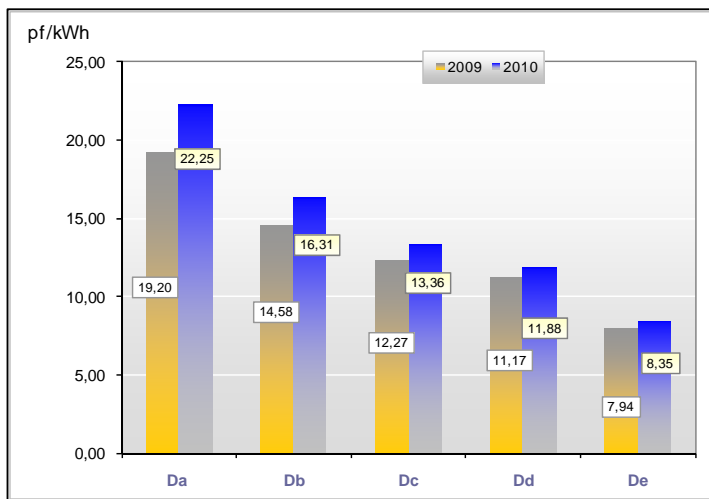
Picture 60 - Benchmarking overview of average prices in pf/kWh for the one-tariff and two-tariff metering for standard customer Dc 3500 (1300 during the night: winter - summer in ratio 50:50<sup>8</sup>



Picture 61 presents the change of the average price for one-tariff and two-tariff metering for standard customer Dc 3500 (1300 during the night) in November 2010 compared to the same period in 2009.



Picture 61 - Change of the average price for one-tariff and two-tariff metering for the standard customer Dc 3500 (1300 at night) in November 2010 compared to the same period in 2009



Picture 62 - Benchmarking overview of average prices for 2009 and 2010 for the groups of customers from the category of household

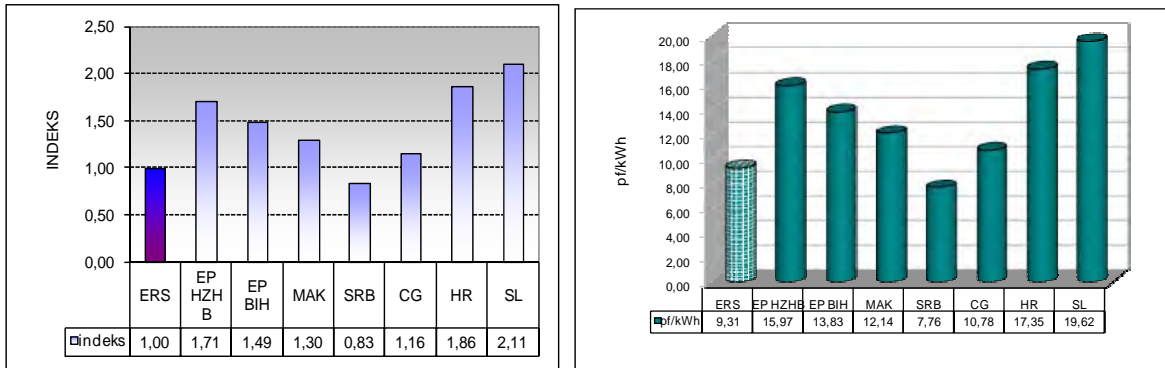
<sup>8</sup> For calculation of the average price in the neighboring countries for standard customer of electricity, tariff rates for non-eligible customers of electricity from the category of "household" which were applicable on 20 November 2010 were used, and they were published at the website of the Regulator or electric distribution companies in the respective countries

Industry - category of the electricity customers

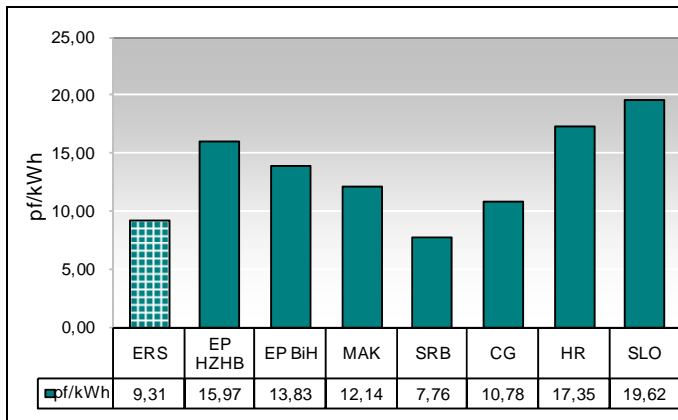
Old Eurostat methodology defines several typical customers of electricity. Benchmarking data are usually give for industrial customer of the category Ie which has typical annual consumption of 2000 MWh and maximum capacity of 500 kW. Table 31 and Picture 63 present the overview of average prices for customers in the industry in RS and neighboring countries. The prices were made on the basis of the valid tariff rates on 20 November 2010 for the customers at 10 kV voltage level (the currency of the neighboring countries calculated applying the valid exchange rate on the same day).

Industrija	ERS	EP HZHB	EP BIH	MAK	SRB	CG	HR	SL
Cijene (pf/kWh)	9,31	15,97	13,83	12,14	7,76	10,78	17,35	19,62
<b>indeks</b>	<b>1,00</b>	<b>1,71</b>	<b>1,49</b>	<b>1,30</b>	<b>0,83</b>	<b>1,16</b>	<b>1,86</b>	<b>2,11</b>

**Table 6** - Benchmarking overview of average prices for customers in the industry of RS and neighboring countries



Picture 63 - Electricity price for the industrial customer in ph/kWh



Picture 64 - Change of the average price in the industry Nov 2010/Nov 2009

#### 4.7. Natural gas market

All activities defined by the Gas law in Republic of Srpska as generation, transport, distribution, storage, supply and trade with natural gas are the activities of general interest.

Three energy undertakings are active in the natural gas sector in Republic of Srpska, such as:

- "Gas Promet" a.d. Istocno Sarajevo - Pale
- "Sarajevo-gas" a.d. Istocno Sarajevo and
- A.D. "Zvornik-stan" Zvornik

Republic of Srpska does not have generation of natural gas so that the supply is completely based on export.

There are long-term contract on natural gas transport with the following foreign partners: with "Mol" on the natural gas transport through Hungary for 600 M Nm<sup>3</sup> annually till 2018 and with JP "Srbijagas" on natural gas transport through Serbia till 2017. The company of "Energoinvest" concluded the contract with "Gaseksport" from the Russian Federation in 1997 on delivery of natural gas for the whole Bosnia and Herzegovina conditioned by payment of debt for delivery of gas in 1996. It was at the same time the reason for "Gaseksport" to insist still having "Energoinvest" as party to the party in the gas delivery.

The process of the gas procurement is initiated by determination of necessary amounts of gas with all distributors and customers. The collected data are submitted by "BH-Gas" to "Energoinvest" being the contract leader on the gas delivery, which is the customer with the supplier "Gaseksport".

The natural gas transport is carried out through one transport direction from Russia, so that security of supply depends on availability of the transit countries' capacity of the countries so it is subject to disturbances in case of the transport interruption in any of the transit countries. In January 2009, during the Russian-Ukraine dispute, whole Bosnia and Herzegovina was 70 hours without any gas at all.

The natural gas consumption in Republic of Srpska is very low both in the absolute amount also in the relative ratios. Season oscillations of the gas consumption directly depend on the biggest industrial customer - industry of alumina "Birac" from Zvornik. The gas consumption in the industrial sector is mostly equal during the whole year while in the category of consumption of the household, call center and heat plant (Zvornik stan) is extremely seasonal. The gas consumption in the month with highest consumption is 18.7 more than consumption in the month with the lowest summer consumption.

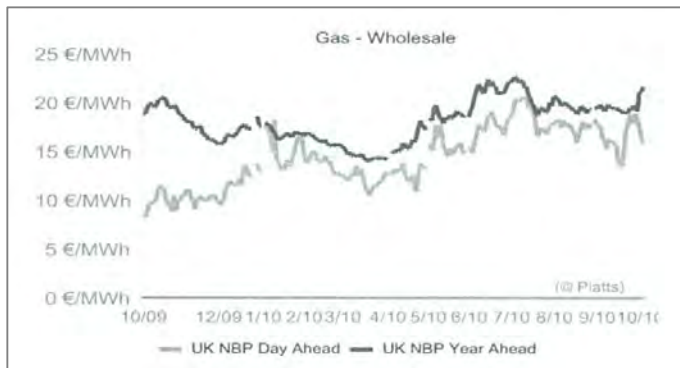
#### 4.8. Natural gas market openness

The gas law prescribes that all non-household customers are the eligible customers from January 2008. Accordingly, Regulatory Commission made tariff methodology prescribing that it gives the consent to the tariff rates for the network use and tariff rates for supply of tariff customers (households), while other customers are given a possibility to freely choose the supplier. In 2009, Regulatory Commission issued two licenses for supply of eligible customers and trade with natural gas to the company "Sarajevo-gas", a.d. Istocno Sarajevo and the company A.D. "Zvornik stan" Zvornik. The company "Gas Promet a.d. Istocno Sarajevo, got the license for supply of eligible customers and trade with natural gas in 2010.

According to the company data, number of eligible customers in 2010 in Republic of Srpska is 347. while total consumption of eligible customers is 8.224.460,81 Sm<sup>3</sup>. There are no data on the maximum daily consumption during the year.

However, although these customers are supplied as eligible, possibility to choose supplier is limited, having in mind that "BH-Gas" d.o.o. Sarajevo and Energoinvest are the only suppliers of natural gas in the region of Bosnia and Herzegovina. "BH-Gas" d.o.o. Sarajevo is at the same time transporter of natural gas in Federation BiH, in which there is neither appropriate regulatory framework nor transparent method for determination of the natural gas prices, which is a serious obstacle for the market opening. Namely, the price which the suppliers in RS get gas from "BH-Gas" d.o.o. Sarajevo from, contains in itself, apart from the procurement price, the price of the network use whereby these amounts are not clearly and separately presented.

#### 4.9. Natural gas wholesale market



Picture 65 - Trend of movement of the gas wholesale prices

Picture 65 gives the compiled trend of movement of the wholesale gas prices at "UK NBP"<sup>9</sup> exchange, from October 2009 and concluded with November 2010. The picture was downloaded from the website of the European Commission<sup>10</sup>, update on daily basis by "EMOS" (Energy Markets Observation

System).

In 2010, the gas wholesale price at which "BH-Gas" d.o.o. was delivering gas to the company "Sarajevo-gas" a.d. Istocno Sarajevo for the first quarter amounted to 0.55 BAM/Sm<sup>3</sup>, and from April 1 to the end of 2010, it was 0.68 BAM/Sm<sup>3</sup>.

Movement of the Russian wholesale natural gas price in the period from May 2006 to the end of 2010, is presented in the Picture 66. It is about the natural gas prices at the border with Germany in US\$/1000 m<sup>3</sup>

<sup>9</sup> National Balancing Point United Kingdom - Virtual place for buying, sale and exchange of the natural gas in Great Britain

<sup>10</sup> ([http://ec.europa.eu/energy/observatory/emos/emos\\_en.htm](http://ec.europa.eu/energy/observatory/emos/emos_en.htm))

Picture 66 - The natural gas price at the border with Germany in US\$/1000 m3 of gas



#### 4.10. Natural gas retail market

The procedure related to determination of the natural gas price in Republic of Srpska, which was effective in 2008, consisted of the fact that local communities approved the natural gas prices determined by the gas sector companies. In December 2008, Regulatory Commission determined methodology for determination of the prices in the energy activities within the natural gas sector. In 2009, the company of "Sarajevo-gas" a.d. Istočno Sarajevo initiated the first tariff proceeding. Regulatory Commission gave its consent to the prices determined pursuant to the methodology, with the application deadline as of 1 January 2010.

In the Table 32, in the example of the natural gas prices for the company "Sarajevo-gas" a.d. Sarajevo and A.D. "Zvornik stan", Zvornik, there is a structure of costs of the natural gas price for end user from the category of household and commercial consumption which were effective in the second half of 2010. The metering point is separately calculated in the end user bill in the amount of 3.00 BAM monthly.

Struktura cijene gasa za krajnjeg kupca	"Sarajevo-gas" a.d. Istočno Sarajevo		A.D."Zvornik stan" Zvornik
	Domaćinstva	Komercijalna potrošnja	Sva potrošnja
	KM/Sm <sup>3</sup>	KM/Sm <sup>3</sup>	KM/Sm <sup>3</sup>
Nabavna cijena od "BH GAS"	0,65000	0,65000	0,6500
Transportne usluge /distr. usluge	0,03000	0,03000	
<b>Nabavna cijena</b>	<b>0,68000</b>	<b>0,68000</b>	<b>0,65</b>
Trošak distribucije	0,07210	0,08761	0,1979
Trošak snabdijevanja	0,04394	0,08240	
<b>Cijena gasa</b>	<b>0,79604</b>	<b>0,85001</b>	<b>0,8479</b>
Cijena gasa sa PDV-om	0,93137	0,99451	0,99204
Mjerno mjesto	3 KM		3 KM

Table 32 - Structure of the natural gas price for end user

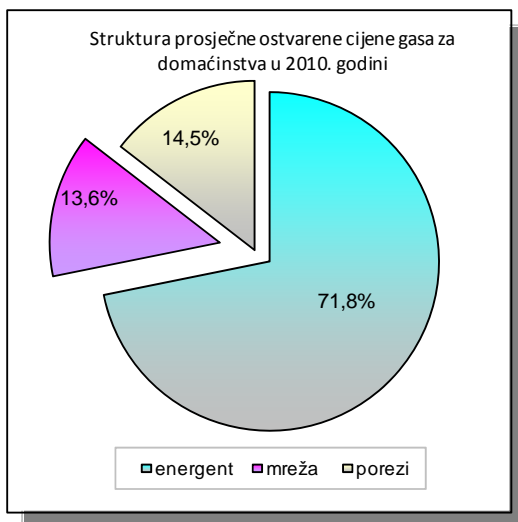
#### 4.10.1 Gas average prices for end users - households

In 2010, for the customers within the category of "households" in the region covered by the company "Sarajevo-gas" a.d. Istocno Sarajevo, total average price (without VAT) was realized in the amount of 0.78 BAM/Sm<sup>3</sup>. Since the gas procurement price in the first quarter amounted to 0.55 BAM/Sm<sup>3</sup>, and then it was increased to 0.68 BAM/Sm<sup>3</sup> and it did not change till the end of the year, the difference is considerable in the amount of the achieved average price in the first quarter compared to other quarters. Table 33 presents the realized average price of gas in the region, covered by the company "Sarajevo-gas" a.d. Istocno Sarajevo and which calculates the gas price for the households at tariffs approved by the Regulatory Commission.

cijena/period	I kvartal	II kvartal	I polugod.	III kvartal	IV kvartal	II polugod.	2010
Prosječna cijena (KM/Sm <sup>3</sup> )	0,693	0,828	0,723	0,995	0,836	0,862	<b>0,780</b>

Table 33 - Structure of the average realized price of gas for the household "Sarajevo-gas" a.d. Istocno Sarajevo

Picture 67 - Structure of the average realized gas price for the household in 2010



Picture 67 gives a structure of the average realized gas price in 2010, and for the category of consumption "household" in the region covered by the company "Sarajevo-gas" a.d. Istocno Sarajevo.

It can be noticed that the biggest share in the price structure is related to the gas procurement (71%).

#### 4.10.2 Natural gas price benchmarking

The legal basis for collection and statistical data processing on the basis of the natural gas price is defined by Directive 90/377/EEC dated 29 June 1990. The European Commission adopted the uniform methodology of the statistical data processing within the scope of generation, consumption and price of gas. Due to the gas market liberalization, the methodology established then collects data on the gas prices is outdated, so in June 2007 new methodology was established. The essence of the change is as follows:

- Prices are published in the national currency,
- Prices should represent the average for 6 months and
- Typical standard customer is replaced by the customer in band

The statistical processing of the gas average prices pursuant to this methodology is done for two basic categories of customers, namely for the household and industry. Within these two

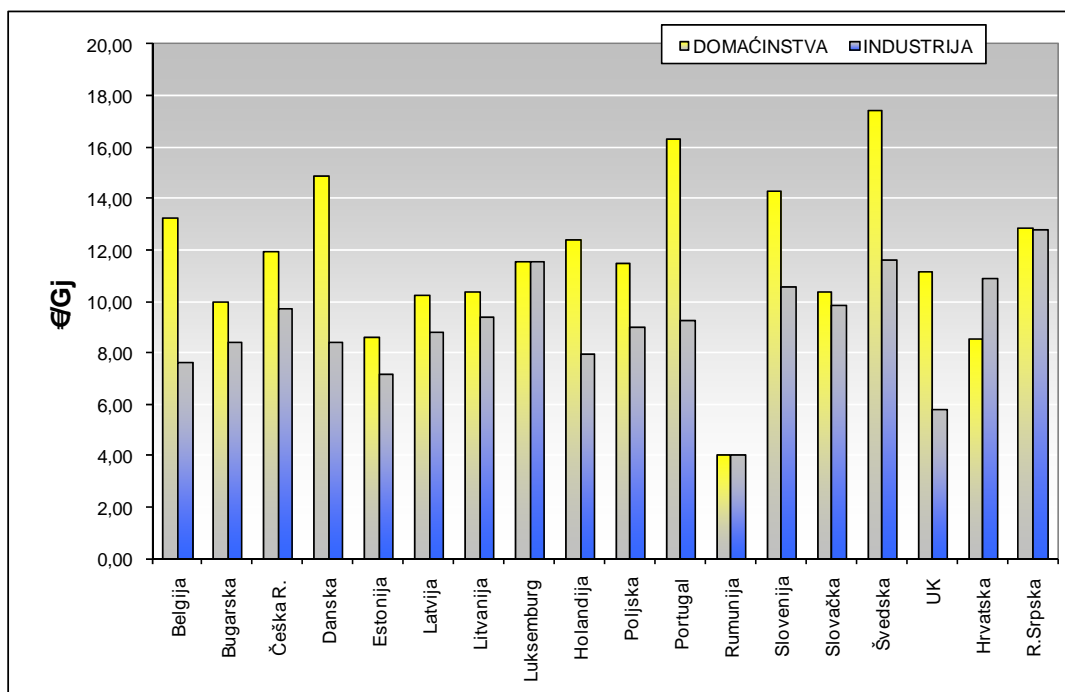
groups of customers, the customers are divided in several typical groups depending on the annual consumption and maximum capacity, as presented in the Table 34.

Godišnja potrošnja gasa (GJ)					
Industrijski krajnji korisnici			Domaćinstva -krajnji korisnici		
Grupa	najniža	najviša	Grupa	najniža	najviša
Band I <sub>1</sub>		<1.000	Band D <sub>1</sub>		<20
Band I <sub>2</sub>	1.000	<10.000	Band D <sub>2</sub>	20	<200
Band I <sub>3</sub>	10.000	<100.000	Band D <sub>3</sub>	>200	
Band I <sub>4</sub>	100.000	<1.000.000			
Band I <sub>5</sub>	1.000.000	<4.000.000			
	0				

Table 34

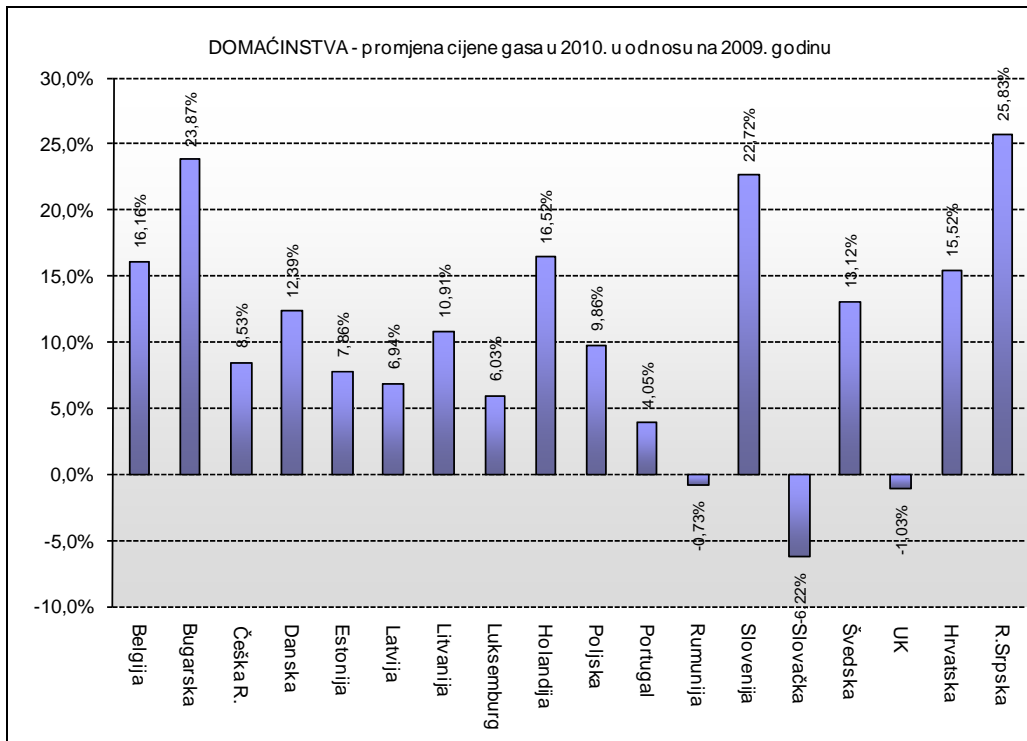
Picture 68 gives benchmarking overview of gas average prices in some European countries for the end user within the category of "household" which annual consumption is between 20 and 200 GJ and for end user within the category of "industrial customer" which annual consumption is between 10.000 and 100.000 GJ. The prices are without VAT and are related to the second half of 2010.<sup>11</sup>

The gas price for end users of "Sarajevo-gas" in Republic of Srpska, which is included in the Table for benchmarking purposes is calculated on the basis of the valid tariff rates for the natural gas and metering point on 1 November 2010 without tax. Calculation of the average price is related to customers in the "household" which annually consumes 500 Sm<sup>3</sup> and customers from the category of "Commercial consumption" which annually consumes 12.284 Sm<sup>3</sup> of gas.

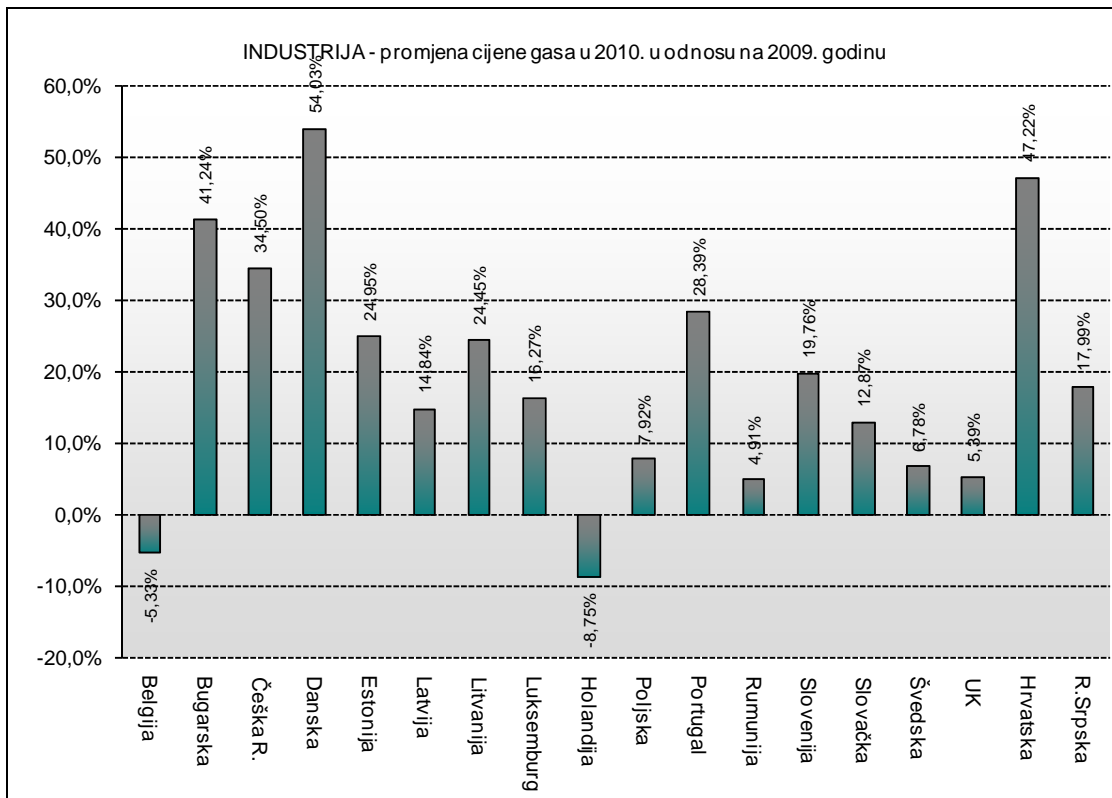


Picture 68 - Average prices of gas for the second half of 2010 - customers from the category "D2 - household" and "I1 - industry"

<sup>11</sup> Source: Eurostat



Picture 69 - Change of the gas price in 2010 compared to 2009 for the household



Picture 70 - Change of the gas prices in 2010 compared to 2009 for the industry

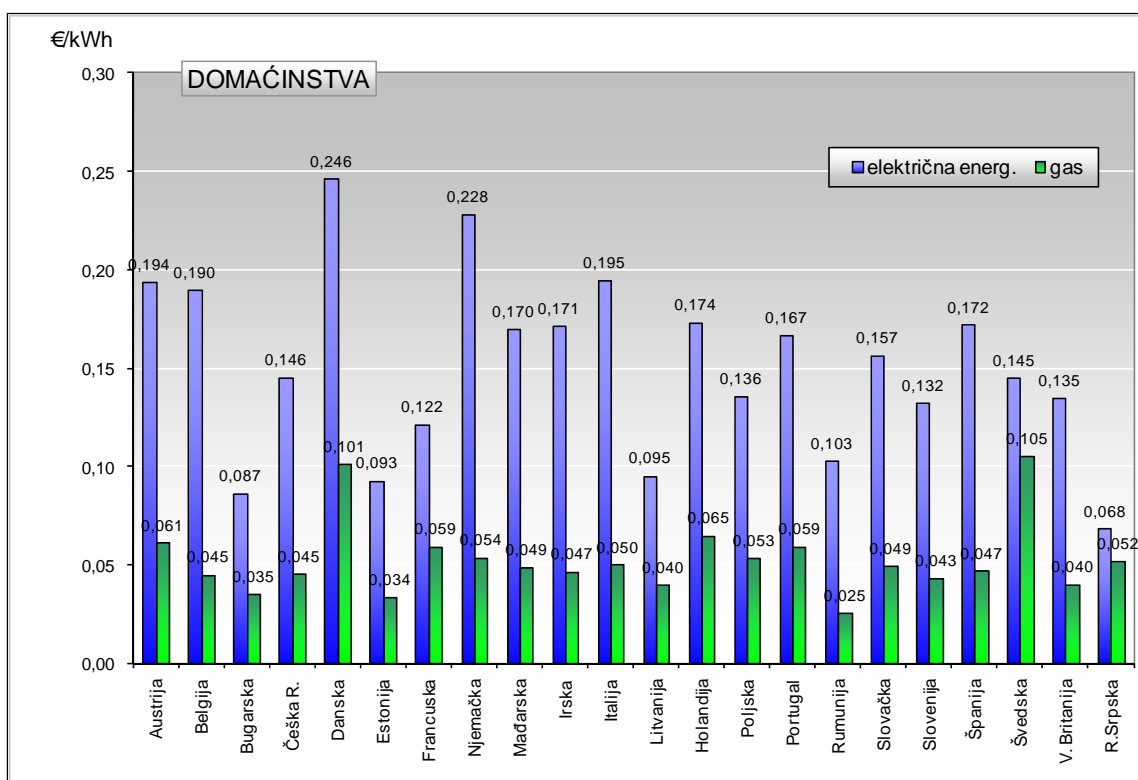


The previous pictures give a graphical overview of changes (%) of the gas price in the second half of 2010 compared to the second half of 2009 for a typical group of customers from the category of households (Picture 69) and typical groups of customers from the category of industry (Picture 70). There is a benchmarking overview of the gas change in Republic of Srpska (the gas price for end users "Sarajevo-gas") and in EU countries, on the basis of the average prices for the countries for which, in the moment of development of this report, Eurostat has the data published following new methodology.

#### 4.11. Electricity and natural gas - benchmarking of prices

This chapter gives a benchmarking overview of average prices in Eur/kWh in November 2010 for electricity and gas in the "household" and "industry". Groups of standard customers of electricity and natural gas have been defined applying the Eurostat methodology. Prices for "households" have been calculated with all taxes, and for the "industry" the tax on added value is excluded.<sup>12</sup>

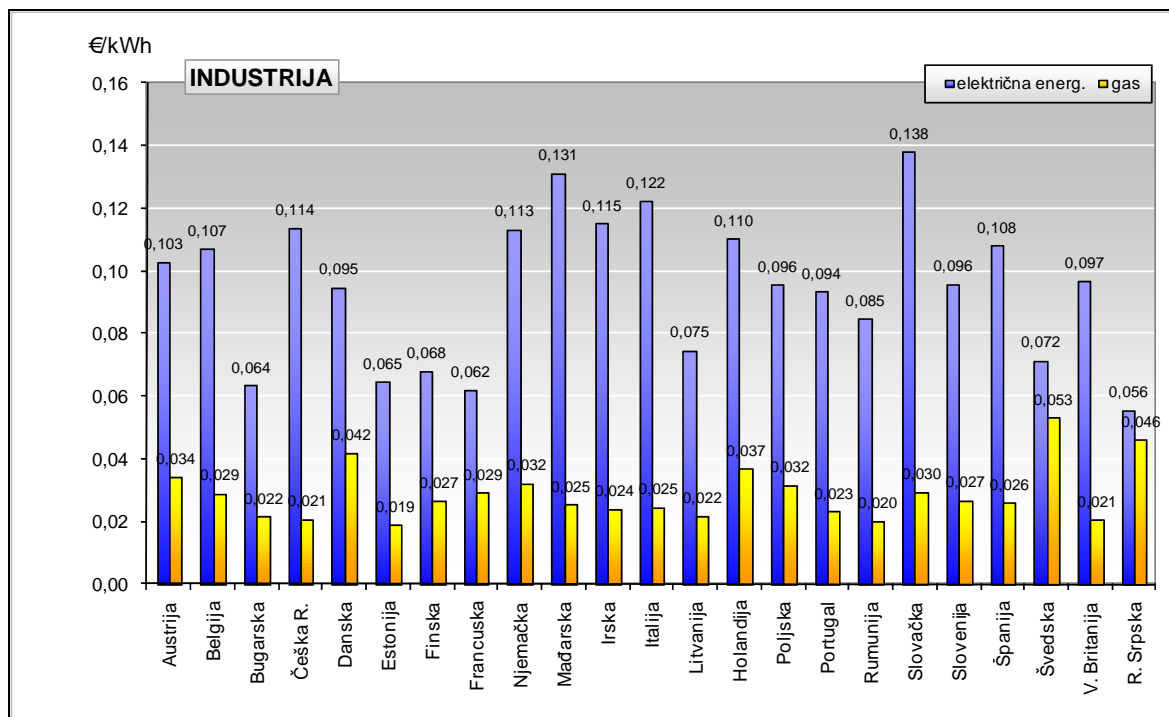
HOUSEHOLD	
Electricity	Gas
Potrošnja: 3500 kWh/god. (30% noću)	Potrošnja: 1380 m <sup>3</sup> /god



Picture 71 - Benchmarking overview of average prices in Eur/kWh for electricity and gas for typical "households"

<sup>12</sup> Source: Europe's Energy Portal/[www.energy.eu/](http://www.energy.eu/)

INDUSTRY	
Electricity	Gas
Potrošnja: 2000 MWh/godišnje (maks. 500 kW, godišnje opterećenje: 4000 h)	Potrošnja: 418.6 GJ/godišnje ≈ 116 MWh ≈ 11000 m <sup>3</sup>



Picture 72 - Benchmarking overview of average prices in Eur/kWh for electricity and gas for typical groups in the "industry"

## 5. Protection of customers of electricity and natural gas

### 5.1. Protection of socially vulnerable customers

The Treaty on establishment of the Energy Community, which the BiH is party to, complying with 3 (5) Directive on electricity and gas (2003/54 and 2003/55) which particularly emphasized a high level protection of socially vulnerable customers, and it emphasizes the obligation of making social program of the parties to it.

Accordingly, the Republic of Srpska Government in December 2007 made the Program of protection of socially vulnerable customers of electricity, which Regulatory Commission actively participated both in development and defining in. Social program of the Republic of Srpska Government aimed at prevention of the "tariff shocks" for socially vulnerable categories of customers that cannot afford the increase of electricity price.

This Program was realized pursuant to the Program of work of the Republic of Srpska Government for 2008, Program of work of the RS Government for 2009 and pursuant to the Program of work of the RS Government for 2010.

The Program included the following social categories defined by law as follows:

- The retired with the lowest pensions,
- Beneficiaries of the permanent financial aid,
- Beneficiaries of the assistance for the other person's care
- Maternity allowance beneficiaries and
- Children allowance beneficiaries;

The amount of the subsidy was, in the first half of 2008, 100 kWh of electricity per beneficiary. The Government, in its Decision from the second half of 2008, increased the amount of the subsidized electricity to the amount of 150 kWh of electricity monthly which was the amount of the subsidy in 2009 and in 2010. Applying the appropriate tariff for category of consumption of "household", Ministry of industry, energy and mining was making quarter calculations and allocation of the means to the electric distribution companies in Republic of Srpska.

Till 31 December 2010, distribution companies in RS were not allocated the means for the last, the fourth quarter of 2010, so that in Tables 35 and 36, there is a total number of beneficiaries of the subsidies in 2010 in (BAM) for the first three quarters of 2010 and number of beneficiaries of the subsidies per electric distribution companies.

Period	Broj korisnika	Pojedinačni iznos subvencije (u KM)	Ukupan iznos subvencije (u KM)
I kvartal 2010. godine	40.045	61,71	2.471.176,95
II kvartal 2010. godine	41.496	47,49	1.970.645,04
III kvartal 2010. godine	42.641	47,49	2.025.021,09
IV kvartal 2010. godine	0	0,00	0,00
<b>UKUPNO</b>	<b>124.182</b>		<b>6.466.843,08</b>

Table 35 - Realized subsidies per quarters for 2010

Elektrodistributivno područje	Broj korisnika kojima je doznačena subvencija			
	I kv	II kv	III kv	IV kv
Elektrokrajina	15.668	16.158	16.598	0
Elektro Doboј	6.932	7.234	7.447	0
Elektro-Bijeljina	8.918	9.322	9.628	0
Elektrodistribucija Pale	4.940	5.090	5.201	0
Elektro-Hercegovina	3.587	3.692	3.767	0
<b>UKUPNO</b>	<b>40.045</b>	<b>41.496</b>	<b>42.641</b>	<b>0</b>

Table 36 - Number of subsidized beneficiaries per electric distribution companies

So, in 2010, realized amount of subsidies is: 6,466,843.08 BAM which is more than in 2008 when 5,560,495 BAM were realized in total. Looking at the total amount, in 2010, it was realized less amount of subsidies than in 2009, when total amount of the realized subsidies was 7,700,645.28 BAM. Less amount of the total amount of subsidies in 2010, compared to

2009, was caused by already mentioned absence of realization of the means till 31 December 2010 for the IV quarter of 2010.

However, if one compares the data on the totally realized subsidies for the first three quarters of 2008 and 2009 to the data for 2010, it can be concluded that in 2010 more means was allocated for the subsidies than in the corresponding period of past years. Namely, number of beneficiaries in 2010 was between 40 and 43 thousand while in 2009 such a number varied between 35 and 38 thousand whereby between 28 and 35 thousand were quarterly applying in 2008 so that total amount of the subsidies for the first quarters of 2010 is much more than compared to the first three quarters of 2008 and 2009.

Taking into account the fact that the average monthly consumption of electricity in the household in Republic of Srpska amounts to 300 kWh, the subsidizing of more than 40 thousand socially vulnerable categories of customers with 150 kWh of electricity per month, in 2010, mitigated the effect of the "tariff shock" due to increase of the electricity price as of 1 January 2010.

## 5.2. Public service obligation

The Treaty on establishment of the Energy Community confirms the role of public service. The European Union policy in relation to the public service operators is still in process of making form for the purposes of liberalization of the public service network and expansion of the competition volume at the national markets. The public service concept, following the EU definition, is two-sided because it includes, on one hand, the structures rendering the service and on the other one the service in general interest.

The idea which is behind the Chapter on public service of the European Union is that there should be an instrument which establishes the basic rights and principles arranging the service rendering to beneficiaries. The principles should include:

- continuity of service,
- quality,
- safety of supply,
- equal approach,
- affordable prices and
- social, cultural and ecological acceptability;

In Article 3, paragraph 2 of Directive on electricity 2003/54/EC, it is stated that parties may, due to general economic interest, impose the companies in the electric power sector the public service obligation. Such an obligation is clearly defined, transparent and non-discriminatory, and may be related to safety, continuity, quality, the supplying price, protection of environment and others.

Accordingly, provision of Article 11 of the Energy law prescribed that the power activities: transport and natural gas transport system control, transport of oil through the oil pipe-lines and transport of oil derivatives through oil-derivatives pipelines, generation of electricity for supply of tariff customers, distribution of electricity and natural gas, supply of tariff customers with electricity and gas and distribution and supply with heat energy, activity of general interest and are carried in the public service obligation system pursuant to the law and license for doing such activity.

The law defined the term public service as the service available to all customers and energy undertakings on certain territory at prescribed prices and according to the regulated conditions of access and use of the service, respecting the safety, including safety of supply,

regularity and quality of service, efficiency of the energy use, protection of environment and prevention of climate changes, which is done applying the principles of transparency and supervised by the law-defined authorities. So, Article 37 of the Law stipulated that the fine of 5,000 to 15,000 BAM will be paid by the energy undertaking which does the energy activity, being a public service, as the market one.

Submitting monthly, quarterly and annual reports of the distribution companies and conducting regular and extraordinary monitoring activities, Regulatory Commission follows and controls application of appropriate tariff rates and conditions of access and use of the network.

Regulatory Commission attempts to follow safety, including safety of supply, regularity and quality of service through indicators of commercial quality, e.g. re-connection after disconnection due to non-payment, number of interventions regarding damage with the supplying fuse of end user, settlement of disputes regarding quality of voltage, data on connections (number of the connections made and average time for its making, responses to the problems with metering, notice on the termination of supply and similar), and indicators of continuity of supply and delivery of electricity.

### 5.3. Affordability of electricity for the customers within the category of "household"

Fuel poverty - affordability of energy for end users

European countries use the term "fuel poverty" to assess and compare affordability of electricity for end users within the category of household.

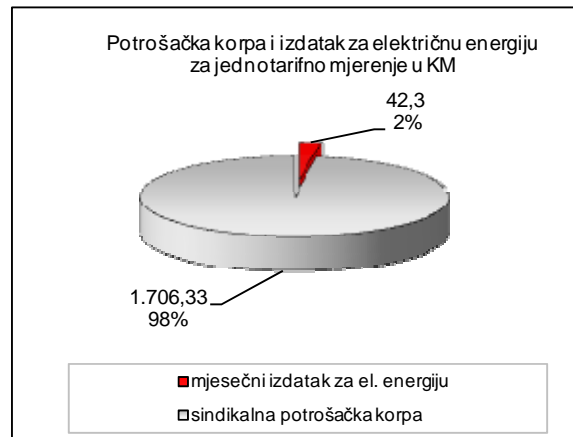
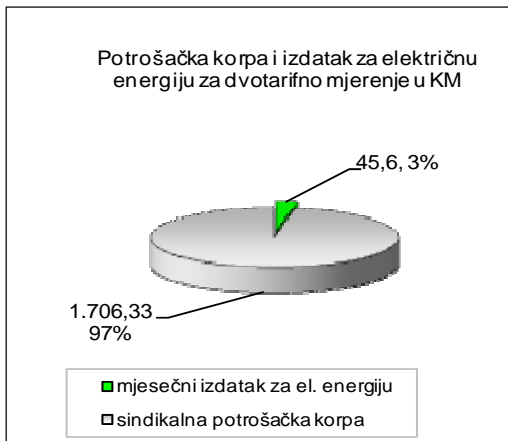
The threshold of fuel poverty is determined by each country based on its own criteria which depends on the average prices of different kinds of fuel items for household, availability of different types of fuel items in the household and GDP per capita, minimum income of the household.

In some European countries, household is defined to be poor in fuel if the monthly bill for consumption of electricity and gas in the household is more than 10% of total monthly income of the household.

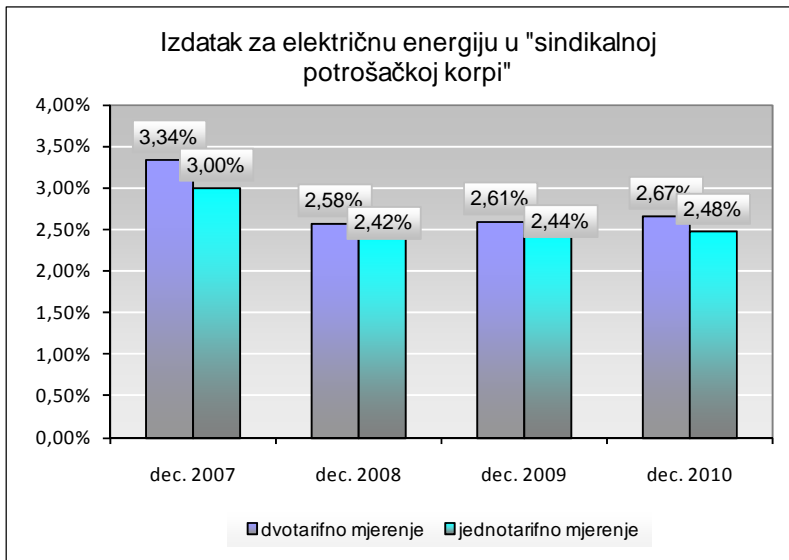
Regulatory Commission, for its own purposes, used the benchmarking overview of the ratio of the bill for electricity and "social consumption basket" published by the League of the trade unions of RS and which represents the value of goods and services necessary for maintenance of the level of the living standard.

Picture 73 - Share of costs of electricity in the consumption basket for the standard customer in 2010

In Republic of Srpska, on 1 January 2010 it has been applicable Decision on amended, higher prices of electricity and it resulted in increase of the monthly amounts for electricity compared to the previous year. "Social consumption basket" in December 2010 was 1,706.33 BAM, which means 89.25 BAM more compared to December 2009 when it amounted to 1,607.08 BAM. Accordingly, the amount for electricity, for the typical customer which uses 3500 kWh annually in 2010 was slightly higher in the social consumption basket compared to the same period of the previous year.



Picture 74 presents benchmarking graph of a share of costs of electricity (including the tax on added value), in the "social consumption basket", for the period from 2007 to 2010.



Picture 74 - Share of costs of electricity in the "social consumption basket" in the period from 2007 to 2010.