



**State Energy and Water Regulatory Commission (SEWRC)  
Bulgaria**

# **Annual Report to the European Commission**

**July 2014**

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## **1. Foreword**

The present document represents a national report elaborated by the State Energy and Water Regulatory Commission (SEWRC) to the Agency for Cooperation of the Energy Regulators and the European Commission in pursuance of the reporting obligations under art.37, para 1b, item d of Directive 2009/72/EC and art.41, para 1b, item d of Directive 2009/73/EC.

With the Energy Act amendments of 17 July 2012 and 5 July 2013, Directive 2009/72/EC and Directive 2009/73/EC have been transposed into the Bulgarian legislation.

In exercising its legal obligations, SEWRC adopted and amended a number of regulations/secondary legislation in order to bring them in line with the currently in force EU and national legislation.

With the changes made all users connected to the MV network entered the open market and could negotiate the price at which they purchase electricity with the licensed electricity traders. That change happened to be one of the steps towards the energy market liberalization in Bulgaria.

The last resulted in reduction of the regulated electricity price users range, namely all households and businesses connected to the low voltage network.

Due to legislative changes in 2013, the electricity pricing model for the regulated market administered by the Regulator also changed, in the context of the changing electricity market structure and expansion of the open market.

In 2013 SEWRC took a number of steps to develop transparent rules for the organization of a balancing market and a power exchange in order to meet the requirements of the abovementioned Directives of the European Commission. In this regard, new Electricity Trading Rules (ETR) were adopted as of 26 July 2013, supplemented and amended as of 9 May 2014. As a result, the necessary conditions for the launch of the balancing market and the power exchange were created.

In the reported year the factual unbundling of ESO EAD from NEK EAD was initiated - a necessary step towards an integrated internal energy market with a target date 2015.

In 2013 the certification process of the transmission network operator Bulgartransgaz EAD has began, assuming the role of an independent transmission operator in pursuance of the independence requirements.

The transmission system operator developed a Methodology for determining the price of access and transmission through the transmission system, which in 2014 the Regulator should approve. In this regard SEWRC has initiated the development of Guidelines on the pricing of access and natural gas storage in storage facilities.

The realization of the gas interconnection Greece - Bulgaria (IGB) is of particular importance and it will directly connect the national transmission systems of Greece and Bulgaria. The project aims to diversify the natural gas supply sources to Bulgaria and Southeastern Europe. Interconnection IGB is defined as a project of national significance in both Bulgaria and Greece and is listed as a project of common interest (PCI) by the European Commission.

**Boyan Boev**  
**SEWRC Chairman**

## 2. Main developments in the gas and electricity markets

### 2.1. Main developments in the electricity market

#### Wholesale market

In line with Directive 2009/72/ C and under the Energy Act (EA), the electricity market in the Republic of Bulgaria has been fully liberalized since 1 July 2007 with a stepwise liberalization process and in 2013 free electricity market involved customers connected to the power system of high (HV) and medium voltage (MV) and the inclusion of low voltage (LV) consumers representing household consumers and small businesses is forthcoming.

The annual net output in the country in the reported period (2013) was 43 650 000 MWh, which was a decrease in the net output by 7.5 % in comparison to 2012. One of the reasons for that decrease was the reported for a second consecutive year reduced gross inner electricity consumption in the country in 2013, which was by 2.4 % lower than the consumption in 2012 and 3.7 % lower than the one in 2011.

The second reason is the decrease tendency of annual export, which is 25.5% lower than the data reported for 2012. Reduced electricity exports were due to the significant increase as of 01 July 2012 of the so-called *õsurchargesõ* (*õgreen energyõ surcharge, õhigh efficient cogenerationõ surcharge and õstranded costsõ surcharge*) over the electricity transmission network price, which surcharges were paid by the energy consumed in the domestic market and by exports too. Price increase for electricity over the electricity transmission network found a negative impact on the electricity exports in the first half of 2013, which related to the curtailment of power generation capacities and difficulties in the power system operation.

Given that the *õsurchargesõ* over the transmission price of electricity through the transmission network reflected energy costs and aiming the balance recovering in the power system, changes in the electricity sector's laws and regulations were undertaken and complete differentiation between network services and energy costs was achieved resulting in several times reduced prices for transmission and access to the transmission network. After taking those measures, a significant increase in electricity exports from the country has been reported as of 1 August 2013 and power system stabilization has been observed, especially concerning the electricity generators - working with local raw materials and Kozloduy NPP.

An important aspect in the new market model development was the electricity consumption structure analysis in the country, including consumption analysis of large consumers (HV consumers) and the consumption of industrial customers (MV), who in 2013 changed their supplies to supplies at freely negotiated prices. That measure connected to the performance of the Commission's statutory obligations to implement the Third energy liberalization package concerning the stepwise to full liberalization of electricity and natural gas trade. The MV market liberalization associated with the development of a procedure, which managed to ensure a smooth transition of consumers from regulated to freely negotiated prices. With that aim SEWRC has issued the relevant licenses of Supplier of last resort (SLR) *ó* to NEK EAD and of End suppliers and adopted a methodology for them to follow in the price-formation of their customers. The initial function of the SLR aimed to ensure a stepwise market liberalization of MV consumers and in consequence its function was limited to supplies of a relatively small share of the market segment, namely consumers who have not chosen another supplier or customers who for one reason or another, temporarily were unable to get electricity at freely negotiated prices. The terms and conditions under which SLR had to operate were dealt in detail in the adopted Electricity Trading Rules (ETR) in July 2013.

As a result of the actions taken by the Regulator for the stepwise electricity market liberalization in 2013, an increase in trade at freely negotiated prices can be reported by 29.7% in comparison to the previous year.

The number of market participants in 2013 increased significantly with highest dynamic for the MV end customers. Participants with real market transactions as of December 2013 were the total of 2157, 9 of which generators, 2096 consumers and 52 electricity traders - 13 of which were standard balancing groups coordinators.

In 2013 SEWRC issued licenses to 9 new companies for the activity of electricity trading with which the total number of licensed traders has become 115. At the request of licensees the Commission has terminated 2 of the active licenses for the activity of electricity trading, thus the total number of licenses for the activity of electricity trading in 2013 became 113.

The electricity market in Bulgaria is characterized as national and at the same time well-integrated with the neighboring countries.

The activities and organization of the market in the country and with the neighboring countries in 2013 were regulated through Electricity Trading Rules and Auction Rules for the Allocation of Capacities on the Interconnections between the Control Area of Electricity System Operator EAD - ESO EAD (TSO) and its Neighboring Control Areas for the Year of 2013. These Rules have been agreed and approved by the national Regulator State Energy and Water and Regulatory Commission (SEWRC) of the Republic of Bulgaria.

In 2013 ESO EAD held tenders for capacity allocation and provision for trade exchange on the interconnections of the Bulgarian electricity system with the electricity systems of Romania, Serbia, Greece, FYROM and Turkey.

In 2013 auctions were organized and conducted under general auction rules at the Bulgarian-Romanian and Bulgarian-Greek borders and at the Bulgarian-Macedonian, Bulgarian-Serbian and Bulgarian-Turkish borders for around 50% of the agreed capacity for trade exchange.

The above mentioned rules are in compliance with Regulation (EC) 714/2009 of the European Parliament and of the Council on the conditions for access to the network for cross-border exchanges in electricity, regulating the terms and conditions governing the allocation of ATC in both directions on the interconnections in a transparent and equitable manner.

By Decision of Protocol No 110 of 18 July 2013, item 1, SEWRC adopted new Electricity Trading Rules. The Rules were published in SG, issue 66 of 26 July 2013, entering into force on 26 July 2013, and amended and supplemented as of issue 39 of 9 May 2014. Under the aforementioned Rules a new market model has been established and the new market organization aims to ensure compliance with the provisions of the Energy Act in relation to the organization of a power exchange on the territory of the Republic of Bulgaria, as well as providing the all necessary conditions to guarantee the balancing market operation in its entirety. The launch of a working balancing market covering all market participants in the chain generation, transmission, distribution and end-users is the key and most important step for the further electricity power exchange organization and functioning and an essential condition for our country's commitments fulfillment concerning the full electricity and natural gas trade liberalization. Balancing market in Bulgaria launched its operation in the end of the first half of 2014.

The basic rules that govern the registration administrative procedure organization of market participants both in the balancing market and in the power exchange were established in 2013. The final administrative proceedings relating to the licensing of the Bulgarian power exchange ended in early 2014.

The wholesale electricity market in Bulgaria, on the other hand, is characterized by the presence of legal and contractual obligations of the Public Provider NEK EAD to purchase electricity from producers at preferential conditions in terms of long-term power purchase commitment (between 12 and 20 years) at purchase prices greatly exceeding the electricity market rates. Such obligations are long-term Power Purchase Agreements between NEK EAD and respectively AES 3C Maritsa Iztok 1 EOOD and Contour Global Maritsa Iztok 3 AD, together with the legal obligations imposed on the Public Provider to purchase mandatorily electricity from renewable sources and high-efficient cogeneration. It should be emphasized that the existing legal and contractual power purchase obligations and the preferential treatment provision are contrary to the newly implemented EU requirements on competitive market conditions.

## **Retail market**

Electricity retail market segment in 2013 was electricity supply to LV customers - small businesses and household consumers.

In 2013, the majority of these consumers were supplied at regulated prices and at this stage a relatively small part of the LV business customers shifted to electricity supplies at freely negotiated prices.

In compliance with the Energy Act, end suppliers supply and sell electricity to protected customers - households and non-household end consumers connected to the distribution network at low voltage in the relevant licensed territory, when those customers have no supplies from another supplier.

The expansion of the electricity market at freely negotiated prices in the medium and small business sector is in accordance with the EA and Directive 2009/72/EC.

To ensure the small consumers consumption SEWRC set mandatory quotas for the different types of producers under the Energy Act, under which quotas the Public Provider sold electricity on the regulated market. Electricity amounts from generators purchased at regulated prices within a quota set by the Regulator for each generator were determined based on the principles of equality and transparency according to a methodology adopted by the Regulator.

The regulated price for protected consumers in the country was formed as a mix of the electricity generators prices from different primary energy sources (nuclear fuel, coal, water energy, RES). The rest of their electricity output producers (mainly condensing power plants) could sell on the liberalized market as equal participants. Electricity generated from renewable energy sources was purchased by the Public Provider under different in duration long-term contracts at feed-in tariffs, some of which were significantly higher than the market levels. Renewable energy generation incentives in the recent years have contributed to certain disproportions in the installed capacities structure, which in turn led to difficulties in operating the power system both technically and economically.

The following prices were set by a decision of the regulator in respect to protected consumers and in pursuance of the Energy Act and the currently in force as of 5 April 2013 Ordinance 1 on regulating the prices of electric power:

- prices for access and/or transmission over the electricity transmission and distribution networks;
- prices at which the end suppliers sell electricity to household consumers and enterprises connected to the distribution network at LV.

The regulated by SEWRC access and transmission prices for the distribution companies under Ordinance 1 of 18 March 2013 on electricity prices regulation, are determined on the basis of eligible by the regulator revenue requirements for the relevant distribution network maintenance and operation.

The main consumer groups connected to the distribution networks in 2013 were as follows:

- Business consumers at middle voltage;
- Household consumers and business consumers at low voltage.

### **Public obligations and consumer protection**

Costs related to legal and contractual obligations to purchase electricity are classified as "public service obligation" and Art. 35 of the Energy Act regulates the rights of energy companies to be compensated for the expenses arising from the obligation to purchase electricity at feed-in tariffs from renewable sources and highly efficient combined heat and power generation and plants with long-term power purchase agreements.

EA expressly governs that equitable allocation of these costs among electricity end consumers should be ensured as a pricing principle in determining regulated prices.

In pursuance of these regulations SEWRC durably develops and implements a model of full compensation for such costs since 2009 to present. Till 31 July 2013, this model provided for public service obligations to be included in the transmission price. A steady trend of increase of these costs was reported over the past few years and in the period 2012-2013 their level has led to a rise in the total amount due over the transmission price, which practically blocked the Bulgarian electricity exports. In this context, a new model was developed to offset these costs and since August 2013 a new public service obligation price was established payable by free market customers for the electricity quantities consumed in the country. The new price intended to recover the costs of the Public Provider and was to be paid separately from the network services administered by the network companies.

Compensation procedures concerning costs arising from the public service obligations imposed to the relevant energy companies and the mechanism by which these costs are established in size and are reimbursed to the energy undertakings that have had them, are determined in a methodology approved by the Regulator. In connection with the above, SEWRC has adopted and applies consistently methodologies to offset the Public Provider and end suppliers costs resulting from imposed public service obligations for the purchase of electricity at feed-in tariffs from renewable energy sources and highly efficient combined heat and power generation.

With the amendment of the Energy Act of 5 July 2013 and the implementation of the new pricing model it was adopted that end suppliers sell to the Public Provider electricity quantities that they have purchased under art.162 of EA and art.31 of Renewable Energy Act at the price at which they had purchased them. In this regard, by a Decision under item 3 of Protocol 110/18 July 2013, SEWRC has approved a Methodology to offset the costs under art. 35 of EA and the allocation of these costs among end consumers connected to the power system. The methodology specifies in detail the ways to purchase and invoice electricity produced from renewable sources and highly efficient cogeneration and the determination of the annual quantities and costs for electricity generation from renewable sources and highly efficient cogeneration. Another key aspect was the inclusion of procedures for determining the public service obligations cost under art.30, para.1, item 17 of EA.

The public service obligations price was formed as the difference between the actual electricity production costs from renewable sources, heating and industrial plants and long-term contracts for energy quantities sold on the free market and the generation costs of this energy under the mix price of the Public Provider.

By the Act of amending and supplement of the Energy Act in force as of 28 Feb 2013, SEWRC was granted the right to adjust electricity prices more than once a year to allow for more flexibility and fairness in pricing.

Given the amendments of the regulations as part of the implementation of the Third energy liberalization package, in particular Ordinance 3 of 21 March 2013 and the envisaged thereof new requirements about the content and scope of the General Conditions of the energy companies providing services of common interest and with the view to ensure a higher level of protection of consumers' rights and equality between customer groups, procedures have been started for the amendment of the current General Conditions of the energy companies.

## **Infrastructure**

Operational costs and transmission network maintenance costs were reimbursed through approved prices for transmission and access.

The prices approved in 2013 were as follows:

- Price for transmission to the electricity transmission network paid by all network users to the transmission operator NEK EAD.
- Price for access to the electricity transmission network paid to electricity system operator ESO EAD by all users of the network, without the amounts under transactions with a subject to electricity transit.

The regulated by SEWRC prices for access paid to ESO EAD and for transmission paid to NEK EAD and for using the transmission network, under the Ordinance on electricity prices regulation, were set out based on allowed by the Regulator revenue requirements for the maintenance and operation of the electricity transmission network.

In 2013 the Electricity System Operator ESO EAD performed the operational management and regulated the allocation of electricity loads of the electricity system, by taking into account the accepted and confirmed notifications for transfer capacity of the trading participants on the basis of the currently in force Electricity Trading Rules and the Auction Rules presented above.

The cross-border transfer capacity on the interconnections is allocated by the Auction Operator in the form of commercial transfer rights in line with the current agreements and



agreed with the operators of the neighboring countries Auction Rules. The Auction Operator calculates and allocates the transfer capacities in line with the standards and rules of the European Network of Transmission System Operators for Electricity (ENTSO-E).

The transmission system and the interconnections with the neighboring countries ensure the needed transmission capacity for the commercial electricity exchange in the region.

### **Security of supply**

In line with the Energy Act, ESO prepares short-term and long-term forecasts and development plans for the electricity system in order to ensure the electricity balance of the country. Based on these forecasts and plans, ESO submits to the Minister of Economy and Energy a draft electricity balance and a list of the sources needed for the country, including new production capacities and interconnection lines.

Total installed capacity in the country in 2013 was 11 960 MW. Maximum available net output capacity to the annual maximum was 10 252 MW and peak load in January 2013 was 6 672 MW.

At this stage of development of the domestic and regional electricity market, the electricity transmission network of the country has not faced significant problems related to security of supply and congestions in the electricity system, including the cross-border transfer capacities. As a result of the considerable in 2013 increase of the RES electricity capacities in the country, mainly solar and wind power, some difficulties occurred regarding their balancing.

Rare cases of short-term congestions occurred in the interconnectors with some of the neighbouring countries of the Republic of Bulgaria (with higher loads in the winter season).

### **Regulation/Unbundling**

In 2013 Electricity System Operator EAD (ESO EAD) was part of a vertically integrated undertaking. By application E-ZLR-74/05.11.2013 submitted by NEK EAD where it asked for a permit the company to be transformed using unbundling via acquisition, also by application E-ZLR-PR-73/05.11.2013 submitted by NEK EAD for the termination of license L-147-04/17.12.2004 for "electricity transmission" and by application E-ZLR-I-75/05.11.2013 submitted by ESO EAD for a license for "electricity transmission" and terminating license L-221-17/28.12.2006 for "power system operation", ESO EAD was unbundled from NEK EAD. By Decision P-205 of 18 Dec 2013, ESO EAD was granted a license for the activity "electricity transmission", with the rights and obligations to fulfill the activity "special balancing group coordinator" for a period of 35 years.

Every year ESO EAD submits an annual report on the fulfillment of the measures under the objectives specified in the program and the report is submitted to the regulator for review and approval.

The implementation of the compliance programme also takes into account and ensures the independence of ESO EAD and of the persons responsible for the management, including the operational management of the electricity system.

Distribution companies in the territory of the country similarly prepare and submit compliance programs setting out the measures to ensure the independence of the Distribution

System Operator. The compliance programs submitted are reviewed by the Regulator at its sessions and are either approved or, if necessary, supplemented by instructions to supplement the program in order to guarantee the independence of the operator from the other activities of the vertically integrated enterprise. Every distribution company prepares an annual report on these measures which is submitted to the Regulator for approval.

At the end of 2013, NEK EAD has submitted an application for a transformation permit and an application for termination of the "electricity transmission" license. At the same time, ESO EAD has submitted an application for termination of the "power system operation" license and has applied for "electricity transmission" license. By Decision P-205 of 18 Dec 2013 SEWRC granted a permit for the transformation of NEK EAD and ESO EAD and made the appropriate changes in the licenses of the two companies related to the activities of electricity transmission and power system operation. Accordingly, the Regulator took the relevant decisions to terminate the licenses and to issue a new one and these decisions came into effect as of the registration date of the transformation in the Commercial Register.

The transformation request relates to the obligations fulfilment under the Energy Act about the legal, organizational and financial unbundling and restructuring of the activities connected to the requirements implementation of Directive 2009/72/EC of the European Parliament and of the Council of 13 July 2009 on the common rules for the internal electricity market.

The unbundling of ESO EAD, as the owner of the grid, allows the company to start a certification process as an independent transmission operator, being a further step in the development of a competitive and financially stable energy market according to the Third liberalization package requirements.

## **2.2. Main developments in the gas market**

By the amendment of the Energy Act, promulgated in State Gazette, issue 54 of 17 July 2012, the Third energy liberalization package was transposed, particularly Directive 2009/73/ C of the European Parliament and the Council of 13 July 2009 on the common natural gas internal market rules. In connection to the Third energy liberalization package transposition and the Energy Act amendment in 2012, SEWRC adopted regulations and rules in 2013, in line with the provisions of § 199, para.1 of the EA.

In EA art.21, § 1, item 27, it is stipulated that SEWRC acquires the power to certify the natural gas transmission system operators about the completion of the independence requirements and also to monitor their compliance. Given the legal requirements, Bulgartransgaz EAD has submitted at SEWRC a certification application for an independent transmission operator and the certification procedure is in process.

In 2013, a second trader entered the natural gas market carrying out imports and at the same time selling natural gas to gas distribution companies and end consumers.

### **Wholesale market**

Under the EA and the Rules on provision of access to the gas transmission and/or gas distribution networks and in compliance with the European Directive for full natural gas market liberalization, all consumers since 01 July 2007 have the right to choose their natural

gas supplier.

Natural gas supply on the territory of the Republic of Bulgaria is carried out over a gas transmission network owned by Bulgartransgaz EAD and over gas distribution networks owned by the respective gas distribution companies. In the territory of the country, a transit gas pipeline has also been constructed, owned by Bulgartransgaz EAD and it transports natural gas to the territories of Greece, Macedonia and Turkey. The public provision activity is carried out by Bulgargaz EAD. The natural gas at the entry of the gas transmission network is provided based on agreements with foreign providers.

In accordance with the Energy Act natural gas public provision and supply are services of public interest and as such are performed by specially licensed companies. The needs of the Bulgarian gas market are met by the natural gas supplied in the country on the basis of contracts between the public provider Bulgargaz EAD on one side and Gazprom Export OOO on the other. The share of domestic production in satisfying these needs is negligible. Bulgargaz EAD has signed a natural gas sales contract with Petroceltic EOOD for the domestic production. Bulgartransgaz EAD owns and operates the transmission and transit gas pipelines at high pressure, as well as the underground gas storage of Chiren.

The activities of the gas transmission network operator - Bulgartransgaz EAD are unbundled legally, functionally and financially from the other activities in the vertically integrated enterprise.

The gas transmission network operator provides:

É integrated management and reliable functioning of the gas transmission network;

É transmission of natural gas over the gas transmission network and its measurement/reporting;

É maintenance of the sites and facilities of the gas transmission network in line with the technical requirements and the safety at work standards;

É development of the gas transmission network in line with the long-term forecasts and plans for development of the gas supply and outside of them, when it is economically justified;

É maintenance and development of the auxiliary networks.

Public provision activity is carried out by Bulgargaz EAD, which is a license holder of a license for the activity of natural gas public provision, issued by SEWRC.

Bulgartransgaz EAD is a license holder of licenses for the activities of natural gas transmission and natural gas storage.

Natural gas at the entry of the gas transmission network is provided by two external suppliers (Overgas Inc. AD and Gazprom Export OOO) and one local supplier from local production (Petroceltic EOOD). Overgas Inc. AD organizes natural gas imports and transportation over the transmission network to its clients. Bulgartransgaz EAD owns the transmission gas network, gas distribution companies are connected to this network and also about 250 directly connected consumers.

Under art.176, para.1 of EA, extractive companies or natural gas traders, on one hand, and the natural gas public provider, suppliers of last resort, storage facilities operators, liquid natural gas facilities operators, natural gas traders or customers ó on the other, conclude natural gas transactions among each other at freely negotiated prices.

For the reported 2013 the quantities traded at freely negotiated prices by natural gas traders under gas transmission contracts with the gas transmission system operator, were: 98.3 million m<sup>3</sup> under a contract with Deksia Bulgaria OOD (supplied by the extractive company Petroceltic EOOD) and 272.4 million m<sup>3</sup> under a contract with Overgas Inc. AD.

The Public Provider Bulgargaz EAD carried out wholesale trade at prices regulated by the SEWRC, with a market share of 87 % for 2013. The remaining 13 % were realized by the traders Deksia Bulgaria OOD and Overgas Inc. AD.

Local extraction in 2013 was 176 million m<sup>3</sup>, realized by Petroceltic EOOD and òExploration and extraction of oil and gasö AD. There was a decrease of the extracted natural gas in the country for the last three years and compared to 2011 (406 million m<sup>3</sup>) in 2013 production reduced by 43 %.

Bulgartransgaz EAD operates the underground gas storage Chiren, with a capacity of the active gas about 450 million m<sup>3</sup>/per year. In 2013, 335.47 million m<sup>3</sup> natural gas were pressurized in there, and the amount of the drawn quantity was 238.53 million m<sup>3</sup>.

## **Retail market**

When regulating the distribution and supply prices, SEWRC takes into account the specific features of the market, including the fact that the needed natural gas distribution infrastructure of the country is still in process of construction and the connected to the natural gas distribution network consumers are still few. The applied by SEWRC regulatory mechanism provides balanced incentives for the natural gas distribution companies to continue the network development and to connect new customers with the purpose to gradually increase their consumption.

In order to stimulate investments in the gas distribution companies, SEWRC applies the òprice capö regulation method. The Commission approves the rate of return on equity on an individual base for each company.

The regular monitoring of the natural gas market carried out by SEWRC is an incentive to encourage retail competition in order to ensure non-discrimination between all participants in the market and between the participants of one and the same category contributing to efficient competition and proper functioning of the market. In this regard, SEWRC in the performance of its control powers, carried out scheduled inspections in the energy companies, as well as extraordinary inspections on the occasion of received irregularities alerts and complaints. As an activity encouraging competition in the market, it could be pointed out the fact that SEWRC approves price cap for the sale of natural gas, while the gas distribution companies have the right to sell to end consumers at prices lower than the ones approved.

Under EA provisions and the Rules for provision of access to the gas transmission and/or gas distribution networks, all consumers have the right to choose their supplier of natural gas, which right is guaranteed in the issued in 2009 licenses for the activity of ònatural gas supply by an end supplierö.

## **Regulation/ Unbundling**

With the amendment of EA of 17 July 2012, art.21, para.1, item 27, SEWRC has been empowered to certify the transmission system operators: to certify the electricity transmission network operators and the natural gas transmission networks concerning their compliance with the independence requirements, to monitor observance of these requirements and send the appropriate notifications to the European Commission. Art.81 ( ), para.1 of EA stipulates that SEWRC shall certify each transmission network operator for the fulfillment of the independence requirements and monitor their observance by the certified operator. SEWRC shall open procedures for the certification under para.1 on its own initiative, upon the request of the transmission operator or upon the motivated request by the European Commission. SEWRC adopts a draft certification decision or rejects certification within 4 months of the application submission date for certification or of proceedings initiation by it or upon the request of the European Commission. In case that in this period SEWRC does not act expressly, it is considered that the draft for a decision for certification has been adopted.

Regarding the natural gas distribution undertakings, para 1, 2 and 3 of art.26 of the Directive do not apply in the Republic of Bulgaria, due to the fact that all 27 distribution companies serve less than 100 000 connected consumers.

## **Conclusions**

In performing its powers, SEWRC is guided by the following key principles:

- to ensure balance between the interests of energy enterprises and consumers;
- to ensure equal treatment among the different categories energy enterprises and among customers groups;
- to create incentives for a competitive environment development for the activities in the energy sector, where appropriate conditions exist.

Being a part of the requirements of the Third energy liberalization package and to provide an unimpeded and non-discriminatory approach in the provision of access to the gas networks and their development in the interest of the natural gas market participants, Independent Transmission Operator has been chosen as the optimal solution for ensuring non-discriminatory access to the natural gas networks and provision of transparency and efficiency of the transmission operator activities.

## **3. Electricity market**

### **3.1. Networks regulation**

#### **3.1.1. Unbundling**

Article 9 of Directive 2009/72/ C requires the guaranty of the unbundled activities of transmission, supply and generation of electricity, and any form of control among the companies performing these activities to be excluded.

By the transposition of Directive 2009/72/ C with the amended EA<sup>1</sup> Art.21, para.1, item 27 the power of SEWRC to certify the transmission system operator was regulated about

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<sup>1</sup> Published in State Gazette , issue 54 of 17 July 2012

its compliance with the independence requirements, to monitor fulfillment of these requirements and to send the respective notifications to the European Commission. In art.81 , para.1, SEWRC's power is further developed by introducing the possibility to open a certification procedure officially or at the request of the transmission operator, as well as at the motivated request of the European Commission. Certification or the reject of certification is adopted by a Regulator's draft decision within four months of the certification application submission date or of the proceedings initiating at the operator's request or at the request of the European Commission. In case the Commission does not act expressly in the cited period, it shall be considered that the draft certification decision is adopted.

Regarding the certification of transmission systems owners or transmission systems operators, which are controlled by person or persons by third states, Directive 2009/72/ C in art.49 "Transposition" delays this process, as the procedure under art. 11 of the Directive is due to be applied as of 3 March 2013. In the light of the foregoing, SEWRC has not performed certification of such entities. Despite this fact, the certification procedure of such entities and the grounds for applied rejection are expressly envisaged in the legislation (art. 81 b of EA). At the end of 2013 NEK EAD submitted a transformation permit application and a license termination application for the "electricity transmission" activity. At the same time, ESO EAD submitted a license termination application for the activity "electricity system operation" and applied for electricity transmission license.

The transformation application related to the fulfilment of the obligations under the Energy Act for the legal, organizational and financial unbundling or activities restructuring related to the implementation of the requirements of Directive 2009/72 / EC of the European Parliament and the Council of 13 July 2009 concerning the common rules on the internal electricity market.

ESO EAD unbundling as an owner of the grid allows the company to start a certification process as an independent transmission operator being the next step in the development of a competitive and financially stable energy market under the requirements of the Third liberalization package.

### **3.1.2. Technical operation**

Electricity market operation in the country is regulated by the Electricity Trading Rules. New Electricity Trading Rules were adopted in the mid of 2013. The implemented general principles of the Electricity Trading Rules contain also some concrete requirements connected to the provisions performance of Directive 2009/72/ C and Regulation (EC) 714/2009 according to the requirements of the Third liberalization package.

In 2013, the electricity balancing market continued to be not organized on a market basis, as the sole supplier of balancing energy was the Public Provider, which provided to the market balancing energy through the regulation capacities in its possession. ESO EAD maintained the balance between generation and consumption, security and quality of supply in the electricity system using the balancing energy provided by the generators under a contractual relationship.

The energy to cover the energy shortage in 2013 was 79 677 MWh, compared to 65 673 MWh in 2012 and represented 1.15 % of the registered schedules to end supplier. The energy to cover the energy surplus in 2013 was 249 421 MWh, compared to 239 467 MWh in 2012 and represented 3.62 % of the registered schedules to end supplier. Proceeding from the number of participants and transactions concluded on the market, imbalances marked a slight increase at the significant increase in trading volumes.

Since September 2012 ESO EAD has been registering balancing groups' coordinators and as of December 2013 their number was 13 according to public register. ESO EAD continued to test the new market model and the IT systems that will use to administer the market under the new conditions.

The establishment of balancing groups reduces the financial risk arising from the effect of netting in the group. The percentage of deviation from the schedules for participants to be balanced is relatively small and shows good forecasts and small additional balancing costs.

ESO EAD determines for each settlement period two balancing energy prices. The average 2013 energy shortage price was 186.33 BGN/MWh, compared to 171.48 BGN/MWh for 2012. The average energy surplus price was 28.27 BGN/MWh, compared to 26.21 BGN/MWh for 2012.

Balancing energy price is determined by a mechanism regulated in the Electricity Trading Rules and ESO EAD balances only the transactions concluded at freely negotiated prices.

In the table below, concrete electricity price values traded on the balancing market are presented for 2013.

<b>Shortage balancing energy</b>	
Minimum price, EUR/MWh	95,26
Maximum price, EUR/MWh	95,43
Average price, EUR/MWh	95,33

<b>Surplus balancing energy</b>	
Minimum price, EUR/MWh	12,79
Maximum price, EUR/MWh	14,00
Average price, EUR/MWh	13,70

Since the beginning of 2014, ESO EAD has been the owner and operator of the electricity transmission network of high and medium voltage in the country with a length of about 15 130 km. The Company holds a license for electricity transmission, including the coordination of special balancing groups for a period of 35 years and license was granted in December 2013.

ESO prepares a compliance programme, subject to review and approval by the regulator, which presents specific actions fulfilling the licensing terms and the above requirements. The programme includes specific obligations of employees. ESO prepares an annual report on fulfilling the measures for objectives, set out in the programme, which is then sent to the Regulator for approval.

The four distribution enterprises on the territory of the country prepare and submit compliance programmes, specifying measures ensuring the independence of the distribution system operator. These compliance programmes are reviewed at Regulator's sessions, and approved, or, if needed, the regulator sets guidelines for amendment of the programme, in

order to guarantee the independence of the operator from other operations in the vertically integrated enterprise. The distribution operator prepares an annual report on these measures, to be approved by the regulator.

### **Security and reliability standards, quality of services and supplies**

Regarding the security of supply and guaranteeing the compliance with the requirements of services quality and electricity supplies, SEWRC monitors and yearly carries out a review of the fulfillment of the adopted in 2010 "Methodology for reporting the fulfillment of the target indicators and electricity quality indicators control and service quality of network operators, public providers and end suppliers". To guarantee the consumers interests it is envisaged for SEWRC to adjust the revenue requirements of the energy company every price period of the regulatory period depending on the energy quality indicators fulfillment and on service quality during the previous year. In 2010 for the first time a correction factor was applied, reflecting the fulfillment of the adopted energy quality and service quality target indicators.

As a quality indicator in these relations, the response time or the time for taking the necessary corrective measures by the energy utilities is taken into consideration, the same being divided into: general indicators for quality of commercial services and guaranteed indicators. The guaranteed indicators have been laid down as commitments in the General Conditions of the contracts for sale of electricity and General Conditions of the contracts for transmission of electricity to consumers over the electricity distribution networks of the end supplier approved by the Commission.

In applying the Ordinance on regulating the prices of electric power, a generalized adjustment ratio is applied, including the performance of the target values for quality of energy, for non-interruption of supply and for the quality of service specified in the Methodology.

In case of non-fulfillment of the target values, the revenue requirements of the companies are reduced by a maximum negative adjustment set by a decision of the Commission for each year of the regulatory period.

The implemented regulatory mechanism for adjustments in the revenue requirements of the distribution companies and according to the achieved fulfillment of the power quality indicators applied since 2010 represents an incentive for the companies to improve the electricity supply quality.

The value of the maximum negative adjustment is linked to the expected return which the company will have on the investments made in order to improve the indicators.

Thus the Methodology provides incentives for the distribution companies to develop and invest in their networks, and the monitoring of the regulator for the fulfillment of service and supply quality requirements is in compliance with Article 37 (1) (h) of Directive 2009/72/ C.

### **Monitoring time taken to connection and repair**

The Energy Act regulates the duties of the transmission and distribution companies to connect all generation and user entities to the relevant network. Under art.116, para.7 of EA the terms and conditions for connection, suspension of connection or supply and the limits of property between electrical facilities, are defined by an Ordinance of SEWRC. Instructions for the price-formation of connecting consumers to the electricity distribution network, general conditions of the contracts for electricity supply and distribution and the rules for work with



consumers are approved by SEWRC and are publicly available. They are placed at a prominent place at the clients servicing centres of the companies and on the web pages of the suppliers and distribution companies. Due to the considerable increase of the electricity capacities in the country in 2013, mainly coming from renewable energy, certain difficulties aroused concerning the connection of new capacities to the transmission and distribution networks due to limited capacity.

**Total number of connected RES power plants in 2013 was 121 with total installed capacity around 52.21 MWp. Wind energy total installed capacity in the country in 2013 was 682.4 MW at annual output around 1 372 000 MWh. In 2013 PV installed capacity was around 1 019.77 MW at the output of 1 349 000 MWh. In 2013 biomass power plants installed capacity was around 37.62 MW at the output of 49 800 MWh.**

Average time needed for the elaboration of a preliminary contract and written statement about the conditions for connection of a consumer according to the grounded target indicators in the Methodology is 30 days.

Information regarding connection complaints of new consumers enters SEWRC every year. It represents mainly complaints concerning rejection or delay of connection to the distribution network, incorrectly set price or connection conditions.

Complaints concerning the consumer's right to be connected in order to be supplied with electricity, are reviewed by SEWRC under the current Ordinance 3 of 21 March 2013 on the licensing of the activities in the energy sector.

In relation to submitted electricity consumers complaints and the intensive connecting of new RES capacities to the electricity system in 2012, in 2013 SEWRC carried out some inspections of the electricity distribution companies and electricity end suppliers and a number of violations related to electricity quality (deviations from established voltage level standards) and of the connection procedures of new RES power generation capacities were identified.

### **Monitoring safeguard measures**

In 2013 ESO EAD carried out the activities under the license "electricity system operation". These activities are determined by the assigned by the Energy Act obligations for coordinating, planning and managing the work of the electricity system. In detail these activities are regulated in the Ordinance on the terms and conditions of the activities of the electricity system and distribution network operators, as well as of the operational personnel of electrical facilities and electrical installations of consumers; in Rules on electricity system operation; in Electricity Trading Rules; in Rules on the terms and conditions of access to the electricity transmission and distribution networks.

All scheduled and coordinated activities of ESO EAD in 2013 were based on electricity loads and consumption forecasts with the relevant objectives: investment planning with a forecast period more than five years, monthly annual planning, monthly planning, weekly daily planning, hourly or round the clock internal daily re-planning.

The parallel work of Bulgaria with neighbouring countries, members of ENTSO-E in 2013 was realized through interconnectors and was based on the principles of mutual benefit, solidarity and mutual assistance in emergency situations - to ensure safe, quality and efficient supply to electricity consumers. The existing Bulgarian electricity system interconnections ensure the necessary technical conditions for the exchange of significant amounts of electricity in normal and emergency modes.

In 2013 ESO EAD used computational models collecting and processes information daily, both within the National Dispatching Centre (NDC) and within ENTSO-E according to the procedure for the daily forecast of day ahead electricity system limitations (DACF - Day Ahead Congestion Forecast). Up-to-date load flows allocation model results from the procedure, reflecting the neighbouring and Bulgarian electricity system status, which contains: topology, load and generation. Based on this model NDC makes daily security checks on the electricity system operation and on the criteria "n-1" compliance.

Every year SEWRC agrees Auction rules for the allocation and procurement of transmission capacity on the interconnections in the control area of Electricity System Operator EAD and the control areas of the neighbouring operators.

Regulation 714/2009 the European Union provides for the system operators to apply market approaches in the management of congestion on the interconnectors, to publish the available transmission capacities and to allocate them on a yearly, monthly, weekly and daily basis in a transparent and non-discriminatory manner.

Through the established regional cooperation and the operational arrangements for the coordinated allocation of cross-border capacity, as well as the coordinated mutual support in emergencies, the safe and secure operation of both the internal and international electricity markets is guaranteed.

### **3.1.3. Connection and access network tariffs**

In accordance with the adopted method of regulation, the Commission uses a different approach in assessing the economic effectiveness of the price components and the network tariffs regulation of the transmission network and of the distribution networks.

In the regulation of the network tariff for transmission through the transmission network, where the SEWRC uses the method "rate of return" regulation without incentives, all price components are assessed annually when the new tariff is being approved. Due to the fact that in the country there is only one regulated HV electricity transmission company, there is no comparable basis on which costs evaluation to be done. Regarding the last, SEWRC uses as an assessment criterion of the annual costs level the annually collected information and in addition, taking into consideration the specific circumstances concerning the legal requirements for security and technical security of supply.

In the regulation of the network tariffs for the electricity distribution companies and end suppliers, the Commission applies incentive-based regulation. Through the application of the "revenue cap" method, the Commission approves the revenue requirements of the energy utility for the first year of the regulatory period and analyses them and adjusts them for each subsequent year of the regulatory period. The envisaged adjustments of the revenue requirements are related to the inflation rate, the efficiency ratio, the performance of the target quality indicators, the difference between forecast and actual expenses for the purchase of energy, as well as expenses incurred by the change in the structure of consumption. In addition, indicators are applied to the methods, reflecting the quality of activity performance (electricity quality, service quality), in accordance with which the recognized revenue requirements of energy utility are adjusted in view of the performance of the target indicators specified by the SEWRC. The difference in the performance of the forecast investments and actual investments is also taken into account. The revenue requirements are reduced in accordance with the difference between the reported non-performance of the target indicators for quality and allowed deviation.

The tariffs for transmission and distribution of electricity to the end consumers are approved by the Commission upon the proposal of the companies within the time limits and

format specified in the Ordinance on the regulation of prices of electric power and the Instructions adopted thereto. The separate groups of consumers and tariff structures are specified upon the proposal of the companies and the same are grouped in accordance with the voltage level and by zones in the 24-hour period.

Since August 2013 the third regulatory period has started for the companies in the electricity sector regulated under the method *revenue cap* and in the applying the common approach in pricing the companies the Commission took into account the analysis conclusions of the regulated companies achieved results and the objective of the applied regulation method *o* creating conditions under which the companies reduce their operating expenses and at the same time ensuring the necessary investments in order to improve the quality of service.

In determining the revenue requirements of electricity distribution companies, the amount of technological costs is allowed in accordance with SEWRC's Instructions on pricing of electricity transmission through the distribution networks and the technological costs levels in 2013 were adjusted twice as a result of the analyses and assessment.

An important issue regarding the distribution companies' network tariffs regulation in 2013 was the phased reduction of technological costs allowed levels. By Decision C-13 of 05 March 2013, the Commission adjusted the allowed technological costs from 15 % to 12 %, for based on an analysis, it was found out that the reported technological costs exceeded the allowed ones in 2012. With the beginning of the third regulatory period for electricity distribution companies, the Commission set new technological costs target values according to the reports submitted by individual companies and they were as follows:

- CEZ Distribution Bulgaria AD *o* 10%;
- EVN Bulgaria Electricity distribution EAD *o* 10%;
- Energopro Bulgaria Networks AD *o* 11%;
- ERP Zlatni Pjasatsi AD *o* 5%.

As of 30 Dec 2013 SEWRC carried out another adjustment in the technological costs allowed level based on Statement ref. E-12-00-1201 / 18.12.2013 of the Scientific and Technical Union of Power Engineers in Bulgaria, according to which the technological costs allowed level was clearly set. This approach aims to achieve full compliance with the Energy Act requirements to allow as pricing element only the technical costs related to electricity distribution. In this sense, SEWRC applies a uniform policy of non-allowance of other technical or commercial losses arising from the sale of electricity that power companies do not keep separate records about.

According to the expertise opinion of the Scientific and Technical Union of Power Engineers in Bulgaria team, there are real opportunities for electricity distribution companies in Bulgaria to reduce their technological costs to 8.5 % and the team recommended to the independent regulator that, at that stage, it should accept 8.5 % technological costs, with a tendency to decrease for the subsequent periods.

By Decision C-43/30.12.2013 of SEWRC and after a review and analysis of the opinion delivered by the team of Scientific and Technical Union of Power Engineers in Bulgaria and based on information of ERRA as of 11 June 2013 on the achieved values in 14 countries ranging from 5 to 8 % reporting a trend towards technological costs reduction via optimizing the investment and maintenance programs activities implementation costs. In addition, the quality management system implementation helped the companies to improve electricity security of supply, thus reducing electricity transmission losses by up to 2%, with the exception of ERP Zlatni Pjasatsi AD. After the last adjustment in the reported year, technological costs by company are as follows:

- CEZ Distribution Bulgaria AD ó 8%;
- EVN Bulgaria Electricity distribution EAD ó 8%;
- Energo-pro Bulgaria Networks AD ó 9%;
- ERP Zlatni Pjasatsi AD ó 5%.

### **3.1.4. Cross-border issues**

#### **Cross-border infrastructure access, including capacity allocation and congestion management procedures**

Regarding the operational management and the allocation of the available transmission capacity on the interconnections between ESO EAD in its role as an electricity system operator of the Republic of Bulgaria and the neighbouring electricity system operators, Memorandums of cooperation have been signed between them. The procurement and allocation of the available transmission capacity on the interconnections is coordinated and carried out through the application of auction rules developed jointly by the Bulgarian electricity system operator ESO EAD and the neighbouring electricity system operators. Auction rules are agreed with the regulatory authorities of the countries.

In 2013 ESO EAD carried out tender procedures for the allocation and procurement of transmission capacity for the commercial exchange in the interconnections of the Bulgarian electricity system and the electricity systems of Greece, Romania, Serbia, FYROM and Turkey.

In 2013 tenders were organized and carried out under Common Auction Rules at the Bulgarian-Romanian and the Bulgarian-Greek borders and for 50 % of the agreed transmission capacity for the commercial exchange at the Bulgarian-FYROM, Bulgarian-Serbian and the Bulgarian-Turkish borders.

At the Bulgarian-Romanian border ESO EAD carried out annual and monthly tenders for 100 % of the agreed transmission capacity for commercial exchange and Transelectrica (Romania) carried out the daily and intraday tenders. At the Bulgarian-Greek border ESO EAD carried out the monthly tenders for 100 % of the agreed transmission capacity for commercial exchange and IPTO (Greece) carried out annual and daily tenders and administered the secondary market for transfer of commercial transfer rights (CTR).

In 2013 ESO EAD developed and negotiated with EMS (Serbia) common rules for joint tender procedures for the allocation of the transmission capacity on the Bulgarian-Serbian interconnection. The common rules were agreed by SEWRC. In accordance with these rules in December 2013, ESO EAD held the yearly auction and the monthly auction for January 2014. Pursuant to those common rules EMS (Serbia) can conduct daily tenders as of 01 January 2014 about any remaining and unused capacity. The secondary market for transfer / return of CTR shall be administered by ESO EAD.

In 2013 ESO EAD held daily tenders for the not allocated, returned or revoked CTR on the interconnections with Serbia, FYROM and Turkey.

Coordination of the maintenance programme of the interconnections by the system operators in Southeast Europe in 2013 was carried out by a working group "Annual Maintenance Schedule". This group developed and coordinated the maintenance programme

for the interconnections and for some major internal lines for a year ahead, according to Policy 4 of the Operation Handbook of ENTSO-E. Members of the Annual Maintenance Schedule working group were representatives of the system operators of Bulgaria, Romania, Serbia, Macedonia, Albania, Greece, Bosnia and Herzegovina, Croatia, Hungary and Turkey. Current group coordinator is selected in rotation and in 2013 it was the system operator of Serbia and in 2014 it shall be the system operator of Albania; the system operator of Turkey shall be the coordinator in 2015.

For the purposes of security assessment and planning the transmission network modes, in 2013 ESO EAD used computational models collecting and processes information daily, both within the National Dispatching Centre (NDC) and within ENTSO-E according to the procedure for the daily forecast of day-ahead electricity system limitations (DACF - Day Ahead Congestion Forecast). Up-to-date model of load flow allocation results from the procedure, reflecting the neighbouring and Bulgarian electricity system status, which contains topology, load and generation. Based on this model NDC makes daily security checks on the electricity system operation and on the criteria n-1 compliance.

The amount of the ancillary service (primary regulation) is planned based on the obligations laid down by subgroup System Frequency in System Operations Committee of ENTSO-E. Primary regulation shall be provided only to units of thermal power plants. The work of the managing and regulatory systems in the power plants and the substations system automation is continuously controlled. Systematic tests are periodically organized and conducted to check the readiness of the power plants to provide ancillary services and the implementation of the security and recovery plans.

Rare cases of short-time congestion occur on the interconnections with some of the neighbouring countries (mainly during peak loads in the winter period).

### **Utilizing revenues for the interconnections**

In pursuance of the provisions of art.16, para 6 of Regulation ( C ) 714/2009 of the European Parliament and the Council of 13 July 2009 on conditions for access to the network for cross-border exchange in electricity and repealing Regulation ( C ) 1228/2003 (in force since 3 March 2011), any revenues resulting from the allocation of interconnection shall be used for the following purposes:

- a) guaranteeing the actual availability of the allocated capacity; and/or
- b) maintaining or increasing interconnection capacities through network investments, in particular in new interconnectors.

In cases, where revenues cannot be efficiently used for the purposes set out in the above mentioned items, they may be used, subject to approval by the regulatory authorities of the Member States concerned, up to a maximum amount to be decided by those regulatory authorities, as income to be taken into account by the regulatory authorities when approving the methodology for calculating network tariffs and/or fixing network tariffs.

### **Cooperation**

In 2013 SEWRC realized cooperation with the regulatory authorities of the neighbouring countries regarding issues connected with the cross-border exchange in the region. The main direction was the negotiation of agreements with the regulatory authorities of the neighbouring countries, which ensure the security of electricity and electricity supply.

The liberalized market operation and organization in the country and with the neighbouring countries in 2013 were regulated by Electricity trading rules and by Auction Rules for the Allocation of Capacities on the Interconnections between the Control Area of

Electricity System Operator EAD and its Neighboring Control Areas for the Year of 2013. The same are approved by the State Energy and Water Regulatory Commission (SEWRC) of the Republic of Bulgaria.

The cross-border transmission capacity on the interconnection in the form of commercial transfer rights is allocated and agreed bilaterally by the Auction Operators of the neighbouring systems based on the electricity system managing rules and the current Auction rules approved by the regulator and in compliance with the rules of the European Network of Transmission System Operators of Electricity (ENTSO-E). ESO EAD is a full member of ENTSO-E and works in a regime of parallel work with the European . Parallel work is carried out in compliance with the Operation Handbook of ENTSO-E and is based on mutual benefit principles, solidarity and mutual support in case of emergencies to ensure the safe, qualitative and effective electricity supply of consumers.

In 2013 ESO EAD carried out tender procedures for the allocation and procurement of transmission capacity for the commercial exchange in the interconnections of the Bulgarian electricity system and the electricity systems of Greece, Romania, Serbia, FYROM and Turkey.

In 2013 ESO EAD developed and negotiated with EMS (Serbia) common rules for joint tender procedures for the allocation of the transmission capacity on the Bulgarian-Serbian interconnection. The common rules were agreed by SEWRC by a Protocol Decision 179/29.11.2013. In accordance with these rules in December 2013, ESO EAD held the yearly auction and the monthly auction for January 2014. Pursuant to those common rules EMS (Serbia) can conduct daily tenders as of 01 January 2014 about any remaining and unused capacity. The secondary market for transfer / return of CTR shall be administered by ESO EAD.

These Common Auction Rules with a procedure for allocating intraday transmission capacity between the Bulgarian and Romanian, respectively the Bulgarian and Greek TSOs, increase the electricity market flexibility, including balancing market flexibility between Bulgaria, Romania and Greece.

Procedures contained in the new Common Auction Rules agreed between the Bulgarian and Romanian, respectively the Bulgarian and Greek electricity system operators meet the requirements set out in Regulation (EC) 714/2009.

### **3.1.5. Compliance**

In EA, art. 21, para. 1, item 31, the obligation of the regulatory authority under art. 37, § 1, d of Directive 2009/72/EC is transposed to apply and control the fulfillment of legally binding decisions of the European Commission and the Agency for the Cooperation of Regulators.

The main principles leading SEWRC's activities in 2013 regarding the fulfillment of its regulatory powers were prevention and non-admission of energy market competition distortion, as well as guarantee the balance between energy companies' interests and consumers.

In exercising its powers, the Commission analyses the performance of controlled energy companies, in order to create an environment preventing abuse of monopoly and limiting/violating the competition on the energy market in Bulgaria. Within the territory of the country, in view of its special competence, there is only one authority which is in charge of the application of the Community legislation in the field of competition, namely Competition Protection Commission (CPC). To that end, SEWRC has the right, pursuant to art. 21, para. 6 of EA, to inform the Competition Protection Commission, which in turn reviews the

information and on a case by case basis may start a procedure under the Competition Protection Act.

National legislation guarantees that the regulatory authority takes independently its decisions and the later are not a subject of control by the Government, but pursuant to art. 13 of EA, only to the Court in terms of their legality.

In order to exercise its powers in price regulation SEWRC annually receives information on annual financial statements of the licensees, their annual audit reports and accounting information by types of activities. Separately, the Commission may require other accounting documentation, technical and economic information, including concluded contracts.

Within the calendar year 2013, as it was cited above, certification was not carried out.

A certification procedure for an independent transmission operator is to be performed. § 192 of the Transitional and Final provisions of the amended EA stipulates, that in a six months period since its coming into force the owner of the transmission network must submit at SEWRC a certification application, and within the legally established period of four months SEWRC is obliged to issue the respective certificate. After the completion of the certification process, the Commission may practically realize its power of art.21, para.1, item 27 of EA to monitor the obligation implementation of the independent transmission operator. In case of non-implementation of the obligation the independent transmission operator pursuant to art. 21, para. 3 of EA within its regulatory powers, the Commission shall:

1. impose sanctions for a discriminatory behaviour of the operators to the benefit of the vertically integrated undertaking;
2. monitor the communication between the operator and the vertically integrated undertaking, to guarantee that the operator implements its duties;
3. act as an authority for the dispute resolving between the vertically integrated undertaking and the operator;
4. request information and documentation concerning trade and financial relations, including loans between the vertically integrated undertaking and the operator;
5. approve trade and financial agreements between the vertically integrated undertaking and the operator in cases when they influence the conditions of market development;
6. require justification of the vertically integrated undertaking regarding the presented by the compliance responsible decision concerning network development plan or certain investments of the operator, including the compliance of the non-discrimination behaviour requirement to the benefit of the vertically integrated undertaking;
7. perform inspections at the entities of the vertically integrated undertaking and the operator;
8. approve ten-year transmission network development plan, monitors and controls its execution at the terms and conditions of the Ordinance pursuant to art. 60;
9. assign all or certain tasks of the independent transmission operator to the independent system operator, at the proposal of the network owner, in case the operator violates habitually its duties regarding the independence requirements, pursuant to chapter eight ( ), section , including habitual discriminatory behaviour to the benefit of the vertically integrated undertaking.

The Agency for the Cooperation of Energy Regulators (ACER) provides an integrated framework within which national regulatory authorities (NRAs) cooperate in order to perform their tasks at EU level. This framework is designed, among others, to support the development

of EU-wide rules (network codes) and their consistent implementation across the European Union, and other activities where NRAs are expected to coordinate their actions.

In 2013 SEWRC has been involved in the electronic procedures of ACER Board of Regulators about the voting of recommendations and opinions of the Agency on the draft electricity and gas network codes.

In July 2013 SEWRC, together with other national regulatory authorities signed a Multilateral Memorandum of Understanding between the Agency for the Cooperation of Energy Regulators and national regulatory authorities on the cooperation and coordination of market monitoring under Regulation (EC) 1227/2011 on electricity market integrity and transparency (REMIT).

## **3.2. Promoting competition**

### **3.2.1. Wholesale market**

#### **3.2.1.1. Monitoring the level of prices, the level of transparency, the level and effectiveness of market opening and competition**

Wholesale electricity market is regulated by the adopted in August 2010 by the Commission Electricity Trading Rules.

In 2013 all MV customers entered the open market, which significantly increased its share compared to the regulated market. The applied market model up to 26 July 2013, when new Electricity Trading Rules were adopted, characterized as follows:

- Schedules notification on a daily basis, on the day D-1 and allocation of transmission capacity on an auction base;
- Introduction of balancing groups in the market structure within the current testing period of Electricity Trading Rules and new licensing procedure for balancing group coordinators;
- Stepwise introduction of hourly schedules for all transactions, nonetheless at regulated prices or concluded at freely negotiated prices;
- Market mechanism upgrading in the balancing energy market operation;
- Introduction of a separate settlement for the balancing groups coordinators and balancing power suppliers;
- Regulating the conditions for participation in the market for renewable energy generators;
- Creation of trading conditions based on power exchange principle.

In 2013 new Electricity Trading Rules (ETR) were adopted. They were accepted by SEWRC with Protocol Decision 110 of 18 July 2013 and repeal Electricity Trading Rules adopted by SEWRC with Protocol Decision 94 of 25 June 2010 (SG. 64 of 2010). The electricity market structure has not been changed and includes: electricity market through bilateral contracts, power exchange, balancing energy market, reserve and ancillary services market and interconnection capacity provision market.

Chapter four of ETR provides for the organization of a power exchange. The conclusion of individual independent of one another electricity supply transactions is being regulated, corresponding to the hourly products of exchange or block products (combination of



hourly products). To achieve the liquidity of the power exchange, the power exchange administrator may contract with a registered market participant (market maker).

Chapter five (Balancing responsibility) includes the establishment of combined balancing groups involving renewable energy sources and high-efficiency combined heat and power electricity generators.

Supplements in the adopted in 2013 ETR include the regulation of:

- a contract arranging the exchange of power in connection to the RES and cogeneration generators participation in a combined balancing group. Subject of this contract is the relations arrangement concerning the difference between the generated electricity from RES and cogeneration generators amount and the amount approved by a schedule for each settlement period.

- a contract related to Art.100, para.4 of EA about the offset of costs arising from public service obligations of energy companies. Contract subject is the public service obligations price paid to the public provider by electricity generators and traders supplying power to end customers connected to the grid under a methodology approved by the Regulator.

A Methodology setting the balancing energy price has been adopted as an integral part of ETR.

By the ETR amendments all prerequisites for the establishment of a working comprehensive balancing market, a day-ahead market and a power exchange have been created. The so called "standard balancing groups coordinators" operate in practice and they provide the members of their balancing group the service of taking responsibility for their balancing.

When regulating the network tariff for transmission through the transmission network, where the Commission uses the method "rate of return" regulation without incentives, all price components are assessed annually when the new tariff is being approved. Due to the fact that in the country only one regulated HV electricity transmission company exists, there is no comparable basis on which costs evaluation could be done. Regarding the last, SEWRC uses as an assessment criterion of the annual costs level the annually collected information and in addition, taking into consideration the specific circumstances concerning the legal requirements for security and technical security of supply.

In 2013 the public provider "Nationalna Electricheska Kompania" EAD remained almost the sole electricity supplier on the balancing market. Independent generators are not yet economically interested enough in participation on the electricity balancing market.

Currently in the country there is no organized power exchange and electricity trading is performed mainly at bilateral contracts between the market participants and on a balancing market organized by ESO. That is why at this stage objective average price and margin between buy and sell prices on the Bulgarian electricity market cannot be defined.

As a result of the organization and market operation parallel tests under the Electricity Trading Rules, a necessity for some feasible amendments and streamline of the rules appeared. The Commission has opened a procedure of amendment and supplement of the latter, in line with the common principles and specific requirements pursuant to the formulations of Directive 2009/72/EC and Regulation (EC) 714/2009.

The total installed capacity of all types of electricity generation, including RES in the country is 11 840 MW. The available generation capacity (without RES generators) to the annual maximum amounts at 10 132 MW and the peak load in February 2013 amounted to 6 672 MW. RES generators are excluded from the available generation capacity as their

generation is intermittent and difficult to forecast and dispatch. The RES sector development has been included in the National Plan for the period 2010 ó 2020.

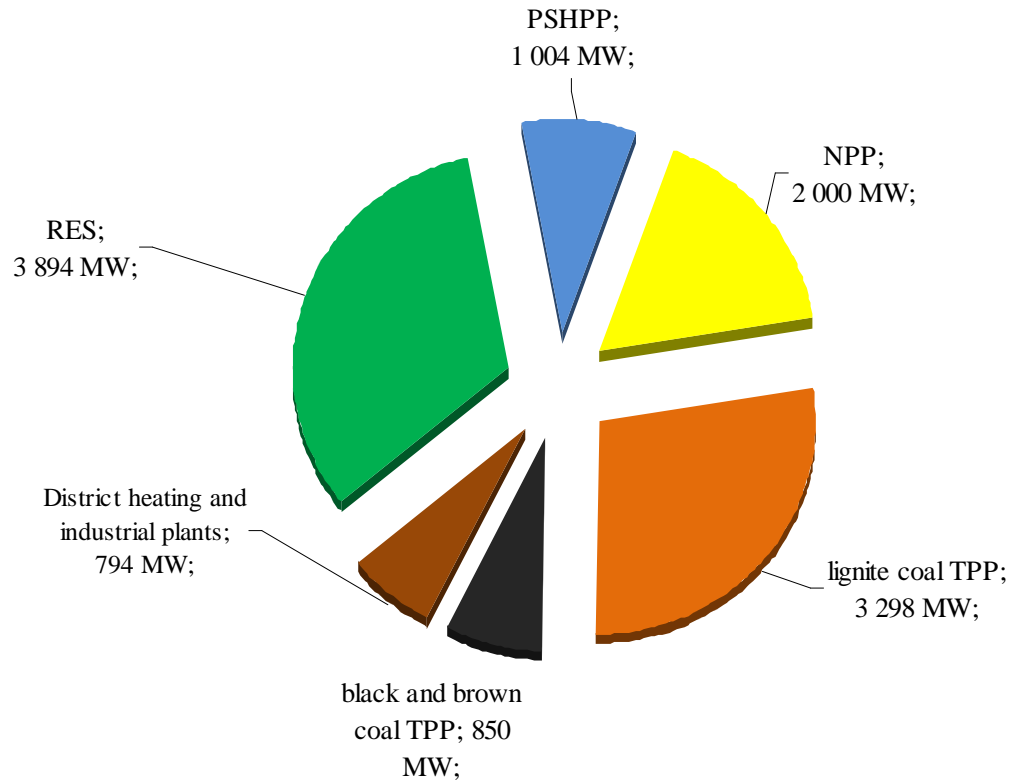
In the ten-year electricity network development plan of the country for the period 2010-2020 it is indicated that there are expectations of a significant increase in the installed capacity from renewable sources and in the share of electricity generated from renewable sources, mainly wind and photovoltaic plants. The indicated values of the planned capacities for this type of plants as of the end of 2020 totalled 2070 MW, of which wind farms were 1400 MW, and photovoltaic plants were 300 MW. As a comparison - for 2013 it was projected the construction of 100 MW photovoltaic power plants and 200 MW wind. The actual state of the power system today is radically different in terms of connected RES capacities. What could be shown from the presented data are the **multiple increases of wind power plants - more than three times, and in photovoltaic plants - more than 10 times**. That circumstance created some difficulties in the system management resulting in limitation of the work of base plants, which influenced the facilities technical condition. Alongside with the expansive RES sector deployment, the reduced total electricity consumption in the country also had a negative impact on the system management. **At the same time, the effective electric power system (EPS) management under the intensive RES development depends on adequate assessment of the factual situation, which appeared to involve a significant deviation in the operational capacity structure in 2013 and from the National Development Plan 2010-2020**. The operational capacity of wind and photovoltaic plants is directly dependent on the intensity of the wind and solar radiation. Changes in the operational capacity of these plants are compensated by conventional power plants, primarily by overusing the HPP.

The significant growth of the newly connected power plants in 2012 generating RES electricity **caused significant and sudden changes in the generation-consumption balance in the EPS**. In order to ensure that balance a **multiple curtailment, turning on and turning off of base capacities had to be performed, which in turn had influence on the respective plants effectiveness and led to deterioration of the key facilities technical characteristics**.

In the current ten - year plan for the development of the power system of the Republic of Bulgaria it is noted that with the existing and planned generation capacities in order to ensure the electricity supply security and management in accordance with the ENTSO-E standards, it is required by the end of 2020 the wind power plants capacities not to exceed 1800 MW and those from PV plants - 600 MW. At the same time, as noted above, **at present the installed capacity of wind power plants and PV plants significantly exceed the recommended needed for the guarantee of the EPS security, without providing the necessary infrastructure and adequate balancing capacities to ensure the increasing rate of new RES plants**. It should also be emphasized that **the existing RES plants can not provide ancillary services to the system operator related to primary, secondary and tertiary voltage regulation**.

The chart below presents the general structure of all types of installed capacity in the country.

## Total available installed capacity in MW

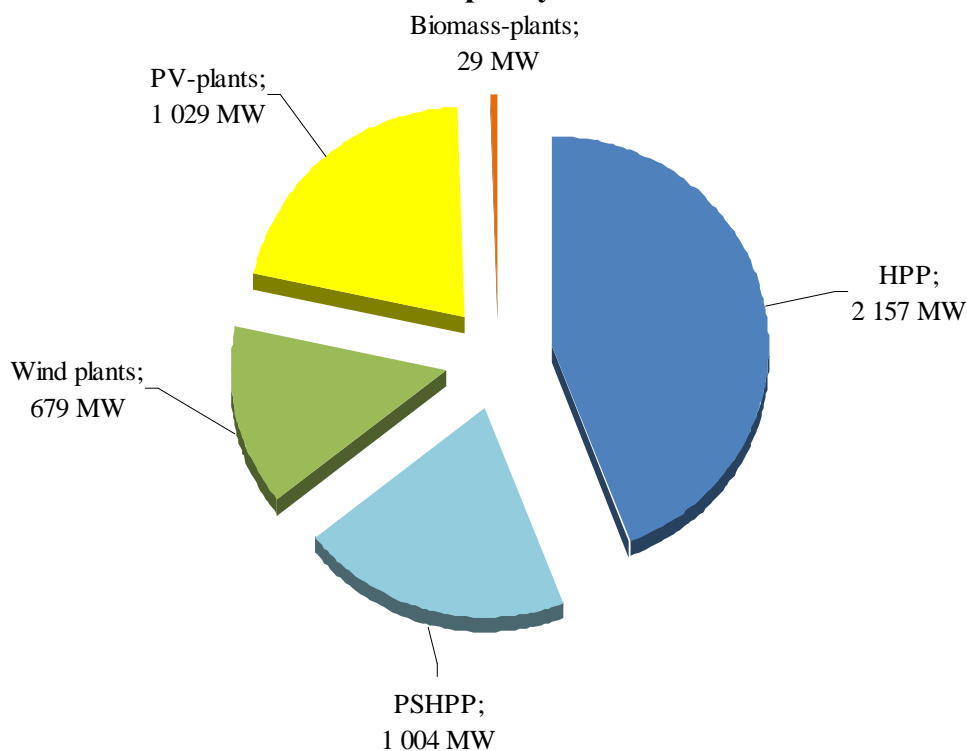


*Data provided from the Sustainable Energy Development Agency and the independent transmission operator (ESO EAD)*

As could be seen from the information presented, the renewables share in the overall structure of the installed capacity in the country was 41.37% and the share of energy generated from renewable sources in the total production in the country reached 16.6%.

The structure of installed capacity from renewable sources is presented in the graph below.

## RES installed capacity structure in MW



*Data provided from the Sustainable Energy Development Agency and the independent transmission operator (ESO EAD)*

The total installed capacity of wind energy in 2013 amounted to 679 MW, with an annual production of about 1 372 000 MWh. In 2013 the installed capacity of photovoltaic (PV) plants was about 1 029.77 MW and production of 1 349 000 MWh. In 2013 the installed capacity of power plants fuelled with biomass was about 29 MW and production of 49 800 MWh.

In line with the latest recommendations of the European Commission on the energy sector, renewables have been strongly supported by feed-in-tariffs in the recent years. This fact has made the enormous growth of renewable energy in the energy mix possible and is in line with the environmental targets for 2020. This type of support, however, leads to deviations in the price and market mechanisms and thus to a distortion of competition in the sector.

Generation structure and the electricity wholesale market in 2013 was characterized with an extreme concentration of compulsory purchased energy at various long-term contracts ó on one hand the American plants AES 3C Maritsa East 1 EOOD and Contour Global Maritsa East 3 EAD and on the other ó the long-term contracts of renewable energy generators. The existence of these contractual obligations of NEK EAD to purchase energy at non-market prices makes it impossible to realize this energy.

The main reason for the heavy financial commitments that NEK EAD and the end suppliers bear as a result of the long-term contracts is rooted in the agreed purchase prices and quantities of available capacity and energy that are based on no market conditions and are not consistent with the level and structure of electricity consumption.

Under the contracts signed NEK EAD shall be committed to buy about 90% of the available capacity of the two plants, regardless of electricity consumption.

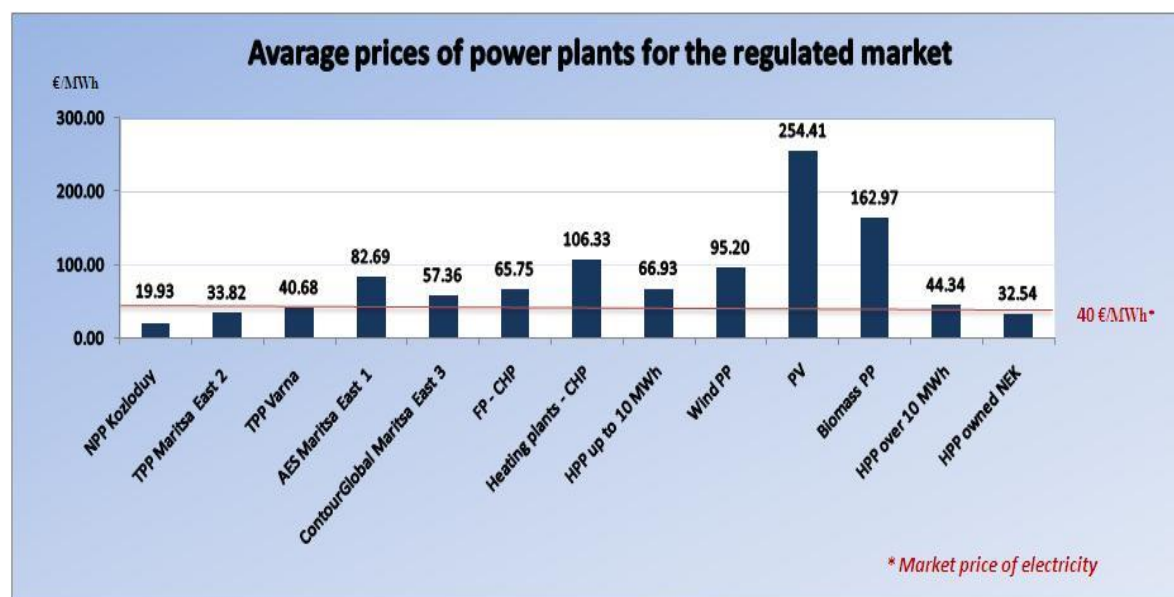
As the approved by the Regulator quota of electricity generated by the two plants is equivalent to about 40% of the available capacity paid under the contract, the remaining 50% purchased available capacity remains unused.

Under the new pricing model approved by the Regulator as of 01 Aug 2013, 144 million BGN of the cost to cover the whole purchased available capacity were allowed in the price of electricity sold by NEK EAD, which led to an increase in the approved price by 6.64 BGN/MWh. After an opinion made by NEK EAD and adopted by SEWRC, stating that the approved 144 million were not sufficient to cover all costs as of 01 Jan 2014, nearly 69 million BGN were allowed also, which were expressed into an additional price increase by 3.17 BGN/MWh.

Thus the obligation under the long-term contracts to purchase all agreed availability led to increased regulated market prices by **9.81 BGN/MWh** or amounted to **213 million BGN** total for the period.

Besides the condition of buying almost all available capacity of the two plants, the high purchase capacity and energy prices to be paid by NEK EAD also have their influence and the generated electricity prices were respectively **54% (Contour Global Maritsa Iztok 3)** and **120% (AES 3C Maritsa Iztok 1)** higher than the average electricity price of other TPPs that sell electricity on the regulated market.

To compare, the average energy prices of the various market players on the regulated market are the following:



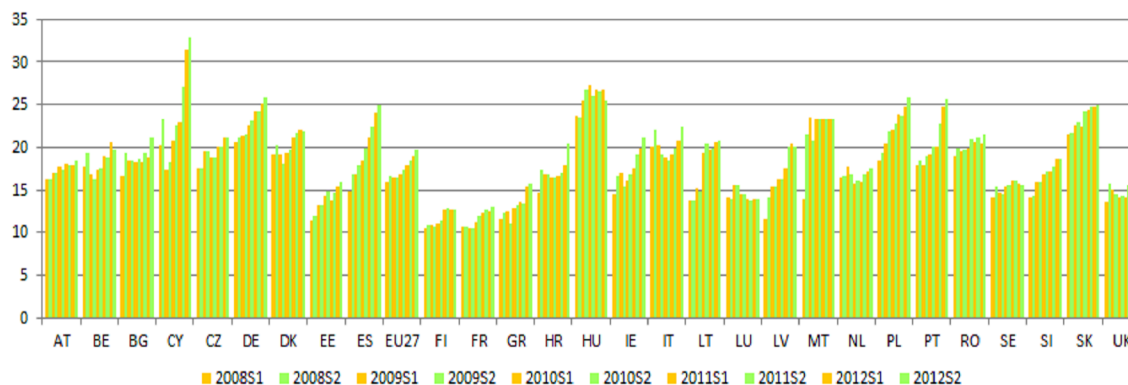
Apparent from the above table, there is a strong distortion of the market and at present, the price at which NEK EAD sells electricity to retail suppliers (supplying electricity to households) is **100.43 BGN / MWh** and electricity traded on the free market is realized at rates of **75-80 BGN / MWh**.

Here we should note that the forecast regulated market consumption in 2014 was about 13 million MWh and **the electricity subject to compulsory purchase of the two plants represents over 50% of the total consumption of this market segment.**

In this sense, obligatory purchase of electricity from some generators at such scale and at such price parameters is completely contrary to the development of liberalized electricity market and hinders the creation of mechanisms for transparent and competitive supply of electricity, which are prerequisites for the launch of a power exchange.

The full costs of NEK EAD relating to the commitments under long-term power purchase agreements with the two power plants cannot be transferred to households, given the fact that the disposable income of Bulgarian households is the lowest compared to other EU countries. Although the households' electricity price is the lowest one, **the population's income share used for electricity bills payment is significantly higher than the EU average:**

Source: Eurostat, Energy Statistics



The above is confirmed in the conclusions and findings of various international institutions on the problems of Bulgarian electricity sector.

According to a rapid assessment of World Bank on the power sector in Bulgaria of 27 May 2013, the sector has large financial deficits that increase contingent liabilities on the State as a result of long-term contracts. According to the aforementioned report long-term contracts lead to a financial deficit in the budget of NEK EAD from 1.67 to 2.27 billion BGN.

**The Findings and Recommendations of the European Commission** of April 2013 on the power sector in Bulgaria show that energy sector in Bulgaria should be liberalized to ensure the efficient and competitive functioning of the energy market in the country. The document shows that in a normally functioning and well-organized market with a central buyer, **the power plants with lowest cost-effectiveness would not be dispatched and even would be potentially taken out of the market. There have been dispatching of economically and environmentally inefficient generations.** Among the measures to address the problems of Bulgarian energy market, the Commission explicitly states **the review of long-term power purchase agreements (PPAs) in the short term (3-9 months).** In the said document, EC also notes that concluded contracts between NEK EAD and the power plants Contour Global Maritsa Iztok 3 and AES 3C Maritza East 1 under the principle 'take or pay' commits NEK EAD to pay for the whole capacity of the plants, regardless of the fact whether this capacity has been dispatched or not. Reviewing the PPAs, in line with recommendations of the European Commission, in order to ensure consistency between the purchase price and the current market conditions would not only lead to NEK EAD's financial situation stabilization, but would lead to resolving competition problems created by the presence and the conditions of the said contracts.

By Decision 800 of 03 July 2013 the Competition Protection Commission (CPC) adopted a Sectoral analysis of the competitive environment in the generation, trading, transmission and supply electricity markets in Bulgaria. the Competition Protection Commission shows that 'the obligation of the Bulgarian State (NEK EAD) to purchase compulsory large amount of capacity availability and power from the thermal power plants

Contour Global Maritsa East 3 and AES Maritsa East 1 at price agreed in long-term power and availability purchase agreements creates additional difficulties for the development of the electricity market liberalization process and creates obstacles in establishing its market balance point.

It should be borne in mind that under Directive 2009/29/EC of the European Parliament and of the Council of 23 April 2009, from the beginning of 2013 no free carbon dioxide emission allowances for the energy sector were allocated and businesses in the same sector must have purchased them on their own account at the polluter pays principle and as a result plants will have to purchase the necessary allowances on the CO<sub>2</sub> market.

In pursuance of Directive 2009/72/EC of 13 July 2009 concerning common rules of the internal electricity market, which was transposed into Bulgarian legislation in the Energy Act and Renewable Energy Sources Act, the country is obliged to ensure competition and electricity supply at most competitive prices and a level playing field for all market participants. Under preamble paragraph 57 of the Directive, promoting fair competition and easy access for different suppliers and fostering capacity for new electricity generation should be of the utmost importance for Member States in order to allow consumers to take full advantage of the opportunities of a liberalised internal market in electricity. Article 37 of the same Directive envisages that the national regulatory authorities shall have the duty to monitor the level and effectiveness of market opening and competition at wholesale and retail levels, including on electricity exchanges, prices for household customers including prepayment systems, switching rates, disconnection rates, charges for and the execution of maintenance services, and complaints by household customers, as well as any distortion or restriction of competition, including providing any relevant information, and bringing any relevant cases to the relevant competition authorities.

In view of the above requirements of Directive 2009/72/EC, SEWRC has analyzed the long-term power purchase agreements (PPAs) concluded between NEK EAD on one side and Contour Global Maritsa East 3 AD, respectively, AES 3C Maritsa East 1 EOOD on the other. Based on the analysis made SEWRC has found that there are prerequisites for breach of the EU legislation, because there is evidence from which it follows that the PPAs are new and unlawful state aid to the producers under these contracts and as such they are incompatible with the internal market. In this regard, the Regulator referred to the European Commission with an appeal ref. E- 04-11-7 of 20 June 2014, where arguments for the suspension in the form of termination of the agreements were presented. The appeal was accompanied by a request ref. E- 04-11-8 of 20 June 2014 under Art. 11 item 1 of Regulation (EC) 659/1999 of the Council of 22 March 1999 laying down detailed rules for the application of Art. 108 of the Treaty on the Functioning of the European Union concerning the power of the European Commission to issue an order about the state aid suspension until its final ruling on the appeal. The request was justified in view of the need to stop the illegal state aid influence, which jeopardizes free economic environment by putting in a better position the producers under the PPAs compared to the other players in the energy market.

Also, SEWRC has analyzed the existing support schemes for generators of electricity from renewable sources, upon which it found that the schemes regulated in the Renewable Energy Sources Act (RESA) lead to excessive support, creating conditions for breach of the EU legislation. In this regard, the Regulator referred to the European Commission with an appeal ref. -04-11-9 of 20 June 2014, where arguments for the suspension in the form of termination of the support schemes, in so far as they lead to excessiveness. The appeal was accompanied by a request ref. -04-11-10 of 20 June 2014 under Art. 11 item 1 of Regulation (EC) 659/1999 of the Council of 22 March 1999 laying down detailed rules for the application of Art. 108 of the Treaty on the Functioning of the European Union concerning

the power of the European Commission to issue an order about the support schemes suspension, in so far as they lead to excessiveness, until its final ruling on the appeal.

Notwithstanding the difficult market situation in 2013, net trade exports for the same period amounted to 6 225 000 MWh. Electricity generation, consumption and export development is presented in the table below:

Index	Year							
	2006	2007	2008	2009	2010	2011	2012	2013
PP gross output fed into transmission grid [MWh]	45 710 000	43 093 000	44 831 000	42 573 000	46 260 000	50 070 000	47 195 000	43 650 000
PP consumption and auxiliary services [MWh]	5 890 000	6 067 000	5 890 000	5 307 000	4 689 000	5 957 000	6 658 000	6 938 000
Net generation fed into transmission grid [MWh]	39 730 000	37 026 000	38 941 000	37 266 000	41 571 000	44 113 000	40 537 000	36 712 000
Physical import [MWh]	1 139 000	3 058 000	3 097 000	2 662 000	1 168 000	1 450 000	2 353 000	3 350 000
Total net generation fed into transmission grid [MWh]	40 869 000	40 084 000	42 038 000	39 928 000	42 739 000	45 563 000	42 890 000	40 061 000
Losses in transmission grid [MWh]	881 000	872 000	905 000	847 000	895 000	951 000	916 000	907 000
Gross consumption from transmission grid [MWh]	39 988 000	39 212 000	41 133 000	39 081 000	41 844 000	44 612 000	41 974 000	37 424 000
PSPP consumption [MWh]	471 000	590 000	718 000	927 000	988 000	1 199 000	1 103 000	1 053 000
Physical export [MWh]	8 391 000	7 538 000	8 441 000	7 731 000	9 613 000	12 111 000	10 660 000	9 531 000
Net consumption from transmission grid [MWh]	31 126 000	31 084 000	31 974 000	30 423 000	31 243 000	31 302 000	30 211 000	28 527 000

Source: ESO EAD

Cross-border transfer capacity on the interconnections is allocated by the Auction Operator in the form of commercial transfer rights. The Auction Operator calculates and allocates the transfer capacities in line with the norms and rules of the European Network of Transmission System Operators for Electricity (ENTSO-E).

The electricity market in the country is operated by a model where part of the electricity sale transactions are concluded at regulated prices, approved by the Regulator, and the remaining part is traded on the liberalized market at freely negotiated prices between the parties on the market. Under the Energy Act electricity producers, traders and consumers are parties in transactions in the liberalized electricity market.

RES installed capacities as of 31 Dec 2013 amounted to 3 894 MW and the amount of electricity generated was 6 825 257 MWh. In 2013 the renewable energy growth remained and according to the certificates issued as guarantees of origin for electricity produced from renewable sources by the Sustainable Energy Development Agency this energy amounted to 6 825 257 MWh, by 6.52 % more than electricity generated in 2012. The percentage change in the renewables share in the final gross energy consumption indicated on 19 Feb 2014 by the National Statistical Institute was 16.3% and the target for 2020 of the Republic of Bulgaria is 16%.



At this stage, in line with the Energy Act, electricity trade in the country is based on bilateral contracts between participants – producers, traders in electricity and consumers.

Electricity System Operator (ESO) performs the operational management and regulates the distribution of electricity loads of the electricity system, by accounting for accepted and confirmed requests for transfer capacities of traders, based on the Electricity Trading Rules and Auction Rules.

Simultaneously, ESO balances the energy system using technical and economic criteria, considering the bids and offers for the balancing market.

The effective cold reserve and ancillary services market is regulated by the Energy Act. Cold reserve and additional services transactions are concluded by ESO under the terms of Electricity System Management Rules and Electricity Trading Rules. Quantities of purchased availability for cold reserve are determined on the basis of the necessary level of reliability of electricity supply, decided by Ordinance of the Minister of Economy and Energy.

To facilitate consumers in their choice of a supplier, the regulator maintains a list of all licensed electricity traders and their addresses on its website.

Balancing energy price is determined by a mechanism regulated in the Electricity Trading Rules and ESO balances only transactions made at freely negotiated prices.

Since September 2012 ESO EAD has been registering balancing group coordinators and as of December 2013 their number was 13, according to the Public Register and ESO EAD continued the tests of the new market model and information systems, which will administer the market under the new conditions.

Number of market participants in 2013 increased significantly, with highest dynamics in the group of end MV customers. Participants with real market transactions as of December 2013 totalled 2 157, of which generators -9, users - 2096 and electricity traders - 52, of which 13 were standard balancing groups coordinators.

In 2013, amounts traded on the open market to consumers in the country were 6 871 571 MWh, compared to 5 295 565 MWh in 2012, or an increase of 29.7 %. The largest share of the amounts realized on the free market was provided by Kozloduy NPP and Maritsa East 2 TPP.

Total energy traded by producers at freely negotiated prices in 2013 was 13 157 797 MWh, compared to 13 515 527 MWh in 2012 and these were the quantities for both consumers in the country and export.

In 2013 the execution and implementation of two long-term PPAs continued, signed between the Public Provider NEK EAD and electricity generation companies AES Maritsa Iztok 1 EOOD and ContourGlobal Maritsa Iztok 3 EOOD.

At present the country does not have an organized power exchange and trade is done based on bilateral contracts at freely negotiated prices on a market, organized by ESO. Therefore, an objective sell/buy price margin for electricity cannot be determined.

The electricity market in the Republic of Bulgaria is national and well integrated with the neighbouring countries; therefore the country plays the role of a net exporter in the region.

At this stage of development of the domestic and regional electricity market, the transmission network in the country does not have major problems with congestion in the electricity system, including the cross-border transfer capacities. Some congestion appears in interconnections with some neighbouring countries, mostly during the winter.

Under the Energy Act the Regulator has powers to control issues relating to possible denial of access to networks by the electricity system operator or the distribution system operator.

Trading Rules with neighbouring countries are in compliance with the effective European rules and bilateral agreements and the Auction rules for cross-border exchange and trade in electricity. The latter refers inclusively to the coordination of interconnection transfer capacities between the Bulgarian TSO and neighbouring transmission systems.

In 2013 the electricity sector in the country and the participants on the electricity market did not register any significant mergers and acquisitions, influencing market competition. During the reported year the number of electricity traders grew, including such active on the market.

The electricity market in the country is organized and administered by the Electricity system operator. In compliance with the Energy Act, electricity trade in the country is carried out mainly on the base of bilateral contracts between the market participants ó electricity generators, traders and consumers, as well as on the balancing market. ESO balances the electricity system according to technical and economic criteria taking into consideration the submitted bids and offers for the balancing market.

In 2013 free electricity market in the country encompassed the bigger part of the industrial consumers connected to high voltage (HV) networks and the middle voltage (MV) network consumers.

### **3.2.2. Retail markets**

Electricity òretail marketö segment in 2013 included electricity supply to customers at low voltage - small business and household customers.

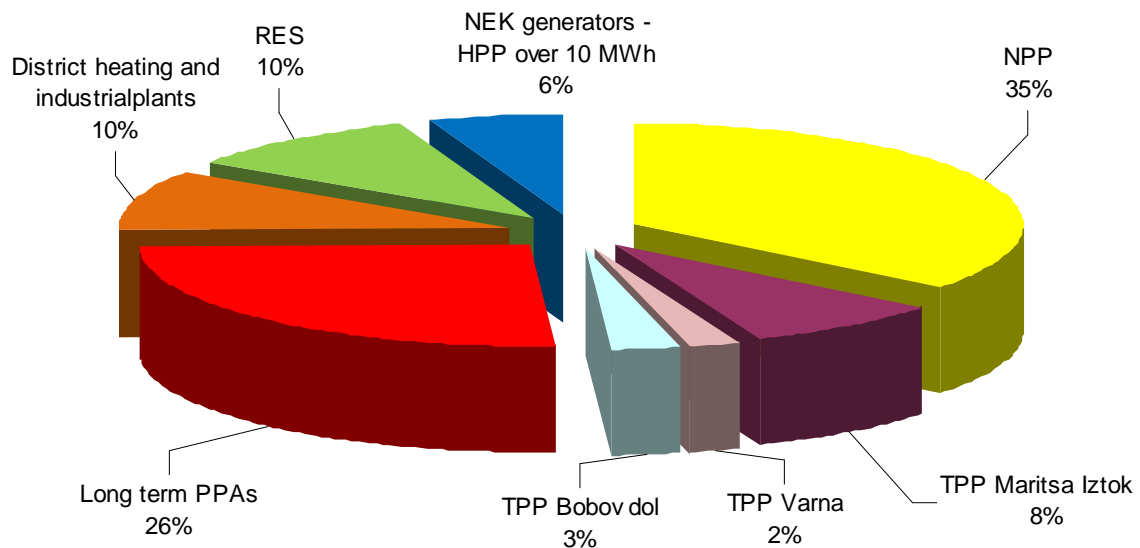
In 2013 the major part of those customers were supplied at regulated prices and at that point a relatively small part of the LV business customers switched to electricity supply at freely negotiated prices.

Under the EA, end suppliers provide and sell electricity to protected consumers ó households and non-household consumers connected at low voltage in the respective licensed territory when these customers have no other supplier.

Expansion of the electricity market at freely negotiated prices in the sector of small business customers is in accordance with the requirements of the Energy Act and Directive 2009/72/EC.

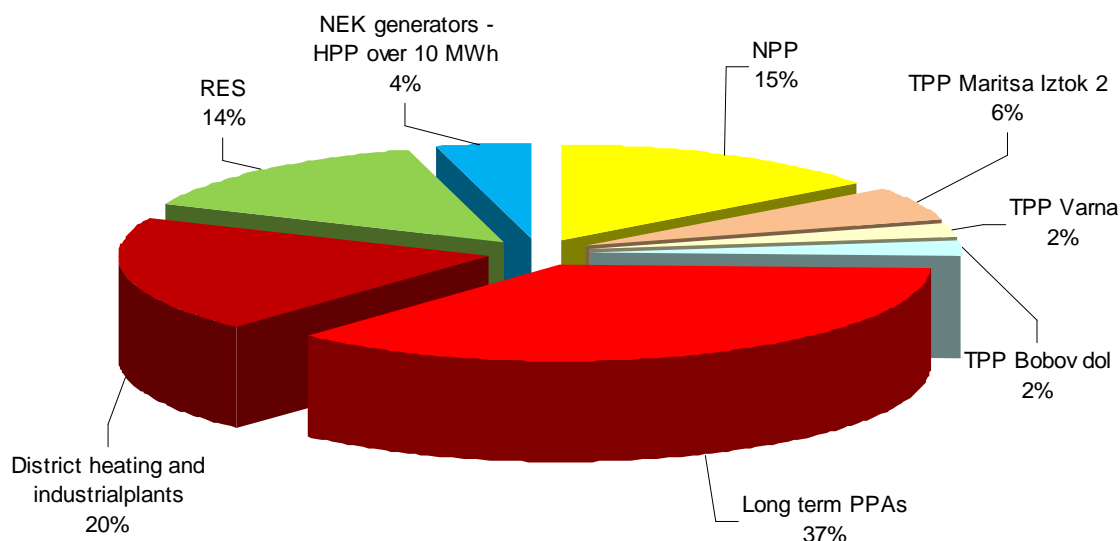
To ensure the consumption of òsmallö customers the Regulator sets mandatory quotas for the different types of producers under the Energy Act, based on which the Public Provider sells electricity in the regulated market. The amounts of electricity purchased at regulated prices from producers within a set by the Regulator òquotaö shall be determined based on the principles of equality and transparency according to the methodology adopted by SEWRC.

### Electricity generation structure of the various regulated market generators [%]



In terms of the costs included in the customers' electricity price in the regulated market, it may be summarised that in 2013 the largest share of expenditures was of the long-term contracts with AES Maritza East 1 EOOD and Contour Global Maritsa Iztok 3 EAD and the costs for the purchase of electricity from renewable sources. The chart below shows the Public Provider regulated price structure and it should be borne in mind that part of the RES energy costs has been compensated by revenues coming from the sale of  $CO_2$  allowances. The value of that compensation was 255 million Euros.

**Electricity purchase costs structure of the regulated market without the foreseen compensation for RES generation at the amount of 255 million Euros [%]**



A new pricing mechanism became possible to implement with the EA amendments in force as of 05 July 2013.

The main motive for the change was related to the need to adapt the pricing model to the actual electricity market conditions, taking into account the following facts:

- Reducing the amount of electricity sold at freely negotiated prices because of the high uncompetitive end export energy price. It was due to the calculation of not only access and transmission price to the freely negotiated energy price, but of the so called "surcharges" to the price as well. Those "surcharges" by their nature were the energy production costs above energy market value. It was a legal obligation for these costs to be covered through the prices by all users, including the energy exports.

- high share of energy in the gross local consumption, which by virtue of legal obligations and long-term contract is a subject to mandatory purchase by the Public Provider and end suppliers. The share of energy quantities subject to mandatory purchase for the price period 2013-2014 was over 50 %.

- SEWRC has made an analysis of the RES installed capacities and optimal amounts were identified against the established hour usability of each renewable source.

- relative share reduction of domestic customers who buy energy at regulated prices - under EA, for the current price period only customers connected to LV networks or households and small businesses can buy electricity at regulated prices set by the Regulator.

- Creating conditions for the activity and real introduction of the so-called "Supplier of last resort", who is to be obliged to provide electricity to those users of the free market segment that have not chosen another energy supplier.

- Creating competitive for the provision of cold reserve and ancillary services via tender procedure implementation.

- Exclusion of the electricity amounts used by electricity and heat cogeneration generators for their own needs and consumption.

The new electricity pricing model adopted by SEWRC in 2013 treats equally all customers that consume energy in the country, observing EA requirements end prices to reflect all costs along the technological chain from generation through transmission over the networks to its supply. At the same time, real conditions have been created for the operation of all generation facilities and electricity exports.

Regulated price for protected consumers in the country is formed as a price mix of the different primary energy sources (nuclear, coal, HPP, wind, PV plants and biomass) electricity producers and they are in accordance with the relevant quantities needed to cover the regulated market needs. This, in turn, provides satisfactory level of equality among all consumers. The remaining part of the electricity generation (outside the defined quota), producers have the right to sell in the free market as equal participants.

In pursuance of the EA and the currently in force Ordinance for the electricity prices regulation as of 18 March 2013, by a decision of the Regulator the following prices have been approved for protected consumers:

- access and/or transmission through the electricity transmission and distribution networks;

- prices of end suppliers selling to household consumers and small businesses connected to electricity distribution LV network.

Regulated by SEWRC prices of access and transmission for the electricity distribution companies under Ordinance for the electricity prices regulation (18 March 2013), shall be set based on allowed by the Regulator revenue requirements for maintenance and operation of the relevant distribution network.

Main consumers groups connected to the electricity distribution networks in 2013 were as follows:

- Non-household consumers connected at medium voltage;

- Household and non-household consumers connected at low voltage.

End prices paid by these consumers in the regulated market include apart from the energy price the following network prices:

- price of access to the electricity transmission system;

- transmission price through the electricity transmission network;

- price of access to the electricity distribution network;

- price of transmission to the electricity distribution network, split into voltage levels 6 respectively MV and LV.

After the new pricing model implementation by the EA amendment as of 05 July 2013, "green energy" and "high-efficient cogeneration" surcharges were excluded from the transmission price through the transmission network and were added to the energy price.

Prices approved as of 01 Aug 2013 were as follows:

- The price of access to the electricity transmission network paid to ESO EAD by all network users was 0.00141 EUR/kWh.

- The price of transmission through the transmission network paid to the Transmission Company by all network users was 0.00212 EUR/kWh.

In 2013 SEWRC, within its competence, took a number of steps to develop clear rules on the organization of balancing energy market and balancing principles for market participants. In this connection, the new Electricity Trading Rules created all the prerequisites for the establishment of a working comprehensive balancing market, day-ahead market and a power exchange. The so-called "standard balancing groups coordinators" work in practice and they provide their balancing group members the service of taking responsibility for their balancing.

In 2013 all high and middle voltage customers entered the free market, which led to a significant increase of the free market share as to the regulated market.

HV end - consumers purchase electricity only in the free market.

In the table below some average values of the different tariffs by consumers groups are presented, approved as of 01 Aug 2013:

<b>Approved by SEWRC prices as of 01 Aug 2013 in EUR/kWh</b>		
<b>Tariffs</b>	<b>Economic LV consumers</b>	<b>Households</b>
<b>Average energy price</b>	0,06275	0,04293
<b>Transmission LV</b>	0,01854	0,01854
<b>Access LV</b>	0,00317	0.00317
<b>Network services HV</b>	0.00638	0.00638
<b>Common average sell price</b>	<b>0.09084</b>	<b>0.07102</b>

*\* The presented price values are without VAT and excise duty for economic consumers.*

Business customers connected to the low voltage networks of two of the companies pay an average price for access to the electricity network at the amount of 8.3731 EUR/MWh/Day.

MV and LV network services values include the access price to the distribution network and the transmission price for the relevant voltage price.

HV network services include the access price to the distribution network and the transmission to the transmission network.

### **3.2.2.1. Monitoring the level of prices, the level of transparency and the level and effectiveness of market opening and competition**

Regarding SEWRC's power to contribute for the compliance of the data exchange processes concerning the most important market processes on a regional level, is explicitly stipulated, guaranteeing also the necessary information confidentiality level, SEWRC monitors weather limiting contractual practices and provisions for exemption exist, which may set an obstacle for households to conclude contracts simultaneously with more than one supplier or to limit their choice of suppliers.

Key principles underlying SEWRC activities in fulfilling the regulatory powers of the Commission are prevention and avoidance of limitation or violation of competition on the energy market, as well as balancing the interests of energy companies and consumers.

In exercising its powers, the Commission analyses the performance of controlled energy companies, in order to create an environment preventing abuse of monopoly and limiting/violating the competition on the energy market in Bulgaria. To that end, SEWRC has the right to inform the Competition Protection Commission, which in turn reviews the information and on a case by case basis may start a procedure under the Competition Protection Act.

Ordinance 3 of 21 March 2013 on licensing the activities in the energy sector provides for another important power and obligation of SEWRC in issuing a license and/or a permit or consent. If in the course of administrative proceeding, a need of permit from CPC is identified, the energy regulator suspends the proceedings, informs the applicant and notifies CPC on starting a procedure under the Competition Protection Act. Only after the entry into force of the CPC decision, SEWRC renews the proceedings on issuing the respective administrative document.

In addition, in exercising its powers for giving consent for transformation of licensees, permitting transactions, and management of unfinished construction site or property, or permission for pledge/mortgage on a property which is involved in licensing operations, SEWRC has the right to demand for the opinion of CPC on the specific case before making a decision or issue a permit.

Under the Energy Act, electricity transmission or distribution energy enterprises, which provide a service of public interest and have dominance on the market within the meaning of the Competition Protection Act, comply with the provisions of this act, unless it thwarts actually or legally the performance of their obligations.

SEWRC continuously monitors the market in view of the guaranteeing equal treatment among all market participants, as well as among the participants belonging to one and the same group and contribution to the effective competition and correct market functioning. In this regard, SEWRC applying its controlling functions performs scheduled inspections of the energy companies, as well as unscheduled inspections on submitted complaints and signals.

Concerning its controlling powers, SEWRC is in close cooperation with the Consumers Protection Commission, and with a range of other non-governmental organizations for consumer protection likewise.

At this stage of electricity market opening in the country, end suppliers provide and sell power at regulated prices mainly to protected consumers. Supply contracts are concluded with consumers based on "Electricity supply general conditions". General conditions are elaborated and proposed by the electricity supply companies and are approved by the regulatory authority.

#### **3.2.2.2. Monitoring the licenses terms and conditions compliance of licensed companies providing services of public interest**

The most significant actions taken by SEWRC in relation to the exercise of monitoring powers regarding companies providing services of public interest are the following proceedings:

1. In 2013, based on decision on compulsory administrative measure, partial audit has been carried out in CEZ Distribution Bulgaria AD, Energo-Pro Networks AD and EVN Bulgaria Electricity EAD. The audit included inspection and evaluation of the work organization of companies, the reported investment and the impact of its implementation in terms of network development and improvement, enhancing security of supply and decrease technology costs.

Based on the inspection were identified: lack of convincing analysis and studies in favour of the need to set certain technical and investment decisions, not good planning in some of the investments and necessity to achieve better results in terms of the investments impact.

These results and findings necessitated a thorough regulatory audit of CEZ Distribution Bulgaria AD, Energo-Pro Networks AD and EVN Bulgaria Electricity EAD regarding the licensed activity – electricity distribution. The regulatory audit scope included examining the overall licensed activity of the companies under the issued by the Regulator licenses for the period 01 July 2008 – 30 Nov 2013, including analysis and evaluation of all costs associated with the implementation of the licensed activity.

The results of the comprehensive audit found: 1088 violations in CEZ Distribution Bulgaria AD, 542 violations in Energo-Pro Networks AD and 359 violations in EVN Bulgaria Electricity EAD.

2. On 19 Feb 2013, by Decisions 1- -135-07/19.02.2013 and 1- -135-11/19.02.2013 of SEWRC, the Commission opened proceedings to revoke the license issued to CEZ Distribution Bulgaria AD (License 135-07/13.08.2004) for the activity – electricity distribution and respectively the license issued to CEZ Electro Bulgaria AD (License 135-11/29.11.2006) for the activity – public electricity supply. The devised to the two companies acts of the licenses terms administrative violations thus violating the Energy Act, became the reason to open proceedings under Art.71, para. 2 t. 1 of the Ordinance on licensing the activities in the energy sector (publ. SG. 53, 22.06.2004, repealed SG.38, 23.04.2013) in conjunction with Art.59, para. 1 of EA. In the Decisions for opening of proceedings the licensees were given a deadline to seize the violations and to eliminate their consequences established by acts of administrative violations and to submit written comments on the opening of proceedings. Besides the licenses withdrawal opened procedures of CEZ Distribution Bulgaria AD and CEZ Electro Bulgaria AD, given the acts of administrative violations, the opened administrative penalty proceedings continued with the issuance of penal provisions which imposed on the companies pecuniary sanctions and warnings under the Administrative Violations and Sanctions Act.

By Decision 2- -135-07 of 13.11.2013 and Decision 2- -135-11 of 11.13.2013, the Commission suspended the opened license withdrawal proceedings of CEZ Distribution Bulgaria AD and CEZ Electro Bulgaria AD on the grounds that the Energy Act violations, based on which the procedure had been opened, in their integrity, cannot justify the need for the withdrawal of licenses as it does not affect the continuous and secure supply of consumers.

3. By Decisions 01- -135-11 of 19.03.2014, 01- -139-11 of 19.03.2014 and 01- -141-11 of 19.03.2014, SEWRC opened proceedings to revoke the license for the activity – public electricity supply of CEZ Electro Bulgaria AD, Energo-Pro Sales AD and EVN Bulgaria Electricity EAD. The Commission's decisions have been taken in accordance with the applicable law and aiming to ensure the security of the energy system in Bulgaria. The opening of these procedures was premised by serious problems that had already started in April 2013. In the period April - August 2013 EVN Bulgaria Electricity EAD unlawfully set off amounts of its then unimburshed RES and high-effective cogeneration electricity costs against costs that EVN owed to NEK for purchases of electricity. In November and December 2013 such set-offs were exercised by EVN Bulgaria Electricity EAD and Energy - Pro Sales AD. Since February 2014 CEZ Electro Bulgaria AD has started violating the terms of its license by jeopardizing the payment it owed to NEK EAD, linking it with the satisfaction of their claims arising from other legal grounds. The described problems escalated in the period December 2013 - January 2014 for which the Regulator received complaints by the Public Provider - NEK EAD.



The above cited actions of the electricity supply companies deprived NEK EAD of cash required for the implementation of its licensed activity. That led to the actual blocking of the overall activity of NEK EAD and to inability to make payments to electricity generators. As a result, the security of supply in the energy system has been actually threatened, as its guarantee is directly related to the provision of financial flows in order to avoid debt of energy companies along the chain generation-transmission-supply-distribution-supply of end consumers.

On the other hand, the above-described actions of CEZ Electro Bulgaria AD, Energo-Pro Sales AD and EVN Bulgaria Electricity EAD represent violations of the issued licenses, which violations have been found by findings of administrative offense in the course of NEK EAD's complaints investigations. These violations, due to their impact on the security of the energy system, have been the basis for the opening of withdrawal procedures for the licensed activity of public electricity supply.

At present, SEWRC has been examining and analyzing all the evidence, statements and objections provided by the electricity supply companies and NEK EAD and after the finalization of this process shall issue decisions on the opened license withdrawal procedures of CEZ Electro Bulgaria AD, Energo-Pro Sales AD and EVN Bulgaria electricity EAD for the activity of public electricity supply.

### **3.3. Security of supply (if and in so far as NRA is competent authority)**

#### **Implementation of safeguard measures Article 42**

By a tradition, Bulgaria is a net electricity exporter for the region and in 2013 the share of net exports in the regional market amounted at about 20 % of the net electricity output of the country.

The presented in the previous sections of the report established regional cooperation and operational arrangements for the coordinated allocation of cross-border capacity with the neighbouring system operators, as well as the agreed mutual support at emergencies, ensure the safe and reliable operation both in the internal and external electricity markets.

#### **3.3.1. Monitoring balance of supply and demand**

In pursuance of EA, ESO EAD elaborates short-term and long-term forecasts and electricity system development plans aiming the provision of the electricity balance in the country. Based on forecasts and plans, ESO EAD provides to the Minister of the economy and energy an electricity balance project and a list of the needs for the country resources, including the needed new generating capacities and interconnection lines.

At this stage of development of the domestic and regional electricity market, the electricity transmission network of the country does not face significant problems related to security of supply and congestions in the electricity system, including the cross-border transfer capacities. As a result of the considerable in 2013 increase of the RES electricity capacities in the country, mainly solar and wind power, some difficulties occurred regarding their balancing.

## **4. Natural gas market**

### **4.1. Network regulation**

#### **4.1.1. Unbundling**

In compliance with the main purposes of Directive 2009/73 of the European Parliament and the Council regarding the achievement of a fully operational internal market with a non-discrimination access to the natural gas transmission networks and fair natural gas pricing, by a Decision of SEWRC transformation has been carried out via the unbundling of Bulgartransgaz EAD from Bulgargaz EAD and their establishment into two independent legal entities. Thus the legal, functional and accounting unbundling of the activities of natural gas transmission and public supply has been achieved.

The Directive's operators independence requirement has been met by the transmission system operator and Bulgartransgaz EAD has been unbundled as an independent entity within the vertically integrated undertaking BEH EAD and the persons responsible for the management, including operational control do not participate in the management of the other companies in the vertically integrated undertaking. The activities along the chain have been horizontally divided: natural gas extraction, import, transmission, storage, distribution, supply and trade.

In 2013 Bulgartransgaz EAD has submitted at SEWRC a certification application for an independent transmission based on art. 81d, relating to § 192 of EA, art. 98 of Ordinance 3 of 21 March 2013 on licensing the activities in the energy sector (publ.SG, issue 33 of 5 April 2013). SEWRC has approved a draft decision based on art.21, para.1, item 27 of EA. The draft decision and the whole relating information and documentation have been notified to the European Commission for opinion. In connection with a letter of the European Commission requesting additional information on the draft decision of the Regulator about the certification of Bulgartransgaz EAD as an independent transmission operator with the aim to clarify issues raised in the review and evaluation of the draft decision, SEWRC has decided to withdraw the notified draft decision about the certification of Bulgartransgaz EAD as an independent transmission operator in order to perform further analysis, on which it informed the Commission by a letter.

SEWRC has adopted a report on the clarification of the European Commission's questions raised in the review and evaluation of the draft decision of the Regulator about the certification of Bulgartransgaz EAD as an independent transmission operator and had a decision to send the additional information to the Commission. In connection with that decision SEWRC sent a letter to the European Commission, which provided additional information and informed the Commission on the draft decision amendment.

In relation to the provided by SEWRC additional information to the European Commission, in a reply letter EC admitted the significant efforts on the part of the Regulator on the certification of Bulgartransgaz EAD and in turn asked questions regarding the information sent by SEWRC. The European Commission asked the re-presentation of the draft decision to integrate all the new and updated information in the draft and to attach all the necessary annexes thereto.

Regarding the submitted by the European Commission letter SEWRC has approved a draft decision about the certification of Bulgartransgaz EAD as an independent transmission operator. It has also adopted to initiate a preliminary discussion with the European Commission by sending the completed form "Independent transmission operator questionnaire" and the approved draft decision. After receiving the EC opinion on the draft decision, its adoption shall be performed.

#### 4.1.2. Technical functioning

In pursuance of the requirements of art.41, § 6, (b) of Directive 2009/73/ C, by a Decision -119/26.08.2010, SEWRC approved Methodology on determining the price of imbalance of the gas transmission operator, which Bulgartransgaz EAD has announced to the public, under the requirements of Article 7, § 3 of Regulation. Prices of imbalance reflect as accurately as possible costs, providing at the same time appropriate incentives for the network users to balance the filling and withdrawal of gas from the system and prevent mutual subsidization among network users and do not obstacle the entrance of new market participants. Natural gas market balancing is carried out through the available in the system gas bought at regulated prices by the Public Provider. The filling and withdrawal possibilities of the underground storage facility Chiren are used to compensate the season consumption unevenness.

Balancing gas market functioning in Bulgaria is in process of development and harmonization with the European Regulation (EC) 715/2009 on conditions for access and with the developed by ERGEG Guidelines for best practices for gas balancing, as well as with the Comitology on establishing Network Code for balancing the transmission system. Requirements on balancing the transmission system are to be included in the Natural gas Trading Rules. A procedure on the amendment of the Natural gas Trading Rules started, pursuant to § 199. (1), under which provision secondary legislation acts and general administrative acts for the implementation of this Law shall be adopted or put in compliance with this Law within one year of its entry into force and its draft has run a public consultation. The draft Natural gas Trading Rules has been published on the website of SEWRC and on the Portal for public consultation. Natural gas Trading Rules are in the process of being adopted by the Regulator.

In 2013, given the EA amendments and to comply with the requirements of energy market liberalization and complete transposition of Directive 2009/73/EC, SEWRC has adopted the following regulations and rules:

1. Ordinance 4 of 5 Nov 2013 on natural gas transmission and distribution networks connection

The Ordinance regulates:

- ) the terms and conditions of natural gas transmission networks connection of:
  - the natural gas transmission networks of other transmission networks operators;
  - natural gas distribution networks of distribution networks operators;
  - extracting pipeline networks;
  - natural gas storage facilities;
  - LNG facilities;
  - units for gas production from RES;
  - end consumers through direct pipeline.
- ) the terms and conditions of natural gas distribution networks connection of:
  - industrial gas installations of non-household consumers;
  - building gas installations of consumers;
  - extracting pipeline networks;
  - units for gas production from RES;
  - natural gas storage facilities.

2. Ordinance 2 of 19 March 2013 on natural gas price regulation.

The Ordinance regulates:

- natural gas price regulation methods, rules for the formation, setting and adjustment of prices, the procedure of providing information, price proposal submission and adoption;

- energy enterprises costs compensation method about costs incurred by imposed on them public service obligations under EA;
- the terms and conditions of network connection pricing;
- the terms and conditions of price-formation of natural gas access and transmission through the gas transmission and/or distribution networks.

### 3. Rules on the provision of access to the gas transmission and/or distribution networks and access to the natural gas storage facilities.

The Rules regulate:

- the conditions on the provision of access to the gas transmission and/or distribution networks, which the entities asking for access should observe;
- the procedure on the provision of access to the gas transmission and/or distribution networks, to the entities asking for access, including access application submission and reviewing;
- capacity allocation mechanism and congestion management procedures principles;
- information provision requirements about the information needed to network users in order to receive actual access.

The regulation of rules for providing access to natural gas storage facilities is a new element in the secondary legislation in view of the operator's obligation to provide third party access to storage facilities observing non-discriminatory procedures, transparent and fair to all potential consumers.

### 4. Natural Gas Transmission Networks Management and Technical Rules.

The Rules regulate:

- the availability and operation of an information system, including all network elements, which shall be used to manage sites/facilities, to collect and archive data, to analyze the status, to test modes, etc.;
- the natural gas quality and determining its quality parameters;
- the technical conditions for the safe and reliable operation of the gas transmission operator networks;
- the technical conditions for the natural gas amounts metering;
- the technical rules on the operational management ó centralized operational management, coordination and control of the gas transmission network operational regime;
- the operational networks technical rules in the event of gas transmission limitation or interruption;
- the technical rules on gas transmission networks connection.

### 5. Rules on natural gas distribution networks management.

The Rules regulate:

- relationship between the gas distribution system operator and the gas transmission system operators, network users, customers connected to the grid; other natural gas undertakings;
- stages of planning, construction and development of the gas distribution network, its work organization, operation and service, its operational management, connection of consumers and providing additional services;
- information access provision requirements about the gas distribution network and informational coordinating procedures between the gas distribution network operator and network users;
- description of the services provided by the gas distribution network operator;
- gas distribution network customer connection procedures and switching of a supplier;
- gas distribution network operational regimes management;
- regulation and metering facilities realization, maintenance and decommissioning;
- natural gas metering;
- services commercial quality;

- gas distribution networks and customers gas installations safety;
- natural gas quality;
- energy efficiency enhancement activities.

Under the 2012 EA amendment, as part of the Third Energy Liberalisation Package transposition, the natural gas transit license granted to Bulgartransgaz EAD has been transformed to a transmission natural gas for the remaining license validity period, which was made in 2013 by Decision 1- -214/03.06.2013 of SEWRC.

#### **4.1.3. Network and LNG tariff for connection and access**

The price of transmission through the system is regulated by the method of rate of return on capital. The tariff model applied to the transmission company is of post stamp. It is expected the TSO to implement the tariff model of entry-exit with the of revenue cap method, in pursuance of the Third energy liberalization package requirements.

In EA art.197, para.9, the access and the terms for the usage of foreign gas facilities is regulated. The connected to the gas transmission network customers ( in case of technical possibility and free capacity) may provide their own facilities to the relevant distribution network operator, a license holder, for the purposes of natural gas distribution to other customers in the territory defined in the license. The usage is to be provided after the concluding of a contract at a negotiated price defined through methodology approved by the Commission. In the contract with the licensee the terms and conditions of the usage are negotiated, including the terms and conditions of the operative management and natural gas metering, supplied to each of the customers, including the person providing usage, to guarantee the unified operative management and metering of the supplied to the customers natural gas. At the absence of consent, the Commission shall order provision of usage and payment of the price defined by SEWRC following the methodology.

Prices of the activities of natural gas distribution and of natural gas supply by an end supplier have been regulated under the of price cap method, under art. 3 of Ordinance 2 of 19 March 2013 on natural gas price regulation.

In relation to the adopted pricing method SEWRC annually collects data on the licensed companies' activities reports in terms of investment, network constructed, number of users and consumption and they are compared to the data in the approved business plans.

SEWRC requires information from all licensees and conducts ongoing monitoring of: interruptions number, interruptions duration, complaints number, response time to complaints and time to correct metering errors in order to improve the quality of natural gas supply.

At this stage, quality of supply does not affect tariffs

#### **4.1.4. Cross-border issues**

Under EA art.170, para.1, item 9 the transmission system operator has the duty to provide sufficient cross-border capacity aiming the European gas transmission infrastructure integration, satisfying all economically feasible and technically realistic capacity requests, keeping in mind the observance of gas supply security requirements. Pursuant to art.21, para.1, item 28, SEWRC has the power to establish cooperation concerning cross-border issues with regulatory authorities of other countries of Member states and with ACER, and to conclude cooperation agreements with NRAs. For the reported 2013, no cooperation agreements were signed.

At present, there is no system congestion, neither on national, nor on cross-border level, since the transmission system project capacity is 8 billion m<sup>3</sup>. The actual annual consumption does not exceed 40% of the maximum projected consumption. The available capacities allocation is at first come first served principle and under the new Rules on the provision of access to the natural gas transmission and/or distribution networks and access to the natural gas storage facilities approved by a decision of SEWRC of 14 March 2013, the possible overall available capacity allocation mechanisms of each entry/exit point and to the network as a whole, could be as follows:

1. Proportionate allocation;
2. Auction procedure;
3. Opened request (in case of new gas infrastructure).

#### **4.1.5. Compliance**

The power of the Regulator under art.41, §1 d of the Directive is transposed in art.21, para. 1, item 31 of EA, namely to comply with and implement any relevant legally binding decisions of ACER and EC. The Regulator also, has the duty to ensure the compliance of the transmission and distribution system operators, as well as of all natural gas undertakings in their obligation under the Directive, under Regulation ( C ) 715/2009 and under any relevant Community legislation.

Regarding Bulgartransgaz EAD in its role as independent transmission operator, after its certification notification, SEWRC's powers to regulate its activities are stipulated in art. 21, para. 3 of EA.

## **4.2. Promoting competition**

### **4.2.1 Wholesale markets**

#### **4.2.1.1. Monitoring the prices levels, the level of transparency, the level and effectiveness of the market and the competition**

In pursuance of art.21, para.1, item 35 of the new EA, respectively art. 41, §1, item (i) and (j) of the Gas Directive, SEWRC monitors the level and efficiency of the market opening and the competition in the wholesale and retail market and monitors the integration with other energy markets of other countries ó Member States.

The transmission price on the transmission network is calculated by the method of rate of return. The tariff model applied to the transmission company is post stamp. It is expected the TSO to implement the tariff model of entry-exit, in pursuance of the requirements of the Third energy liberalization package.

As it is laid down in art.21, para.1, item 29 of EA, SEWRC shall contribute to the compliance of the data exchange processes concerning the most important market processes on regional level, guarantying the necessary information confidentiality level.

The new controlling powers of SEWRC, namely art.76, para.4, item 9, comprise of monitoring the presence of limiting contractual practices and exemption provisions, which may hinder household consumers to conclude contracts at one and the same time with more than one supplier or to hinder their choice of suppliers.

The natural gas required to satisfy the needs of the Bulgarian market are provided based on contracts between the Public Provider Bulgargaz EAD and Gazprom Export OOO. Local extraction share in the internal market is negligible. Bulgargaz EAD has concluded a sale and

purchase contract for local gas with Petroceltic EOOD. Bulgartransgaz EAD owns and operates the transmission pipeline of high pressure and the underground gas storage facility Chiren.

The activity of public provision is carried out by Bulgargaz EAD, which is a license holder of a license for the activity of natural gas public provision, issued by SEWRC.

The natural gas on the entry of the gas transmission network is provided by two foreign suppliers (Overgas Inc. AD and Gazprom Export OOO) and one local extraction supplier (Petroceltic EOOD). Overgas Inc. AD organizes the gas import and the transport over the gas transmission network to its customers. Bulgartransgaz EAD owns the gas transmission network, to which distribution companies and about 250 directly connected consumers are connected.

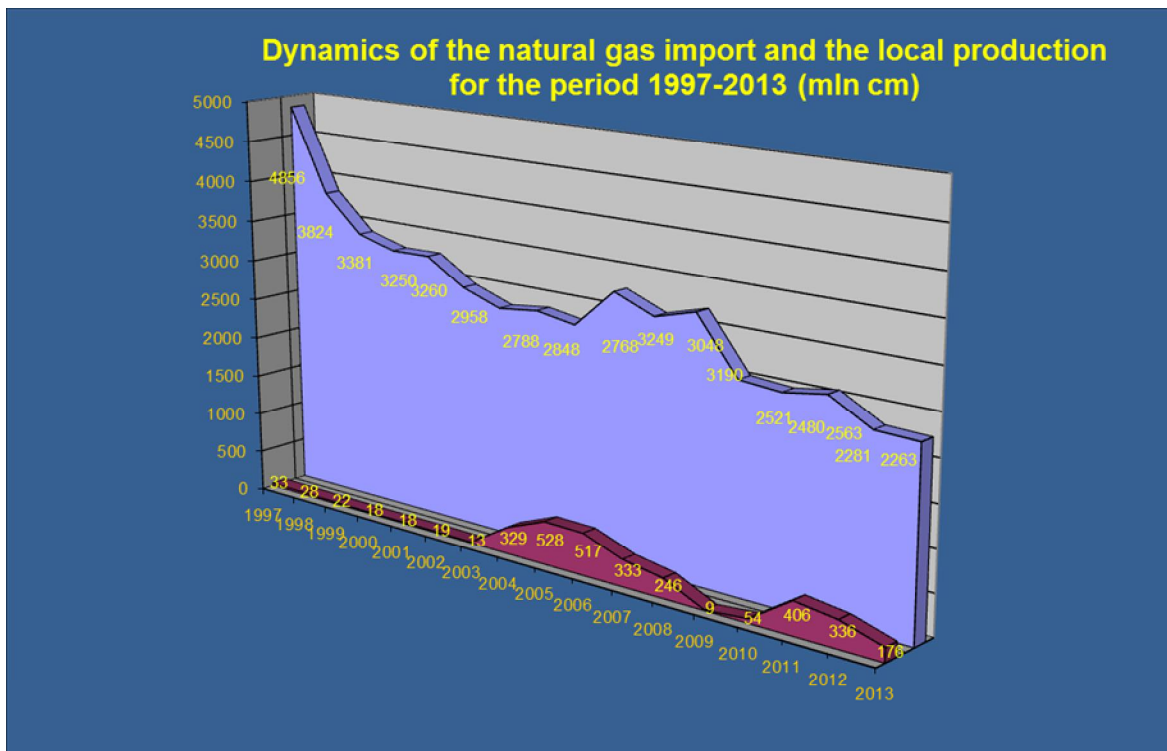
Under art.176, para.1 of EA, extractive companies or natural gas traders, on one hand, and the natural gas public provider, suppliers of last resort, storage facilities operators, liquid natural gas facilities operators, natural gas traders or customers on the other, conclude natural gas transactions among each other at freely negotiated prices.

Under natural gas transportation contracts with the transmission system operator, the quantities traded at freely negotiated prices by natural gas traders were: 370.7 million m<sup>3</sup>, including 98.3 million m<sup>3</sup> with Dexia Bulgaria OOD (supplied by the extraction enterprise Petroceltic EOOD) and 272.4 million m<sup>3</sup> with Overgas Inc. AD.

Public provider Bulgargaz EAD trades on regulated by SEWRC prices and its share in the natural gas sales in 2013 was 87 %. The remaining 13% were realized by the traders Dexia Bulgaria OOD and Overgas Inc. AD.

Local extraction in 2013 was 176 million m<sup>3</sup>, realized by Petroceltic EOOD and Exploration and extraction of oil and gas AD. There has been a decrease in the local extraction gas amounts for the last three years and in comparison to 2011 (406 million m<sup>3</sup>) in 2013 the extraction has decreased by 43 %.

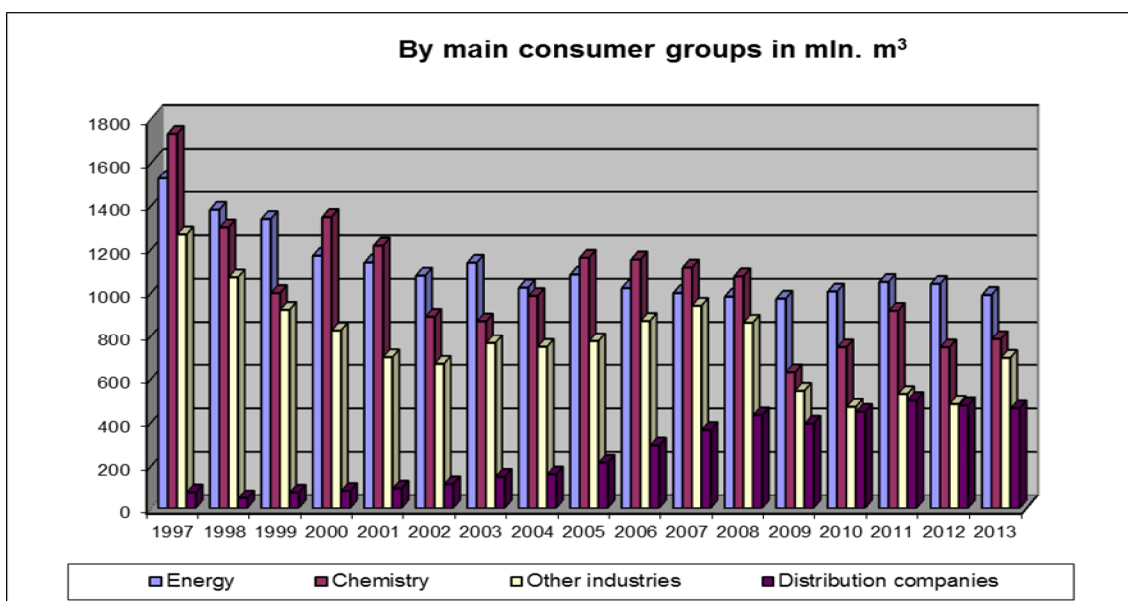
Bulgartransgaz EAD operates the underground gas storage facility Chiren, with a capacity of the active gas about 450 million m<sup>3</sup>/per year. In 2013, 335.47 million m<sup>3</sup> natural gas were pressurized in there, and the amount of the drawn quantity was 238.53 million m<sup>3</sup>.



15.8 % of the natural gas consumption (including local production quantities) in the country was realized by 28 natural gas distribution companies, servicing 5 natural gas distribution regions (Dunav, West, Thracia, Mizia, Dobroudja) and 66 municipalities outside these regions.

The quantities of realized natural gas by Bulgargaz EAD in 2013 for customers of the company were 2 553 million m<sup>3</sup> and the consumption structure by sectors was the following:

- Energy sector 6 980 million m<sup>3</sup> or 38 %
- Chemical industry 6 684 million m<sup>3</sup> or 27 %
- Other industries 6 694 million m<sup>3</sup> or 27 %
- Distribution companies 6 195 million m<sup>3</sup> or 8 %





Chiren storage capacities are reserved only by the Public Provider Bulgargaz EAD. There are two methods for allocation of available storage capacities, namely first come first served and the proportionate method of allocating bids and offers according to quantities. There is no storage capacities trade on the secondary market.

The five gas distribution companies with largest market share in sales to end consumers were the following:

- Overgaz North EAD ó 17 %
- Citigaz Bulgaria EAD ó 16 %
- Sofiagaz EAD ó 16 %
- Overgaz East AD ó 14 %
- Black Sea Technological Company AD ó 10 %

In compliance with the European directives for full liberalization of electricity and natural gas markets, transposed into EA by the amendments of 2012, all consumers have the right to select their natural gas supplier. Practically in 2013 that right was exercised by one business consumer (District heating-Razgrad EAD) and the five gas distribution companies of the Overgas Inc. AD group Overgaz East AD, Overgaz North EAD, Overgaz West AD, Overgaz South AD Sofiagaz EAD). Households have not exercised that right in the reported year.

In 2013 SEWRC approved natural gas transmission prices through the gas distribution networks, prices of natural gas supply by end supplier, and prices of connecting consumers of three licensed companies, according to the pricing method price cap

#### **4.2.2. Retail market**

##### **4.2.2.1. Monitoring the prices levels, the level of transparency, the level and effectiveness of the market opening and the competition**

When regulating the prices for natural gas distribution and supply SEWRC takes into account the characteristics of the market, including the fact that the needed natural gas distribution infrastructure in the country is still in process of construction and the consumers connected to the natural gas distribution network are few. SEWRC applies a regulatory mechanism, which ensures balanced incentives for the natural gas distribution enterprises to continue the development of the networks and the connection of new consumers aiming the increase of consumption. One of the incentives is the defined target rate of return on equity for the activities distribution and end supplier provision. SEWRC approves cost-based tariff structures, part of the pricing application, where the company may propose justified differentiation of consumers into groups and subgroups, depending on similar characteristics of consumption and/or another feature, for which it may request approval of separate prices. In this sense, the types of tariffs in force of the gas distribution companies end consumers are separated depending on the type of consumption (industrial, publicly administrative and households), evenness and unevenness of consumption and the relevant consumption.

Prices are formed under Ordinance 2 on natural gas price regulation.

The Energy Act regulates the obligation of the transmission undertaking to connect to its network at a defined by it point the distribution companies, extraction companies and companies for natural gas storage. The obligation of distribution companies to connect and provide the gas supply to consumers at conditions of equal treatment is regulated in EA, with complying with the technical requirements of reliability and safety. Conditions of connecting to the transmission and distribution networks, general conditions of contracts, natural gas

prices and rules for work with consumers are approved by SEWRC and are publicly available, and are placed at a prominent place in the clients' centers of the companies and on the internet pages of the gas transmission and gas distribution companies.

The Law does not require issuance of a license for trade with natural gas, thus giving a full freedom for traders. Natural gas trade market is 100 % opened.

Monitoring the natural gas market stimulates retail competition. SEWRC permanently monitors the market with the view to ensure non-discrimination between all market participants, as well as between the participants of one and the same category and to promote efficient competition and proper market operation. Regarding the latter, when exercising its controlling powers, SEWRC carries out scheduled inspections of the energy companies, as well as surprise inspections in case of filed complaints and signals.

Regarding its controlling powers, SEWRC is in a close cooperation with the Consumer Protection Commission and with some other non-governmental organizations for consumer protection.

SEWRC monitors the energy companies' obligations related to provision of information about: ways of payment, disconnection or restoring of supply prices, prices for maintenance services and other services prices concerning licensed activities; change of supplier procedure and information about the lack of additional payments for energy services consumers when shifting supplier; real consumed quantities and costs incurred and no additional payments owed for this service; elaboration of final equalizing bill at each supplier shift; every energy source share in the total supplied energy by the supplier during the previous calendar year in a comprehensible and clearly comparable way.

SEWRC monitors and inspects the gas distribution companies regarding the compliance of the set in their approved business plans parameters connected with their duties under the licenses for the activities of natural gas distribution and supply. Gas distribution companies' business plan performance in 2013 is given below:

Gas distribution companies	Constructed network for 2013	Investment 2013	Number of consumers (accumulative)		Natural gas consumed, thousand norm m <sup>3</sup> 2013	
	m	Thousand BGN	Non-households	Households	Non-households	Households
<b>Total</b>	<b>149 531</b>	<b>27 075</b>	<b>5 683</b>	<b>68 797</b>	<b>406 453</b>	<b>61 390</b>

#### **4.2.3. Recommendation on supply prices, investigations and measures to promote effective competition**

In the past 2012 the Bulgarian regulatory authority did not give any recommendations concerning the prices of the supplied natural gas. However, SEWRC published information on the approved actual marginal prices, statistics and analyses.

The provision of Article 30, para.2 of EA stipulates that the prices of electricity, natural gas and services provided by energy companies are not subject to regulation by the Commission when the later finds out the existence of competition, which creates pre-conditions for the free negotiation of prices under market conditions for each energy sector activity.

In this respect, as far as natural gas sector is concerned, pre-conditions for the existence of competition in the market are provided by the legislature through the provision of art.180, para.1 of EA: "Every customer connected to the gas transmission and / or gas distribution network may choose a natural gas supplier, regardless of the European Union member state in

which the supplier is registered, provided the supplier complies with the rules under art.173, para.1 and the security of supply requirements.

In line with art.181 of EA, natural gas contracts are concluded at regulated by the Commission prices for services of public interest regarding transmission, distribution and supply and at freely negotiated prices among the parties ó prices outside the public interest services.

To achieve the existence of competition, which is a prerequisite for free negotiation of electricity and natural gas prices at market conditions, an effective market opening is needed, an establishment of a single EU natural gas market, which is in the interest of citizens and industry. This can be achieved through the implementation of the inter-connection projects, which will enable the natural gas supply from other sources and will increase competition and the possibilities to choose a supplier. The interconnection projects are a priority for Bulgaria and have significant influence regarding the security of supply in the region.

### **4.3. Security of supply**

Pursuant to art. 4, para. 2, item 4 of EA, the Ministry of economy and energy to be the competent authority concerning the security of supply in the meaning of Regulation (EC) 994/2010 of EP and the Council. In line with art.72 of EA, the Minister of economy and energy after consultations with natural gas companies and organizations representing the household and non-household customersø interests and with SEWRC introduces at national level:

1. Preventive action plan containing the measures needed for the removal or limitation of the identified risks impact in compliance with the risk assessment, approved by an Order -16-1662/30.11.2012 of the Minister of economy and energy.
2. Emergency action plan containing the measures needed for the removal or mitigation of natural gas supply interruption impact, approved by an Order -16-1663/30.11.2012 of the Minister of economy and energy.

Pursuant to the obligations under Regulation (EC) 994/2010 Art.6, § 5, namely: øThe transmission system operators provide a permanent bi-directional capacity on all cross-border interconnectors between Member States as soon as possible and no later than 3 December 2013ö, Bulgartransgaz EAD as of 1 January 2014, has provided transmission technical capability of 1 million m<sup>3</sup>/d to 3 million m<sup>3</sup>/d natural gas in the direction from Greece to Bulgaria, depending on the Greek gas transmission network capabilities.

#### **4.3.1. Monitoring balance of supply and demand**

Natural gas supplies for the Bulgarian gas market are carried out by:

- Overgas Inc. AD
- Gazprom Export
- Petroceltic EOOD

Since the beginning of 2013 Bulgargaz EAD have been purchasing natural gas on the basis of a new contract with Gazprom Export . In 2013 Overgas Inc. AD joined the natural gas market as a second trader, who imports and at the same time sells gas to distribution companies and end users. The local production share for domestic needs is provided by Petroceltic EOOD.

At this stage, natural gas supplies are made by one supplier (Russian Federation) on one route ó through the territories of Ukraine, Moldova and Romania.

#### **4.3.2. Measures to cover peak demand or shortfalls of suppliers:**

- *Configuration of network, real gas flows, including possibilities of physical flows in both directions*

There are possibilities for reverse physical flow of natural gas from Greece and Turkey (2.4 million m<sup>3</sup>/day in the event of complete Russian gas supplies interruption). Reverse flow from Greece was realized at the end of January 2009 gas crisis, based on signed agreement.

- *Natural gas storage*

Natural gas storage activities are realized in the underground gas storage facility Chiren and the available stored natural gas amounts as of 1 Dec 2012 amounts at 332 million m<sup>3</sup>. These amounts are intended mainly for compensating the intermittent consumption as well as for guaranteeing security of supplies in the event of deficit..

- *Natural gas role in producing heat and power and in the proper industrial sector functioning*

The main part of natural gas realization is for industrial purposes ó 98 %, and this share we expect to be the same in the next years. The energy sector consumption share is 38 % of the total realized natural gas and the trend is for increase. Household sector consumption is very low ó 2 % of the total consumption and the expected growth for the period 2014-2017 is from 1.4 to 2.3 % of the total natural gas consumption in the country.

- ***Interconnections construction projects***

- Gas Interconnection Bulgaria - Greece

Gas Interconnection Greece - Bulgaria (IGB) will connect directly the national transmission systems of Greece and Bulgaria. The project aims to diversify the natural gas supply sources to Bulgaria and South-eastern Europe. IGB gas pipeline is defined as a project of national significance both in Bulgaria and Greece and as a Project of Common Interest by the European Commission. IGB Project is essential to ensure security of supply for South East Europe. For the realization of the interconnector a new route will be created and new suppliers will have access to the market.

Natural gas interconnection Bulgaria-Greece is being realized by a mixed investment company ICGB AD with the participation of Bulgarian Energy Holding EAD (50 %) and the Greek investment company IGI Poseidon (50%). DEPA (Greece) and Edison (Italy) are shareholders in IGI Poseidon with equal shares. The interconnection's length is 140 km on Bulgarian territory. The designed initial capacity of the interconnector shall be 3 billion m<sup>3</sup>/y and the max up to 5.5 billion m<sup>3</sup>/y at a next stage (with the construction of a compressed station), IGB gas pipeline shall have pipeline diameter 32'' (~813mm) and ~ 57 bar pressure at the entry point and ~ 42 bar pressure at the exit point. The pipeline is planned to operate in reverse mode and the downstream is in the direction of Greece - Bulgaria.

Environment Impact Assessment has been elaborated and adopted for the pipeline pursuant to the Environmental Protection Act (EPA), the evaluation process included a four-seasonal environmental monitoring in the territory of the route. Currently a detailed plot plan (DPP) and a working draft are being developed. By EC decision C (2010)5813, amended by EC decision C (2012) 6405, co-financing has been defined for the project of 45 million Euros under the European Energy Recovery Programme.

The commissioning deadline, in the absence of complications, is the second half of 2016.

Caspian basin (Caspian Sea) and Middle East Pool producers are planned to be the natural gas source for the pipeline and also producers of liquefied natural gas (via terminals of

the Greek and Turkish coasts). The main potential gas suppliers are Azerbaijan, Turkmenistan and Iraq.

In the Bulgartransgaz EAD ten-year network development plan for the period 2014 ó 2023 investments have been foreseen about the IGB pipeline connection to the gas transmission network in the connection point near Stara Zagora.

In connection with the implementation of the gas interconnection Bulgaria ó Greece, ICGB AD has submitted to the Regulator an application for a temporary exemption of art.172d and art.172e of the Energy Act, respectively art.36 of Directive 2009/73/EC. Regarding the submitted application SEWRC has approved the following documents: Phase I - Guidelines for the management and allocation of interconnection capacity of the gas interconnection Bulgaria - Greece (IGB) and Notice of participation with its annexes to conduct Phase I - Invitation to stakeholders to express interest in reserving capacity as part of the temporary exemption procedure under Art.172d and art.172e of EA, respectively Art. 36 of Directive 2009/73/EC; Phase II - Guidelines for the management and allocation of interconnection capacity for the IGB interconnector and Notice of participation with its annexes to conduct Phase II: Call for participants in phase òexpression of interestö to submit binding offers for booking capacity in the interconnector IGB.

➤ Gas Interconnection Bulgaria - Romania

The reverse interconnection has total length 25 km, 15.4 km of which in the territory of the country, 7.5 km in the territory of Romania and 2.1 km underwater Danube river. The envisaged maximum capacity is 1.5 billion m<sup>3</sup> per year and the minimum ó 0.5 billion m<sup>3</sup> per year, pipeline diametre Dn 500 mm and operational pressure Pn 54 bar.

Construction works on the ground part of the pipeline in the territory of Bulgaria and GIS Russe have been fulfilled. Hydraulic density and strength testing have been successfully completed too. Currently tests in operational conditions are being conducted (gas filling and 72-hour samples) and the site is to be adopted by the State Acceptance Commission.

Regarding the implementation of the underwater part of the route under Danube river, the pipe drilling needed to protect the optical cable has been carried out. At present, drilling works are being fulfilled in order to finalize the main pipeline. If no further complications associated with the specific geological structure of the area under the river appear and an increased river level, it is expected the construction work to be completed during the month of July 2014.

Projected total value of the project amounts at 23 823 836 Euros. Under Decision (2010) 5962 of 06 Sep 2010 of the European Commission, Bulgartransgaz EAD and S.N.T.G.N. Transgaz S.A. ó Romania have been awarded a grant under the European Energy Recovery Programme (EERP) at the amount of 8 929 000 Euros. For the Bulgarian part of the project financing is provided as follows:

- Up to 4 375 294 Euros ó by EERP (the amounts utilized to date - 1 312 000 Euros). Under the contracts concluded and the invoices issued 2 015 827 Euros are to be utilized.
- The remaining part of the project budget is to be co-financed by Bulgartransgaz EAD. Under the contracts concluded to date co-financing amounts at 5 478 278 Euros.
- Costs foreseen for the project in 2014 are 2 417 000 BGN own funds of Bulgartransgaz EAD.

The project has been included in the Ten-year network development plan of Bulgartransgaz EAD for the period 2014 - 2023, and the Ten-year network development plan of ENTSG (TYNDP) for 2012-2021. In view of its commissioning in 2014, the project has not been included in the Regional Investment plan of Central and Eastern Europe (GRIP CEE) from 2014 to 2023, the Regional Investment plan of the Southern Gas Corridor region (GRIP SGC) 2014-2023.

➤ Gas Interconnection Bulgaria - Serbia

Interconnector Pipeline Sofia ó Dimitrovgrad (Serbia) ó Nish (Serbia) is designed to be a reverse one and to connect the national gas transmission networks of Bulgaria and Serbia. The goal is to achieve diversification of the routes, the intersystem connectivity and transmission of natural gas. The Pipeline is expected to provide initially supply capacity of 1.8 billion m<sup>3</sup>/year.

The expected investment for the Bulgarian part of the route is 49 million provided by the Operational Programme "Competitiveness Development of the Bulgarian Economy", co-financed by the European Union through the European Regional Development Fund. The investment in the Serbian part of the route is expected to be provided by a loan of 52 million Euros from EBRD to Srbiagas (under the condition of the company's restructuring ó unbundling of the operator), 15 million Euros from Instrument for Pre-accession Assistance (IPA) and 8 million Euros from the state budget of Serbia. Based on the results of the feasibility studies conducted separately for the two sections of the project, a Memorandum of Understanding was signed on 14 Dec 2012 in Brussels by the Prime Ministers of Bulgaria and Serbia and it provides for the items that will be used to build the pipeline will have a diameter between DN 600 and DN 700; the pipeline will enable gas transmission in both directions: minimum gas volume of 5.5 thousand m<sup>3</sup>/day and a maximum gas volume 9.5 thousand m<sup>3</sup>/day; border crossing point pressure in the range of 32-53 bar of the gas from Bulgaria to Serbia.

In 2012, within a completed project funded by "Regional Development" Operational Program, feasibility studies were made and a detailed development plan (DDP) - plot plan (PP) - Phase "Draft Project" was prepared. The Draft Project examined four variants of the transmission lines routes and the technological platforms to it and a second version was approved under which DDP-PP - Phase "Final Project" and construction investment projects will be developed. By Decision 111 of 15 February 2013 of the Council of Ministers the project "Gas Interconnection Construction Bulgaria ó Serbia" was declared national under § 1, Supplementary Provisions of State Property Act and an object of national importance under § 5 item 62, Supplementary Provisions of Spatial Planning Act.

By Decision 16-1627 of 19 Nov 2013 of the Minister of economy and energy a public procurement was opened - Design, exercising supervision and consultancy activities of "Gas interconnection Bulgaria - Serbia on Bulgarian territory".

The project construction route of the Bulgarian-Serbian interconnection and the "South Stream" project route in direction Serbia do not coincide and are not interconnected. The "South Stream" project route with a market direction North Italy has entry-exit point at the Bulgarian-Serbian border in the town of Zajchar.

In the ten-year networks development plan of Bulgartransgaz EAD for the period 2014 - 2023 investments for the interconnection with IBS pipeline to the transmission network have been planned.

➤ Gas Interconnection Bulgaria - Turkey

The Interconnection is envisaged to be constructed as a further development of the existing system connection between Bulgartransgaz EAD and Botash . . ó Turkey by creating a possibility for reversibility conditions applicable depending on the market interest. The currently reviewed Interconnection Bulgaria - Turkey working route in the territory of Bulgaria is "Lozenets" compressed station to "Malkochlar" gas measuring station, with a capacity of 3 billion m<sup>3</sup>/y, with the Bulgarian and Turkish gas transmission operators as investors - Bulgartransgaz EAD and Botash . . respectively. The route is the result of the gas interconnection feasibility investigation and assessment prepared by an ad hoc Working Group established with Order 16-141 / 10.02.2011 of the Minister of Economy and Energy.

The Interconnection Bulgaria - Turkey has been ranked in the list of "projects of common interest" of the European Commission, published on October 14, 2013.

Bulgartransgaz EAD has declared intentions to the EC to apply for the co-funding of research, analysis and evaluation of the technical, economical, financial and market conditions for the feasibility of the project and to carry out project activities (FEED).

The construction of 20 km pipeline segment CS Lozenets – Nedyalko can be considered as part of this project, which at this stage is to be realized in order to increase security and capacities of the existing transit pipeline network of Bulgartransgaz EAD. Project activities for this project have recently taken place. Its value is 32.37 million BGN.

Indicative value will be determined after the completion of the feasibility study.

The project is included in the Ten-year network development plan of Bulgartransgaz EAD for the period 2014 - 2023, the Ten-year network development plan of ENTSO (TYNDP) for 2012-2021, the Regional Investment plan of Central and Eastern Europe (GRIP CEE) from 2014 to 2023 and the Regional Investment plan of the Southern Gas Corridor region (GRIP SGC) 2014-2023.

## **5. Consumer protection and dispute settlement in the electricity and gas sectors**

### **5.1. Consumer protection**

Pursuant to the requirements of Art.37 (1) (n) of Directive 2009/72/EC to ensure quick access and provision of data on customer consumption, commercial metering devices, including the devices ruling the tariffs, are located in a way that the consumer has the opportunity to observe the figures displayed in the commercial metering devices. In cases where it is needed to guarantee the life and health of citizens, property, power quality, continuity of supply and the security and reliability of the energy system, commercial metering devices are put in place with difficult access, the electricity distribution company shall be obliged to provide at its own account the possibility of visual inspection within three (3) days following a written request. The same obligation has been imposed on licensed companies in the natural gas sector under approved by SEWRC general conditions. Apart from that, energy companies have established in every major city of their licensed territory customer service centres and have their own internet sites for each user to have an access to them. Gas energy companies are required to maintain sufficient numbers of centres working with clients in the licensed area to meet their needs. In these centres, licensees' customers can obtain information and submit all documents (including requests, complaints and suggestions) associated with the natural gas distribution services and natural gas supply by end supplier.

Another key direction of the electricity distribution companies' investment policy is related to the improvement of the customer service. A significant portion of these investments were directed towards the implementation of a unified information system for all companies, which enables the customers to use the services of the customer service centres and to pay electricity bills from any point in the territory of Bulgaria, regardless of the consumption location. The companies run uniform call centres for information and references that serve all customers in each licensed area.

By the EA amendments of 17 July 2012, a new section has been created in the EA - Section V – Measures to protect the end consumers, in pursuance of the requirement of art. 41 of the Directive and it defines: agreements between energy services consumers and the energy companies providing services of public interest, which compulsorily contain: data identifying the energy company, including address; the services provided and the conditions and terms of their provision; the means used to receive the up-to-date information for all applied prices of the proposed services; duration of agreement, conditions on temporary suspension, termination of their provision and of the agreement; terms on the unilateral termination of contract by the user of the energy services and the possibility of such termination without additional payment; terms and conditions on set-off and recovery of amounts at non-compliance with the quality

requirements of the contracted services, including incorrect or delayed invoicing; energy services consumers rights, including information on procedures of handling and solving complaints; other terms as provided for in this law.

Under the EA amendments of 17 July 2012 and Ordinance 3 of 21 March 2013 on licensing the activities in the energy sector, energy companies provide to their energy services consumers information on: ways of payment, prices for disconnection and restoration of supply, service prices for maintenance and other service prices connected to the licensed activity; the supplier shifting procedure and information on lack of obligations of the consumers about additional payments when making the shift; real consumed quantities and costs incurred without obligation of additional payments owed for this service; elaboration of final equalizing bill at each supplier shift; every energy source share in the total supplied energy by the supplier during the previous calendar year in a comprehensible and clearly comparable way; existing resources of public information about the environment impact concerning at least the carbon dioxide emissions and radio active waste ó a result of the different energy sources power generation in the total supplied energy provided by the supplier in the previous year. The Commission shall monitor compliance with the adopted network security and reliability standards and review their implementation by the network operators.

Power and provided to consumers services standards and quality requirements have been defined under the SEWRC's methodology for assessing the performance of target indicators and for monitoring power quality and service quality of network operators, public providers and end suppliers.

According to the achieved power and service quality performance indicators for each year, adjustments in the revenue of the companies are made and they are reduced for non-target performance levels during the previous year.

Regarding the obligation to monitor compliance of security and network reliability standards, the Commission has been working together with the Ministry of Economy and Energy on security and networks reliability rates, thus fulfilling the requirements of Art.37(1) (h) of Directive 2009/72/EC.

In 2013 SEWRC launched an approval procedure of electricity distribution and supply companies new General conditions, in order to ensure the equal electricity consumers rights and obligations throughout the country.

One of the main priorities of the Commission in 2013 was consumers' issues, their protection regarding service quality and the right to be informed. It is envisaged for the Regulator to start remote offices days in the regional cities of Bulgaria. The initiative is part of a package of measures taken by the Commission, which aim the improvement of complaints handling. SEWRC has a hotline for inquiries and alerts, where users may have an answer to a problem or to clarify the complaint filing procedure.

In 2013 a total of 3480 complaints, applications, alerts and proposals of natural persons and organizations were filed at SEWRC, 2332 of which (67 %) in the electricity sector. In all letters sent to the companies it is required for them to respond with opinions and all actions taken both to the Regulator and to the complaining consumer as well.

The complaints analysis in the electricity sector in 2013 and the complaints division in certain types show the existence of certain trends. These refer mainly to incorrect consumption metering, problems with the meters and tariff switches and grid connection conditions. The relative largest number of complaints is connected to errors in consumed electricity metering and billing.

The filed in 2013 electricity sector complaints can be divided in percentage as follows:

- 46 % errors in metering, billing and invoicing;
- 41 % about corrective bills for used but unpaid power after a found undue intervention in the commercial metering device (CMD) and damages compensation payment request due to network failures;
- 6 % requests for CMD checkup;



- 3 % supply conditions and service quality standards;
- 2 % consumers' right to be connected;
- 2 % licensee's right to stop the supply.

Part of the total number electricity complaints (157 or 7 %) was submitted via the respective electricity distribution or supply companies, as required in Art. 143, para. 3 of Ordinance 3 of 21.03.2013 on licensing the activities in the energy sector, according to which the complaint is filed with the Commission via the relevant energy company, which is required to make an inspection and send it to the Commission accompanied by its opinion together with the entire file within 7 days of the complaint receipt.

In 2013 electricity sector experts participated in 23 complaints inspections, in seven (7) cases binding instructions to remove violations were given and twenty-four (24) Acts finding an administrative violation were made, on three (3) of the inspections made by the supervisory regulatory authorities it was determined that the complaints submitted to the Commission were unfounded, since the inspections found no licensee's violations, and one (1) was forwarded to the Ministry of Economy and energy as it was in its competences.

Complaints filed at SEWRC in the natural gas supply sector were 45 or 1 % of the total complaints submitted at the Commission. The majority of the gas complaints sales at prices higher than the approved ones, inaccurate gas supply metering billing content and gas disruption due to unpaid consumption.

Complaints filed in 2013 in the natural gas supply sector could be divided in percentage as follows:

- 39% inaccurate gas consumption metering;
- 9% gas disruption due to unpaid consumption;
- 26% billing content;
- 26% sales at prices higher than the approved ones;

In compliance with EA, Statutory Rules of SEWRC and its administration and approved by the Chairman periodic inspections schedule, in 2013 scheduled and surprise inspections on users complaints were carried out in the licensed gas distribution companies. The inspections resulted in finding protocols and binding instructions with deadlines.

Part of the total number gas complaints (2.2 %) was submitted via the respective gas distribution or supply companies, as required in Art. 143, para. 3 of Ordinance 3 of 21.03.2013 on licensing the activities in the energy sector, according to which the complaint is filed with the Commission via the relevant energy company, which is required to make an inspection and send it to the Commission accompanied by its opinion together with the entire file within 7 days of the complaint receipt.

In 2013, 287 complaints were filed at the gas energy companies and were reviewed by them.

In 2013 registered customer requests by phone at the General Division of SEWRC were average 32 per day.

Consumers' visits at the Regulator, asking for advice, consultations and explanations were at the average of 26 a week.

## **5.2. Dispute settlement**

Amicable disputes settlement term and conditions are regulated by the Energy Act (EA) and Ordinance 3 of 21.03.2013 on licensing the activities in the energy sector (Ordinance 3).

Within two months as of the complaint filing under art.22, para.1, item 1, 2 and 3 and para.2 of EA and art.146, para.1 Ordinance 3, SEWRC may assist for a voluntary settlement. The time limit may be extended by another two months if the dispute nature requires the collection of additional data and information by the Regulator. Should an amicable settlement

was not achieved or some of the parties rejected an amicable settlement, the Regulator shall make a decision on the complaint within two months as of receiving it. This period may be extended by two months if the dispute nature requires the collection of additional data and information by the Regulator. The extended period may be extended by another two months with the applicant's consent.