



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

**2010 Annual Report
to the European Commission**

July 2011

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1. Foreword

Key theme in 2010 was the security of supply through diversification of the energy supply and development of the electricity and natural gas markets.

The economic crisis caused significant changes in the energy markets – drop in the consumption, as well as drop in the regional energy and fuel prices. This process was the motivation for the consumers to seek for the advantages of the liberalized market for a greater choice, greater competition and better service and security of supply.

Energy companies, on the other side, were compelled to enhance their efficiency and competitiveness in order to keep their position on the free energy market.

During the past year SEWRC worked actively for the improving of the conditions of the electricity market development by launching procedure for the adoption of new market rules in compliance with the new Directives and Regulation in the third energy package. The new rules are a prerequisite for the establishment of a power exchange.

With the active participation of SEWRC the drafts of a new Law on renewable energy and the Law amending the Energy Act have been elaborated during the past year where the principles and provisions of the new European legislation of the third energy package have been transposed.

Angel Semerdjiev
Chairman of SEWRC

2. Main developments in the gas and electricity markets

2.1. Main developments in the electricity market

Wholesale market

In line with Directive 2003/54/EC and under the Energy Act, the electricity market in the Republic of Bulgaria has been fully liberalized since 1.07.2007.

The annual net output in the country in the reporting period – 2010 is 41.57 TWh, which is an increase in the net generation with more than 11% in comparison to 2009. To a greater extent, the reason for this increase is the cheaper electricity by HPP power generated during the comparatively wetter 2010 year in the country. The share of opening of the electricity market for 2010 is 27.1% (35% for 2009) with sales on the free market to the amount of 11.28 TWh – in the internal market and in the region.

In 2010, 18% of the internal consumption in the country is traded in the wholesale market at freely negotiated prices (24.5% share in 2009). The marked decline in the relative share of electricity traded on the open market in the country in 2010 compared to 2009 is due largely to certain side effects as a result of the financial and economic crisis. The share of the quantity traded in the internal market is 4.52 TWh with annual electricity end consumption of 25.1 TWh in 2010.

In 2010, the regulator issued licenses to 15 new companies for the activity of “electricity trading” with which the total number of licensed traders has become 82, which is an increase in their number with 17% to 2009.

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 2010 are regulated by the “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 2010”. These Rules have been harmonized and approved by the national regulator State Energy and Water and Regulatory Commission (SEWRC) of the Republic of Bulgaria.

In 2009 Electricity System Operator EAD of the Republic of Bulgaria and the Romanian system operator CN TRANSELECTRICA SA developed and adopted new “Intraday Capacity Allocation Auction Rules for the ROMANIA – BULGARIA Interconnection and for the Allocation of Capacities on the Interconnections of Bulgaria and Romania between the Control Area of Electricity System Operator EAD - «ESO» EAD (TSO) and CN TRANSELECTRICA SA (TRANSELECTRICA)”. The Auction rules have been agreed with the State Energy and Water and Regulatory Commission (SEWRC) of the Republic of Bulgaria by Decision of Protocol No 119 of 23 Aug 2010, item 1., as a imminent part of the agreed by Decision No 154 of 3 Dec 2009, item 2.1 “Auction rules for Allocation of Capacities on the Interconnections between the Control Areas of Electricity System Operator EAD - «ESO» EAD (TSO) and CN TRANSELECTRICA SA (TRANSELECTRICA) for 2010” (Common/General Auction Rules). These Common Auction Rules complement the agreed Common Rules with a procedure for the allocation of intraday transmission capacities, using an Auction Office.

In 2010 by Decision of Protocol No 159 of 29 Nov 2010, item 9, SEWRC likewise agreed “Common Auction Rules for Allocation of Transmission Capacities on the Interconnections between the Control Areas of Electricity System Operator EAD - «ESO» and “Hellenic Transmission System Operator” SA (HTSO) for 2011 for the interconnection between Bulgaria and Greece.

The procedures in the new agreed Common Auction Rules between the Bulgarian and Romanian system operators, respectively between the Bulgarian and Greek system operators comply with the requirements of the new Regulation (EC) No714/2009, which presents the possibility for the rules to be applicable after the repealing of the current Regulation (EC) No1228/2003.

In a process of reconciliation are Common Auction Rules for Allocation of Transmission Capacities on the Interconnections between Bulgaria and FYROM for 2011, which likewise comply with the new Regulation (EC) No714/2009 regarding the cooperation and coordination between both operators of neighbouring transmission networks.

The auction rules with other neighboring countries are in line with the effective EU rules and with the bilateral agreements and rules for cross-border exchange and electricity trading. The latter also applies to the harmonization of the interconnection transfer capacities between the Bulgarian TSO and the operators of the neighboring transmission systems. The cross-border transfer capacity on the interconnections is allocated by the Auction Operator – Electricity System Operator (ESO) – 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).

By Decision of Protocol No 94 of 25 Jun 2010, item 5 SEWRC adopted new “Electricity Trade Rules”, which envisage the implementation of the Third Liberalized Energy Package. The Rules were published in SG, issue 64 of 17 Aug 2010 and entered into force in August 2010. Under the aforementioned Rules a new market model has been created and the new market organization envisages:

- Introduction of hourly schedules for all transactions, notwithstanding at regulated or freely negotiated prices;
- Notification schedules on a daily basis, in the day D-1;
- Introduction of balancing groups in the market structure and a new registered procedure for the balancing groups coordinators;
- Introduction of new market relations between ESO EAD and balancing energy providers;
- Introduction of a balancing mechanism in the balancing energy market operation – separation of the energy the operator uses for regulation from the energy the generator offers on the market – regulated and/or open;
- Introduction of a separate settlement fro the balancing groups coordinators and the balancing energy providers;
- Regulation of the terms and conditions for the market participation of RES generators;
- Regulation of the trading terms and conditions on exchange principle.

The new Electricity Trade Rules, which entered into force in August 2010, define the necessary period (till 30 June 2011) for the gradual implementation and parallel testing of the organization and market operation and in pursuance of previously presented new electricity market functions. The introduced in the new Electricity Trade Rules common principles and detailed requirements comply with the provisions

of Directive 2009/72/EC and Regulation (EC) No714/2009, under the requirements of the 3rd liberalized package.

By tradition, Bulgaria is a net electricity exporter for the countries of the South East Europe region. In 2010, the share of net country exports 8.44 TWh exceeded 19% of the net electricity country output. The latter is mainly due to the increased cheaper hydropower in a relatively wet year for the country 2010.

The electricity market in the country is organized and administered by the Electricity System Operator. In line with the Energy Act, electricity trading in the country is carried out on the basis of bilateral contracts between the trading participants: producers, traders and consumers of electricity and a balancing market. ESO balances the energy system by technical and economical criteria, taking into consideration the received applications and bids for the balancing market.

At present, there is no electricity exchange organized in the country. There are trade exchanges, including at day-ahead offers, and they are carried out under the above mentioned Common Auction Rules between the system operators of Bulgaria and Romania and Greece, and under the new Electricity Trade Rules. The open electricity market in 2010 includes the bigger part of the business consumers, connected to high voltage network (HV) and a part of the middle voltage (MV) consumers.

Retail market

At this stage, the electricity market in the country operates in line with a model, under which a part of the transactions for sale of electricity are concluded at regulated prices, approved by the regulator, and the rest is traded on the liberalized market at freely negotiated prices between the participants in the electricity market, under the currently in force EA.

The Suppliers of Last Resort supply and sell electricity to the protected consumers – households and small business consumers (in line with Directive 2003/54/EC) at regulated prices.

A certain share of the quantity of electricity output from separate producers in line with the Energy Act is purchased by the Public Provider for protected consumers at regulated prices. The quantities of electricity purchased at regulated prices from the producers with the framework of the «quota» set by the regulator in respect of each producer are determined on the basis of the principles of equal treatment and transparency in line with the methodology adopted by the regulator.

The regulated price for protected consumers in the country is formed as a mix price of the electricity producers from different primary energy sources (nuclear fuel, coal, water energy, RES), which represents a prerequisite for sufficiently reasonable equality of all consumers. The rest of the electricity output can be sold by the producers on the liberalized market as equal participants.

Within the developed draft of the Law on Amendments and Additions to the Energy Act in accordance with Directive 2009/72/EC and the third energy package, some requirements are analyzed and formed, and these requirements aim at the electricity market enlargement in the sector of small and medium-sized economic consumers.

In pursuance of the currently in force *Ordinance on regulating the prices of electric power*, in respect of the protected consumers, by a decision of the regulator, the following prices are set:

- prices for access to the electricity distribution networks;
- prices for transmission over the electricity distribution networks;

- prices at which the suppliers of last resort sell electricity to household consumers and enterprises having less than 50 hired personnel and an annual turnover up to 10 million euro.

Since 2008, the price for transmission over the distribution networks has been defined separately as a price for transmission over the electricity distribution networks and a price for access to the networks. The regulated by SEWRC prices for access and transmission of the distribution companies, under the Ordinance on regulating the prices of electric power, are set based on admitted by the regulator revenue requirements for the relevant distribution network maintenance and operation.

The main consumer groups connected to the distribution networks in 2010 were as follows:

- Business consumers at middle voltage – the price for these consumers includes: a price for electricity to a supplier of last resort, a price for transmission over the electricity distribution network and a price for access to the electricity distribution network.

- Business consumers at low voltage – the price for consumers at low voltage includes: a price for electricity to a supplier of last resort, a price for transmission over the electricity distribution network and a price for access to the electricity distribution network.

- Household consumers connected at low voltage – the price for electricity includes: a price for electricity to a supplier of last resort, a price for transmission over the electricity distribution network and a price for access to the electricity distribution network.

Public obligations and consumer protection

Considering the increased since 2009 share of electricity output generated by renewable energy sources (RES) like small HPP, wind energy, biomass, etc., a charge for green energy is added to the price of the Public Provider for transmission wheeling through the transmission network. This charge is calculated as the difference between the costs for the purchased electricity at preferential prices and the costs of basic price. These additional costs are directed to all consumers in the country, as a common obligation of the society.

In 2009 SEWRC adopted with a Decision protocol No78 of 22 June 2009 a “Methodology for compensation of the costs of the Public Provider and the Suppliers of last resort coming from the imposed to them obligation to purchase electricity at preferential prices from renewable energy sources”. The Methodology has been developed with the aim to formulate standard and transparent rules, ensuring equitable assignment of costs from the purchase at preferential prices to all consumers.

Alongside with the other components of the price – for generation, transmission and distribution, the appointed by the Regulator green energy top-up and the highly effective co-generation of heat and electricity top-up too, contribute to the necessary transparency when forming the price for the end consumer.

In line with the Energy Act, the powers of the SEWRC include the review of complaints of consumers against licensees or of licensees against licensees relating to the performance of the licensed activity.

The terms and procedure for lodging complaints, their review and the procedure for voluntary settlement of disputes are established in a sub-regulatory act: the Ordinance on licensing the activities in the energy sector. The Commission has adopted Internal Rules for reviewing complaints and requests for voluntary settlement of disputes in 2004, updated in 2008.

SEWRC makes a thematic analysis every year of the received complaints under pre-defined indicators.

In 2010 1648 complaints were registered in SEWRC Electricity sector in a total of over 5.9 million consumers. This number represents an increase - 13% more in comparison to 2009. According to the reported by the companies' data, about 30% of the complaints were resolved absolutely or partially and a considerable part of remaining share was unfounded. To carry out the control on the distribution companies' and end suppliers' work with the consumers, the Commission requires from the companies reported information regarding the solving of the received complaints.

During the year 4 extraordinary inspections were carried out in the electricity distribution companies and companies end suppliers regarding the fulfillment of the license terms and obligations, as well as regarding SEWRC's decisions. As a result, finding records were drawn up and obligatory instructions were given, containing deadlines for implementation.

A scheduled inspection of the Public Provider NEK EAD was also carried out on the fulfillment of its license activities "electricity transmission" and "electricity public provision". A finding record was drawn up where obligatory instructions were given, containing deadlines for implementation.

A surprise inspection of the electricity system operator ESO EAD was carried out, regarding the connection procedure and the manner of introducing curtailment of the generation of some RES generators, under the terms and obligation of its license for the activity "electricity system management". A finding record was drawn up where obligatory instructions were given, containing deadlines for implementation.

In 2010 SEWRC carried out a regulatory audit of three electricity distribution companies and three suppliers of last resort companies under a relevant feasibility ToR and a work program. Within the regulatory audit finding record were given to the different companies with the relevant acts of administrative violations and the relevant penal provisions.

In order to optimize the results of the Commission's activities in respect of the main consumer issues and complaints, since 2008, a working group has been formed comprising of officials participating in the procedures for the review and consideration of files relating to complaints and requests for voluntary settlement of disputes. In case of a factual or legal complexity of the complaint, working groups comprising more officials may be appointed, and external experts may be consulted. In relation to consumer issues with a wide public concern, SEWRC works in collaboration with the other state institutions.

The main principles governing the activities of the SEWRC in the performance of its regulatory powers are the prevention and non-admissibility of infringements relating to the competition on the energy market, as well as ensuring a balance between the interests of the energy utilities and consumers.

Infrastructure

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

The prices approved in 2010 were as follows:

- Price for access to the electricity transmission network was paid to electricity system operator ESO EAD by all users of the network, without the amounts under transactions with a subject "electricity transit", and amounted to 0.00455 EUR/kWh.

- Price for transmission wheeling through the transmission network paid to the Transmission Company by all users of the network and amounts to 0.00493 EUR/kWh.

The regulated by SEWRC prices for access paid to ESO EAD and for transmission paid to NEK EAD for using the transmission network, are set based on admitted by the regulator revenue requirements for the maintenance and operation of the electricity transmission network.

In 2009 the regulator approved technical measures and means for the rehabilitation of the electricity transmission system of the country with the modernization of transmission control and the transformation, realized by loan funds from the EBRD and EIB and own funds of the transmission company NEK EAD. The beginning of the commercial operation scheduled for 2010 has been practically realized within the approved plan-schedules.

In 2010 the Regulator approved an investment programme and the transmission enterprise undertook a number of reconstructions and enlargement of the transmission network, as well as construction of new substations and lines, due to the current high pace of constructing new RES capacities from wind, HPP, biomass and photovoltaic energy in certain regions of the country.

The Electricity System Operator (ESO) carries out the operational management and regulates the allocation of electricity loads of the electricity system, by taking into account the accepted and confirmed applications for transfer capacity of the trading participants on the basis of the then in force Electricity Trading Rules and the Auction Rules.

The cross-border transfer capacity on the interconnections is allocated by the Auction Operator in the form of commercial rights for transfer 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 norms 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 necessary transit 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. On the basis of the forecasts and the plans, ESO submits to the Minister of Economy and Energy a draft electricity balance and a list of the sources needed by the country, including new production capacities and interconnection lines.

The total installed capacity in the country in 2010 is 12 072 MW. The maximum net available output capacity to the annual maximum is 9728 MW, and the peak load in January 2010 was 7270 MW.

The country is a net exporter of electricity for the region, and in 2010, the share of electricity sold on the regional market amounted to over 19% of the total net output in the country.

At this stage of development of the domestic and regional electricity market, the electricity transmission network of the country is not faced with 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 2010 increase of the RES electricity capacities in the country, mainly wind power in north-east Bulgaria, some difficulties occur regarding the connection of new capacities to the transmission and distribution networks due to limited capacity. In this regard, in the Ministry of economy, energy and tourism, under the currently in force EA, and in SEWRC an Electricity Transmission Network Development Plan of Bulgaria for the period 2010 – 2020 is in process of reviewing and approval. Under

the current legislative framework SEWRC reviews and approves investments and schedules for the network expansion of electricity distribution companies.

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

Regulation/Unbundling

In line with the Energy Act, the Electricity System Operator (ESO) is part of a vertically integrated enterprise, the Public Provider NEK EAD. But in line with the Act and the terms of the license, ESO's activities are independent from a legal and organizational point of view, from a financial and accounting point of view and in view of the decision-making process in relation to the functions assigned to it by law from the other activities of the vertically integrated enterprise.

The legal, organizational and financial unbundling of ESO from the Public Provider has been ensured.

ESO prepared a compliance program subject to approval by the regulator for 2010 as well, setting out the specific measures related to the performance of the conditions of the license and the requirements specified above. Every year, ESO 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 performance of the compliance program also takes into account and ensures the independence of ESO, of the persons responsible for the management, including the operational management of the electricity system.

The 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 a vertically integrated enterprise. The distribution enterprise prepares an annual report on these measures which is submitted to the regulator for approval.

In 2010, the regulator approved the reports for the compliance programs of ESO and of the distribution companies.

In 2010 the Electricity System Operator continues to prepare, maintain and publish on its web site the necessary general and specialized information concerning the activities on the balancing energy market and about the transactions at freely negotiated prices.

The new Auction Rules and Electricity Trading Rules ensure transparency and non-discrimination between all participants in the auctions for transfer capacities.

In 2010 continued the organizational and technical activities for transition to calculation and provision of transit capacities on the interconnection lines with the controlled areas of the neighboring countries by day-ahead offers.

Since the end of 2009 the above mentioned Auction Rules have entered into force between "ESO" EAD and the Romanian system operator CN TRANSELECTRICA SA for allocation of the transit capacities on the interconnection lines by day-ahead offers. In pursuance of the requirement of item 3.1 of the Guidelines, Appendix I of Regulation (EC) 714/2009 "ESO" EAD, at the end of 2010, by SEWRC's Decision of Protocol No 159 of 29 Nov 2010, the agreement of the "Common Auction Rules for Allocation of Transmission Capacities on the Interconnections between the Control Areas of Electricity System Operator

EAD - «ESO» and “Hellenic Transmission System Operator” SA (HTSO) for 2011 was completed.

In a process of reconciliation are Common Auction Rules for Allocation of Transmission Capacities on the Interconnections between Bulgaria and FYROM for 2011, which likewise comply with the new Regulation (EC) No714/2009 regarding the cooperation and coordination between both operators of neighbouring transmission networks.

Since the end of 2009 and in 2010 the elaboration and drafting of the new Act for Amendment and Supplement of the EA have been in continuation, according to the principles and performances of the Directive 2009/72/EC and the requirements of the third energy package.

In 2010 with the decisive participation of SEWRC, a draft of the new Renewable Energy Law was developed, under Directive 2009/28/EC and implementing principles and formulations of the third energy package. The Law was passed by the National Assembly of Bulgaria in May 2011.

Given the new responsibility activities and competences of the national regulatory authorities, resulting from the introduction and implementation of the principles and provisions of the third energy package, SEWRC developed an updated draft of the Rules of Procedures of the Commission, which is to be the pre-condition for adequate structure, expertise and budget to ensure the Commission's activities.

2.2. Main developments in the gas market

Wholesale market

In line with the Energy Act, the Rules for provision of access to the gas transmission and/or gas distribution networks and in pursuance of the EU Directive on full liberalization of the natural gas market, since 1.07.2007, all consumers are entitled to choose their own supplier for natural gas, or, in other words, the market is 100% liberalized.

Gas supply in the territory of Bulgaria is carried out over the 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, which transports natural gas through the respective sections to the territories of Greece, Macedonia and Turkey. The activity of public supply is carried out by Bulgargaz EAD. The natural gas on the entry of the gas transmission network is provided based on agreements with foreign providers.

Wholesale trade in natural gas is carried out by the regulated access of third producer countries. The import of natural gas is carried out on the basis of long-term agreements with Gazprom OAO for internal consumption and for transit over the transit pipelines. The supply of natural gas to the consumers from South Western Bulgaria over the transit gas pipeline to Greece and Macedonia is carried out on the basis of an agreement with Gazexport OOO. Bulgartransgaz EAD owns and manages the transmission and transit gas pipelines at high pressure as well as the underground gas storage of Chiren.

Bulgargaz EAD is the sole Public Provider that carries out wholesale trade at prices regulated by the SEWRC, with a market share of 97.9% of the total resource in 2010, and the remaining 2.1% is from domestic extraction.

The activities of the gas transmission network operator, Bulgartransgaz EAD, are

separated legally, functionally and financially from the other activities in the vertically integrated enterprise.

The gas transmission network operator ensures:

- single management and reliable functioning of the gas transmission network;
- transmission of natural gas over the gas transmission network and its reporting;
- maintenance of the sites and facilities of the gas transmission network in line with the technical requirements and the safety at work requirements;
- 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;
- maintenance and the development of the auxiliary networks.

With respect to the activities of the gas transmission system operator, as part of a vertically integrated enterprise, effective mechanisms have been set in place to guarantee its independence, while the persons responsible for managing, including the operational management of the gas transmission system:

- are not allowed to participate in the management of the other companies of the vertically integrated enterprise, which carry out extraction, distribution, public provision, public supplies and trade in natural gas;
- take independent decisions in the performance of the tasks entrusted to them;
- are obliged not to allow discriminatory treatment in the performance of their tasks.

The “Regional initiatives” Programme of ERGEG aims at accelerating the integration of the national energy markets. SEWRC participates in the working group of the South-Southeast gas region. The contribution of the *Regional gas initiative* is to be found in the upcoming development of projects such as Nabucco, connecting the Caspian region and the Middle East with Central and West Europe, the ideas about construction of interconnections with Romania and Greece and a LNG terminal at Aegean Sea.

Retail market

16.76% of the natural gas consumption in the country is carried out by 31 gas distribution companies servicing 5 gas distribution regions (Dounav, West, Trakia, Mizia, Dobrudja) and 66 municipalities outside these regions, and the total number of the licensed municipalities is 157.

In 2010, SEWRC issued licenses for the activities of “natural gas distribution” and of “natural gas supply by an end supplier” to 2 (two) gas distribution companies.

The natural gas price at the entry of the gas transmission network is formed by the Public Provider, Bulgargaz EAD, as a weighted average value taking into account the quantities of natural gas notified for delivery from imports for the domestic market and from local extraction enterprises for the purposes of sales in a subsequent period, the terms and conditions under the contracts for transit of natural gas to the Bulgarian border and the exchange rate set by the Bulgarian National Bank of the US dollar or any other foreign currency to the Bulgarian lev, in which the natural gas imported in the country is paid. The quarterly periodicity of the price fluctuation of natural gas is in compliance with the conditions of the commercial contracts under which the Public Provider purchases natural gas for the domestic market.

In 2010, the natural gas transmission prices over the gas distribution networks, the supply price and the consumers' connection to the distribution networks prices thereof were approved by SEWRC for 9 (nine) gas distribution companies.

For consumers connected to the transmission network the price which they pay for 1000 m³ is equal to the price at the entry of the gas transmission network to which the charge for transmission is added.

The prices for end consumers connected to the gas distribution network are formed by adding to the natural gas price at the entry of the gas transmission network and the charge for transmission the distribution price and supply of the specific group or subgroup of consumers.

SEWRC requests information every year about the complaints received in the gas distribution companies. The number of complaints received in the gas distribution companies is insignificant – 0.8‰ (of every 1000 consumers). The filed complaints in the Commission in the “Gas supply” division are 54 or 0.98% from the total number. The complaints in the sector relate to the price, the measured amounts of consumed natural gas, and a delayed connection to the gas distribution networks of residential consumers in settlements. In separate cases the problem is failure to comply with the licenses requirements or contract terms.

In order to stimulate investments for the gas distribution companies, SEWRC applies the “price cap” method of regulation. As an investment incentive for the gas distribution companies, the Commission approves the rate 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 likewise and to contribute to efficient competition and proper functioning of the market. In this regard, the SEWRC in the performance of its control powers carried out scheduled inspections of the energy companies, as well as extraordinary inspections on the occasion of received warnings and complaints. As an illustration of the activity encouraging competition in the market, is the fact that SEWRC approves price cap for the sale of natural gas, the gas distribution companies being entitled to sell to end consumers at prices lower than the ones approved.

Under the Rules on the provision of access to the gas transmission and/or gas distribution networks of 1.07.2007, 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 “natural gas supply by an end supplier”.

Infrastructure

The tariff model applied in respect of the transmission company is „post stamp”. After the completion/finalization of the EBRD project with beneficiaries SEWRC and Bulgartransgaz EAD it is envisaged the entry-exit tariff model to be introduced in pursuance of the 3rd energy liberalized package.

The price of natural gas at the entry of the gas transmission network is formed by the Public Provider as a weighted average value taking into account the quantities of natural gas notified for delivery from imports for the domestic market and from local extraction enterprises for the purposes of sales in a subsequent period, the terms and conditions under the contracts for transit of natural gas to the Bulgarian border and the exchange rate set by the

Bulgarian National Bank of the US dollar or any other foreign currency to the Bulgarian lev, in which the natural gas imported in the country is paid. To the price thus formed, a margin of 2% is added, pursuant to Art.17, para.6 of the Ordinance to regulate natural gas prices (ORNGP). Upon approval of the periodic changes, prices can be adjusted by the commission based on extra loss/extra profit due to the difference between estimated and reported values of the pricing elements of previous / prior period/periods.

On 30.12.2009 Decree № 325 of Council of Ministers was adopted amending the Ordinance to regulate natural gas prices / ORNGP / adopted by Decree № 131 of Council of Ministers of 2004 (Promulgated, SG. 55 of 2004, as amended and supplemented. No. 64 of 2007) and entered into force on 01.01.2010. This Decree amends Art. 17 of ORNGP, which concerns the manner the sales price of natural gas by public provider, are determined.

In line with the currently effective contracts of Bulgargaz EAD with external suppliers, the entry price is changed every quarter, i.e. four times per year.

The prices for end consumers connected to the gas distribution network are formed by adding to the natural gas price at the entry of the gas transmission network and the charge for transit (19.73 BGN/1000 m³) the price for distribution and supply of the specific group or subgroup of consumers.

For the improvement and development of the gas distribution networks in 2010, 68.808 million BGN have been invested, a total of 442.049 km of distribution pipelines having been constructed.

The development of the country's infrastructure in 2010 resulted in a drop in comparison with previous years, which is the result of some objective factors like: a change in the interest of connecting consumers and lower consumption by the industrial sector due to the economic crisis; economical inexpediency of part of the scheduled investments due to a change in the investment conditions in the country.

Security of supply

In order to improve security and quality of the gas supply in the country, in 2010 a number of investments were made in the gas transmission network and facilities. Under a contract for a grant with EBRD high pressure transmission pipelines are in a process of development between Dobrich – Silistra and Silistra GDS. Under a consultancy services with EBRD, the process of reconstruction to expand the working volume of the underground gas storage Chiren started and its connection with Kozloduy and Oryahovo is forthcoming. A number of measures were taken aiming to connect the gas transmission systems of Bulgaria with Romania, Serbia and Greece. The gas extraction site Galata is expected to be transformed into the second gas storage in the country.

The licensee Bulgartransgaz EAD in its capacity as the transmission system operator carries out dispatching and operational control of the transmission and transit of natural gas.

In pursuance of the EU Directive on full liberalization of the natural gas market and in line with the Energy Act, the natural gas market in the country has been opened for all consumers since 1 July 2007.

Regulation/Unbundling

In 2010, SEWRC completed the regulatory audit of Bulgartransgaz EAD - the operator of the transmission network, and holder of respectively the licenses for the activities of “natural gas transmission”, “transit transmission of natural gas” and “natural gas storage”.

In relation to the amendments of the Energy Act and the Ordinance on licensing of the activities in the energy sector, after the accession of the Republic of Bulgaria to the European Union, SEWRC has approved an independence program of Bulgartransgaz EAD. The requirement for independence of the operators has been fulfilled, as the persons responsible for the management, including the operational management, may not participate in the management of the other companies of the vertically integrated enterprise. In pursuance of the requirements of the Energy Act, Regulation (EO) 1775/2005 and the Guidelines to it (the Regulation) regarding the terms and conditions for the access to the gas transmission networks and the EU Directives ensuring equal treatment and non-discrimination, SEWRC compounded finding, where some mandatory guidelines to Bulgartransgaz EAD were pointed out:

1. Till 31 Dec 2009 Bulgartransgaz EAD must publish on its internet website the maximal capacity of its transit system, in pursuance of Art.5, para.1 of the Regulation.
2. Till 31 Dec 2009 Bulgartransgaz EAD must announce publicly data on its technical capacity, contractual and available capacity, in line with Art.6, para.3 of the Regulation, in pursuance of Art.6, para.3 of the Regulation.
3. Till 31 Dec 2009 Bulgartransgaz EAD must announce publicly the important points of the transmission system in in pursuance of Art.6, para.4 of the Regulation.
4. Till 31 Dec 2009 Bulgartransgaz EAD must prepare and submit for approval by SEWRC a Methodology for calculation and final tariffs of the charges when imbalance occurs. There should be taken actions for their public announcement, in pursuance of Art.7, para.3 of the Regulation.
5. Till 31 Dec 2009 Bulgartransgaz EAD must provide a publication of daily updated information regarding its possibilities to offer short-term services, pursuance of Art.7, para.3 of the Regulation.
6. Bulgartransgaz EAD must in short terms publish regularly updated information in details, expected duration and results from prevention in pursuance of item 1, para.9 of the Guidelines.
7. Till 30 Sep 2009 Bulgartransgaz EAD must provide and publish long-term prognosis about the available capacity, including in all important points of the system, in pursuance of item 3.3, para.3 of the Guidelines.
8. Till 30 Sep 2009 Bulgartransgaz EAD must publish historical data about monthly max and min norms for using the capacity and average annual flows in all important points for the last three years, after an approval by SEWRC, in pursuance of item 3.3, para.4 of the Guidelines.

To correct violations, "Bulgartransgaz" EAD has prepared and submitted for approval by SEWRC a "Methodology for determining the price of imbalance of the gas transmission operator", pursuant to Article 7, § 3 of Regulation (EC) 1775/2005 of the European Parliament and EU Council.

Also, in order to meet the requirement of Article 6, § 3 of the Regulation, at the request of "Bulgartransgaz" EAD, SEWRC by its decision approved the limited published information on important points of the transmission system of the company, on which points public information must be provided under Article 6, § 4 of Regulation (EC) 1775/2005.

In order to achieve an improvement of the regulatory framework in the gas supply sector and with the aim to develop new tariff policy of Bulgartransgaz EAD and harmonized principles and methodologies, consultant assistance was contracted with EBRD to present the experience of other Member States and to assist the establishment of a regulatory framework and price/tariff methodology in compliance with the best international practice. After the completion of the project for consultant assistance and as a result of the technical cooperation, Bulgartransgaz EAD will be obliged to remedy the violations of the Regulation.

2.3. General conclusions

2.3.1. Electricity

The now effective Energy Act and the respective normative framework are in compliance with the provisions and requirements of Directive 2003/55/EC. The prevailing part of the requirements of the Directive and the Act concerning the unbundling of the activities of the Public Provider, the transmission enterprise and those of the Electricity System Operator (ESO) within the vertically integrated enterprise have been fulfilled. Adequate measures and decisions in this respect have been applied by the SEWRC also in respect of the unbundling of the activities of the operators of the distribution networks from those of the end suppliers.

In pursuance of the requirements of Art.4, para.4 of Regulation (EC) 1228/2003 “ESO” EAD applies a charge for access to the network concerning only “the consumed amounts of electricity” in its controlled area notwithstanding the origin of these amounts. The transactions concluded for “electricity transit” are not a subject to accession fee. The disputed Article 30, para.1, item 7 of the Energy act, which was the base for the EC to declare finding of violation of art.4, para.4 of the Regulation, has been amended in State Gazette No 103 of 2009.

In pursuance of the requirements of Art.5, para.2 of the Regulation “ESO” EAD has published on its website approved by a Decision of SERWC No 108/20 Aug 2009 “General scheme for calculation of the total transfer capacity, including the transfer reliability reserve”, applied for the different interconnections. The scheme is accessible through respective links on the website both in Bulgarian and English. As could be seen in the published scheme, the calculation and definition of the interconnection transfer capacity and the transfer reliability reserve are made in compliance with the ENTSO – E rules. The published by “ESO” EAD scheme is equally applicable for all interconnections of the Bulgarian electricity system.

With the indicated amendments and supplements to the effective Energy Act related to Regulation 1228/2003/EC as well as with the application of the measures from the third energy package, the unbundling of the activities of transmission and supply with electricity on the Bulgarian electricity market will obtain the necessary legal basis. The chosen model for the unbundling of the transmission system operator is **Independent transmission operator**. The latter is also a prerequisite and a basis for the construction of a power exchange in the country.

2.3.2. Natural gas

In performing its powers, the SEWRC is guided by the principle of balancing between the interests of energy enterprises and consumers and it creates a competitive environment and equal treatment for access to the service of gas supply.

In 2010, the SEWRC enhanced monitoring and control on the licensed companies in the sector in order to improve the capacity of the gas distribution networks, to encourage investments in the improvement of the gas infrastructure and the right of access to the service under transparent procedures and rules.

Regarding the necessity of choosing a model for the unbundling of the transmission system operators as part of the requirements of the Third energy liberalized 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, SEWRC was asked to express a position. In its position SEWRC proposed the **option Independent Transmission Operator** to be notified by the European Commission as the optimal decision

for ensuring non-discriminatory access to the natural gas network and provision of transparency and efficiency of the activities of the transmission operator.

Given the requirement to transpose the Third Energy Liberalisation Package into national legislation, by its Decision SEWRC submitted its proposals for amending the Energy Act. The proposals relate to the new powers of regulatory authorities referred to in Directive 2009/72/EC and Directive 2009/73/EC of the European Parliament and Council. The decision of the regulator was sent to the Ministry of Economy, Energy and Tourism, which will submit the draft Act for Amendment and Supplement of EA for the Council of Ministers at the end of 2011.

3. Regulation and Performance of the Electricity Market

3.1. Regulatory Issues

3.1.1. Management and Allocation of interconnection capacity and mechanisms to deal with congestion

At this stage of development of the internal and regional electricity markets, the transmission network of the country has no problems related to congestions in the electricity system. Certain short periods of congestion occur on the interconnections with certain neighboring countries of the Republic of Bulgaria, mainly during peak loads in the winter period.

The cross-border exchange of electricity of the Republic of Bulgaria with some neighbouring countries like Serbia, FYROM and Turkey continues to be carried out on the basis of developed and updated for 2010 “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 2010” (Auction Rules). The same are approved by the State Energy and Water Regulatory Commission and are applied by Electricity System Operator (ESO).

The Auction Rules also regulate all issues related to the allocation in 2010 of available transfer capacities in both directions on the interconnections of the electricity system of the Republic of Bulgaria with its neighboring electricity systems.

In 2010 Electricity System Operator EAD of the Republic of Bulgaria and the Romanian system operator CN TRANSELECTRICA SA developed and adopted new “Auction rules for the Allocation of Capacities on the Interconnections between the Control Area of Electricity System Operator EAD - «ESO» EAD (TSO) and CN TRANSELECTRICA SA (TRANSELECTRICA)”. The Auction rules have been agreed with the State Energy and Water and Regulatory Commission (SEWRC) of the Republic of Bulgaria with Decision of Protocol № 119 of 23.08.2010, item 1, as an integral part of the protocol agreed with Decision № 154/03.12.2009 of the regulator, 2.1 "Auction Rules for allocation of transmission capacities on interconnection in the control areas "ESO" EAD and CN TRANSELECTRICA SA (TRANSELECTRICA) 2010 "(General Auction Rules). These Common Auction Rules complement the agreed Common Rules with a procedure for the allocation of intraday transmission capacities, using an Auction Office.

In 2010 by Decision of Protocol No 159 of 29 Nov 2010, item 9, SEWRC likewise agreed “Common Auction Rules for Allocation of Transmission Capacities on the Interconnections between the Control Areas of Electricity System Operator EAD - «ESO» and “Hellenic Transmission System Operator” SA (HTSO) for 2011 for the interconnection between Bulgaria and Greece.

The procedures in the new agreed Common Auction Rules between the Bulgarian and Romanian system operators, respectively between the Bulgarian and Greek system operators comply with the requirements of the new Regulation (EC) No714/2009, which presents the possibility for the rules to be applicable after the repealing of the current Regulation (EC) No1228/2003.

In a process of reconciliation are Common Auction Rules for Allocation of Transmission Capacities on the Interconnections between Bulgaria and FYROM for 2011, which likewise comply with the new Regulation (EC) No714/2009 regarding the cooperation and coordination between both operators of neighbouring transmission networks.

The cross-border transfer capacity on the interconnection is allocated by the Auction Operator in the form of commercial transfer rights. The Auction Operator calculates and allocates the transfer capacities according to the norms and rules of the European Network of Transmission System Operators – Electricity (ENTSO-E).

The interconnections of the Republic of Bulgaria with its neighboring countries – Greece, Romania, Serbia, Macedonia and Turkey – ensure the necessary conditions for the realization of electricity market under bilateral contracts as well as mutual help in case of emergencies.

For the allocation of the capacities on the Bulgarian interconnections for the region of South East Europe, a monthly allocation model is prepared. Every month, the net transfer capacities (NTC) are calculated, including for certain periods within the month. These capacities are harmonized bilaterally with the neighboring system operators on the basis of bilateral contracts. For the harmonized NTC, public auctions are announced for transfer capacities.

Electricity System Operator (ESO) prepares, keeps and publishes on its website general and specialized information on its activities on the balancing energy market and on the transactions at freely negotiated prices.

The rules ensure transparency and non-discrimination of all participants in the auctions for transfer capacities.

Since the end of 2010 the above mentioned Auction Rules between the Electricity System Operator EAD and CN TRANSELECTRICA SA Romania for allocation of day ahead interconnection transfer capacities have entered into force. In pursuance of the Guidelines requirement item 3.1, Appendix I of Regulation EC 714/2009, ESO EAD have agreed such rules with the system operator of Greece HTSO. Similar Rules are in process of conciliation with the Republic of Macedonia.

3.1.2. The regulation of the tasks of transmission and distribution companies

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 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 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 created by the change in the structure of consumption. In addition, indicators are applied to the methods, reflecting the quality of performance of the activity (the quality of electricity, the quality of service), in accordance with which the recognized revenue requirements of the energy utility are adjusted in view of the performance of the target indicators specified by the Commission. 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 variation.

The tariffs for transmission and distribution of electricity to the final 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.

For the application of a general approach in approving the prices for the second regulatory period, the Commission took into account the conclusions of the analysis of the achieved results of the regulated companies and the objective of the applied regulation method – 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 technology costs is determined in accordance with accepted protocol to Decision № 94 of 25.06.2010, amending the "Instructions of the State Energy and Water Regulatory Commission for the electricity transmission through the distribution networks price-formation, using the regulatory method "price cap" revenues for the second regulatory period", where the recognized value of the technological costs on the distribution network was reduced to 15%, which is close to the reported real technological costs over the past several reporting periods.

In 2010, for the first time, a correction factor was applied, reflecting the implementation of adopted quality indicators for the quality of electricity supply, according to updated in the same year, "Methodology for reporting the target indicators implementation and monitoring of power quality and quality of service of network operators, public providers and suppliers of last resort".

To guarantee the consumers interests it is envisaged for the Commission to correct the revenue requirements of the energy company for each price period of the regulatory period depending on the fulfillment of the power quality and service indicators of the previous year.

The indicators for non-interruption of supply are the System Average Interruption Duration Index – SAIDI and the System Annual Interruption Frequency Index – SAIFI.

When determining and reporting the indices for non-interruption, the periods of interruption longer than 3 minutes are taken into account, which fall into:

- scheduled interruptions (determined in minutes per year), for which the consumers are previously informed by the companies;

- non-scheduled interruptions, which are due to stable or incidental failures of the facilities, incorrect manipulations, etc., for which it is not possible to notify previously consumers.

Interruptions due to third parties and force majeure (unforeseen or inevitable event of an extraordinary nature) are excluded.

The average reported values of the four electricity distribution companies in the country according to the SAIFI and SAIDI indices in the case of scheduled and non-scheduled interruptions in 2010 are as follows:

Indices	Types	Reported values 2010
SAIFI	Scheduled, number	3,61
	Non-scheduled, number	4,65
SAIDI	Scheduled, minutes	224,21
	Non-scheduled, minutes	197,24

The indicators for quality of commercial services defined in the Methodology are directly linked to the results and relations between the electricity distribution companies, end suppliers and the consumers.

As an indicator of the quality 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 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.

Balancing

In line with the Energy Act, transactions with electricity may be concluded at freely negotiated prices between the market players (producers, traders in electricity and consumers) or at regulated by the Regulator prices.

The Electricity Trading Rules adopted by the regulator determine the conditions for participation in the work of the electricity market, the balancing energy market, the balancing mechanisms of the market players and the methodology for determination the prices of balancing energy.

With amendments in the Energy Act, a number of provisions were repealed and new requirements for the electricity sector were introduced, changing significantly the regulatory framework and the obligations of the parties when concluding transactions at freely negotiated prices and at regulated prices. In 2009 and 2010, in accordance with the

amendments in the Act, the regulator changed by its decisions the mechanisms laid down in the Electricity Trading Rules. The amendments relate to the formation of the prices of balancing energy, which did not take into account the changed price framework and the new conditions under which the Public Provider carries out purchases and sales of balancing energy.

In the end of 2009, the Regulator launched additional measures for amendment and supplement of the Electricity Trading Rules, regulating the activities on the electricity market, which amendments provide the possibility for the establishment of a power exchange.

By protocol Decision № 94/25.06.2010, on item 5 SEWRC adopted new "Electricity Trading Rules" providing for the implementation of the requirements of the Third Liberalisation Package. The Rules were published in State Gazette, issue No 64 of 08.17.2010 and in force since August 2010. Under those Rules, a new market model is created and the new organization of the market implies:

- Introduction of hourly schedules for all transactions, whether regulated or concluded at free-negotiated prices;
- Schedules notification on a daily basis, on the day D-1;
- Introduction of balanced groups in the market structure and new registration procedure for balancing group coordinators;
- Introduction of new market relationships between "ESO" EAD and the suppliers of balancing power;
- Introduction of a market mechanism in the balancing energy market operation - the separation of energy that the operator uses for regulation from the energy that the manufacturer offers in the market - regulated and / or free;
- 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 producers;
- Regulating the trading conditions based on power exchange principle.

In connection with the new Electricity Trading Rules in late 2010 working groups were formed with the participation of experts from SEWRC and stakeholders (market participants under the rules) for the preparation of a Roadmap, containing the stages of preparation and testing work for their actual implementation in practice.

Simultaneously with the developed changes in regulatory framework, in 2010 the transmission system operator "ESO" EAD prepared the technical conditions for the realization of the daily data exchange with trading participants – change and availability of the procedures for notification, validation and registration of the schedules for delivery from a weekly to a daily basis. The negotiation conditions of the electricity delivery one day ahead are a step to a better functioning electricity market.

The New Electricity Trading Rules, in force since August 2010, determined a necessary period (until 30 June 2011) for phasing and parallel testing of the market organization and operation as an implementation of new features previously presented to the electricity market. The introduced in the new rules general principles and specific requirements are pursuant to the formulations of Directive 2009/72/EC and Regulation (EO) № 714/2009 in accordance with the Third Liberalisation Package.

In 2010, the average reported price of balancing energy in the country in case of deficit was 77.9 EUR/ MWh , and the average price of balancing energy in the case of surplus was 13.7 EUR/ MWh. With the transition in 2010 to notification and registration of the schedules one day ahead the total balancing energy deficit tends to reduce.

In 2010 the Public Provider – National Electric Company EAD – still remains the sole electricity supplier on the balancing market. The independent producers are not sufficiently

economically interested in participating in the balancing energy market. After the actual introduction of the aforesaid new Electricity Trading Rules, it is envisaged that independent producers of electricity will be attracted in addition to participate in the balancing market.

3.1.3. Effective unbundling

The legal, organizational and financially accounting unbundling of the Transmission System Operator (TSO) and of the Distribution System Operators (DSOs) within the vertically integrated enterprises, respectively, the Public Provider and the public suppliers was realized in 2008.

Under the Energy Act, the Electricity System Operator (ESO) is part of the vertically integrated enterprise of the Public Provider. However, under the law and the licensing terms its operation is independent, in legal and organizational form, in finance and accounting aspect and in decision making in functions, assigned by law, from the other operations of the vertically integrated enterprise.

The legal, organizational and financial unbundling of ESO from the Public Provider is implemented.

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

According to the currently developed amendments to the current Energy Act related to Regulation (EC) № 714/2009, and the application of measures of the third energy package, the separation of the transmission and supply of electricity activities in the Bulgarian electricity market will receive necessary legal basis. The selected at this stage model for separation of the transmission system operator is independent transmission operator. The latter is a prerequisite and basis for building a power exchange in the country.

Activities related to electricity supply and operational management of distribution networks by the distribution network operator (DSO) are also split into separate entities. The functional unbundling of DSOs in the vertically integrated enterprise based on the compliance program ensures the independence of the DSO.

In view of the above, 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 meetings of the regulator, 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. Compliance programmes contain specific responsibilities of employees, in order to achieve the targets, and assign employees, responsible for programmes' follow-up. The Distribution operator prepares a year-end report on these measures, to be approved by the regulator.

In 2010, the regulator reviewed and approved the reports and the compliance programmes of the electricity system operator ESO and of the distribution enterprises.

3.2. Competition Issues

3.2.1. Description of the wholesale market

The total electricity output potential of the country, based on primary energy sources and electricity output in 2010, is structured as follows:

- Producers with primary energy source of fossil fuels – 51%;
- Producers with primary energy source of nuclear fuel – 34.3%;
- RES (without pumped-storage hydro electricity) – 14.7%.

During the reported period – 2010, the total number of licensed producers with installed capacity over 5 MW was 48. The total installed capacity in the country is 12 072 MW. The maximum net output capacity was 9728 MW, and the peak load in January 2010 amounted to 7270 MW. The yearly net output in the country for the reporting period was 41.57 TWh. Out of free market sales of 11.28 TWh – domestic market and net export, the share of open electricity market for 2010 was 27.1%.

Net commercial exports for 2010 amounted to 8.44 TWh.

In 2010 18% of domestic consumption was traded on the wholesale market at freely negotiated prices, at about 24.5 percent in the previous 2009. The marked decline in the share of electricity traded in the domestic market in the country in 2010 compared to 2009 is due largely to certain side effects of the financial and economic crisis affecting the country. With annual domestic consumption of electricity of 25.1 TWh in 2010, the share of traded quantity on the domestic market amounted to 4.52 TWh. This quantity was directly negotiated by 65 large and medium economic consumers of high and medium voltage with six large producers as market participants.

In line with Directive 2003/54/EC of the European Parliament and the Energy Act, the electricity market in the Republic of Bulgaria is fully liberalized as of 01.07.2007. Cross-border transfer capacity on the interconnections is allocated by the Auction Operator in the form of commercial rights for transfer. 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 transactions for electricity sale 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, parties to transactions on the liberalized market of electricity are producers, traders in electricity and consumers.

Certain share of the quantity of electricity output by individual (mainly large) producers, under the Energy Act and Directive 2003/54/EC, is sold to the Public Provider for protected consumers at regulated prices. The quantity of electricity purchased at regulated prices from producers, within a regulator-defined ‘quota’ for each producer, is determined on the basis of the principles of equality and transparency. Within this model, the regulated price for protected consumers is calculated as an average weighted mix of prices of electricity producers from various primary energy sources (nuclear, coal, water). Producers may, under the law, sell the rest of electricity output on the liberalized market as equal participants.

In 2010 there continued the effect and implementation of two long-term contracts signed between the Public Provider NEK EAD and electricity output companies TPP Maritsa Iztok 2 EAD and the privatized Energy Company Maritsa Iztok III. Contracts with these power stations include modernization in order to promote output efficiency and fulfillment of contemporary environmental protection requirements. In 2010 still continues implementation of the contract between NEK and AES 3C Maritsa Iztok I for construction of a contemporary capacity on local coal.

For producers using renewable energy sources, the regulator annually defines preferential prices (feed-in tariffs) for their electricity output. The Public Provider and the public suppliers are required to purchase the electricity output of these producers at the respective preferential prices.

In 2010, with the decisive participation of the regulator, a new Law on renewable energy has been developed in accordance with Directive 2009/28/EC and implementing the principles and provisions of the Third Energy Package. The law was passed by the National Assembly of Bulgaria in May 2011.

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 Trade 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 Trade 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. Under the provisions of the Electricity Trade Rules, producers and operator sign contracts for cold reserve and ancillary services at a regulated price of availability. Net energy from activated cold reserve and provision of ancillary services is paid by the Public Provider NEK EAD at a price, agreed by a contract between NEK EAD and the respective producer.

In 2010, the regulator licensed 15 new companies for ‘trade in electricity’, which increased the total number of licensed traders to 83. The number of active traders on the electricity market in 2010 was 35.

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.

There is no market monopolist of the 35 active traders on the domestic market in 2010. The largest share of purchased/sold electricity by a trader is about 34% of the total traded volume on the market. The share of purchased/sold energy by the three largest volume traders does not exceed 48% of the total traded volume.

At present the country does not have an organized electricity 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 presented above in Sections 2.1 and 3.1.2 new Electricity Trading Rules, in force since August 2010, are in fulfilment of the principles and provisions of Directive 2009/72/EC and Regulation (EO) № 714 / 2009, according to the Third Liberalisation Package. After their complete putting into practice, these rules shall be a good basis for the power exchange in the country.

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.

Total installed capacity of wind energy in 2010 was 488 MW with annual output about 658 GWh. In 2010 the photovoltaic (PV) installed capacity was about 25 MW with output 14,32 GWh.

By tradition, Bulgaria is a net electricity exporter for the countries of the South East Europe region. In 2010, the share of net exports of the country exceeded 19% of the net electricity output of the country. This results from realized electricity output from well-structured and optimized mix of primary energy sources – nuclear energy (34,3 %), local and

partly imported coal energy (51 %), water energy and other RES (14,7 %) etc. Therefore, during most of the year and particularly with increased consumption of electricity in the region (in winter and partly in summer) electricity prices in most neighbouring countries rise substantially.

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.

All disputes relating to the implementation of the provisions of Electricity Trade Rules, are referred to the regulator for resolution under the procedure of the Energy Act.

In the event of denial of registration by the operator, the trader has the right to dispute the denial in writing before the regulator within fourteen days of receipt of denial. In 2009 complaints of trade participants concerning this matter were not filed in SEWRC.

Rules on trade with neighbouring countries are in compliance with the effective European rules and bilateral agreements and the 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 2010, 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.

3.2.2. Description of the retail market

The procedure of transition of consumers from the regulated prices market to freely negotiated prices market and vice versa is performed under the terms and conditions of the Electricity Trade Rules.

The licenses for public electricity supply by end-supplier provide in line with Directive 2003/54/EC that the end-supplier must supply electricity at regulated prices to household consumers and enterprises with less than 50 employees, and annual turnover below BGN 19,5 million which have not selected another supplier or have left the electricity market. The end-supplier must ensure uninterrupted electricity supply to consumers for a transitional period, if their electricity supplier at freely negotiated price terminates supply, until the consumer finds another supplier.

At this stage of development of the electricity market, trade covers entirely the large consumers of high voltage (HV) and part of the business consumers connected to medium voltage networks (MV). Trade is carried out on the basis of bilateral contracts between producers, traders in electricity and consumers. Operations of traders in electricity presently do not cover retail markets for small business consumers and household consumers. Alongside with the above-mentioned in Section 3.1.2 new Electricity Trading Rules, in force from August 2010 during the year 2010 amendments are analyzed and prepared to the Law on Amendments and additions to the Energy Act, aiming the expansion of the electricity market among the medium and small business consumers.

In the reporting period 2010, the number of registered trading participants was 151, business participants who concluded transactions at freely negotiated prices were 106 (increase of 13%), of which 6 producers, 65 consumers (increase of 7%) and 35 traders (increase of 35%).

The annual consumption of electricity in 2010 was 25.1 TWh, and the share of traded quantity on the domestic market was 4.52 TWh. This quantity was traded between producers, traders in electricity and large and medium business consumers, based on bilateral contracts signed at freely negotiated prices.

Presently, operations of traders in electricity do not cover retail markets for small companies and household consumers. Amendments of legislative framework are developed, aiming at expanding the electricity market in the medium and small business consumers sector.

Total consumption of end-users in 2010 was 25.1 TWh.

Total sold electricity in the free market, namely high voltage (HV) and partly middle voltage (MV), was 4.52 TWh, compared to 2009 – 7.9 TWh, which to a great extent is the result of the financial and economic crisis affecting the country in 2010.

Total end consumption by protected consumers (household consumers and small businesses) which purchased electricity at regulated prices in 2009 was 20.57 TWh.

The consumption structure and the quantities of electricity by key consumer groups are as follows:

- Economic consumers and public sector – 14.54 TWh (incl. 4.52 TWh sales on the open market) – 58 % of the consumption in the country.
- Household consumers – 10.56 TWh – 42 % of the total consumption in the country.

In compliance with the ‘Ordinance on regulation of electricity prices’ by a decision of the regulator of 01.07.2010 on protected consumers, the following regulated prices without VAT were established:

1. sell prices of electricity producers for the Public Provider NEK EAD;
2. sell price of the Public Provider for end suppliers;
3. sell prices of the Public Provider for distribution system operators to cover technological costs of transmission through distribution systems;
4. transmission price of electricity through the transmission system;
5. green energy supplement to the transmission price, which is paid to the transmission company by all consumers as a public obligation;
6. price of access to the electricity transmission system;
7. price of access to the electricity distribution system;
8. price of transmission through the distribution systems;
9. prices of end suppliers for household consumers and small businesses with less than 50 employees and annual turnover below BGN 19,5 million.

The main groups of consumers in 2010 were as follows:

- Economic consumers of high voltage – these consumers purchase electricity on the free market.

- Economic consumers of medium voltage – part of these consumers purchase electricity on the free market; however, the bigger part of them is in the regulated area of the market.

- Economic consumers of low voltage – practically, these consumers are in the regulated area of the market.

- Household consumers connected at low voltage – currently, these consumers are in the regulated area of the market too.

Prices approved for 2010 are as follows:

The price of access to the electricity transmission system is paid to ESO by all users of the system is at 0.00455 EUR/kWh.

The prices of transmission through the transmission system is paid to the Transmission Operator by all users of the system is at 0.00493 EUR/kWh.

The green energy top-up to the transmission price, which is paid to the transmission company by all consumers as a public obligation is 0.00155 EUR/kWh.

The top-up of the high-effective combined generation transmission price Добавка към цената за пренос за високоефективно комбинирано производство, which is paid to the transmission company by all consumers as a public obligation is 0.00112 EUR/kWh.

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

In 2010, the distribution networks transmission price was regulated by the Commission and was differentiated into a price for transmission through the distribution networks and a price for access to the networks.

Average prices of access, transmission, and supply in 2009, paid by the main groups end-consumers to the distribution company and the supplier of last resort are:

№	Consumers groups	Access Price EUR/kWh	Transmission Price MV EUR/kWh	Transmission Price LV EUR/kWh	Supply Price EUR/kWh	Total Price EUR/kWh
1.	Economic consumers and MV	0,00317	0,00394		0,04874	0,05585
2.	Economic consumers and LV	0,00317		0,02225	0,05190	0,07732
3.	Households	0,00317		0,02225	0,04310	0,06851

* All prices are without VAT (20%) and without excise duty for economic consumers.

To achieve efficiency in prevention, avoidance of limitation, or infringement of competition on the energy market and avoiding abuse of monopoly, there is close cooperation between SEWRC and the Competition Protection Commission. In order to exercise its regulatory powers, SEWRC is in close cooperation with the Consumer Protection Commission, and other non-governmental organizations for consumer protection.

A major priority of the Commission in 2010 is working with consumers and protecting the quality for service and the right to information.

SEWRC has a consumer hotline for inquiries and signals, where anyone can receive a short response to a problem or clarify the complaint procedure.

From the information about the filed complaints in the Commission, Electricity sector shows the largest share of complains in the category "others" - 40%. The complaints include: requests for payment of benefits for low quality of electricity supply, the result of which are detrimental to consumers; damage caused by accidents on the network; problems related to consumer service centres; complaints against distribution companies concerning correction

accounts for used, but unpaid electricity; found undue influence on the commercial metering device (CMD), the content of bills and other.

The second complaints group, about 24%, represents doubts for errors in metering and bills calculation.

The third complaints group, 17%, are for non-compliance of the rules for replacement of old metering devices with new ones, installation of power meters in locations distant from the consumer's property border, lack of visual control of the commercial metering device.

Complaints, registered in the categories „connection” and „interruption of supply” are respectively 14% and 5%. These are complaints for rejected or delayed connection to the distribution network, incorrectly specified price and the terms of connection.

In order to supervise the distribution companies' dealings with household consumers in 2010, they must submit reporting information. Complaints to electricity distribution operators in 2010 were 27 785 at total number of consumers about 5 889 000, which is an increase to 2009 by 9 %. The companies report about 30 % full or partial satisfaction of registered consumer complaints 30%. About 6% of complaints responses are overdue more than 1 month. Satisfied complaints are considered the ones, where corrective measures have been taken and / or a response have been sent by the company electricity provider and the applicant has not raised an objection.

In 2010, experts from SEWRC participated in 6 scheduled and extraordinary inspections of energy companies. Working groups determined by an order of the Commission, conducted a regulatory audit in "EVN Electricity Bulgaria" AD, "CEZ Bulgaria", "EON Networks Bulgaria" AD, "Electrical EVN Bulgaria" AD, "CEZ Electro Bulgaria" and "E. ON Bulgaria Sales "AD. Terms and conditions of the energy companies were updated and adopted. The methodology for reporting the target levels of power quality indicators and service, the setting of a uniform approach in applying the distribution networks connection prices and the developing of a new pricing structure were updated.

3.2.3. Measures to avoid abuses of dominance

The market operations and organization are regulated by 'Electricity Trading Rules'. By Decision № 94/25.06.2010 protocol on the item 5, SEWRC adopted new "Electricity Trading Rules" providing for implementation of the requirements of the Third Liberalisation Package. The Rules were published in State Gazette, issue No 64 of 08.17.2010 and in force since August 2010. The presented above in Sections 2.1 and 3.1.2 new Electricity Trading Rules, in force since August 2010, are in fulfilment of the principles and provisions of Directive 2009/72/EC and Regulation (EO) № 714 / 2009, according to the Third Liberalisation Package.

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

The needed data and information is published by ESO on its website. At this stage of opening the electricity market in the country the public/end supplier provide and sell electricity at regulated prices mostly to protected consumers. Supply contracts are signed with consumers on the basis of 'General terms for electricity supply', developed and proposed by electricity supply companies, and approved by the regulator.

The key principles underlying the 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.

The Regulation on licensing energy activities provides for another important power and obligation of a 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, energy enterprises managing the electricity system, transmission of electricity or distribution of electricity, which provide a commonly offered service 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.

The amount of the free market sales in 2010 was 11.28 TWh (domestic market and net export) and the electricity market shares of the largest market participants are as follows:

- generators selling electricity on the market – 38.0%
- trader selling the biggest amount of electricity on the market – 34.6%
- consumers buying biggest amount of electricity on the market – 11.3%.

The data shows absence of monopoly market power in the country in 2010.

In 2010 6 large generators, 35 active traders and over 65 mostly large and medium business consumers have participated on the electricity market in the country. The share of purchased / sold energy by the three biggest traders with the highest trading volume did not exceed 47.7% of total trading volume.

4. Regulation and Performance of the Natural Gas market

4.1. Regulatory issues

4.1.1. Management and allocation of interconnection capacity and mechanisms to deal with congestion

At this stage of market development, there is no system congestion, neither on national, nor on cross-border level, since the transmission system projected capacity is 8 billion m³. The actual annual consumption does not exceed 50% of the maximum projected consumption. The allocation of available capacities is on the 'first come first served' principle.

Transit transmission is carried out by the System Operator on the basis of long-term contracts. There are old contracts with priority access to cross-border capacities. The ratio of capacity needed to serve old contracts to total cross-border capacity is 100%. These contracts are valid until 2030.

In 2010 TSO did not have a methodology for assessment of the maximal technical capacity and to the current moment it is in process of development.

4.1.2. The regulation of the tasks of transmission and distribution companies

The price of transmission on the system is calculated by the method 'Rate of Return' (cost plus).

The tariff model applied to the transmission company is „post stamp”.

The price of natural gas at the network entry is calculated by the Public Provider as average weighted value taking into account the demanded quantity of natural gas from import to the domestic market and from local extraction enterprise to sell in a future period; the contract terms for transmission of natural gas to the Bulgarian border, and the exchange rate of the Bulgarian National Bank for USD or another foreign currency paying for the imported natural gas. On this price a charge of 2% is calculated.

On 30 Dec 2009 a Decree No 325 of the Council of Ministers was adopted for the amendment and supplement of Ordinance for regulating the natural gas prices, adopted with Decree No 131 of the Council of Ministers of 2004 (promulgated SG issue 35 of 2004; amended and supplement SG issue 64 of 2007). Art.17 of the Ordinance is amended with that DCM, which article concerns the method used in defining the natural gas purchase prices when buying from the Public Provider.

Under the amendment the natural gas purchase prices, when end suppliers and consumers connected to the gas transmission network buy from the Public Provider, are formed based on cost estimates for the supply of quantities of natural gas imports for the domestic market, of domestic extract enterprises, of natural gas storage and a charge within 2%.

Under the effective contracts of Bulgargas EAD with external suppliers, the entry price changes every quarter, which is four times per year and reflects to the whole chain of connected consumers.

The price for end consumers connected to the gas distribution network is calculated by adding the price for distribution and supply for the specific consumer group or subgroup to the price of natural gas at the entry of gas transmission system and the transmission tax (BGN 19.73).

For consumers linked to the transmission network, the price for 1000 m³ is equal to the entry price of the gas transmission system, to which the transmission tax (BGN 19.73) is added.

The price of natural gas for distribution and supply in gas distribution systems is calculated by the 'price cap' method.

The 'price cap' method involves approval by the Commission of prices set by the gas distribution companies for natural gas transmission through the gas distribution network and for natural gas supply from end supplier for the first year of the defined regulatory period, and change at the end of each year of the regulatory period by an inflation index, reduced by efficiency of improvement rate.

The commission may change approved prices at the end of each year of the regulatory period, and based on shortage or excess revenue, due to difference between projected and actual quantity of natural gas from the preceding pricing period and investments.

With regard to the above, incentive regulation is applied to companies licensed for distribution and supply.

The regulatory period for which prices of gas distribution companies are defined, is in accordance with the business plan of the respective company, usually five years.

Regulation through the 'price cap' method have been applied since 2008, and pricing corrections for the reported 2010 for the activities of natural gas distribution and supply, have not been applied yet.

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 higher rate of equity for the activities distribution and end supply (15%), the price formation of the regulatory period as annuity prices and the promotion cost tariff structures.

The tariff structure is part of the pricing application, where the company may propose 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. The companies justify and prove individual tariffs in front of the Commission where the highest price is paid by those groups of consumers whose natural gas end supply costs are highest. 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.

The prices are formed under the “Guidelines of the State Energy and Water Regulation Commission for pricing of transmission of natural gas through gas distribution networks and natural gas supply by end supplier” and “Guidelines for pricing of transmission of natural gas and natural gas storage and the form and content of information needed for pricing”. The Guidelines constitute both the general and specific requirements of SEWRC regarding the price calculation methods, types of costs, assets incl. investments and all other pricing factors.

Annual data is collected to report the operations of licensed companies regarding investments, constructed network, number of consumers, consumption; and are compared with data in the approved business plans.

Annual information is collected from all licensees regarding: number of interruptions, durations of interruptions, number of complaints, complaints response time, and time for correction of metering errors.

At this stage, quality of supply does not reflect the tariffs.

Transmission and distribution system operators submit updated information regarding effective tariffs for transmission, provision, storage, distribution, supply and connection.

4.1.3 Effective unbundling

A decision of SEWRC allowed transformation of Bulgargaz EAD by unbundling of Bulgargaz EAD and Bulgartransgaz EAD into independent economic entities, thus enforcing the legal, functional, and accounting unbundling of natural gas transmission and public provision of natural gas. The transformation is in compliance with the main provisions of Directive 2009/73 of the EU, namely achieving a domestic market with non-discriminatory access to gas transmission systems and fair pricing of natural gas.

There is horizontal division of the following activities: extraction, import, transmission, storage, distribution, supply and trade with natural gas. Market liberalization requires further extension of options envisaged in the Energy Act for direct contracts between consumers and gas suppliers – traders, gas distribution companies, or direct providers.

Pursuant to Directive 2009/73/EC, and after the entry into force of the amended Energy Act in mid- 2007, all gas distribution companies were legally unbundled. In 2008 started the process of issuing new licenses according to the differentiation of activities: ‘natural gas distribution’ and ‘natural gas supply by end supplier’.

Each gas distribution company must apply separate accounting by types of operations within the company, under the provisions of the Energy Act. For the purposes of unbundled accounting in gas distribution companies, the Uniform Chart of Accounts was adopted, which provides separate accountability for regulatory purposes of the activities – distribution, supply and non-regulated. Subject to regulation by the State Energy and Water Regulation Commission are the activities of natural gas distribution and supply.

Each activity has special characteristics which allow their accounting unbundling. This allows their monitoring, measurement and control, by the accounting mechanisms for the purpose of regulation. The consolidation of regulated activities allows comprehensive management of the process and control.

Activities related to natural gas distribution may be unbundled by ownership and organizations from natural gas supply to end consumers from other activities of gas distribution companies, when the gas distribution system connects at least 100 000 end consumers of natural gas.

The independence requirement of the Directive is met and TSO Bulgartransgas EAD is separated as an independent legal entity in the frame of the vertically integrated enterprise Bulgargas – holding EAD.

In relation to the amendments of the Energy Act and the Ordinance on licensing of the activities in the energy sector after the accession of the Republic of Bulgaria to the European Union, SEWRC approved an independence program of Bulgartransgaz EAD. The requirement for independence of the operators has been fulfilled, as the persons responsible for the management, including the operational management, are not allowed to participate in the management of the other companies of the vertically integrated enterprise. In pursuance of the requirements of the Energy Act, Regulation (EO) 1775/2005 and the Guidelines to it (the Regulation) regarding the terms and conditions for the access to the gas transmission networks and the EU Directives ensuring equal treatment and non-discrimination, SEWRC compounded finding, where some mandatory guidelines to Bulgartransgaz EAD were pointed out:

1. Till 31 Dec 2009 Bulgartransgaz EAD must publish on its internet website the maximal capacity of its transit system, in pursuance of Art.5, para.1 of the Regulation.
2. Till 31 Dec 2009 Bulgartransgaz EAD must announce publicly data on its technical capacity, contractual and available capacity, in line with Art.6, para.3 of the Regulation, in pursuance of Art.6, para.3 of the Regulation.
3. Till 31 Dec 2009 Bulgartransgaz EAD must announce publicly the important points of the transmission system in in pursuance of Art.6, para.4 of the Regulation.
4. Till 31 Dec 2009 Bulgartransgaz EAD must prepare and submit for approval by SEWRC a Methodology for calculation and final tariffs of the charges when imbalance occurs. There should be taken actions for their public announcement, in pursuance of Art.7, para.3 of the Regulation.
5. Till 31 Dec 2009 Bulgartransgaz EAD must provide a publication of daily updated information regarding its possibilities to offer short-term services, pursuance of Art.7, para.3 of the Regulation.
6. Bulgartransgaz EAD must in short terms publish regularly updated information in details, expected duration and results from prevention in pursuance of item 1, para.9 of the Guidelines.
7. Till 30 Sep 2009 Bulgartransgaz EAD must provide and publish long-term prognosis about the available capacity, including in all important points of the system, in pursuance of item 3.3, para.3 of the Guidelines.
8. Till 30 Sep 2009 Bulgartransgaz EAD must publish historical data about monthly max and min norms for using the capacity and average annual flows in all important points

for the last three years, after an approval by SEWRC, in pursuance of item 3.3, para.4 of the Guidelines.

To correct violations, "Bulgartransgaz" EAD has prepared and submitted for approval by SEWRC a "Methodology for determining the price of imbalance of the gas transmission operator", pursuant to Article 7, § 3 of Regulation (EC) 1775/2005 of the European Parliament and EU Council.

Also, in order to meet the requirement of Article 6, § 3 of the Regulation, at the request of "Bulgartransgaz" EAD, SEWRC by its decision approved the limited published information on important points of the transmission system of the company, on which points public information must be provided under Article 6, § 4 of Regulation (EC) 1775/2005.

In order to achieve an improvement of the regulatory framework in the gas supply sector and with the aim to develop new tariff policy of Bulgartransgaz EAD and harmonized principles and methodologies, consultant assistance was contracted with EBRD to present the experience of other Member States and to assist the establishment of a regulatory framework and price/tariff methodology in compliance with the best international practice. After the completion of the project for consultant assistance and as a result of the technical cooperation, Bulgartransgaz EAD will be obliged to remedy the violations of the Regulation.

4.2. Competition Issues

4.2.1 Description of the wholesale market

Under the Energy Act, the Rules for access to gas transmission and/or gas distribution networks, and in compliance with the European Directives for full liberalization of electricity and gas markets, as of 1.07.2007 all consumers have the right to select their supplier of natural gas. The market is 100% liberalized.

Natural gas public provision is performed by Bulgargaz EAD, which has been licensed by SEWRC for this activity. Bulgartransgaz EAD has been licensed for transmission, transit transfer, and storage of natural gas. The natural gas at the entry of the gas transmission system is provided by three external providers (Overgaz Inc., Wintershall, and Gazexport) and one domestic provider (Petreko SARL). The gas transmission system is owned by Bulgartransgaz EAD, whose network connects gas distribution companies and about 386 directly connected consumers. Gas supply in the territory of Bulgaria is carried out through a gas transmission network, owned by Bulgartransgaz EAD and through gas distribution networks owned by the respective gas distribution companies. On the territory of the country there is a transit pipeline owned by Bulgartransgaz EAD, which transfers natural gas to the territories of Greece, FYROM and Turkey at certain points.

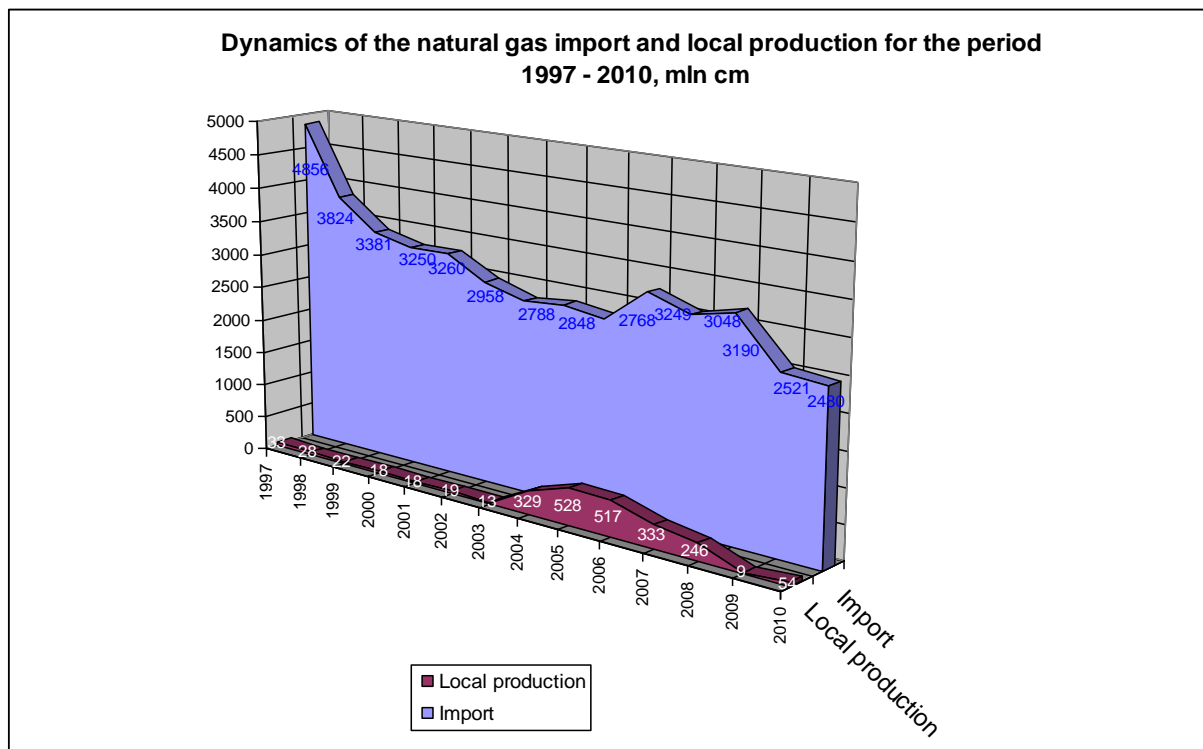
Local natural gas extraction is minimal – with a market share of 2.1% for 2010. Gas is imported by a sole imported – Bulgargaz EAD, which is part of the Bulgarian Energy Holding (BEH EAD). BEH EAD was founded in September 2008 with 100% state share, engaged in generation, production, transmission, transfer, storage, management, distribution, sale and/or purchase of natural gas, electricity, thermal power, coal, and all types of energy and resources for energy production. BEH EAD includes large energy companies such as Bulgartransgaz EAD (functioning as a combined operator in activities such as storage, transfer, and transmission of natural gas) and Bulgargaz EAD, operating as public provider of natural gas.

Wholesale trade in natural gas is carried out by a regulated access of third parties – producers. Natural gas import is on the basis of long-term contracts with Gazprom for domestic consumption and transfer through transit pipelines. Provision of natural gas for consumers in South Western Bulgaria through the transit pipeline for Greece and FYROM is based on a contract with Gazexport. Bulgartransgaz EAD owns and manages transmission and

transit pipelines – high pressure, and the underground gas storage Chiren.

The contribution of *Regional gas initiative* is the future development of projects such as Nabucco, connecting the Caspian region and Middle East with Central and Western Europe, ideas for interconnections with Romania and Greece, and a liquefied natural gas terminal on the Aegean Sea.

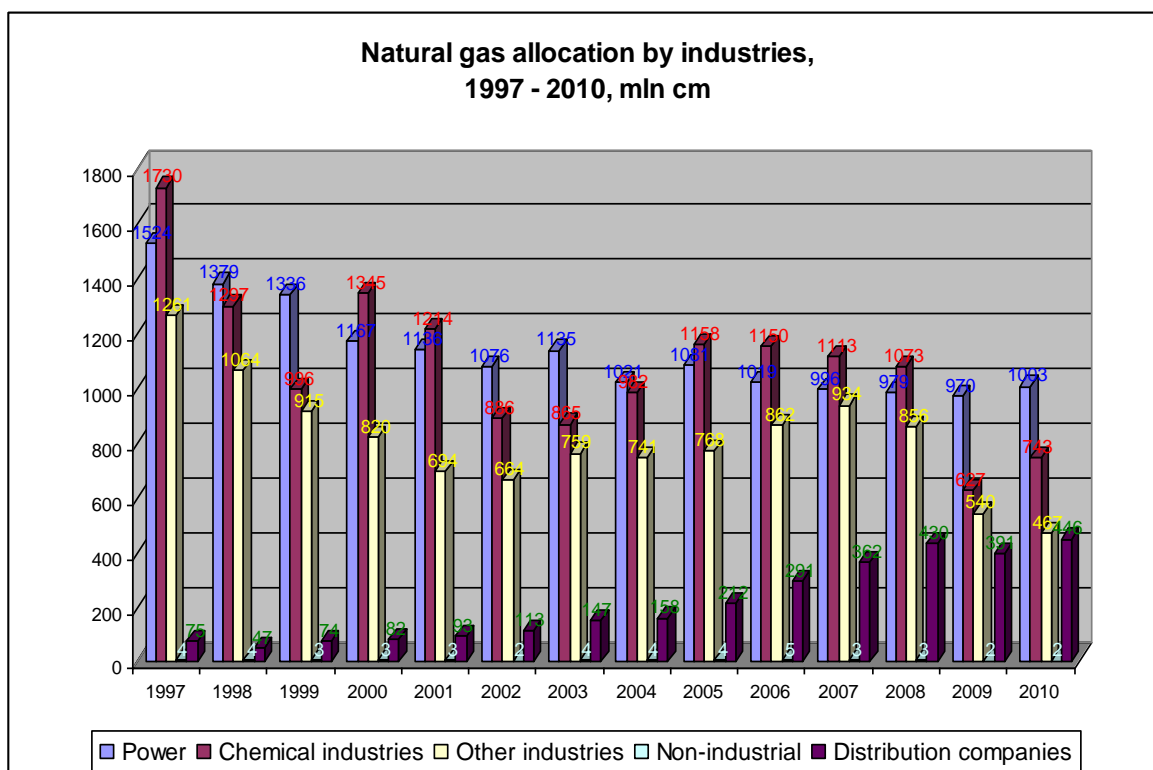
Bulgargaz EAD is the sole public provider who trades at prices, regulated by SEWRC, with market share of 97.9% of the total consumption for 2010, and the remaining 2.1% is from local extraction.



16.76% of the natural gas consumption in the country (incl. local extraction quantities) is done by 31 gas distribution companies, servicing 5 gas distribution regions (Danube, West, Trakia, Mizia and Dobrudzha) and 66 municipalities outside these regions.

The total natural gas consumption by Bulgargaz EAD consumers was 2 661 million m³. The consumption by industries in 2010 is as follows:

- Energy sector – 1003 million m³, or 37.69%
- Chemical industry – 743 million m³, or 27.92%
- Other industries – 467 million m³, or 17.55%
- Distribution companies – 446 million m³, or 16.76%



The maximal volume of active natural gas for 2010 in the only presently useable underground gas storage area is 650 million m³ (for a six-month period the extraction capacity is 400 million m³), and the volume of buffer gas is 749.954 483 m³. The active gas amount is about 26% of the total annual consumption in the country. For the time being, there is one declined application for access to the storage service and the operator of UGS Chiren has not yet given an answer. Storage capacity was reserved only by the Public Provider Bulgargaz EAD and in past periods, by large industrial consumers. There are two methods for allocation of available storage capacities, namely ‘first come first served’ and the proportionate method of allocating requests according to quantities. The second method is in process of amendment as part of the Natural Gas Trade Rules. There is no storage capacities trade on the secondary market.

4.2.2 Description of the retail market

The Bulgarian gas market has a national framework. Taking into account Bulgaria’s membership in the ERGEG’s *Regional gas initiative - South – South East* and the future interconnections, it will expand beyond national borders.

In compliance with the current legislation and the established practice in regulating licensed companies, the key principles and approaches were defined for the application of economic regulation, which have a significant influence and provide general guidelines for company development.

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

- Overgaz East AD – 18.7%
- Overgaz North EAD – 16.58%
- Sofiagaz EAD – 14.58%
- Citygaz Bulgaria AD – 11.66%
- Overgaz West AD – 6.56%

For gas distribution companies, shares of consumer groups are as follows:

- Industrial consumers – 8.4%, 5 234 consumers;
- Household consumers – 91.6%, 57 041 consumers.

In compliance with the European directives for full liberalization of electricity and natural gas markets as of 01.07.2007 all consumers have the right to select their natural gas supplier. However, there are no procedures yet for switching the end supplier. This is caused by the fact that each gas distribution company has a price, approved by SEWRC, for transfer of natural gas through the gas distribution networks, owned by the state. In switching the end supplier, the consumer is to pay additional transmission price of each 1 000 m³ transmitted natural gas to the gas distribution company, whose licensed territory it crosses.

In 2010 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 9 (nine) licensed companies, according to the new pricing method ‘Price Cap’.

Average weighted prices of natural gas for 2010 (without VAT)

Dimension	BGN/1000 m3	BGN/GJ	BGN /KWh	EUR/KWh	ct/KWh
2010 price for sale by Public Provider	474.75	14.17	0.051	0.03	2.61
Industrial consumers	488.26	14.58	0.05	0.03	2.68
Public-administrative and commercial	632.42	18.88	0.07	0.03	3.48
Household consumers	667.40	19.93	0.07	0.04	3.67

SEWRC conducted scheduled inspections and concluded that companies make considerable efforts to improve the quality of services they offer and to achieve rapid solution of consumers’ complaints.

SEWRC demands annual information on complaints received in gas distribution companies. The number of complaints received in gas distribution companies is negligible – 0.8‰ (for each 1000 consumers).

Complaints received in the Commission at Gas Supply Sector are 26, or 0.97% of the total number of complaints. During the year, six surprise inspections of gas distribution companies were conducted.

In 2010 there were 13 inspections in gas supply companies, of which 2 surprise inspections related to consumers’ complaints. The main themes of complaints were: price, measurement of consumed natural gas volumes and problems with connection of new consumers. In some cases the problem was about non-fulfillment of licensing terms. The inspections drew up statements and made binding instructions with time limits for action.

Balancing the natural gas market is done by the gas available in the system, purchased from the Public Provider at regulated prices. To compensate the seasonal irregularity of

consumption, the extraction and injection capacities in Underground Gas Storage Chiren are used. The gas is owned by persons other than the operator and the contract terms are fulfilled.

Balancing the natural gas market in the Republic of Bulgaria is in process of development and harmonization with the European Regulation 1775/2005 on terms of access, and the ERGEG's Guidelines for Good Practices for Gas Balancing.

4.2.3. Measures to avoid abuse of dominance

SEWRC has adopted Natural Gas Trading Rules, which at present are in process of amending and harmonization in line with the best European practices. Administration of natural gas transactions is carried out by the gas transmission system operator. According to the rules, extraction undertakings, natural gas traders and eligible consumers sign contracts for natural gas supply at freely negotiated prices. Rules govern the balancing of the natural gas market. Parties to the transactions are extraction undertakings, natural gas traders, the Public Provider, public suppliers, end suppliers, and eligible consumers. As of 01.07.2007 all natural gas consumers are eligible to purchase natural gas from a supplier of their choice. At present, there is a working group of SEWRC experts on amending the rules for natural gas trade in compliance with Directive 2003/55 of the EU. The working group will also propose to SEWRC draft rules for natural gas by end supplier. The by-laws mentioned will provide an opportunity to avoid dominance on the natural gas market.

The Energy Act lays down the obligation of the transmission undertaking to connect to a specific point in its network distribution undertakings, extraction undertakings, and natural gas storage undertakings. The Energy Act sets out the obligation of distribution companies to connect and ensure natural gas supply to consumers on equal terms, fulfilling technical requirements for safety and reliability. Terms for connection to transmission and distribution networks, general terms of contracts, natural gas prices and consumer relations rules are approved by the SEWRC and are publicly available, placed in customer relations centres of companies and on the website of gas transmission and gas distribution companies.

The Energy Act does not require licensing for trading in natural gas, ensuring greater freedom for traders. The natural gas trade market is 100 % liberalized.

SEWRC performs monitoring of the market to ensure non-discrimination of all players on the market, contributing to efficient competition and adequate market functioning for players from the same category. SEWRC performs its supervision powers and conducts inspections of energy companies and surprise inspections after complaints and inquiries.

In order to perform its regulatory powers, SEWRC is in close cooperation with the Consumer Protection Commission and a number of consumer protection NGOs.

5. Security of supply

5.1. Electricity

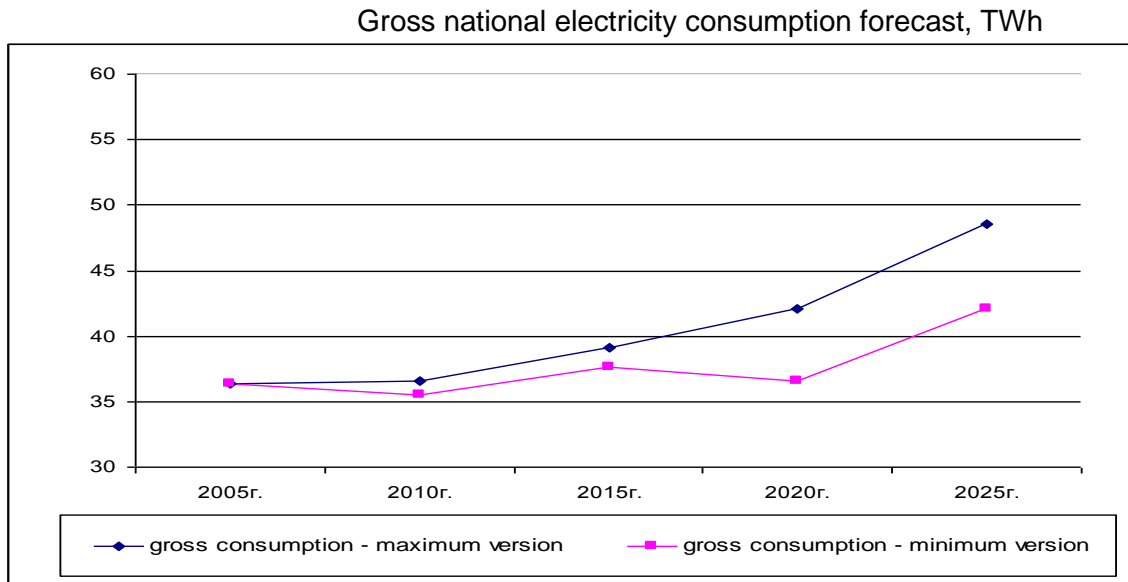
Total installed capacity in 2010 in the country amounts to 12 072 MW. The maximum net output capacity is 9728 MW, and peak load in January 2010 was 7270 MW.

By tradition the country continues to be a net exporter of electricity in the region. In 2010 the share of electricity sold on the regional market amounted to 8.44 TWh, over 19 % of total net national output.

The forecast for future development of electricity capacities focuses on further guarantee of the system security and electricity supply, including regional aspects, and is based on the National electricity strategy of the Republic of Bulgaria until 2020, approved by the Council of Ministers and on ten-year "Plan for the development of transmission network

in Bulgarian for the period 2010 -2020 " of ESO EAD and "National Electricity Company" EAD.

The graph below shows a forecast of gross national consumption – ‘variant maximum’ and ‘variant minimum’ – for the next 10 years. Variants show possible forecast reduction of electricity consumption intensity by about 1.4 % in the period 2012 – 2014, having in mind the start of emissions trading and certain decline in electricity consumption after 2017 with "minimum scenario" due to the implementation of energy efficiency measures.



New electricity capacities that are currently constructed and planned for operation in the next 10 years are mostly based on primary energy sources, nuclear energy, wind and water energy, photovoltaic and partly – local coal.

The construction of the new nuclear power plant NPP Belene is in the process of technical, economical and financial analysis, with two units with total installed capacity of 2000 MW. The planned schedule for capacity launch is 2018 – 2020.

Total installed capacity of wind energy in 2010 was 488 MW (1,6 times increase to 2009), with forecast increase up to 2015 – about 1000 MW.

Close to completion (2010 – 2011) is the construction and launch of a new capacity on local coal AES - 3C Maritza East I EOOD, two units with total installed capacity of 670 MW.

The photovoltaic installed capacity in 2010 reached 25 MW.

The HPP installed capacity is 3108 MW in 2010, 938 MW of which are PSHPP.

The water power plant Tsankov Kamak is also in a late stage of construction, with installed 80 MW, and planned launch in 2010. The construction of the plant is a pilot project under the Kyoto Protocol, based on a Memorandum of Understanding between Bulgaria and Austria. The launch will reduce the gas emissions of CO₂, sulphur oxides and dust. The reduced emissions of CO₂ will be sold to the Republic of Austria.

In 2010 continued the implementation of large-scale rehabilitation of the electricity transmission system of the country, by modernization of transmission and transformation management. Modernization is financed by loans from EBRD and EIB, and own funds of the transmission company NEK EAD. The beginning of operations is planned for 2010 – 2011. In pursuance of its investment program in 2010, "NEK" EAD put into operation six substations 220 and 110 kV and 9 power lines of 400, 220 and 110 kV after rehabilitation or new construction.

Maximum net output capacity in 2010 was 9035 MW with peak load of the electricity system in winter – 7270MW.

The structure and development of the transmission system in the Republic of Bulgaria is in compliance with the current and projected needs of the domestic and regional electricity markets, and meets the requirements and standards of system adequacy and security.

For net electricity output in 2010 of 41.57 TWh, the fuel mix by primary energy sources is the following:

2010 г.	Мярка	Нетно производство	Дял (%)
NES	TWh	14,24	34,3
TPS	TWh	17.43	41.9
RES	TWh	6.1	14.7
Cogeneration	TWh	3.8	9.1
Total	TWh	41.57	100

In 2010 there were launched about 183 MW new energy capacities from renewable energy sources (excluding HPPs), mainly wind generators and photovoltaic, with total installed capacity of about 513 MW.

In 2009 5.3 MW new capacities were launched from cogeneration of heat and electricity. For the period 3,8 TWh electricity and 11,8 TWh useful heat from combined output was sold.

For the construction of new capacities with installed capacity over 5 MW the regulator reviews projects and issues the respective licenses for construction and operation of the new capacity in compliance with the provisions of the Energy Act and Regulation on licensing the energy operations.

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

In October 2010, ESO EAD and National Electricity Company EAD, which currently is the owner of the network, submitted for review at SEWRC a ten-year Development Plan of the transmission network of Bulgarian for the period 2010 -2020. This plan is both the basis and in pursuance of the approved by Council of Ministers Energy Strategy of the Republic of Bulgaria 2020, where the National Action Plan for renewable energy, according to Directive 2009/28/EC is also reported.

ESO prepares short-term, medium-term and long-term forecasts and plans for expansion and modernization of the transmission network and development of the auxiliary networks.

Two new substations were completed and some substations and electricity lines of the transmission system were rehabilitated and renovated, in order to ensure the necessary security of the system, and higher quality of provided services.

5. 2. Natural Gas

The current level of natural gas consumption is 2.661 billion m³ for 2010. It is expected in 2011 consumption to reach 3.2 billion m³, while the forecast for 2018 is 4.0 billion m³.

The amount of imported natural gas from external suppliers in 2010 was 2.48 billion m³. Quantitative forecast for future supplies is not available.

SEWRC has adopted Indicators for gas supply quality which determine the main requirements and security of supply standards:

- Indicators and standards of natural gas quality;
- Uninterrupted natural gas supply;
- Quality of commercial service.

The licensee Bulgartransgaz EAD, in its capacity of a system operator, must continually report and analyse all interruptions (planned and unplanned) in the supply of natural gas.

Annually the licensee prepares and submits a report to SEWRC, including detailed information on all interruptions of supply to consumers.

Planned interruptions, with duration longer than the period announced by the Licensee as necessary duration of intervention and/or longer than the announced duration, will be considered unplanned interruptions.

The licensee may interrupt the supply of natural gas in line with the Regulation on limiting regime, temporary interruption or limiting of output or supply of natural gas in the following cases, under the Energy Act:

- a limiting regime for a period longer than 48 hours;
- temporary interruption or limiting due to planned repairs, new facilities, operational switches or connections, post-emergency repairs.

Continuity of supply indicators:

System Average Interruption Frequency Index - SAIFI = Total number of interruptions / Total connected consumers

System Average Interruption Duration Index - SAIDI = Total duration of interruptions / Total connected consumers

Customer Average Interruption Frequency Index - CAIFI = Total number of interruptions / Total number of interrupted consumers

Customer Average Interruption Duration Index - CAIDI = Total duration of interruptions / Total number of interruptions or

CAIDI 1 = Total duration of interruptions / Total number of interrupted consumers

The second index is the average time for renewal of supply for an interrupted consumer for a given period of time.

Another important instrument related to security of supply is the quality of commercial services and complaints treatment.

Indexes of commercial services quality fulfillment

	Fulfillment Index	Index measure	Initial value	Target value
1	Written reply to written complaints and inquiries from consumers	Average number of days to reply to complaints and inquiries from consumers	30 days	10 days
2	Duration of supply interruptions	Average time (per year) for which each consumer's supply was interrupted due to breakdown in the gas distribution system	minutes/ consumer	<1
3	Applications for connection of a new consumer	Average time for reply to applications sent for one year	20 days	10 days
4	Connection of a new consumer	Average time for connection	60 days	30
5	Inspection of accounts at the complaints of consumers	Average number of days for response and finding a solution which satisfies the consumer	days/ consumer	7
6	Correction of measurement errors of meters	Average number of days for response and finding a solution which satisfies the consumer	days	7
7	Inspection of commercial measurement devices at the request of consumers	Average number of days for response and finding a solution which satisfies the consumer	days	15
8	Pressure level	Average time outside the standard pressure range	time outside the standard pressure range	-
9	Natural gas humidity	Average time above the determined humidity level	Time above the determined level	0
10	Natural gas odour	Average odour deviation time	Time below the determined level of odour	Inspection at every 14 days

The total amount of natural gas, supplied in 2010 was 2.534 billion of m³, of which imported was 2.48 billion m³. The natural gas at the entrance of gas transmission network is provided by three external suppliers (Overgas Inc., Wintershall, and Gasexport) and one domestic (Petreko SARL). The quantity of locally extracted natural gas was 0.054 billion m³.

In relation to the need of diversification of supplies and to the conclusions from the gas crisis at the beginning of 2009, some projects are being developed such as Nabucco, connecting the Caspian region and the Middle East with Central and Western Europe, 'South Stream' and also started the construction of interconnections with the transmission systems of Romania and Greece. There is a perceived need for the construction of a liquefied natural gas terminal on the Aegean Sea.

Emergency measures:

- Bulgartransgas EAD is working on draft memorandums of cooperation with Ukrtransgas – Ukraine, and Transgas – Romania;
- The company has signed agreements with DESFA – Greece, and BOTAS – Turkey, for reverse transmission of natural gas in case of interruption of supplies through Ukraine;
- Bulgartransgas EAD, on the basis of the gas crisis of January 2009 has an optimized plan for limiting the supply to consumers in the event of a new interruption of natural gas supplies;
- The extraction capacity of Chiren natural gas storage area is to be increased;
- Based on the gas crisis experience, the set of possible switches on the gas transmission system was multiplied, increasing its flexibility;
- Closer cooperation was achieved with gas transmission systems operators of the neighbouring countries.

Future investments in output capacity and import capacity for the next three years are, as follows:

- Building an interconnection with the gas transportation system of Romania, with a capacity of up to 1.5 billion m³/ per year.
- Building an interconnection with the gas transportation system of Greece with a capacity of up to 1.0 billion m³/per year.

The maximal volume of active natural gas in the sole active underground gas storage area is 650 million m³ (for a period of six months the capacity is 400 million m³), and the volume of buffer gas is 749.954 483 million m³. The amount of active gas is about 26% of the total annual consumption in the country.

Natural gas import is done on the basis of a long-term contract signed between Bulgargaz EAD and Gazprom, valid until 2012.

The security of supply issue is reflected in the Energy Act. The Energy Act provides for the Minister of Economy, Energy and Tourism to monitor the security of supply and publishes future and past measures and outcomes of monitoring in the bulletin on the condition and development of energy, published annually, and on the website of the Ministry of Economy, Energy and Tourism.

The act specifically defines the concept of 'monitoring the security of supply' in line with the definition of Directive 2003/55/EC. Under the Additional provisions, 'monitoring the security of supply' is the balance between supply and demand of electricity and natural gas on the national market, the level of expected future consumption, and planned additional capacity

in process of planning and building, the quality and maintenance levels of networks, as well as measure for covering peak consumption and overcoming deficit of one or more providers, suppliers, or traders.

The Act provides for that centralized operational management, coordination and control of the operating regime of the gas transmission system is carried out by the transmission system operator, and the operational management of each distribution system is carried out by the distribution system operator. Orders of the gas transmission system operator are binding for gas distribution system operators, consumers, extraction enterprises and gas storage area operators, connected to the transmission system, and for other companies.

The gas transmission operator is a specialized unit in the structure of the transmission enterprise. The distribution system operators are specialized units in the structure of distribution enterprises.

On national level, the Directive requirement for operator's independence is fulfilled. The transmission gas operator Bulgartransgaz EAD is an independent legal entity with the vertically integrated enterprise Bulgargaz Holding EAD. For gas distribution, Bulgaria has used the legal option of Directive 2003/55/EC for not applying the requirement for legal independence for undertakings serving less than 100 000 consumers.

Strategic gas projects, guaranteeing the security and continuity of gas supply to Bulgaria, South East Europe and EU are in a list of projects which will be central for Bulgaria:

On national level:

- Expansion of gas transmission network in the country, extension of the existing storage and building new gas storage areas;
- Faster development of gas distribution networks and household gasification in the country.

On bilateral and multilateral level:

- Implementation of the top priority EU project – Nabucco Pipeline for transport of natural gas from the Caspian region, Middle East and North Africa to South East Europe and EU.
- Development of a strategic project – South Stream pipeline from Russia through Black Sea to the Black Sea coast. From Bulgaria two routes are envisaged – ‘south’ and ‘north’, to Italy and Austria respectively;
- Construction of a gas interconnection between Bulgaria and the pipeline Turkey - Greece;
- Project for construction of a South East Europe regional regasification liquefied gas terminal on the Bulgarian Black Sea coast, or the Greek Aegean coast, depending on the feasibility study;
- Construction of a gas pipeline from Bulgaria to Serbia: Doupnitsa – Dimitrovgrad – Nish, or Sofia – Dimitrovgrad – Nish, supplying natural gas to Serbia and other Western Balkans countries;
- Project for the so called Trans Adriatic pipeline from Bulgaria through FYROM and Albania on the bottom of Adriatic Sea to Italy. This project is part of the development of energy infrastructure of European Corridor No.8;
- Project for construction of an interconnection between the Bulgarian and Romanian gas transmission systems, ensuring security and diversification of supplies.

6. Public Service Issues

6.1. Electricity

Under the Energy Act and other by-laws, energy companies must perform their activities in the interest of the community and individual consumers, by ensuring security of supply, continuity and quality of electricity, effective use of fuels and energy, protection of environment, life, health, and property of individuals. The Minister of Economy, Energy and Tourism may require from energy companies other standards for public service, related to the continuity of supply of electricity and natural gas and environmental protection.

Under the secondary regulation, the method for expenditures compensation of the energy companies resulting from public service obligations and the mechanism, which sets the expenditures amount and the way of reimbursement of the companies, are set out in an approved by SEWRC methodology. Such expenditures may occur in relation to the established national indicative goals for promotion of the renewable energy recourses electricity and in relation to SEWRC's obligation to set feed-in tariffs for the sale of renewable and alternative energy recourses electricity. In 2009 SEWRC prepared and adopted by a Decision protocol № 94 of 25 June 2010 a "Methodology for reimbursement of the Public Provider and the end suppliers arising from the imposed public service obligation of purchase of renewable energy recourses electricity and highly effective co-generation at feed-in tariffs". The Methodology has been developed with the aim to form standard and transparent rules when reimburse expenditures, to ensure a balanced price amending for the end consumers taking into consideration the public service obligations of the Public Provider and the end suppliers. It also should guarantee the just allocation of the cost of buying electricity at preferential prices to all consumers.

By the methodology there are set the scope, the procedures for finding and recognition of energy companies' expenses, the "green energy" and "highly effective co-generation" top-ups and the methods of their incorporation in the transmission through the transmission network price.

The defined by SEWRC's Decision green energy and highly effective co-generation top-ups' price is paid by all consumers connected to the electricity transmission network on the base of consumed electricity, including traders of quantities of electricity for the free market.

Social protection measures, relating to supporting socially disadvantaged persons and families are a priority of the Ministry of Labour and Social Policy, with the active involvement of the Ministry of Economy, Energy and Tourism.

In the Republic of Bulgaria, target benefits are paid for heating, regardless of the type of power used for heating pursuant to Regulation No.RD-07-5 of 16.05.2008 on the terms and conditions of paying target benefit for heating', issued by the Minister of Labour and Social Policy.

The right to receive a target benefit is granted to persons and families, whose average monthly income for six months, prior the month of application, is less or equal to a differentiated **minimum** income for heating, and meet the requirements of the Regulation on applying the Social Benefits Act.

Differentiated minimum income for heating is calculated on the basis of the guaranteed minimum income (GMI) whose monthly amount is determined by a decision of the Council of Ministers. The monthly amount of the target benefit is calculated on the basis of BGN equivalent of 350 KWh electricity, of which 250 KWh daytime and 100 KWh night-

time electricity, by an average final sell price of electricity for household consumers at the beginning of heating season.

Under Directive 2003/54/EC of the European Parliament and the Council, European electricity consumers (household consumers and small enterprises) enjoy the right to be supplied with electricity of a specified quality at clearly comparable, reasonable, and transparent prices. This means that consumers may exercise the universal right to be connected to electricity networks and receive electricity at reasonable and non-discriminatory tariffs with an option for price adaptation as a result of indexing mechanisms.

In order to strengthen consumer protection, the Directive recommends precautionary measures to prohibit switch-off or interruption of the network, and the creation of supplier of last resort in the national legislation of member states.

The supplier of last resort may be appointed by representative of the sector, determined by law, administrative decision, or a tender procedure. The purpose of this mechanism is to ensure continuity in the electricity supply, and the respective national competent authorities may monitor the access to electricity and announce the monitoring results to the public.

At present the mechanism of Public supplier of last resort is not laid down and differentiated from other players in the Electricity Sector.

Its appointment and functioning will be envisaged by the forthcoming amendment of the Energy Act. The idea is that the supplier of last resort will sell electricity at prices, regulated by SEWRC, but determined by the market, as opposed to current pricing, where tariffs are cost-based. The supplier of last resort will purchase energy on the market and will transfer all costs and losses to end consumers, therefore the regulatory commission will have the power to set a maximum price of this company. The transfer of costs to the end consumer should stimulate customers to seek for competitive supplier.

Under the General conditions of contracts for transmitting electricity through electricity transmission networks, electricity distribution companies have the right to interrupt or limit electricity to a consumer at the request of the end supplier, in case of delay of payment or failure of payment of electricity and distribution bills.

The General terms do not provide for limiting the electricity switch-off in winter time.

In 2008 companies have limited electricity switch off of non-paying consumers to a minimum. In such cases companies send the consumer a reminding letter, which repeatedly notifies of the owed amounts on electricity bills and deadlines for payment, although it was already announced in the previous letter.

In addition, the current price regulation for end consumers should be reported, covering the following electricity issues:

- The Commission regulates the sell prices from electricity end suppliers to household consumers and enterprises with less than 50 employees and annual turnover of less than EUR 10 million.

- In compliance with Regulation on regulating the electricity prices, when approving the electricity output prices, the Public Provider NEK prices and the tariffs for transmission and access of ESO EAD, the Commission applied the 'rate of return' method. In compliance with the Regulation, in calculating the distribution prices of electricity distribution companies and end suppliers, the Commission applies the 'price cap' regulating method.

Under the Regulation, the Commission regulates prices based on approved necessary income, including projected economically justified costs and return, as well as projected quantities for the respective regulatory period and monitors actual values of necessary income of energy companies and their components. In case of reporting significant difference between the approved and actual costs and/or return, it approves new prices. While performing on these powers, SEWRC has monitored the reported financial results for 2010 of electricity producers, the transmission enterprise NEK and the electricity system operator ESO EAD.

Based on monitoring carried out for 2009, the Commission reported that regarding the above energy companies, there are significant differences between commission-approved costs for the regulatory period, and the actual ones. Pursuant to the Regulation, by a decision of the Commission, it requested a new regulatory review. The Commission requested from electricity producers, NEK, and ESO, to send applications for approval of prices and tariffs for electricity output and transmission.

In 2010 the Commission performed a regulatory review of companies pursuant to the Ordinance on regulation of electricity prices. The regulatory review identified the overall financial condition of regulated companies for electricity transmission and supply, and the differences from reported values of pricing components from the approved ones in the effective prices, and reviewed the performance on investment plans.

The results from the regulatory review were reflected by companies in a report, approved by the Commission, which is published on commission's website. After an open meeting to discuss the applications, there was a closed meeting where the draft decision was adopted, and a public debate was scheduled.

After the debate was held, in the regulatory time limit there were objections from the respective energy companies, which were duly analysed. The final decision approving the prices and network tariffs for the respective regulatory period, was adopted after a detailed analysis of the information available.

In this review and subsequent approval of electricity prices in force since July 2010 all factors within the powers of the regulator, influencing the level of the regulated final prices were minimized and the results of the regulatory audit of the electricity distribution companies and electricity end suppliers were used as well.

During the performance of its regulatory powers, the regulator is led by the following general principles: prevention or avoidance of limiting or distorting competition on the energy market, creating stimuli for the development of a competitive market for energy operations, and last but not least ensuring equality and transparency of procedures regulating the monitoring mechanisms on electricity and natural gas market.

6.2. Gas

Companies operating in the gas sector must perform their activities in the interest of the community and individual consumers, by ensuring security of supply, continuity and quality of electricity, effective use of fuels and energy, protection of environment, life, health, and property of individuals.

The Energy Act provides for that the end supplier sells natural gas at publicly available general terms, which must contain:

- Conditions for quality of supply;
- Information provided by the supplier;
- Time limits of contract;
- Responsibility of the energy enterprise for failure to comply with the general terms.

End supplier consumers sign a contract with the distribution company for transmission through distribution networks of the consumed natural gas at publicly available general terms. General terms must contain:

- Conditions for quality of supply
- Terms for switch-off or interruption of supply;
- Responsibility of the energy company for unregulated interruption or low-quality supply.

The general terms of contracts must be published in one central and one local newspaper.

SEWRC reviews consumer complaints under the Energy Act against licensees and licensee complaints against licensees, relating to the performance of licensed operations. The procedure of submitting complaints, their review and the procedure for voluntary resolution of disputes, are regulated in the Regulation on licensing energy operations. Complaints are reviewed following the Internal Policies for consumer relations for submitted complaints and inquiries for voluntary resolution of disputes relating to:

- Consumer right to be connected in order to be supplied with natural gas;
- Licensee right to interrupt the connection and supply of natural gas to the consumer;
- Terms of supply and standards of quality, offered by the licensee to the consumers.

A useful introduction of out-of-court institution for voluntary resolution of disputes improves the quality and efficiency of dispute resolutions, avoids expensive court proceedings and ensures faster solution of existing problems.