



# **National Report 2008**

## **Regulatory Office for Network Industries**

### **Slovakia**



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## 1. Introduction

The previous period in Slovakia is characterized by a significant change in the meaning of the complete gas and electricity market liberalization from 1 July, 2007. This fact has had an influence on the entire business environment, and simultaneously the activities of the network industries state regulation bodies- the Board for Regulation and the Regulatory Office for Network Industries.

The Board for Regulation has revised the previous regulatory period and elaborated a strategic document "Regulatory policy for the Upcoming Regulatory Period 2009- 2011" complying with the new energy markets situation. This document serves as a starting point for creating unified conditions and an equal degree of eligibility for the entire internal market and the right, transparent and efficient methods and conditions for connection and access to the national grid and the method of price setting. The regulatory policy has set up the directions that will be followed by the state regulation. The instruments for its application will include also monitoring, comparing and harmonization of the regulatory methods which are being applied in the EU countries with the regulatory methods being applied in the Slovak Republic. There is a new factor in the regulatory policy, laying an emphasis on an insufficiently used field of activities and competencies, and thus an analysis and correction of the influence of the decisions issued by the Regulatory Office for Network Industries on the network industries from the view of the whole community.

The market liberalization resulted from the process of a consistent implementation of the European Union legislation to the legislation of the Slovak Republic. This fact has significantly influenced the activities of the Regulatory Office for Network industries as well, and thus the way it enhanced its independence and there were new competencies laid upon it.

The Office followed up with the Regulatory Policy in the meaning of its secondary legislation. There were principally the generally binding provisions stipulating the scope and structure of justified costs, the method of determination of a reasonable profit for individual regulated activities for the year 2008. The significant provisions that will be used as instruments for securing and enhancing the quality and security of energy supplies and for protection of consumers will be represented by quality standards which are currently being applied.

Conducting business on electricity and gas markets is the subject of adjustments in the Regulation of the government of the Slovak Republic on the Rules for electricity and gas markets functioning which serve as a guaranty for non-discriminatory and transparent performance of activities in network industries. The rules adjust, in more detail, the rights and duties of the electricity and gas markets stakeholders, stipulated by the Act on Energy the way so that the security and reliability of supplies would not be violated. The statements of these rules include the methods of allocation, accumulation and exceeding of gas capacity in the transport and distribution system. They also adjust the conditions for electricity and gas supplies to non-household customers and household customers which have become eligible since 1 July, 2007.

One of the important issues the Office had to deal with was electricity market stabilization laying an emphasis on the security of electricity supplies. After decommissioning one of the units in the Nuclear Power plant in Jaslovské Bohunice, Slovakia has gained the position of an importer, and due to both insufficiently developed competition on the electricity market and protection mechanisms against hidden speculative business practices, there is a threat of deformation of the market and the price environment, and this may lead to market instability with negative impacts on all its stakeholders. In relation to this fact, the Office has used all possibilities resulting from the application of the European Union Directives on internal electricity and gas markets that enable adoption of measures on national levels to use a high degree of customer's protection, mainly households and small businesses and with an emphasis on security of supplies and reasonable tariffs in order to keep correctness, competition and to create new work opportunities.

The Regulatory Office for Network Industries was monitoring this situation carefully and, according to the requirements of the implemented European legislation, consistently, within its 2007 activities, took into account the changes resulting from acceleration of the Slovak economy development and the conditions on the national and international energy markets. The Office helped to establish a stable business environment and appropriate conditions for transparent and non-discriminatory performance of activities in network industries. In compliance with its role and tasks, it will further on support all activities that will lead to a quality competition environment on the electricity and gas markets. However, it will pay attention to the protection of consumers' rights, most of all those who belong to the group of vulnerables.

**Jozef Holjenčík**

*Chairman of the Board for  
Regulation and Acting Head of the Office*

## 2. Basics

### 2.1 Basic organizational structure and competencies of the Regulatory Office

The development in the past year was characterized by significant changes in the Slovak legislation having an important influence on the position of the Regulatory Office for Network Industries (hereinafter only “the Office”) and its competencies. The amendment of Act No. 276/2001 Coll. on Regulation in Network Industries which came into effect on 15 March 2007, implemented more consistently the European Community legislation into the legal system of the Slovak Republic, and, in particular, significantly strengthened independence of the Office and, in the main, broadened its competencies.

#### **Competences of the Regulatory Office**

**The Regulatory Office** is the state administration authority established by the Act No. 276/2001 Coll. on Regulation in Network Industries and on Amendments and Additions to Some Acts as amended (hereinafter only “Act on Regulation”). The Office is a state budgetary organization based in Bratislava.

**The Board for Regulation** (hereinafter only “the Board”), as an independent collective state body, is in charge of strategy and management of regulation in network industries:

- develops the proposal of the regulatory policy,
- approves the scope of price policy and the method of its implementation,
- proposes the Government of the Slovak Republic candidates for the appointment of the function of the Office chairman and the Office vice-chairman and proposes their dismissal,
- approves the annual accounting closure of the Office,
- elects and removes the chairman and the vice-chairman from the Board,
- approves the negotiating order of the Board,
- approves the proposal of a report on activities and economic management of the Office, on the performance of regulatory policy and the results of the performance of tasks of the Office,
- makes decisions on the appeals against decisions of the Office in the first instance price proceedings,
- performs different tasks associated with the regulatory activities of the Office.

The Board consists of six members and has a quorum of at least four of its members, of which one is a chairman or a vice-chairman of the Board. The Board takes decisions with the majority of all its members. The chairman of the Board is in charge of managing and calling the sessions of the Board. The chairman together with other members of the board signs the resolutions and decisions made by the Board as well.

The Board members shall be appointed and removed by the President of the Slovak Republic. The membership in the Board is a public function. The President of the Slovak Republic appoints three members of the Board according to the proposal of the National Parliament of the Slovak Republic and three members of the Board according to the proposal of the Government of the Slovak Republic (hereinafter only “the Government”). At least two candidates shall be proposed for each position of the Board member.

The term of office of the Board members shall be six years. Every two years, the Board replaces one third of its members. The membership in the Board is not compatible with the function of the Office chairman and the Office vice-chairman, the function of MP in the National Parliament of the Slovak Republic, the function of a member of the Government, the function or employment in a central or a local state administration body, the function, membership or employment in the

territory-confined municipal authorities. The membership in the Board is further incompatible with business activities and a membership in the management, the supervisory and controlling bodies of business entities.

A member of the Board is not allowed to become an employee of the regulated companies, a member of the management, the supervisory and controlling bodies of regulated companies, he or she is not allowed to have any equity participation in business activities of regulated companies involved in regulated activities on their behalf or by methods of the association of persons; such restriction will last one more year after the termination of the function of a Board member.

The President of the Slovak Republic is allowed to withdraw Board members if his/her close person becomes an employee of the Office, an employee of regulated entities, if he/she raises interests in the regulated entities business conduct, if he/she starts conducting business in regulated activities himself/ herself or on behalf of another person or through an association, in case of any illegal action or any administrative procedures of the Office has been proven or if a Board member acts in contradiction with the regulatory policy and his/her withdrawal is proposed by a person who proposed his or her appointment to the Board member if he/she does not perform his/her post for the period of more than two months.

***The Office Chairman is the leading person of the Office and:***

- manages the Office and is responsible for its activities,
- acts as a statutory body of the Regulatory Office on behalf of the Office in all matters,
- signs generally binding legal provisions issued by the Regulatory Office,
- approves the organizational order of the Regulatory Office once it is discussed in the Board,
- takes decisions on appeals against Office decisions issued in the first instance proceedings unless otherwise stated by law,
- takes decisions on any objections of prejudice of Office employees while performing his duties.

***The organizational divisions of the Regulatory Office:***

- Division of Heat Regulation
- Division of Gas Regulation
- Division of Electricity Regulation
- Division of Water Service Regulation
- Division of International Co-operation
- Division of Strategic Analysis
- Legislative and Legal Department
- Division of Surveillance and Control
- Economic and Administrative Division
- Chairman's Department
- Personnel Office

### ***Regulatory policy***

The Board elaborated, in compliance with valid legislation, a regulatory policy proposal for the transitional regulatory period in 2007, stipulated for one year. The reason of the one-year regulatory period was a need to apply provisions in as short time as possible, primarily in order to secure unified conditions and the same level of eligibility for internal market, or adequate methods and conditions for connection and access to the electricity network.

Based on the assessment of the previous regulatory period from the view of achieved market transparency and the influence of price regulation on the market, the Board, within the regulatory policy, settles the need of further regulation proposes a concept of the scope of price regulation and proposes the method of price regulation performance. The new regulatory policy proposal is based on an opinion that it is necessary to create and secure unified conditions and the same level of eligibility for the whole internal market, the right, transparent and efficient methods and conditions for connection and access to the national grid, the method, procedures and conditions for price setting.

The regulatory policy defines the Board's and Office's procedures connected to SR legal provisions which are valid and effective at the date of its elaboration, complying with Act No. 107/2007 Coll. amending Act on Regulation, through which the EU energy legislation is being transposed into the SR law and order.

### ***Objectives and priorities of regulatory policy***

The Regulatory Policy objective and priority for the upcoming regulatory period is:

- a) to apply regulatory tools and methods of regulation that will ensure transparent and non-discriminatory activity performance in network industries,
- b) to prevent from abuse of a dominant position on market with commodities and services by using all available regulatory tools in order to protect the rights of eligible consumers and households,
- c) to create permanently the conditions for non-discriminatory and transparent electricity and gas market operation, to monitor and assess the effectiveness of market operation rules;
- d) to define appropriate conditions, methods and procedures for connection and access to the grids, as a stepping-stone for the promotion of market operation effectiveness,
- e) to create the conditions for the competition improvement by a gradual removal of barriers in electricity and gas markets, mainly within the services connected with their supply,
- f) to ensure the promotion of competition environment within the internal electricity market, and thus by defining impartial rules for cross-border electricity exchange including the promotion of appropriate compensatory mechanisms,
- g) to ensure implementation of such methods and regulatory tools into secondary legislation that will result in an increase of safety of electricity and gas supply, of investments into infrastructure and in preservation of an optimal balance between supply and demand,
- h) to protect the consumers from unjustified increase of regulated prices by setting the limiting selected cost items, maximal prices and profits in order to achieve the prices in the area of commodities and services in network industries that will be comparable with other EU countries,
- i) to ensure the conditions for reliable, economical and quality supply of goods and services provided within the regulated activities in network industries,
- j) to apply such regulatory methods that will result in lower costs of regulated activities while maintaining the quality of supply, and thus price stability of regulated activities,

- k) to motivate the companies to put their investments into renewable sources of energy and progressive energy technologies by using appropriate regulatory instruments together with other forms of the state support,
- l) to create conditions for effective development, secure and reliable operation of energy, water and sewage systems,
- m) to create conditions for protection of eligible interests of the owners of licenses for performance of activities in network industries by enabling them to achieve an appropriate return of their investments,
- n) to create conditions for promotion of special forms of electricity generation by combined heat and electricity generation from renewables and domestic coal,
- o) to monitor and assess the level of achieved market transparency and competition efficiency on the market within the regulated industries in order to accept the measures to improve and promote the competition environment,
- p) to monitor and assess the regulatory methods in selected comparable EU countries, to verify their efficiency and, if possible, to apply them in a specified area in the Slovak Republic,
- q) to ensure the protection of consumers and the cost optimisation by a gradual implementation of optimal quality standards of supplied commodities and services in network industries and by consistent surveillance of their compliance,
- r) to define the limits and to monitor the investment costs including their effective usage for regulated activities,
- s) to define unambiguous and transparent rules for enforcing the rental relationships referring to the assets used in network industries and in regulated activities,
- t) to verify the amount of eligible costs necessarily used for regulated activity performance, using the help of control mechanisms,
- u) when an extraordinary market situation occurs, such as insufficiently developed competition environment or with the aim to guarantee consumer protection, to establish the regulation of another commodity or service as well, which may possibly elicit an appearance of such phenomena which requires customers protection,
- v) to ensure and develop an effective cooperation between the Board for Regulation, the Office and other state administration authorities while maintaining the position of independence of the Board for Regulation as a collective state authority of regulation strategy and management in network industries,
- w) to respect and consistently apply the principle of independence towards the subjects performing activities in network industries,
- x) to develop international cooperation with the bodies of European Commission, European Community and EU regulatory offices on the basis of a mutual favourableness in order to improve the activities within the Office and the Board for Regulation,

- y) to monitor and assess the fulfilment of an obligation to keep separate accounting register on assets, debits, performance of the rules for setting schedules on assets, debits, costs and revenues and the rules for depreciation in regulated activities,
- z) to monitor and assess performance of the approved rules for selling and course of selling of electricity in an auction form,
- aa) to define an appropriate length of the regulatory period in order to stabilize the prices and the business environment.

### ***Application of the competencies of the Office and the Board for Regulation***

***The subject of regulation*** under the Act on Regulation is to determine or approve the methods, procedures and conditions for the following purposes:

- Connection and access to the transmission network, distribution network, transport system and distribution system,
- Electricity transmission and distribution in the territory of the Slovak Republic,
- Gas transport and distribution in the restricted territory,
- Provision of ancillary services in electricity and gas sector,
- Provision of services of the transmission system operator and the distribution system operator,
- Access and connection of new electricity and gas producers to the system or network, and heat production and distribution,
- Access into underground gas storage facilities and storage of gas,
- Operation of the system and the network,
- Gas supply and electricity supply,
- Production, transmission and distribution of electricity generated from renewable energy sources, by combined generation of heat and power and from domestic coal.

***The subject of regulation*** is further regulation of prices of goods and prices of services provided in network industries and determination of the conditions of their implementation (hereinafter only „the price regulation“). The price regulation is applied on the following activities:

- Generation of electricity from renewable energy sources, in combined heat and power generation technology and from domestic coal,
- Connection to the system and the network, in case of storage tanks in the scope limited by the gas market rules,
- Connection of new producers of electricity and gas within the system or the network, in case of storage tanks in the scope limited by the gas market rules,
- Access to the system and the network, in case of storage tanks in the scope limited by the gas market rules,
- Electricity transmission and distribution,
- Household electricity supply,
- Provision of system services in electricity sector,
- Provision of ancillary services in electricity sector and gas sector, in case of storage tanks in the scope limited by the gas market rules,
- Gas transportation and distribution for gas end-consumers in the restricted territory,
- Household gas supply,
- Heat production, distribution and supply,
- Potable water production, distribution and supply through public water supply system,
- Discharge and treatment of waste water through the public sewage system,
- Provision of water management services related to the utilization of hydro potential of river flows and treatment, supply and off-take of surface water and off-take of power water from watercourses.

### **Liability**

The Office submits, on a yearly basis, to the Board for Regulation a report on activity and economic management and on regulatory policy performance of the Office for approval before March 31 of the following year. The Board for Regulation approves this report before May 15.

The Office submits, on a yearly basis, to the Parliament of the Slovak Republic the report approved by the Board for Regulation before May 31 of the following year.

If the Parliament of the Slovak Republic asks for amending this report, the Office is obliged to submit the amended report approved by the Board within 15 days from the date this requirement is delivered.

### **Cooperation with other state administration authorities**

The Office, in cooperation with the Antimonopoly Office of the Slovak Republic and the Ministry of Economy of the Slovak Republic, shall submit to the Government, on a yearly basis, the Report on gas and electricity markets functioning in the Slovak Republic before April 30, 2009.

## **2.2 Major features of the developments in the past year**

### Electricity

The scope of regulation in electricity was stipulated for generation, transmission, distribution and supply of electricity and the related services. The price regulation was performed by setting the methods of calculation of prices and tariffs for specific regulated activities.

Besides others, the price regulation includes generation of electricity from renewable energy sources, generation of electricity from combined production of electricity and heat, generation of electricity from domestic coal, connection to the network, and access to the network, transmission and distribution of electricity, provision of supply of electricity to households, provision of system and ancillary services in electricity.

### *Evaluation of the regulatory year 2007 from the market transparency prospects*

The generally binding legal provision that defines the rights and duties of electricity market stakeholders and the conditions necessary for non-discriminatory and transparent electricity market organisation, is represented by the Decree of the Government No. 317/2007 Coll. The conditions for access to the network cross – border exchange of electricity, provision of electricity supply, provision of ancillary and system services, deviations of the electricity market and congestion of the network are regulated by this Decree. Other instruments used for non – discriminatory and transparent electricity market organisation, are included in the operational orders of the system operators, approved by the Office.

An important input to the transparency of electricity market was represented by the process of unbundling of operation of distribution from the activities not related to distribution. The mentioned unbundling took place before July 1, 2007 and it concerned distribution system operators that were part of vertically integrated undertaking providing services to more than 100 000 connected electricity end – users.

The scope of price regulation in electricity and the methods of its performance, the scope and structure of justified costs and the methods of setting an adequate profit was determined for specific regulated activities in the Decree of the Office No. 2/2006.

**a) Generation of electricity from renewable energy sources (hereinafter only „RES“) and electricity generated by combined production of electricity and heat (hereinafter only „CPH“) and electricity generated from domestic coal.**

Price for electricity from RES was set for the year 2007 as fixed price with expected period of return on investments to be 12 years and was applied on the basis of a guarantee of origin of electricity issued by the Office. Price of electricity generated by the CPH technologies was set for 2007 as fixed price. Price of electricity produced from domestic coal was set for 2007 in a way that it reflects justified generation costs and profit set by the Office.

The electricity produced from RES and CPH was purchased for set fixed prices by distribution system operators to cover the losses. Distribution system operator cleared the difference between set fixed prices for electricity and market price of electricity for losses through the operation tariff. The electricity produced from domestic coal in a general economic interest was purchased from the producer by suppliers on a compulsory basis. The suppliers applied the price difference through the system operation tariff. The tariff for system operation relating to end consumption of electricity negatively affects the end price of electricity for end users but does not discriminate the market stakeholders.

**b) Connection to the network**

Price for connection to the network was for the year 2007 set for specific connections according to the Decree No.2/2006. The price had the form of a single payment.

**c) Access to the transmission network and transmission of electricity**

Prices for 2007 were set in a way that the actual profit for access to the transmission network and for transmission of electricity did not exceed the maximum allowed profit, which takes into account justified costs and adequate profit. The regulatory framework was set in a way to ensure financial means for investments of the transmission system operator and to take into account all of the profit from provision of transmission and system services and also for billing of deviations in order to ensure stability and safe operation of the electricity network of the Slovak Republic.

Price for transmission of electricity was set as a two-item fixed price. Profits from cross-border exchanges of electricity account to the profits of the transmission system operator. Profits from cross-border exchanges have had a positive effect on the price for transmission of electricity, at the current method of payment. The one-item price for electricity transmission without losses in 2007 decreased in comparison to 2006 by 5, 24%.

**d) Access to the distribution network and distribution of electricity**

The maximum price for access to the distribution network and for distribution of electricity was set in 2007 for each voltage level and calculated as a weighted average of particular tariffs on corresponding voltage level. The maximum price on the particular voltage level comprises justified costs and adequate profit of the voltage level and an aliquot part of justified costs and adequate profit from the higher voltage levels including the costs for transmission of electricity. Setting of entry parameters of the part of the maximum price for access to the distribution network and distribution of electricity on the voltage level, taking into account justified costs and adequate profit of the distribution itself for 2007, was based on the starting yield part of the price for access to the distribution network and distribution of electricity of the price level of the year 2005.

An average price for access to the distribution network and for distribution of electricity in the Slovak Republic (including transmission) in the year 2007 decreased by 3, 44% in comparison with the year 2006.

**e) Supply of electricity to the households**

Electricity off-takers in the households could change the supplier from July 1, 2007. By July 1, 2007, legal unbundling of supply from distribution within vertically integrated undertakings took place, as well. The mentioned facts influenced the regulation of supply of electricity to the households in the following way:

*Period from January 1, 2007 to June 30, 2007:*

Tariffs and fixed prices were set in a way so that the actual yield per electricity unit did not exceed the maximum price for supply of electricity to the households. The maximum price takes into account justified costs including the costs for distribution and transmission and adequate profit. After complex deliberations, the prices for electricity supply for 2007 were negotiated to be at the level of average prices of 2006.

*Period from July 1, 2007 to December 31, 2007:*

Three companies with license for distribution of electricity and three end – suppliers of electricity for households emerged after the legal unbundling of supply activities from distribution activities. The Office approved maximum prices for supply of electricity to households with territorial validity for off-take spots belonging to distribution network of the particular vertically integrated undertaking. The approved prices for supply remained in the same structure and height as the prices in the period from January 1, 2007 to June 30, 2007. Such approved prices are binding also for the other electricity suppliers to the households in the defined territory of the vertically integrated undertaking.

### **Regional integration**

One of the main priorities of the Regional Initiative Central East Europe was congestion management within this region, which fully implements relevant provisions of the Regulation of the EC No. 1228/2003. With this aim, the work on the project of load-flow based calculations and allocations of cross-border capacities, suggested by transmission operators in 2006, continued also in 2007. The support framework and IT – background should be provided by the “ETSO Vista platform” project established in November 2006 and further improved in 2007. First tests carried out in 2007 did not lead to logical results, therefore an external support by a consultant company was provided by the end of 2007.

The regulators of the region declared their basic standpoint towards this issue and thus support of the development and implementation of a coordinated, transparent and non – discriminatory mechanism for allocation of cross-border capacities within the Central and East-European region, i.e. mechanism ensuring a compliance with the EU legislation.

In 2007, a public consultation on the Document on transparency in electricity took place within the Regional Initiative Central and East Europe. This document – analogically to the transparency project within the Nordic region – includes specification of requirements for publishing of information in compliance with the attachment to the Regulation of the EC No. 1228/2003 on Management of Bottlenecks and Guidelines of Good Practice on Information Management and Transparency in Electricity Markets.

### *Wholesale market*

National legislation does not bind any subject to establish a company to organize long-term or short-term electricity trade. In 2007, the electricity trade between suppliers was carried out on the basis of bilateral contracts between the stakeholders, using information on expected deviations. In this context, it is inevitable to emphasize relatively recent electricity market opening in Slovakia, where there has been no protection mechanisms developed against speculative trade practices distorting the market.

The supreme legislative framework, i.e. currently valid European legislation does not reflect this fact enough. It is strictly liberally oriented, which means strong instability for the Slovak market and increased vulnerability of some stakeholders. This situation means unexpected distortion of the anticipated prices for supply of electricity with negative impacts on all off-takers.

#### *End - users*

Since July 1 2007 the electricity market is open for all customers including households. In the year 2007, the end suppliers of electricity received:

- 152 595 requests of off-take spots to terminate a contract for electricity supply
- out of which the households accounted to: 99 149,
- all other electricity off – take spots : 53 446,
- 707 requests of off-take spots for electricity supplier switching

#### Gas sector

Gas market functioning was, in connection to the valid primary and secondary legislation and other business conditions, defined by operational orders of network operators, approved by the Office. The gas market has been characterized by proceeding unbundling and by existence of one dominant natural gas supplier- SPP company, a. s., even after Office's elaboration of legislative conditions for gas market opening and after entering of new stakeholders into the market. It was a process connected to the approval of the Regulation of the Government No. 123/2005 setting gas market rules and coming into force on 30 March 2005. During the following three years, there were changes in primary legislation and its amendments resulted, consecutively, in the secondary legislation amendment.

The year 2007 was important from the view of the amended Act on Regulation coming into force and of the Act on Energy amendment being under the process of preparation.

The amended Act on Regulation adjusted some powers of the Office. At the same time, in compliance with its provisions, there were changes in the structure of gas market consumers and on 1 July 2007, households became eligible customers. Thus, the Slovak market has become fully open. In relation to vulnerability, the household customers are protected by the Office's price regulation by methods of setting maximum prices. Every household gas supplier in the defined territory of the Slovak Republic must accept maximum prices for household gas supply determined for the dominant household gas supplier.

The process of amendment was applied also in the case of the Act on Energy. The currently valid Act on Energy No. 112/2008 elaborates in more detail the conditions for construction of energy devices and the situations resulting in emergency. It includes provisions of assessment of supplied and off-taken amount in energy units. Broadened provisions of the Section on supplier of the last resort guarantee security of supplies in energy market. The Act also legally adjusts other changed conditions on the Slovak gas market resulting from its development. Thus, in compliance with the EU legislation, it elaborates in more detail the requirements related to security of gas supplies and liberalized gas market.

Amendment of Acts resulted in adjustments of secondary legislation. On 1 September 2007, the new Regulation of the Government No. 409/2007 on Gas Market Rules substituting the to-that-moment valid Regulation of the Government No. 123/2005 and adjusting in more detail the conditions of access and connection to the system, supplier switching and metering conditions, came into force. The gas market stakeholders' rights and obligations are, according to the Act on Energy, determined in a way, so that there would be no violation of security and reliability of gas supply to consumers and so that there would be guarantee of equal conditions and possibilities for access and performance for all stakeholders.

In the first half of 2008, the Proposal of the Office's Ordinance on Separate Accounts Book-keeping and the proposal of the Office's Ordinance on Standards of quality of supplied gas and services in gas sector, were submitted for inter-section commentary procedure and in case of their approval, they will come into force in the second half of 2008. The Proposal on the Ordinance on Separate Accounts Book-keeping defines details on the method of keeping separate records of the data which are subject to accountancy and on the method of book-keeping of assets and debts, the Proposal on Standards of quality defines qualitative conditions of fulfillment of the operator's contractual obligations. After their approval, a complete legislative pillar for liberalized gas market in Slovakia will be codified.

The main objective in the gas sector is, within the actual regulatory period, compliance of the Slovak conditions on the gas market with the EU legislative requirements and creation of suitable environment for transparency and non-discrimination of performance of activities and for competition on the liberalized gas market. At the same time, it is important to create such an environment that would protect vulnerable customers and secure quality, economy and reliability of supplies of goods and services.

On 1 July 2007, the Slovak gas market became open. The household gas customers got the statute of eligible customers from this day on. Despite this fact, Slovenský plynárenský priemysel, a. s. keeps its dominant position on the market, and, with the date of effect since 1 July 2006, it completed legal unbundling of transport and distribution activities. Besides the parent company SPP, a. s., its 100% daughter company - eustream, a. s., and SPP- Distribúcia, a. s. are as well active in the market. Complying with the process of energy market liberalization, the main objective of SPP unbundling is to gradually create networks of independent operators for transport and distribution who will fortify transparent and non-discriminatory access to the gas network for third parties, i.e. for other gas traders.

The Office is applying its powers also in connection to fulfillment of tasks resulting from the activity of the Regional Initiative for gas of the South- South-East region, while holding its membership and in which it defined national priorities of Slovakia within implementation of the project of unified European gas market. In order to increase security of gas supply, it perceives a need of network diversification, of concluding long-term contracts holding clauses of transit security and continuity and of creation of a central storage centre in the triangle inter-connection - Czech Republic- Austria- Slovakia.

The Slovak tradition in gas industry is dated back to the 19th century. The construction of transit gas line in 1971, together with natural gas storage facilities has secured capacity self- sufficiency of the country. It significantly influences efficiency of gas industry in the Slovak Republic by methods of infrastructure of gas systems. The dependence of the country on Russian natural gas import is, from the long-term view, almost 100%. A partial change in this field can be presumed after implementation of planned new "European gas network projects", including LNG projects. Together with market liberalization, there are evident possibilities of cross-border flows from other sources. Realization of the planned trends will significantly influence the up-to-date structure of the European natural gas market.

The permanent intention of the Slovak energy policy is to apply the requirement of promoting international cooperation in the field of gas transport. Further intention is building of long-term correct and non-discriminatory relations of cooperation with other inter-connected systems and with transport system users, as well as compliance with the national interest and EU legislative recommendations and rules during the creation of the all-European functioning liberalized gas market.

### 3. Regulation and performance in the electricity market

#### 3.1 Regulatory issues [Article 23(1) except for "h"]

##### *General*

In connection with rules on performance of regulation in network industries according to the regulatory policy, the Office has prepared legislative provisions defining the scope and method of regulation for the upcoming regulatory period as well as the structure of justified costs and the method of calculation of the amount of reasonable profit. In relation to this fact, the Decree of the Office No. 2/2007 dated August 27, 2007 amends the Decree of the Office No. 2/2006 dated June 21, 2006 on the scope of price regulation in electricity, the method of its performance, the scope and structure of justified costs, the method of calculation of reasonable profit for particular regulated activities and, at the same time, it supplements the Decree of the Office No. 1/2007 dated June 27, 2007 defining the scope of price regulation in network industries and the method of its performance.

The scope of regulation in electricity has been hereafter defined for:

- Generation of electricity from domestic coal,
- Generation of electricity from renewable sources of energy and on the basis of combined generation of electricity and heat,
- Access and connection to the transmission system and distribution system,
- Electricity transmission,
- Electricity distribution,
- Provision of ancillary and system services in electricity sector,
- Household electricity supply.

The price regulation performance has been applied by determination of:

- a) Fixed price for electricity generated from renewable sources of energy, generated by combined generation and from domestic coal,
- b) The method of calculation of maximum price for access to the system,
- c) The method of calculation of maximum price and a tariff for Access to the transmission system and electricity transmission and by determination of a tariff for provision of ancillary and system services,
- d) The method of calculation of maximum price and a tariff for access to a distribution system and electricity distribution of electricity distribution license holders, whose distribution of electricity to customers in the year t-1 was more than 1,5 TWh and by determination of a tariff for provision of system services,
- e) The method of calculation of maximum price and a tariff for household electricity supply for electricity supply license holders, whose household electricity supply in the year t-1 was more than 1,5 TWh,
- f) The method of calculation of maximum price and a tariff for electricity distribution and supply for electricity distribution and supply license holders, whose electricity distribution and supply in the year t-1 did not exceed 1,5 TWh.

The Decree of the Office No. 2/2007 came into effect on August 31, 2007 with an exemption of Art. I., Section 6 (valid from January 1, 2008). This Decree has set out new parameters for access to the transmission system and for transmission, and thus in connection with starting the one-year transitory regulatory period for transmission regulation (from 2008 to 2009), that is narrowly focused on the necessity to plan and implement cross-border investments (construction of new cross-border inter-connectors, bolstering of the national transmission system and control systems). At present, the rules of the new three-year's regulatory period are under preparation.

In parallel with adoption of the Office's legislative provisions due to the changing market conditions, the Office, in compliance with the Act on Regulation, elaborated and submitted to the SR Government a proposal on the rules for electricity market functioning which was approved by the Government through its Regulation No. 317/2007 Coll. with the date of effect of July 15, 2007 (hereinafter only „the rules for electricity market functioning“).

### ***Management and allocation of inter-connection capacity and the congestion management mechanism***

The Slovak Republic has, in connection with physical capacities, relatively strong cross-border inter-connections with the neighboring control areas as shown below:

#### *Slovakia (SEPS) – Czech Republic (CEPS):*

400 kV line on the profile from CEPS (Sokolnice) to SEPS (Križovany)  
400 kV line on the profile from CEPS (Sokolnice) to SEPS (Stupava)  
400 kV line on the profile from SEPS (Varín) to CEPS (Nosovice)  
220 kV line on the profile from CEPS (Sokolnice) to SEPS (Senica)  
220 kV line on the profile from SEPS (Považská Bystrica) to CEPS (Lískovec)

#### *Slovakia (SEPS) – Poland (PSE-O):*

400 kV double line on the profile from PSE-O (Krosno) to SEPS (Lemešany)

#### *Slovakia (SEPS) – Hungary (MAVIR):*

400 kV line on the profile from SEPS (Gabčíkovo) to MAVIR (Gyor)  
400 kV line on the profile from SEPS (Levice) to MAVIR (God)

#### *Slovakia (SEPS) – Ukraine (WPS):*

400 kV line on the profile from SEPS (Veľké Kapušany) to WPS, Burshtyn Island (Mukachevo).

Development of electricity market within the Central and Eastern Europe and the corresponding physical flows contribute to the remaining congestion, in particular on the profile SEPS/MAVIR. Therefore, there is relatively low value of available tradable cross-border transmission capacities (ATC) on this profile.

The indicative values of net transmission capacities (NTC) on the cross-border profiles of the Slovak transmission operator's (SEPS, a.s.) control area have been published by the transmission operator on the ETSO website within the chapter of regional overview.

The congestion rate on particular cross-border profiles of SEPS, a.s. (on the Slovak side, the congestion rate of particular profiles) is as follows:

CZ/SK: 50 to 75 %, SK/CZ: 25 to 50%, PL/SK: 50 to 75%, SK/PL: 25 to 50%, UA/SK and SK/UA: there is no structural congestion, HU/SK: there is no structural congestion, SK/HU: 50 to 75% congestion.

In 2007, the method of explicit auctions on the basis of net transmission capacities (NTC) stipulated according to the ETSO recommendations was being permanently applied on all profiles of SEPS, a.s. This method was being applied for whole capacity of a profile (regarding the profile with Hungary, it was being applied for the half of capacities of the profile on each side), excluding 300 MW of capacities on the Slovak side of the profiles with Poland and Hungary which have been reserved according to the long-term contract. Most of capacities was offered for long-term allocations on all profiles, the non-used long-term capacities and other free capacities were offered in daily auctions. On the profile with Czech Republic, there are also intra-day allocations being applied.

In 2005, the transmission operators of the region prepared an expansion of trilateral system (ČEPS, VE-T, PSE-O) of coordinated explicit auctions. i.e. to all countries of the region for yearly, monthly and daily allocations of transmission capacities in 2006. The Slovak transmission operator SEPS, a.s. has been connected to this system with the profiles with Czech Republic and Poland since January 1, 2006. In 2007, this system was further on developed and resulted in improvement of congestion management when being compared to the applied bilateral allocations, and thus in the meaning of:

- Improved coordination and common allocation of capacities through one auction Office, it means that the registration for the system 1:1 is being performed on one spot,
- Possibilities of secondary trading with capacities using the capacity transfer through the internet application „Auction ePortal“,
- Possibilities of inter-connection of auction offers within daily auctions and „auction offers being offered in block“,
- Connections of notified long-term programs during calculation of daily capacities (netting).

On the profile with Hungary, the bilateral explicit auctions eventuated and on the profile with Poland, the unilateral explicit auctions eventuated- both on the basis of NTC capacities according to ETSO recommendations.

The auctions on the SEPS/MAVIR profile were organized separately. Each MAVIR and SEPS, a.s. offered in auctions a half of ATC capacities on the common profile, while SEPS a.s. accepted the capacity allocated in MAVIR auction and MAVIR accepted the capacity allocated in SEPS, a.s. auction.

The operational order of SEPS, a.s approved by the Office, stipulates other specific conditions and rules of electricity cross-border flows management. In 2007 as well, while preparing the operation, the transmission operator performed necessary provisions to avoid congestion within the control area.

By means of the above mentioned methods of cross-border capacities allocation, there was an offer of explicitly secured capacities which were, vis-à-vis to the auction Office, guaranteed by both neighboring transmission operators (excluding the profile with WPS and other cases specified in the relevant auction rules). In general, there was a rule that the offered capacity could be reduced before announcement of auction results and, in this case, the capacities reduction could not be a subject of any compensation. The capacities allocated in auctions could be reduced in a particular hour or during every hour of a day in the case of emergency and in such situation, the transmission operator had to act immediately, or under other circumstances which were not possible to be eliminated by the transport operator.

The new electricity market rules being valid since July 15, 2007 (except for some provisions) unambiguously define the steps of the transmission system operator in case of an urgent danger of an appearance of congestion, they define the dispatching powers in a case that the basic provisions are not sufficient to resolve congestion and they also define the evaluation of changes of production devices connection in order to avoid an appearance of a congestion or to solve the congestion.

### ***Regulation of obligations of transmission and distribution companies***

According to Section 5 (3) of the Act on Energy, all electricity stakeholders must hold a license for conducting business in energy sector issued by the Office. In relation to the number of issued licenses for conducting business in energy sector, in 2007 the Office issued 1 license for electricity transmission and 48 licenses for electricity distribution.

The Office, in order to secure non-discriminatory and transparent electricity market organization in connection with other provisions, approves for regulated entities, in the field of transmission and distribution, both regulated fees of the transmission system operator and distribution systems operators and operational orders of these entities in the form of the Office's decision. The system operators are obliged, according to the Act on Regulation, to provide their services complying with an operational order which includes the rules for electricity market functioning incorporated for their own operational conditions. An operational order approved by the Office becomes a binding document for electricity stakeholders. Based on the system operators' requirements, during 2007, the Office issued 72 decisions on operational orders for stakeholders.

### Network tariffs

Network tariffs of the transmission system operator and distribution systems operators

#### **a) Development of transmission operator's regulated fees:**

The Office, within its competencies, determines for the transmission system operator:

- A tariff for connection and access to the transmission system, as well as electricity system management (for electricity transmission),
- A tariff for provision of system services for the transmission system users,
- A tariff for system operation,
- A tariff for accounting, assessment and balancing of deviations,
- Maximum prices for purchasing of particular types of ancillary services,
- Maximum allowed costs for purchasing of all ancillary services,
- Maximum prices of the offered positive regulated power,
- Minimum prices of the offered negative regulated power.

The regulatory framework, and the resulting legislative provisions, hereafter takes into consideration the financial impacts of cross-border activities (auctions, transits, ITC compensation mechanism among transmission operators).

The transmission operator's three-item price includes a fee for transmitted power, for losses and for reserved capacity. This price is being calculated to a two-item price where costs for reserved capacity are included into the so-called calculated single-item price for transmitted power. Development of fees within the three-item price is implying that, in comparison with 2007, there will be both increase and reduction in the amount of particular fees in 2008. The approved tariff for transmitted electricity will be inter-yearly reduced by 30,85% which means, in an absolute expression, the reduction by 25,61 SK/MWh and the tariff for reserved capacity will increase by 72,20%, which means, in an absolute expression, the increase by 231553,63 Sk/MW. This significant movement in prices for transmitted electricity and for reserved capacity was recorded mainly due to the change of a percentage rate of the weights of the charges assorted according to reserved capacity and labor. The electricity reimbursements are now divided according to the following proportion: the bigger part for capacity. i.e. the tariff for reserved capacity and the smaller part for labor, i.e. the tariff for transmitted electricity. The tariff for covering losses increase by 28, 55%, in an absolute expression 7, 80 SK/MWh in the transmission system, is caused mainly by the increase of power electricity price for covering these losses which are not regulated by the Office according to the valid legislation.

The composition of regulated fees for the transmission system customers is as follows: a tariff for the system operation, system fee, transmission fee (i.e. the re-calculated single-item price for transmitted electricity) and transmission losses. The 2007/2008 inter-year change in the amount of the mentioned regulated fees in percentage is as follows: reduction of the system operation tariff by 30,71%, reduction of the system fee by 9,29%, increase of the transmission fee by 3,73% and increase of the price for transmission losses by 30,07%.

In this connection, regulated fees for the transmission system customers show a reduction by 9, 06% within the 2008/2007 inter-year comparison.

**b). Development of distribution operator's regulated fees**

Since July 1, 2007 there has been legal unbundling reported in the electricity market, i.e. electricity distribution has been unbundled from its sale (supply). From this date on, the relevant distribution system in Slovakia have been owned and operated by the newly established companies: ZSE Distribúcia, a.s., Stredoslovenská energetika-Distribúcia, a.s. a Východoslovenská distribučná, a.s.

For the above mentioned distribution system operators whose distribution of electricity was higher than 1 500 000 MWh in the previous year, the Office determines:

- Tariffs and maximum prices for access to a distribution system and for electricity distribution,
- Maximum price for losses during distribution,
- Tariffs for provision of system services for distribution system users,
- Tariffs for system operation,
- Tariffs and maximum prices for household electricity supply.

The development of average regulated fees for the customers connected to a distribution system (in average as for Slovakia) shows, within the inter-year comparison of 2008/2007 and expressed as a percentage, the following changes: reduction of the system operation tariffs by 30, 71%, reduction of the system fee by 9, 29%, increase of the distribution fee (including the transmission fee) by 7, 91% and increase of the fee for losses during distribution and transmission by 2, 24%. To sum it up, the regulated fees for customers connected to a distribution system increased by 0, 38%.

Besides the above mentioned most significant distribution companies in the electricity market, there are also the so-called local distributors operating, having the distribution of less than 1 500 000 MWh/year. Majority of them is represented by premises of production undertakings which are, according to the license on conducting business in electricity sector, executing the role of a distributor. The Office determines for an operator of such distribution system:

- Maximum price for electricity distribution,
- Maximum amount of reasonable profit for electricity distribution,
- Own calculation of a maximum price for household electricity supply (or, an operator may use the electricity distribution and supply tariffs of an electricity distribution license holder whose distribution system is connected onto).

**c) Price of electricity for households**

A part of the price for electricity supply to a household electricity customer is formed by the payments related to electricity transmission, electricity distribution, provision of system services and the system operation costs. The price for household electricity supply is the only final price including also the power electricity price being regulated in 2007, and thus within the regulation of the maximum overall price of household electricity supply.

Because the price of power electricity was formed in the free market (e.g. within the auctions of Slovenských elektrární, a. s.), the power electricity price for end-customers increased by 20% on average. This eminent increase of the price of power electricity was eliminated by optimizing the prices of system and network services and, as a result, the average final price of household electricity increased only by 2, 87%. The changes in the structure of tariffs for households appeared due to the trade policy of the crucial suppliers focused especially on optimization of the costs for electricity purchase and, at the same time, an effective utilization of assets.

The Office laid down the conditions for optimization of the costs related to system operation which, within the adoption of new rules for electricity market functioning in 2007, resulted in qualitative improvement in application practice in the electricity market.

It is being confirmed that the created conditions are promoting competition environment and electricity market transparency. In this connection, it is possible to state that the Office has managed to create such conditions in the electricity market so that reliability, security and stability of the electricity system were preserved even when the tariffs for system services provision and for system operation were reduced.

#### Balancing the system's imbalance

According to the Act on Regulation, the Office determines, event. approves:

- a) In case of electricity producers:
  - Tariffs for provision of ancillary services in electricity sector,
  - Maximum prices for regulated electricity supply
- b) In case of a transmission operator:
  - A tariff for balancing the deviations for a stakeholder who has chosen a regime of his own deviation liability,
  - Maximum prices for purchasing of particular types of ancillary services,
  - Maximum allowed costs for purchasing of all ancillary services,
  - Maximum prices of the offered positive regulated power,
  - Maximum prices for the offered negative regulated power.

The Office, within the rules for electricity market functioning, has stipulated the conditions for improving the situation in the electricity market related to balancing of deviations and payments of the balancing entities, and thus the way, it has determined new conditions for provision of regulated power and a new mechanism for defining more system costs, which is described in detail in the Decree of the Office No. 2/2006 and in the relevant decisions of the Office.

The rules for electricity market functioning stipulate that the costs used for purchasing of reserved capacity on a cross-border profile in order to import ancillary services, are included in the overall costs for purchasing of ancillary services. This is the way how the market opening is being promoted with ancillary services for suppliers of ancillary services from abroad. Regarding the fact that in 2007, the Office increased the price for regulated power in the electricity market, there was an increase of ancillary services suppliers recorded, and thus the competitiveness of the market has risen up. The greater offer of ancillary services providers resulted in the possibility of the Office to reduce the tariff for provision of system services.

The electricity from imported emergency assistance is being accounted as regulated electricity and the regulated electricity import costs within the emergency assistance are a part of the regulated electricity acquisition costs. This provision takes into consideration the case when the deviation of the transmission system operator includes the amount of regulated electricity exported within emergency assistance. In such case, the amount of deviation is reduced by this volume of the regulated electricity exported within emergency assistance due to the need to determine payments for increased costs of the transmission system operator.

Discipline of the customers (accounting entities) related to the fulfillment of registered daily electricity off take diagrams has been significantly improved. It is possible to positively assess the fact that the costs for removal of a deviation caused by electricity customers has been reduced, and thus were reduced also their payments- the costs for off taken electricity.

### **3.1.4 Effective unbundling**

An important contribution for electricity market transparency resided in operational unbundling of distribution systems from the activities not relating to electricity distribution. In the process of formation of the rules for electricity market functioning, the Office cooperated with state authorities, especially in the case of securing transparency of the process of operational unbundling of distribution systems from the activities not relating to electricity distribution in electricity sector. The unbundling eventuated on July 1, 2007 and was related to the distribution systems operators who are a part of an integrated undertaking and who provided services for more than 100 000 connected electricity customers.

Legal unbundling of the operation of a distribution system from supply did not have any influence on household electricity supply, which was and still is provided, based on the existing contracts, by an electricity supplier- a part of a vertically integrated undertaking. However, there was a change in the contract content: the existing contracts on household supply have changed into the contracts on associated supply and distribution of electricity and the fixed prices for electricity supply have changed, based on the Office' s Decree, into maximum prices being valid in the relevant area of the restricted region of SR. The amount of individual integrated prices (supply, distribution and other regulated fees) has not changed, and the contracts, the payment method and amount of an advance being concluded before July 1, 2007 also remained valid. The contracts concluded up to July 1, 2007 were not necessary to change because they include, except for supply, also distribution which is, on the basis of a mandate of a particular distribution company, provided by some of the decisive electricity supplier (ZSE Energia,a.s., SSE, a.s., VSE, a.s.).

It is necessary to point out also negative side-effects of the unbundling, especially in connection with application of contracts on provision of services, the so-called „Service level agreement“ among originally integrated entities. All in all, this phenomenon contributes to price increase.

### **3.2 Competition issues [Article 23(8) and 23(1)(h)]**

The main electricity stakeholders are:

- Electricity producer,
- Transmission system operator,
- Distribution system operator,
- Electricity supplier- at present, 102 licenses for electricity supply have been issued,
- Eligible electricity customer- eligible to choose his supplier without the commodity price guaranty (non-regulated),
- household – eligible to choose its supplier with a guaranty of an overall maximum price for electricity supply from any supplier
- electricity trader,
- trade platforms – intra-day trading, long-term and short-term contracts, balance market.

According to Section 5 (3) of the Act on Energy, all electricity stakeholders must hold a license for conducting business in electricity sector issued by the Office. The number of issued licenses for conducting business in electricity sector during 2007 is shown below:

Electricity production: 11  
Electricity transmission: 1  
Electricity distribution: 48

Electricity supply: 83.

Competition in the field of production is, due to general insufficiency of existing (installed) production capacities within the region, event. across Europe, is, to all intents and purposes, unrealizable and it does not exist. In other fields of activity, the competition is starting to develop.

The Division of electricity regulation, in order to control the fulfillment of the rules for electricity market functioning, performed in 2007 the following inquiries:

- 6 initiatives for re-investigation of the amount of the fee for connection and of the procedure of invoicing of the connection fee to the transmission and distribution system,
- 3 initiatives for re-investigation of the procedure in the case of an electricity supplier switching.

The Office, after the factual status being re-investigated, assessed all initiatives as unjustified due to the fact that the regulated entities' procedure complied with the valid legal provisions.

### ***3.2.1. Wholesale electricity market from the view of competition issues***

The national legislation does not impose to any entity an obligation to establish a company which would organize a short-term or a long-term electricity trade. Based on the information on the presumed deviations, the supply companies purchase or sell electricity among themselves, and thus on the basis of bilateral contracts of particular stakeholders and electricity traders.

In order to enable calculations and prognosis of deviations, an intra-day trade platform SPX has been established within the common project of three distribution companies ZSE, SSE and VSE. This SPX trade platform was further on being developed in 2006 and 2007. An information Exchange in the field of deviations assessment should be performed the way, so that the SPX Company shall, based on reimbursement provision, offer an internet information portal to particular stakeholders in Slovakia, through which these stakeholders shall inform others on an opportunity to sell, event. purchase electricity within the intra-day trading. After this information is published on the SPX internet portal, the further action in contracting business among stakeholders is being applied also through the SPX internet portal.

### ***3.2.2. Retail electricity market from the view of competition issues***

Since July 1, 2007, the electricity market has been opened for all electricity customers including households. However, the effects of the opening have not appeared sufficiently, yet, and thus mainly due to the reason of insufficient competition in the electricity market.

In 2007, the electricity end-suppliers accepted:

- 152 595 applications of off take spots who terminated the contract on electricity supply, out of which 99 149 were represented by households and 53 446 other electricity off take spots,
- 707 applications of off take spots related to electricity supplier switching.

### ***3.2.3 Provisions to avoid the abuse of a dominant position***

Protection of competition in the market of goods, outputs, labor and services in order to avoid its limitation, formation of conditions for its further development to promote economic development in the consumers' favor, as well as an adjustment of powers and the field of activity of the Anti-

monopole Office of SR (hereinafter only „AMO“) is laid down in the Act on competition protection (hereinafter only „ACP“).

AMO did not apply in the monitored period any of its powers according to ACP against the entities performing their activities in the electricity wholesale and retail markets.

## **4.Regulation and performance in the natural gas market**

### **4.1 Regulatory issues**

#### **4.1.1. General**

On July 1, 2007, according to the Act on Energy provisions, households became eligible customers and the Slovak gas market became open. However, the market liberalization process is entering a phase when there is awaited a gradual change of the market structure itself from the view of number and position of its participants. The Slovak market is so far characterized by a historically dominant position of one gas supplier. At present, households represent 95,1% of eligible customers in Slovakia. Therefore, the competition in its typical form is an issue of further development in the Slovak gas market. The competition opportunities and the conditions for new entrants are enabled by legislative conditions within the primary energy legislation and the secondary legislation created by the Office as well. The market liberalization process is closely connected with the flexibility of the networks and their operators and an appropriate diversification of the gas network structure being one of the conditions for market opening.

#### **4.1.2. Management and allocation of inter-connection capacity and mechanism of congestion management**

The transport system in the Slovak Republic, including four compressor stations, is currently 2270 km long. Transport is being realized on the basis of the entry-exit tariff system. The overall import capacity for Slovak and foreign customers achieved 72,8 bill. m<sup>3</sup> in 2007. The capacity possibilities of the transport system are sufficient and they are enabling to cover customers' demands. Regarding the concluded long-term contracts, there is no neither physical nor contractual gas aggregation in the Slovak region and the continuity of gas flows is being sufficiently secured. The continuous operation is supported by a provision of operator's regular information for customers on the availability of transport capacity. In the near future, there is no other experience in the field of securing of gas flow continuity awaited. All planned network maintenance works are discussed and coordinated with all included parties in advance a yearly or quarterly.

The conditions for gas market functioning are adjusted in the Rules for gas market functioning. The provisions of these rules include the methods of allocation, aggregation and overrun of capacity in the transport and distribution system.

The cross-border trading with natural gas is an issue of a long-term development. Its faster development is connected also with the north-south network diversification. Trading with transport capacity in the secondary market is not limited in the Slovak Republic. The seller is just obliged to send a report on this trade to eustream, a.s, the Slovak transport system operator who provides a so-called „bulletin board system“ on its website to enable to merchandise offer and demand of transport capacity in connection with secondary market trading.

There is continuity in realization of the contracts concluded according to Article 3 (1) and according to the conditions stipulated in the EEC Directive No. 296/1991 on Transport of natural gas by gas pipeline networks which have still remained in effect after the EC Directive No. 55/2003 became valid and which are expected to terminate this year.

#### **4.1.3. Regulation of obligations of transport and distribution companies**

In the territory of the Slovak Republic, there is single transport system operator and single dominant distribution system operator.

##### Network tariffs

The price regulation in gas sector includes:

- Connection to the transport network,
- Connection to the distribution network,
- Access to the network,
- Gas transport to end users within a restricted territory,
- Gas distribution to end users within a restricted territory,
- Household gas supply,
- Provision of ancillary services in gas sector.

At price determination, justified costs and reasonable profit are taken into account. Justified costs are verifiable and invested in an inevitable scope for performance of a regulated activity with the focus content defined by the Decree. Reasonable profit must reflect the scope of investments necessary for securing a long-term operationability of the system, a reasonable recoverability of operational assets and stimulation of stable long-term business conduct.

Based on the Decree No. 4/2007 which defines the scope and structure of justified costs, the method of determination of the amount of reasonable profit and the sources for price proposal in gas sector and on the Decree No. 1/2007 which defines the scope of price regulation in network industries and the method of its performance, the Office determined and approved:

- For the transport system operator:  
1/ tariffs and tariff conditions for access to the transport system and natural gas transport for the transport system users;
- For a distribution system operator:  
1/ tariffs for access to a distribution system and gas distribution and provision of ancillary services in gas industry;  
2/ price for connection to a distribution system for:  
a/ the household category- connection of an off take gas device of a household gas customer to a distribution system  
b/ the non-household category – connection of an off take gas device of a household gas customer to a distribution system;
- For a household gas supplier:  
1/ maximum prices for gas supply for household customers.

##### *Transport system operator*

The prices are regulated for access to the transport system and gas transport and for connection to the transport system. The method of price regulation of gas transport is being determined as a direct determination of a comparable price complying with the Act on Regulation which emanates from a comparative analysis of transport prices in other EU member states.

The price for connection to the transport system emanates from legitimate costs necessary for documentation, technical and realization connection phase being a subject of the Office's approval on the basis of a submitted price proposal.

The tariff system for access to the transport system and gas transport contains special tariffs for entry points to the transport system and special tariffs for exit points from the transport system. It is divided into the tariffs related to the daily transport capacity and the tariffs related to the amount of the really transported gas. The initial tariff rates in all tariff groups into which were the network users divided according to a contractually arranged daily maximum gas transport capacity, are increased by an escalatory factor emanating from an inflation rate of EU countries.

### *Distribution system operator*

Regulation of prices for access to the distribution system and gas distribution is related to a regulated entity with the number of off take spots from the distribution system was higher than 100 000 last year and to a regulated entity with the number of off take spots from the distribution system did not exceed 100 000 last year. In the case of a regulated entity with the number of off take spots higher than 100 000, the tariffs for access to the distribution system and gas distribution proposed the way, so that the overall planned yields from the tariffs for access to the distribution system and gas distribution for a particular year of the regulatory period would not exceed the overall yields for access to the distribution system and gas distribution permitted by the Office. In the case of a regulated entity with the number of off take spots lower than 100 000, the prices are being defined by the cost method, and thus the way, so that the price for access to the distribution system and gas distribution would cover justified costs and reasonable profit, while this price is being defined every year,

The price for connection to the distribution system is being defined the way, so that the price or the tariff for connection would not exceed the planned regulated entity's average costs for connection to the distribution system. The tariffs for connection to the distribution system are being proposed separately for household gas customers and for non-household gas customers.

For the year 2008, the Office has approved the tariffs for access to the distribution system, tariffs for gas distribution and the price for provision of ancillary services which are not being provided within the tariffs for access to the distribution system and for gas distribution. The tariffs for access to the distribution system and gas distribution have been proposed the way, so that they would not contain cross subsidies between particular groups of gas customers. When the tariffs for access to the distribution system and gas distribution are formed, the specific features of gas off take of gas market stakeholders are taken into consideration.

### *Supply*

The prices for supply for household gas customers are determined for the year 2008 in the form of maximum prices. They are being stipulated the way, so that the weighted average of prices for gas supply would not exceed the share of overall permitted yields for household gas supply and the planned amount of supplied gas, with an adjustment through the correction factor taking into consideration presumed and real costs of a regulated entity.

In the field of price regulation of household gas supply, there are more closely specified costs on storage as a part of security and reliability of gas supplies and an elaborated correction factor which corrects mainly planned and presumed costs on gas purchase, event. a part of costs on gas purchase determined for households in the meaning of an allocation key on the gas purchase costs entering the formula of calculation of overall permitted yields for household gas supply.

From July 1, 2007, households have become eligible customers. The gas supply to eligible customers itself was not included in price regulation since January 1, 2005. After gas market being fully liberalized (July 1, 2007), the Office guarantees protection of household gas customers by defining the maximum price for household gas supply which includes mainly the costs on gas acquisition, the costs related to gas transport and to gas storage.

Production, storage and accumulation of gas, as well as an access to gas storage facilities are not included in the Office's price regulation. On the basis of the Act on energy, an arranged approach is being applied in these activities.

The table below shows an estimated average national network fee for utilization of the transport and distribution networks in the restricted territory under selected parameters and a one- year contract and the prices paid by network customers according to individual categories in the Slovak Republic:

I4-1	0,032 €/m <sup>3</sup>
I1	0,085 €/m <sup>3</sup>
D3	0,108 €/m <sup>3</sup>

A household gas customer in the Slovak Republic with an average household consumption pays an average price for gas supply in the amount of 0,405 €/m<sup>3</sup>.

#### Balancing of the system's imbalance

Balancing of the system is being realized in compliance with the Rules for gas market functioning. The Slovak Republic is a balancing zone of the transport system and a balancing zone of the distribution system from the view of physical balancing. From the perspective of a distribution system user, the Slovak Republic is one balancing zone.

The system operator is in charge of physical balancing. The commercial system balancing and deviations setting is being assessed by the distribution system operator. Non-fulfillment of the balance and a deviation, i.e. the difference between amounts of gas off taken by a gas market participant on the exit point from the system, is being charged. A gas market participant (hereinafter only „user“) who has concluded a contract with the system operator is in charge of the deviation.

The distribution system operator and the transport system operator shall secure inter-connection of the distribution system and the transport system and submission of the data necessary for system balancing.

The transport system user who is not a distribution system user within a contractual relationship with a relevant capacity and the period of duration, is obliged to arrange the conditions of a commercial system balance and the method of balancing the disproportion between his amount of gas entering the transport system and his amount of gas off taken from the transport system. Only the distribution system operator performs commercial balancing and deviation setting for a distribution system user, even when he has concluded a contract on gas transport with the transport system operator, where the only exit point from the transport system is a household virtual point; in this case, a distribution system user reimburses only the fee for deviation on the distribution system.

The distribution system operator is in charge of physical system balancing and deviations setting within a restricted territory. If there are more distribution system operators within a restricted territory, the system balancing is a subject of responsibility of a distribution system operator who is obliged to fulfil the role of a gas dispatching within the restricted territory. The distribution system operator has a reserved part of storage capacity mainly for covering daily deviations of gas market participants while the costs on this capacity are included in the price for gas distribution.

The balance regime is daily; the balancing is being realized and assessed within a gas day. For every distribution system user, one daily deviation is calculated for all exit points. The amount of a daily deviation is recorded on a distribution system user's balancing invoice. A deviation permitted for a distribution system user is stipulated in the amount of 5% from the contractually arranged daily distribution capacity of a user of the distribution system.

The distribution system operator handles separate records on the distribution system balancing fees. The distribution system operator handles a balancing invoice for every user of the distribution system being in charge of a deviation.

The system operator's detail information for market participants is said in the operational order of a relevant distribution system operator which is available on a distribution system operator's website and is the basis for defining conditions in business contracts of a distribution system operator and a gas market participant.

#### **4.1.4 Effective unbundling**

Regarding the historical development, until June 30, 2006, there was one vertically integrated monopoly company SPP, a.s. performing its activities in the Slovak natural gas market. With the effect from July 1, 2006, SPP, a.s. legally unbundled transport and distribution activities. Besides the parent company SPP, a.s., also its 100% daughter companies - SPP - preprava, a. s. (eustream, a.s. since January 1, 2008) and SPP - distribúcia, a. s. – initiated its activities in the market. The legal unbundling of SPP, a.s. became effective according to the Act on Energy.

Eustream, a. s. operates the transport network within the restricted territory of SR, which is owned by the parent company SPP, a.s. It secures natural gas transport from Ukrainian borders through the Slovak territory to the European market with the overall length of the transport system of 2270 km. The company secures operation and maintenance of compressor stations and line parts of transport gas pipelines through four areas (Veľké Kapušany, Jablonov nad Turňou, Veľké Zlievce and Ivánka pri Nitre). The transport system is being managed by the gas dispatching.

The SPP – distribúcia, a. s. operates and owns the distribution system- gas pipelines in SR, including technologic premises- natural gas regulatory stations and the central gas dispatching. The Slovak Republic holds, within gasification, the second position in comparison with EU member states. Its field of activities includes also the sale of distribution capacities, the development, operation and maintenance of gas networks. The SPP - distribúcia, a. s. secures distribution of natural gas from transport systems through distribution gas device within the restricted territory of the Slovak Republic up to its customers. It secures a connection to the distribution system and calculation of natural gas consumption, as well.

Both daughter companies are, in compliance with the Slovak legislation, subject to an independent account audit. Within the SPP, a.s. organizational structure, there is a division remaining focusing on gas trade and gas supply.

In the regions of Slovakia, there are around 40 active independent local distribution companies. The number of customers of the individual local distribution companies does not exceed 100 000.

It is necessary to emphasize also negative side-effects of the mentioned unbundling, especially in relation to the application of the Service level agreements among originally integrated entities. All in all, the mentioned phenomenon contributes to price increase.

## **4.2 Competition issues [Article 25(1) (h)]**

### **4.2.1 Wholesale market description**

The sale of natural gas in the Slovak Republic represented 5, 7 bil. m<sup>3</sup>. In comparison with the previous year, the consumption among wholesale customers was reduced, and this trend continued in the consumption of households and retail customers. It is due to application of economical measures in energy consumption, especially in the wholesale customers segment. The reduced sale volume of natural gas in 2007 in Slovakia was however caused by warm weather, as well. Besides the previously mentioned measures, in the households segment, there is a tendency to change the before- used fuel which is related to the natural gas price increase as a consequence from global markets development. The higher gas price prefers other types of fuel- coal and wood. The economical measures are directly related to the both natural gas price increase and increase of energy efficiency of the gas customers. Contrary to 2006, the sale of natural gas in the restricted territory of SR was reduced by approx. 3,4 % in 2007.

Domestic natural gas mining in 2007 achieved the level of approx. 120 mil. m<sup>3</sup>. From the long-term view, mining from the current sources is supposed to continue with a decreasing trend. Only the newly- discovered reservoirs may eventually change the situation- the mining will depend on the scope, character and localization of the new reservoirs.

The natural gas supplies for the Slovak Republic needs are guaranteed on the basis of a long-term contract between the Slovenský plynárenský priemysel, a. s. company and the Russian company Gazexport. This contract terminates its validity in 2008. At present, the trade partners are holding intensive discussions on a new long-term contract conclusion.

Tab. 4.2.1.1 *Development of the wholesale market*

Year	Production [mld.m <sup>3</sup> ]	Demand [mld.m <sup>3</sup> ]	Import capacity [bil. m <sup>3</sup> /year]			
			Transit in total	Reserved for transit	Long-term contracts	Free
2001	0,165	7,5	94	71,5	71,5	22,5
2002	0,156	7,1	94	70,4	70,4	23,6
2003	0,150	6,8	94	72,7	72,7	21,3
2004	0,143	6,5	94	82,7	82,7	11,3
2005	0,135	6,3	94	82,7	82,7	11,3
2006	0,135	6,2	94	84	84	10
2007	0,120	5,7	94	84,4	84,4	9,6

The foreign companies are active in the Slovak market through interests in SPP, a.s. in which 49% of assets is owned by the Slovak Gas Holding, B. V. company (formed by Ruhrgas and Gaz de France companies).

In the NAFTA, a. s. company which owns and operates underground gas reservoirs and performs gas mining has the following shareholder structure: SPP, a. s. – 56,15 %, E.ON Ruhrgas – 40,45 %, other shareholders – 3,40 %.

The shareholder structure of the POZAGAS, a. s. company which owns an underground gas reservoir is following: SPP, a. s. – 35 %, NAFTA, a. s. – 35 % and Gaz de France – 30 %.

The Slovak Republic represents a national gas market. There is an interconnection with Ukraine, Czech Republic and Austria. The Slovak transport system is a significant part of the European gas system and represents a significant, reliable and secure transport route, through which gas is transported to the countries of Central and Western Europe. Another field of cooperation includes natural gas reservoirs- the Slovak Republic uses a reservoir (Dolní Bojanovice) situated in the region of Czech Republic and is directly connected with the SR gas infrastructure.

Gas market in Slovakia is a subject of primary legislation represented mainly by Act on Regulation and Act on Energy. The primary legislation is supplemented by the Regulation of the SR Government No. 409/2007 Coll. laying down the rules for gas market functioning.

The detailed technical and business conditions are defined by system operators' operational orders. With the aim to conform the primary legislation to the changing conditions of free market and with an attempt to secure compliance with the development of EU legislation, an amended version of the Act on Energy has been valid since April 1, 2008. The provisions of the amended Act on Energy define in more detail the conditions for construction of a gas device; they elaborate the circumstances and announcement of emergency and appoint a last resort supplier. The Act solves in more detail the issue on gas metering as well.

At present, a proposal of a Decree stipulating the scope and structure of justified costs, the direct determination of a comparable price, the method of calculation of a maximum and fixed price, the method of determination of the amount of reasonable profit, the details about price proposal and about the method of price proposal submission and the sources for proposal in gas industry for the year 2009 is being in the process of approval.

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

SPP, a.s. is hereafter a dominant gas supplier in the territory of the Slovak Republic and covers all market segments- from household customers, through small and medium undertakings to large industrial undertakings. This fact is still persisting despite the possibilities for business entities created by the legislation and despite the fact that the change of legislative conditions results in gradual moderate growth of the companies providing services in gas industry. The total number of local companies who are, based on a granted licence, engaged in mainly supply and distribution of natural gas in the Slovak Republic, was represented by approx. 40 entities in 2007.

#### ***4.2.3 Measures to avoid abuses of a dominant position***

Protection of competition on the market of products, outputs, labour and services against its limitation, formation of conditions for its further development in order to promote economic development in favour of customers and an adjustment of powers and field of activity of AMO.

Every year until May 31, according to the Act on Regulation, the Office publishes a report on fulfilment of the rules for electricity and gas market functioning and on the fulfilment measures in the Office's bulletin and on its website.

In cooperation with AMO and the Ministry, the Office submits before April 30, 2009 a report on electricity market functioning and on gas market functioning in SR to the Government.

Regarding the Office's competencies, the amended Act on Regulation effective from April 1, 2008 strengthened the Office's powers in price regulation. The aim of this change is to consequently verify the invested costs during the performance of a regulated activity from the view of their justness also in connection with the occurred unbundling. The Ordinance, elaborated by the Office, complying with the Act on Energy, which shall define the details on the method of handling the separate records of facts, which are subject to accounting and on the method of handling the records of assets and debits, is also aimed at avoiding of discrimination and cross subsidies between particular activities of network operators who, except for regulated activities, perform other activities as well.

The conditions for optimal electricity and gas market functioning created by the Office, provide wide assertion opportunities for both existing entities and for the entities trying to entrench themselves on the market. The opportunities provided by the rules for electricity and gas market functioning are not currently utilized by them sufficiently. The Office, through the rules for gas market functioning, has created a sufficient space for non-discriminatory and transparent competition of all stakeholders.

In the relevant period from July 31, 2007 up to now, AMO has applied its powers against the entities performing their activities in the electricity wholesale or retail market only once, and thus made a decision in an administrative proceeding that SPP- preprava, a.s. Bratislava company infringed Section 8 par. 2 a) of AEC by enforcing an inappropriate business condition.

The GasTrading, s.r.o. company, as an operator of a newly constructed natural gas distribution system within the premises of the Industrial park Levice- Géňa, asked the SPP- preprava, a.s. company for connection to the transport system. For this purpose and on its own expense, it has constructed a connection device according to the requirements and instructions of the transport system operator. During the following negotiations on concluding the contracts necessary for realization of the connection of a distribution network of the GasTrading, s.r.o. to the transport system, the SPP- preprava, a.s. posed a requirement to purchase the mentioned connection device to its ownership and provided a justification that it is necessary to guarantee secure and reliable transport system operation and to maintain the situation when neither of the distribution system operators connected to the transport system is an owner of the connection devices.

These justifications of the SPP- preprava, a.s. company were neither legal nor objectively legitimate. An obligation to guarantee secure and reliable transport system operation was possible to achieve even without a change of an ownership right to the connection device, but the SPP- preprava, a.s. company refused this alternative.

The GasTrading, s.r.o. company as a future natural gas supplier for the project of a steam-gas cycle in the Industrial park Levice – Géňa, under the threat of losses from late operation activation and despite its disagreement, assented to sell the connection device to the SPP- preprava, a.s. company. Immediately after signing the selling agreement, the SPP- preprava, a.s. conducted also a Contract on connection and an Agreement on inter-connections with the GasTrading, s.r.o. company.

Due to connection of the GasTrading, s.r.o. distribution system to the transport system, the gas supplied to GasTrading, s.r.o. does not flow through the distribution system operated by the SPP- distribúcia, a.s.. As a result, SPP – distribúcia, a.s. losses a part of its takings and profits, which would be under other circumstances gained for gas distribution in the form of distribution fees. The constructed infrastructure also enables its utilization by other natural gas customers in the Industrial Park, and thus creates an option in both natural gas distribution and supply..

The SPP – preprava, a.s. company used its power position to fulfil the condition not relating to the subject of concluded contracts and not necessary for achieving the objective. It proceeded within the interests of SPP, a.s. and SPP- distribúcia, a. s. companies which belong to the same economic group. Despite they were legally unbundled, there is still remaining the same concern of these companies to support each other and to see on the common basis to strengthen their positions in the market and thus to contribute to the power of whole economy group.

The SPP – preprava, a.s. persisted on the condition which was unacceptable for GasTrading, s.r.o. company, and thus was delaying the conclusion of the Contract on Connection and the Agreement on inter-connection. This situation created a threat that the Industrial Park Levice – Géňa GasTrading, s.r.o. customers will not be secured on time and appropriately with gas supplies for their business purposes. They were endangered by harms caused by production failure. These SPP – preprava, a.s. activities would have impaired not only the GasTrading, s.r.o. direct gas customers, but also other customers represented by their trade partners in this case.

AMO stated by its decision that the SPP – preprava, a.s. company perpetrated the abuse of its dominant position according to Act on Economic Competition (AEC), relating to the fact that during the negotiations on the connection of the GasTrading, s.r.o. distribution network to the natural gas transport network and during the conclusion of the Contract on Connection and the Agreement of Inter-connection with the GasTrading, s.r.o. company, the SPP – preprava, a.s. was enforcing an inappropriate business condition, and as a result, AMO imposed a penalty on this company in the amount of 98,9 mil. Sk. The decision has not come into effect, yet.

## 5. Security of supply issues

### 5.1 Electricity

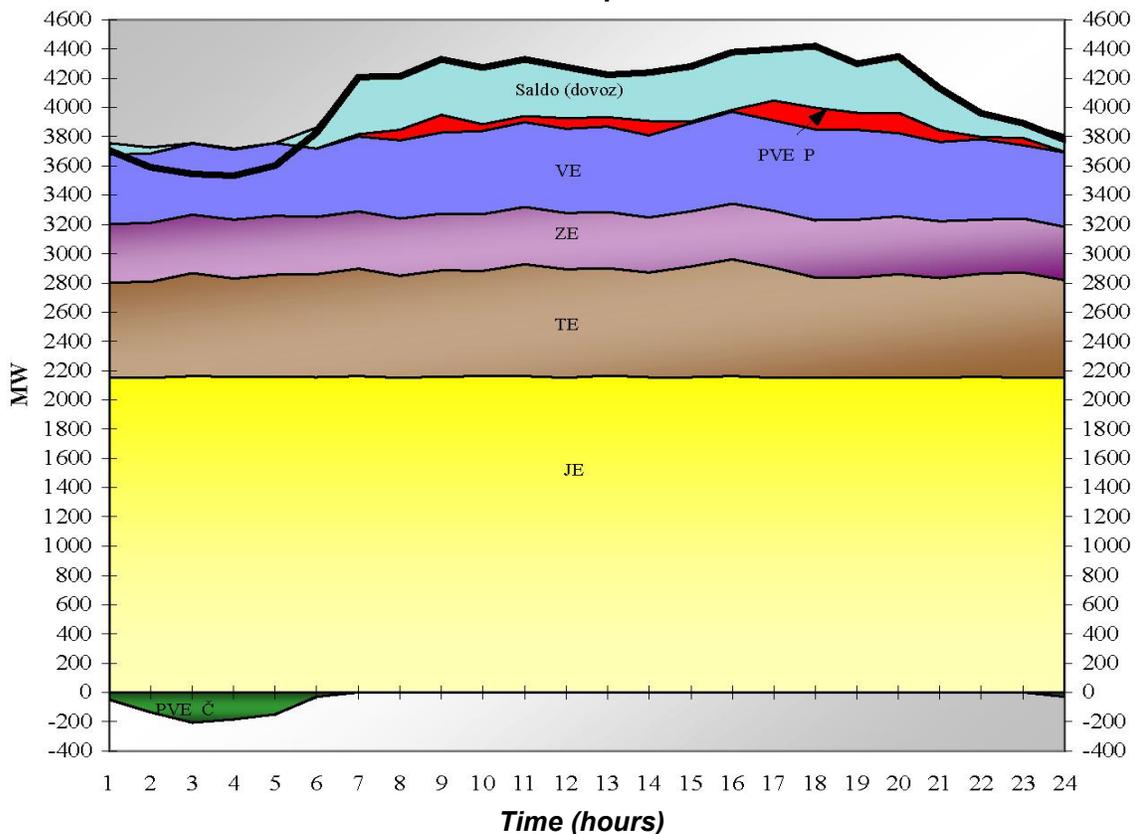
#### *The present situation assessment*

The operation of the Slovak electricity network in 2007 was reliable while all relevant UCTE criteria and recommendations in the primary and secondary regulation within voltage management and balance regulation were being met.

The yearly maximum of congestion in 2007 was reached on 19 December 2007 at 6 p.m. for 4 418 MW and at the frequency of 50,065 Hz (decrease by 5 MW in comparison to 2006).

*Graph No.5.1.1 Congestion shape and its coverage on the day of the maximum reached in 2007*

**Congestion shape and its coverage on the day of the maximum reached in 2007 reached on 19 December 2007 at 6 p.m. in the amount of 4 418 MW**



In 2007, blackouts caused a limitation of electricity supplies for MWh. In 2007, major investment operations in the transmission system were represented by reconstruction of a 400 kV distribution spot in Križovany resulting from decommissioning of the two units V1 of the Nuclear power plant in Jaslovské Bohunice and reconstruction in the Lemešany distribution spot. These reconstructions have had a significant contribution to the increase of security and reliability of the Slovak electricity system in the region of the Eastern Slovakia.

There was also a follow-up in preparation and implementation of a distance management of the electricity stations, information and telecommunication systems in order to secure reliable and failure-free operation of the Slovak electricity system.

### ***Development of electricity supply for the upcoming 5 years***

Future development in electricity supply will be influenced mainly by the following factors and risks:

- Increase of electricity consumption
- decommissioning process of the expired production capacities
- availability of fuels and their price development on the global markets
- development of prices on the electricity market
- development of price increase in the area of new production technologies
- uncertainties related to the stipulation of the amount of fees for emissions, mostly CO<sub>2</sub>
- long-term recoverability of the invested means after implementation of electricity projects

### ***Development of electricity consumption***

The overall electricity consumption in Slovakia in 2007 was calculated to 29632 GWh . In the previous 5 years, i.e. from 2002 to 2007, the overall electricity consumption in Slovakia increased annually by 0,66% on average at the annual GDP increase of 7,1% on average. The current atypical status of development of electricity consumption towards GDP in Slovakia can be partially assigned to a relatively fast growth of the low-energy industries and to the decrease of energy demands. In 2006, the growth of the overall electricity consumption in SR represented 3,7%. In 2007, the consumption stagnated. In the first quarter of 2008, the electricity consumption increased by 3,4%. When taking into consideration the pace of consumption growth until the end of this year and the further consumption growth from 2009 to 2013 with an index of 1,6%, the overall electricity consumption will reach the following revised values:

*Table no. 5.1.2: Prognosis of the development of electricity consumption in the upcoming 5 years*

		2008	2009	2010	2011	2012	2013
<b>reference scenario</b>	TWh	30,6	31,1	31,6	32,0	32,6	33,0

### ***Electricity generation***

The decommissioning of the second unit V1 of the Nuclear power plant in Jaslovské Bohunice on 31 December 2008 will have the most serious influence on electricity generation in SR. This step will lead to the further decrease of the installed system capacity by 440 MW and generation by approx. 2900 to 3000 GWh. It is not real to consider a possibility to mitigate this deficiency by construction of a new larger energy source before 2012. The V1 decommissioning will influence, besides decreasing power electricity supplies, also the availability of ancillary services and the transmission network operation. The decommissioning of EBO V1 invokes a need of high electricity supplies in the scope of 600 to 730 MW from 2009 to 2012. 20% of the Slovak consumption between 2009 and 2012 will have to be covered by imported electricity.

The scope of the necessary power electricity import and of the average zone supply during particular years is shown in the table below:

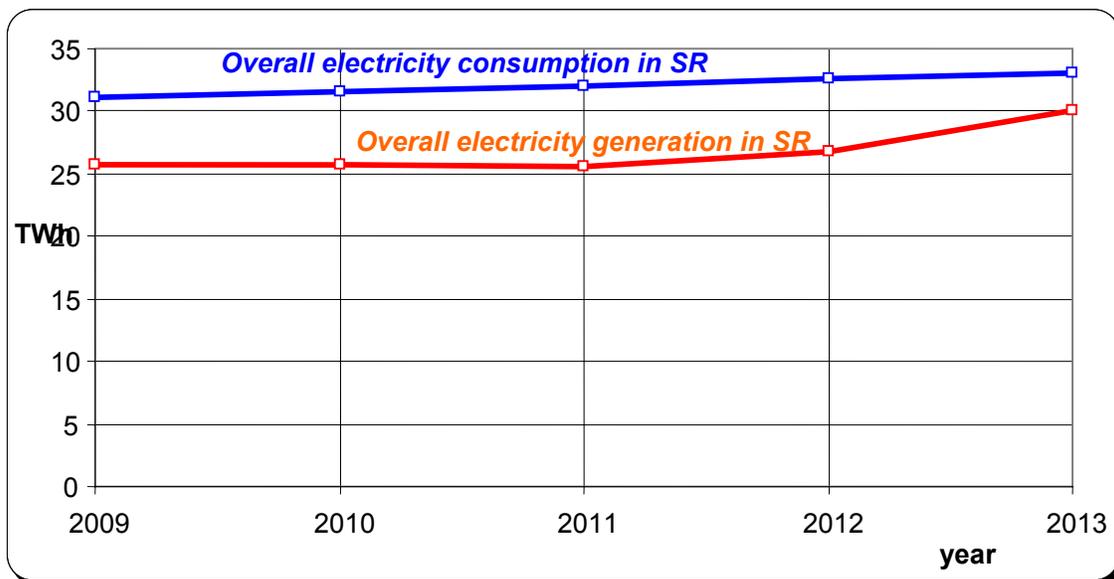
Table No. 5.1.3: Balance of consumption and electricity generation development in SR for the upcoming 5 years

		2009	2010	2011	2012	2013
<b>Overall consumption</b>	TWh	31,1	31,6	32,0	32,6	33,0
<b>Overall production</b>	TWh	25,8	25,8	25,6	26,8	30,0
<b>SR production balance</b>	TWh	5,3	5,8	6,4	5,8	3,0
<b>Zone supply</b>	MW	600	660	730	660	340

The above mentioned data take into consideration the growth of electricity consumption and the need to replace the capacity and production of the decommissioned generation facilities. The balance of securing the missing electricity will depend on its acquisition from import until 2012.

Currently, the most realistic large electricity capacities are, from the view of readiness of the construction sites, the PPC Malženice with an assumed termination in 2012 and the completion of MO34 being put into operation in 2013. After putting these sources into operation, there will be an electricity balance of SR achieved. The most inconvenient period from the view of providing electricity supplies to Slovakia will be presumably the years 2009 to 2012. The implementation of the further known and currently prepared large electricity sources is supposed to be done after 2013.

Graph No.5.1.4: Review of the development of overall electricity generation and consumption in SR in 2009 - 2013



### Ancillary services

The decommissioning of 4 units/ 110 MW in Vojany on 31 December 2006 and the first EBO V1 unit resulted in reduction of availability of ancillary services within the network. The

decommissioning of the second unit of the Nuclear power plant will lead to further reduction of availability of ancillary services. In the PRV+/- primary regulation, the availability of the sources providing this service will decrease by 12 MW, in case of the tertiary regulation of the positive TRV 30 min+ by 40 MW and the negative TRV 30 min- by 40 MW. The source is included in voltage regulation in the Križovany transmission system nod.

Despite the fact that a significant part of sources is already or will be decommissioned, there are still enough sources in the system that will secure the system by means of ancillary services in the period of the maximum winter load. The situation will get worse during the summer where there seem to be an insufficient security of ancillary services. The lack of the revolving reserves can exceed 15% in summer. Neither the tertiary ancillary services will not be secured. From the view of availability of sources, it would be possible to resolve this imperfection by utilization of the less efficient heat power plants, but this would lead to the increase of costs for ancillary services acquisition. The primary and secondary regulation is currently not possible to secure through an import from abroad, therefore it is necessary to cover them with the domestic sources. There is an option in the case of tertiary regulation to use import facilities for its acquisition. In the Slovak regulatory area, there is also electricity consumption regulation being used for the purpose mentioned above, i.e. TRV 30 min+. The extra operation situations caused by extreme weather conditions can threaten the security of ancillary services in the system because of having an influence on the regulatory base within the regulatory area. They are represented by, e.g. high levels of water courses (a big enforced non-regulated capacity being applied), enormous frosts (frozen fuel and capacity reduction in steam power plants), strong wind and a large production in wind power plants (more ancillary services needed), high temperature (limitation of cooling in steam power plants and reduction of supplied capacity out of regulatory limits).

Renewable sources, except for large water power plants, do not provide services necessary to secure operation of the electricity system, and moreover, they will demand extra claims on regulatory performances. In case of further electricity generation from wind power plants, the situation in the field of securing of ancillary services would get worse and the ancillary services demands would significantly increase.

The decommissioning of generation capacities in the electricity system results in the reduction of availability of commodities of ancillary services. Construction of new generation capacities is based on the market and the compliance with decommissioning of the expired capacities is not continual. There is an evidence of bottlenecks in the field of ancillary services provision and of the maintenance of system balance reliability, and thus the reliability of supplies.

### ***The prospective of ensuring gas supply in the period of 5 – 15 years***

The strategic aim of the Slovak Republic is to lay basis for reaching a similar standard of living to the one in the developed European countries. This aim is connected to ensuring an adequate amount of electricity for covering all needs relating to the growth of the standard of living.

The overview of electricity consumption in the Slovak Republic is based on the prognosis of growth of the GDP and the development of energy intensity.

*Table no. 5.1.5 Prognosis of the development of the total electricity consumption in Slovakia (acc. To the „Proposal for energy security strategy for the Slovak Republic“)*

		2015	2020	2025
<b>Reference scenario</b>	TWh	34,7	37,5	40,4
Low scenario	TWh	32,0	33,3	34,6
High scenario	TWh	37,1	41,5	46,0

Average yearly increase of electricity consumption is expected to be between 0, 8 to 2, and 3 % in the period up to 2025. In the reference scenario with an average yearly increase of 1,6 % it means an increase by 10,8 TWh in comparison with the year 2007, which represents 36 % of electricity consumption of the year 2007.

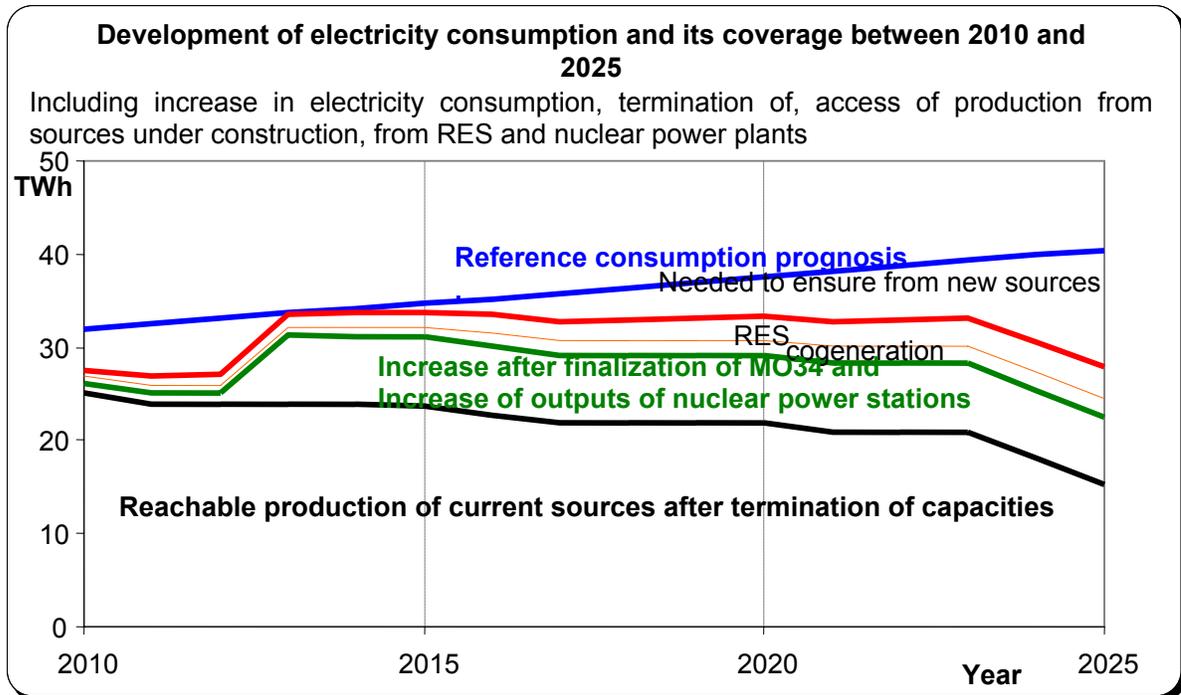
The strategic aim is to reach a balance between domestic consumption and production of electricity up to 2013. This state can be reached if the development of consumption runs according to the reference scenario. For disposal will be above all production from finalized blocks NP Mochovce 3,4, from increased capacity of NP V2 Bohunice and NP Mochovce 1,2 and from renewable energy sources in accordance with the concept of its exploitation. Ensuring of access of consumption and compensation for termed capacities will be solved so that an adequate and balanced development of new nuclear, fossil and renewable capacities is reached. As for heat power plants, more focus will be laid to the development of new coal plants than to compensation for terming power plants Vojany and Nováky. Realization of outputs and production from renewable sources takes into account the concept of development approved by the Government of the Slovak Republic. Construction of large water power plants is currently not performed because of the financial intensity and certain legal obstacles. In a long term there were large water power plants projects Sered' 52 MW, project of exploitation of the river Váh between water power plants Žilina, and plant Lipovec 28 MW being prepared. An impetus for continuation of their construction would be provision of at least the same economic conditions as it is the case for small water power plants, because they could contribute to ecologization of electricity production and to energy security.

Expected increase of use of wind and solar energy sources could cause problems to the operation of electricity network considering that their availability cannot be anticipated and causes output fluctuations. Solution to this problem may be achieved by new pumped water power plant Ipeľ 600 MW that can accumulate energy from irregular production and provide it during the peak overload of the electricity network. It is possible to achieve the balance between consumption and production by using the following electricity capacities:

*Table no. 5.1.6 the scope of realization of sources needed for balance (acc. To the „Proposal for energy security strategy for the Slovak Republic“)*

		<b>2015</b>	<b>2020</b>	<b>2025</b>
<b>Nuclear power plants</b>	MW	1106	1106	2306
<b>Heat power plants and cogeneration</b>	MW	412	1132	1612
<b>Renewable sources</b>	MW	700	1000	1400
<b>Water power plant Ipeľ'</b>	MW		600	600
<b>together</b>	MW	<b>2218</b>	<b>3838</b>	<b>5918</b>

Figure no.5.1.7: Balance of development of whole consumption and its coverage in years 2010 to 2025 (acc. To the „Proposal for energy security strategy for the Slovak Republic“)



**For maintenance of reliability of the electricity network of the SR, it is suggested:**

- to adopt the Strategy for energy security of the Slovak Republic
- To support construction of new system power plants, especially finalization of EMO 3. and 4. block and other sources, including power plants producing from RES that can cover the current shortage of production capacities, in accordance with suggestions of the Strategy for energy security of the Slovak Republic
- To analyze creation of a common commercial zone with the Czech Republic with the aim of increase the security of electricity supply after decommissioning of NP V1 and to maximize the effect of mutual cooperation while maintaining the sovereignty of operation of both transmission networks.
- To support the preparation and realization of new nuclear source, which will cover the anticipated electricity shortage in 2020 – 2025

**In the legislation it is being considered:**

- To adopt the **Energy effectiveness law**, to rationalize the use of natural sources in the attempt to preserve the environment. Monitoring and support of energy effectiveness would enable the use of financially acceptable measures aimed at energy savings and would support the energy effective technologies in which it would contribute to the decrease of dependence on imports of primary energy sources.
- To adopt the law to support the development of **production of electricity from renewable energy sources** because of their contribution to the decrease of greenhouse effect emissions as well as because of securing the energy supplies ( decrease of import dependence) and because of sustainable development. The law should enable adequate

support to these sources but without the negative impacts on network operators from the viewpoint of security of electricity supply.

### ***Development intentions of the transmission system operator***

The activities of the transmission system operator of SR are being performed by SEPS, a. s. Bratislava. The operation reliability of the transmission system of SR is being secured from the view of currently performed necessary maintenance and reconstruction works on the transmission system facilities. As far as future is concerned, the maintenance and improvement of the operational reliability is being secured by planning and gradual preparation and implementation of particular investment actions while taking into account the necessary progress of the SR transmission system from the view of a physical and moral shabbiness of the SEPS, a.s. appliances and the future development intentions related to the gradual reduction in development of the 220 kV transmission system and a gradual transition to a 400 kV voltage level. The strategic development tendency and increase of the operational reliability of the transmission system through construction of the sole 400 kV facilities, is closely connected with the decommissioning of mainly V1 unit of the Nuclear power plant in Jaslovské Bohunice and of other units of the power plants in Vojany and Nováky connected to the 220 kV systems.

### **Other factors related to the gradual recession of the 220 kV systems:**

- The 220 kV system is significantly physically older than the 400 kV system, and thus resulting in higher operational costs (mainly due to maintenance and reconstructions) and in its lower operational reliability.
- The system electricity lines and the 220 kV stations have not been further extended since 1966 (except for some improvements) and they have been kept in operation by minimal lines maintenance and by substitution of some appliances.
- The reconstructions of the relevant 220 kV distribution spots, the new 220/110 kV transformations and the more important reconstructions of some 220 kV lines in order to prolong the lifetime of the whole 220 kV system, have been performed since 1998 in a necessary extent to secure their further operation until they are definitely decommissioned. Only the common and inevitable reconstructions and maintenance works are being performed in the system with the aim to terminate the operation of the 220 kV systems gradually in the years from 2013 to 2025.

### **List of the most important expected investments of SEPS, A.S., until 2013:**

- Set of constructions Line 2x400kV Lemešany - Moldava (US Steel Košice, a.s.)
- Set of constructions Line 2x400kV Gabčíkovo - Veľký Ďur and 400 kV clip station Gabčíkovo
- Set of constructions Transformation 400/110kV Medzibrod and its 400 kV connection
- Set of constructions Transformation 400/110 kV Vola
- Substitution and increase of the transformation capacity of 100/110 kV in the stations of Bošáca, Levice, Moldava, Varín, Stupava, Rimavská Sobota.

**List of the most important expected investments of SEPS, a.s., until 2018:**

- Set of constructions Line 2x400kV V. Kapušany - Voľa - Lemešany
- Set of constructions Transformation 400/110kV Bystričany
- Set of constructions Connection 400kV of the V492 line V. Ďur - H. Ždaňa into the 400kV Levice distribution spot
- Substitution of transformers in the transformation stations of Liptovská Mara, Spišská Nová Ves, Podunajské Biskupice, Stupava

While implementing the above mentioned investment projects into the SEPS, a.s. investment plans, there are intentions of the well-known investors to connect new sources to the SR transmission system for the upcoming period, apart from the physical and moral shabbiness of the SR transmission system appliances. In the case of their construction and connection to the SR transmission system, these prospective intentions of the investors require enormous investments of SEPS, a.s. to improve the 400 kV transmission appliances.

The construction of new electricity stations and reconstruction of the existing electricity stations within the SR transmission system require solely the most recent devices and appliances, which fulfill strict requirements on a secure and reliable operation of the SR transmission system, as well as the requirements of SEPS, a.s. on a sufficiently long failure-free operation of these facilities. Within these investments, there will be a continuity in the transition of the electricity stations being owned by SEPS, a.s. to an independent own consumption, and thus through constructing a remote management of electricity stations and through their gradual transition to a service-free operation.

From the view of improvement of the cross-border inter-connections, this issue includes mainly an improvement of the Slovakia- Hungary and the Slovakia- Ukraine cross-border profiles, This fact is notably related to the expected increase of electricity sources particularly in the Eastern part of Slovakia which would congest the above mentioned profiles by their capacities. The projects for improvement of the SR-HU and SR-UKR profiles are included in the projects in the TEN-E program (Trans European Networks - Energy). The projects comply with the Decision of the European Parliament and the Council No. 1364/2006/EC kept in Annex III under numbers 2.25 (line 2x400kV Sajóivánka - R. Sobota), 2.26 (Moldava - Sajóivánka) and 4.32 (V. Kapušany – borders with Ukraine). The future improvement of cross-border inter-connections between the mentioned electricity systems is currently being negotiated with the relevant foreign transmission system operators.

The Decision No. 1364/2006/EC includes, besides the mentioned projects in improvement of cross-border inter-connections, also the projects on improvement of the inner part of the SR transmission system. These projects include line 2x400kV Gabčíkovo - Veľký Ďur (project 3.77), TR Medzibrod connection to the 400 kV voltage system (project 3.74), 2x400kV line Lemešany - Moldava (project 3.75) and 2x400kV line Lemešany - Voľa - V. Kapušany (project 3.76). These investments improving the SR transmission system on the level of 400 kV, at a reliable carrying out of a capacity from new electricity sources and thus creation of suitable conditions for connection of new industrial customers to both SR transmission system and distribution systems. In order to elaborate necessary surveys for the project of 2X400 kV line Lemešany - Voľa - V. Kapušany (project 3.74), SEPS, a.s. is in 2008 applying for a financial grant from the TEN-E budget. The decision on an eventual financial grant will be published at the beginning of 2009.

A detailed list and description of particular mentioned investment actions will be included in the document „ The development program of the main technological facilities of SEPS, a.s. for the period of 2009-2018“ which will be published after being approved by the Board of Directors of the company in 2008. However, the realization of these investments by the SEPS, a.s. side will

depend on the decisions of the relevant investors on a potential realization of their investment intentions in the field of electricity sources construction.

### ***The role of the state authorities in the process of authorization of investment plans***

Performance of entrepreneur activities in the energy sector is only possible upon license, which is issued by the Office. The license is not obligatory for the following activities:

**a)** production and supply of electricity to facilities with overall installed capacity up to 1 MW,  
**b)** production and supply of electricity produced from renewable energy sources in a production facility with an installed capacity up to 1 MW, when it comes to production and supply of electricity in:

1. small water power plants,
2. wind power plants,
3. solar power plants,
4. geothermal power plants,
5. biogas power plants,
6. biomass power plants,

The Ministry issues licenses on accordance of the investment plan with the long-term concept of the Energy policy of the Slovak Republic. It is only possible to build an energy facility upon this license. The license is issued upon the decision following a written application of an applicant, in which the considered investment plan is enclosed.

The investment plan must contain:

1. the character of the energy facility,
2. data about allocation of the facility,
3. expected impact of the facility on the network on the delimited territory from the viewpoint of security and reliability,
4. primary energy sources data,
5. economic and energy effectiveness of the facility,
6. expected impact on environment,
7. financial coverage of the investment plan,
8. impact on the security of supply on a delimited territory,
9. accordance of the investment plan with territorial planning,
10. means of connection of the facility to the network.

At the same time, the investment plan for construction of the energy facility is considered on the basis of the conditions for issuing of a license, that are published on the website of the Ministry of Economy of the Slovak Republic and in the bulletin. These conditions follow the energy policy priorities:

1. reliable, environmentally acceptable and economically effective energy supply
2. decreasing the dependence of the import of fossil fuels
3. increasing the use of renewable energy sources
4. use of domestic primary energy sources in accordance with raw material policy
5. support of use of facilities with combined production of electricity and heat
6. implementation of new technologies, innovations and the best accessible techniques in energy

Common conditions are:

- Impact on reliable and secure energy supply
- Smart use of energy
- Achievement of energy savings
- Use of technology that will ensure energy effectiveness
- Impact on environment
- Reconstruction and modernization of energy sources and technology processes with increase of energy effectiveness
- Demands on state budget, tax allowance, state aid and other measures that are related to the creation and use of financial means of the state budget, specific grants, or funds of local municipalities
- Connection with other energy facilities, electricity and gas networks including networks and grids of neighboring countries
- Total criminal record not older than 3 months
- Energy streams optimization related to the geographic allocation of sources
- Minimization of the remoteness between source and place of consumption

Shown common conditions are amended by specific conditions concerning the relevant facility. Specific conditions for construction of energy facilities contain:

1. energy effectiveness of conversion of non-renewable primary energy sources into and overall use of energy
2. Use of renewable energy sources during electricity production
3. use of combined production of electricity and heat
4. Impact on competition in the electricity market
5. effectiveness of the facility for transmission of electricity
6. Integration of the Slovak electricity network into the European transmission network UCTE and networks of neighboring states
7. Relation to trans-european energy networks

Ministry keeps evidence of all applicants and publishes list of issued licenses. The validity of decision of issuing of a license is three years from the date of its effectiveness. Validity of license for construction of a facility for electricity production from nuclear fuel is seven years. Applicant, who was granted a license, is obliged to inform the Ministry on the state of preparation and process of construction of energy facilities, once a year.

Long term concept of energy policy approves the Government of the Slovak Republic upon the proposal of the Ministry of Economy of the Slovak Republic. It is elaborated in the term of the Energy law for the period of 25 years. The Ministry updates the Energy policy every fifth year with respect to factors with direct or indirect impact on Energy policy.

### ***Measures to cover peak demands, outages of one or several sources***

The energy power sector in the Slovak Republic is typical by strict separation of the production from power transmission and distribution. This process was yet completed and legally concluded, it has brought new competencies and requires new methodology for planning, development and ES SR operation. Real is that development of sources and sufficiency in regulation power is regulated by market mechanisms. The basic power consumption zone is provided by cooperation between the producer and the consumer directly or indirectly through power dealers. Regulatory power is supplied by the transmission system operator.

The transmission system operator undertakes the power transmission through its 400 kV and 220 kV lines in the territory of the Slovak Republic including connecting lines. The transmission system operator is primarily responsible for balance of the consumption/production in real time. The transmission system operator manages ES SR operatively through its control center as the compensated balance of consumption/production concerns.

The aim of the control operation is to create conditions for reliable and economic operation of the electric networks of the Slovak Republic while respecting the valid legislation, the technical conditions, and obligations resulting from membership in international organizations, operation contracts with foreign system operators and concluded contracts between electricity market stakeholders.

During all phases of preparation of the operation, optimum solutions to operation are proposed and a necessary space for maintenance, innovation and operation of the system is being created. For the management of the state of emergency, or for measures to avoid the state of emergency the system operator and the relevant control center elaborated defense plans to avoid and liquidate severe system accidents, plans for loading system and local frequency contactor for electricity usage regulation, as well as plans for reconstruction of the system. Operational security fulfills the requirements for transmission of electricity and is controlled in every phase of preparation of operation, i.e. yearly, monthly, weekly and daily. The criterion n-1 for outage of every transmission component is controlled in the whole system. Release of facilities of the transmission system from operation is performed in coordination with neighboring transmission system operators within all phases of the preparation for operation. It is checked by calculation of the operation of the network.

Internal documentation of the transmission system operator includes proceedings and information necessary for covering the system loading and solution of emergencies, critical conditions and outages of one or several sources. For so-called „black-outs“, the transmission system operator prepares instructions and proceedings as “Defense plans against spreading of big failures” in terms of UCTE methodology, frequency unloading etc.

Should such changes responsible for sudden overloading occur during the operation in the system, so would the transmission system operator perform the following with the aim to cancel such overloading:

- a) modifies connection of its power energy facilities,
- b) modifies participation of its power production facilities,
- c) exports or imports regulation power from/into the transmission system

The transmission system operator secures to maintain the serviceability of the transmission system, quality and reliability of power supplies from the transmission system and restoration of the synchronous operation in case of ES system service disintegration, the system services (in first place the regulation and reserve output for securing elimination of deviations in relation to planned diagram consumption/production caused by various subjects in the power market). The subsidiary services for system service are provided by the transmission system operator as purchased from subsidiary service providers (whose facilities are able to provide several or all types of subsidiary services). The control center of the transmission system operator ensures reliable and safe operation for ES SR in compliance with the loading diagram for peak periods or during source outages in covering deviations by activation of the subsidiary service.

The criterion of reliability and economic efficiency is used for definition of optimal volume for various subsidiary services. For definition of the optimal volume of subsidiary services there is the

principle of time breakdown and seasonality used, where the input data are mainly the expected max. loading of regulation zone for defined intervals in compliance with the time breakdown and statistical data depending on seasonality covered by the interval.

Further for definition of particular subsidiary service volume the following sources are applied:

- UCTE recommendation,
- Expected max. loading during specific period,
- Dynamic changes in regulation zone (ES SR).

Values of specific ancillary services are ensured in a yearly, monthly and daily selection procedure in a transparent and non-discriminatory way. Required amount of specific ancillary services, ensuring safe operation of the system, is calculated for every hour. Preparation for the operation includes preparation of loaded production facilities, purchased amounts of ancillary services, price for regulatory electricity and planned connection of transmission systems after an agreement with neighboring TSOs and connection of distribution system after an agreement between DSOs.

The issue of determining of a needed amount of ancillary services for ensuring reliable operation of the ES of the SR effects also the calculation of the electricity price. Fee for specific types of ancillary services are derived from the amounts of the relevant services, needed in the regulatory field. The fee for ancillary services is one of the items of the total price of electricity charged to the end user, therefore the costs for regulatory energy effect the height of the final price. The price making is regulated by the Office.

Cross border transmission aimed at importing and exporting of electricity within the international energy cooperation is regulated by bi – and multilateral agreements between the TSOs and their authorized subjects. In case of endangering of the operational security, control center can purchase emergency non-guaranteed regulatory electricity from abroad without granting of a capacity at the relevant profile. In the case of purchasing of emergency regulatory electricity, the purchase is done according to conditions set by the operational contract between TSO control center and the neighboring TSO.

Conditions for import or export of electricity on lower voltage levels (voltage of 110 kV and lower) cannot be realized in parallel operation, but only in reserved parts of the network, after getting an approval of the Office. The technical coordination is done by the control center of the TSO, according to the Technical conditions.

The TSO control center is responsible for operational management of cross border transmissions aimed at importing and exporting of electricity within the framework of valid contracts and agreements, for technical fulfillment of the contracts and agreements and for intra-daily changes of transmission on the connecting lines.

All procedures for management of cross-border transmission, coordination of disconnection plans of the connection lines, setting of capacities of connection lines, control and management of congestion, are in accordance with the Operational guide of UCTE, the Technical conditions and Operational instructions of TSO. Allocation of transmission capacities on specific connecting lines is set on the basis of calculations of transmission capacities of both TSOs and consequent approval of both TSOs, while the lower value is taken as valid. Values of transmission capacities are set for yearly, monthly and daily preparation of the operation. Allocation of capacities is done by a system with definite rules. In the case of disconnection of transmission components, the transmission capacity is adapted to technical parameters of transmission. The expected transmission in specific time intervals is calculated, on a daily basis, one day ahead. In the case of congestion, change of topology or change in loading of the production facility is performed. For

congestion prevention the calculation of balanced operation of the network, as well as of other UCTE networks is performed.

### **Reliability of the electric system**

As reliability can be formulated the capacity of the system to withstand atmospheric conditions during the period and scope defined. If the changes in system point parameters be negligible moreover, not substantial failure occurs, so is the system considered as sufficiently reliable. ES reliability degree is given by importance, size and/or scope of the accident after which follows the stabilized after-accident situation still acceptable in terms of parameters. We can differentiate between the system reliability in connection with slow changes which is considered as static stability and system reliability during quick change that is considered as dynamic stability.

ES SR takes measures to keep with the operating reliability. The measures can be divided into three groups - preventive measures, dispatcher and technical measures - taken in case of outage:

- As preventive measures are considered e.g. calculations for network running, adjustment of protections, short-circuit calculations, optimizing of uncoupling plan, regular maintenance and measures to be taken in emergency situations,
- As dispatcher measures are considered e.g. emergency assistance, interruption of work on transmission system facilities, coordination with distribution system operators, use of subsidiary and system services, measures for solution of emergency situations etc.
- As technical measures are considered mainly protection adjustments, use of ancillary services, actions with frequency characteristics, automatic voltage regulation etc.

Preventive measures for reliability of ES SR are performed as follows:

- measures for protections and automatics,
- measures for preparation of the operation,
- measures for optimizing maintenance and development of transmission system.

Within the preparation of the operation the measures are as follows:

- measures for optimizing the breaking plan PS, network operation calculation,
- provision of system and subsidiary services,
- measures for emergency situations

Restrictive measures in the power industry:

- plan for consumption restriction,
- emergency breaking plan,
- frequency plan

The control center of the transmission system operator updates yearly its plan for frequency unloading. The UCTE recommendations define certain frequency thresholds and corresponding loading volume (in %) that have to be disconnected in fixed degrees. Following to UCTE recommendations, the first-degree start for automatic unloading may not be lower than 49 Hz. When the frequency drops below the limit of 49 Hz, the unloading to at least 10 - 20 % loading begins. The next unloading may start with 48,7 Hz frequency - 10 - 15 % loading and 48,4 Hz 10 - 15 % loading.

The transmission system of the Slovak Republic has adjusted the frequency unloading in the following degrees:

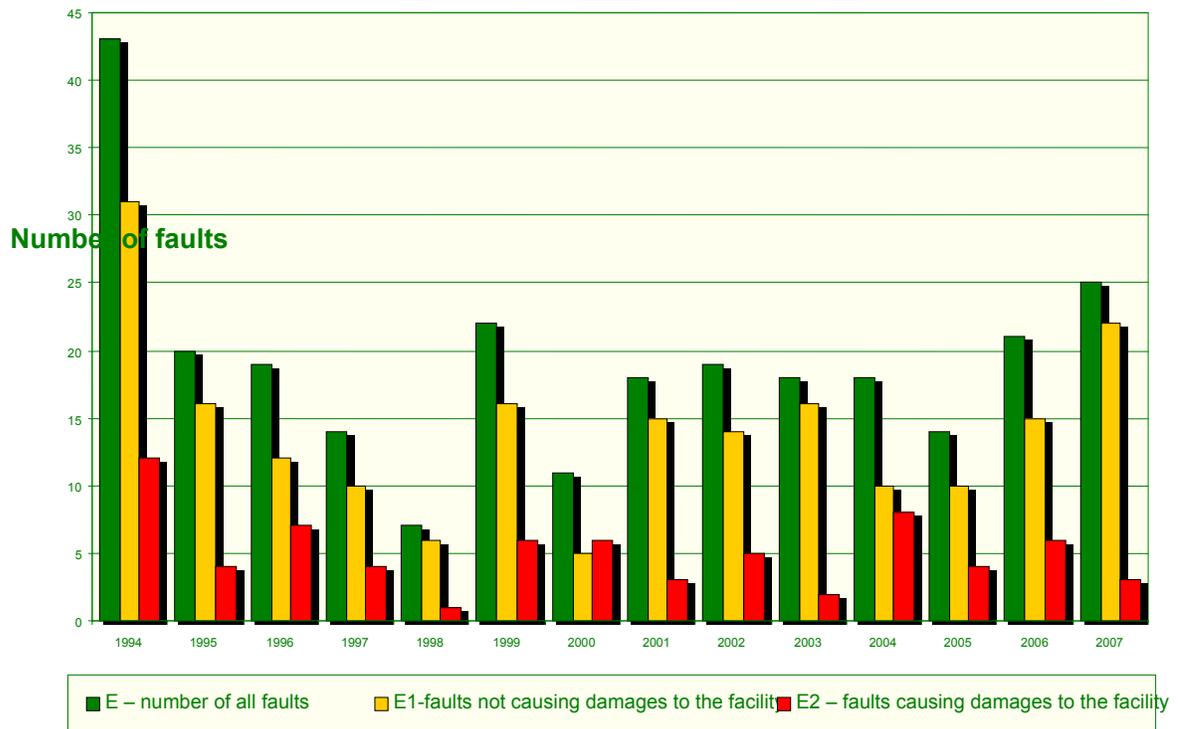
Table No. 5.1.8 Frequency unloading of the system

Degrees of disconnections	Frequency threshold	Disconnected part of load in PS SR	UCTE recommendation
1. degree	49,0 Hz	13,5%	10 – 20%
2. degree	48,7 Hz	12,5%	10 – 15%
3. degree	48,4 Hz	12,5%	10 – 15%
4. degree	48,1 Hz	14,8%	-

Source: UCTE

Results of a monitoring of one of the factors effecting technical reliability of electricity system are shown in the following graph: Development of failure rate of technical facilities of the transmission system of the Slovak Republic between 1994 and 2007“. Nevertheless, due to constantly increasing physical age of the principal technology facilities inside of the transmission system, financial investments required for simple reproduction/renewal of the concerned facilities and maintenance of their serviceability have to be considered.

Graph. No.5.1.9 Development of fault rate in the transmission system of the SR



Source: SEPS, a. s.

**Quality and level of maintenance of the transmission system**

The maintenance of TS facilities during the last year was performed continually. The factor of constantly increasing average age of TS SR technology facilities reminds of several risks. In the future there will be an increase in the intensity of maintenance and repairs as well as concerned operating costs.

Within the preparation of the operation the breaking plans are maximally coordinated with outages of production facilities. Primordial are efforts to prevent decrease of reliability for output of respective production plants. This is very important for output delivered by nuclear power stations. (NP). Another important factor is the ensuring of reserve supply of the power stations own energy consumption. Due to definite shut-down of the NP Jaslovské Bohunice, the 400 kv distribution point Križovany was reconstructed and expanded by 400/110 kV with the aim of increasing the reliability of supply in the electricity network. Focus is laid also on coordination of breaking plans with distribution system operators.

Reinforcement of the transformation output in the distribution point Lemešany contributed to the security and reliability of the electricity supply in the region of eastern Slovakia.

Problems with maintenance activities inside of the transmission system continue even for 400 kV and 220 kV substations supplied in basic connection only by two lines. During the planned outage of one substation due to maintenance work, the other substations will be supplied only by one line. For this reason it is necessary to apply better coordination with the distribution system operators.

**Conclusion**

In the future the electricity network of the Slovak Republic must cope with some new factors, especially with following:

- consumption increase in all economy and population sectors,
- shut-down of several sources,
- obsolescence (moral and physical) of several power facilities inside of transmission and distribution systems with resulting needs for renewal,
- increasing importance of the construction of new facilities in compliance with development and increasing demands of the electricity market undergoing liberalization
- increase of safe and quality supplies for all consumer categories,
- increasing importance of the transmission system within the cooperation of EU members and adjoining countries and the complementary use and construction of actual connecting and following-up internal lines.

**5.2 Security of gas supply**

Slovenský plynárenský priemysel, a.s. Bratislava had the largest share on the Slovak gas market in the previous year. It provided its services to 1 466 000 consumers in particular consumers sectors.

Natural gas consumption in 2007 was 5,8 billion m<sup>3</sup>. In the wholesale sector it came to a decrease by 8,3 %, the consumption at retail sector went down by 10 %. The consumption of the households decreased in 2006 by 13,5 %. The decrease of the consumption was caused mainly by warm winter, realized energy saving measures, as well as modernization of technologies. In the households another fuels have been used. The main reason was the price of the natural gas for this particular sector of consumers. Higher price of natural gas amounts to increased use of

other sorts of fuels, such as coal, or wood. We can expect this trend - substituting the gas with other, cheaper sources – to continue in the sector of households.

Approximately 98% of the domestic consumption is imported from the Russian federation. Natural gas supplies for the needs of SR is ensured by a long term contract between Slovenský plynárenský priemysel, a.s. and Russian company Gazprom Export, which will terminate by the end of 2008. This agreement currently fully covers the domestic demand for natural gas. Companies SPP, a.s. and Gazprom Export are in present negotiating about new agreement (it is expected that the new one will be for the next 20 years).

The domestic exploitation of natural gas is expected to decrease. Any change to this trend is only possible in the case of newly discovered sources – the real process of exploitation would depend on the scope, character and localization of possible new deposits.

In the period of the next 3 to 5 years a slight increase in consumption relating to new sources for production of electricity and heat from gas is expected, in the terms of new legislation, new authorizations for facilities and licenses for construction of new energy facilities have been issued, and energy undertakings have published their plans in this sector. Other factors that will have an impact on consumption are the average yearly temperature and continuation of realization of saving measures.

Anticipated natural gas consumption in the Slovak republic in the period of the next 3 years is showed in the table no. 5.2.1

*Tab. 5.2.1 Anticipated natural gas consumption in the Slovak republic in the period of the next 3 years*

<b>consumption [bil. m<sup>3</sup>]</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
Households and retail	1,8	1,8	1,8
industry	2,6	2,7	2,8
Production of electricity and heat	1,8	1,8	1,9
together	6,2	6,3	6,5

*source: Ministry of Economy of the Slovak Republic*

The SR gas system is composed of the transmission network, distribution networks and the underground gas storage facilities. They are playing important role for the safe gas supply. The SR gas system is interconnected with similar systems of the neighboring countries, namely with Ukraine, Czech Republic and Austria. In the proximity of the Slovak-Austrian border is situated an important gas industrial center Baumgarten, serving as intersection of several transmission networks (Austria, Germany, Italy, Slovenia and Hungary) with the expected terminal of the planned gas pipeline Nabucco (on its construction will participate Austria, Hungary, Romania and Turkey).

During the concerned period no outages having impact on the natural gas supply for consumers in the Slovak Republic or for companies transferring the natural gas across the SR territory to other countries were registered. The demands of the off-takers were completely fulfilled and the off-take was realized accordingly to the amounts agreed in the supply contracts.

During February and March 2008, disputes between Russia and Ukraine (or companies' active in the energy business, respectively) about supply of natural gas reappeared, which led eventually to

reduction of supplies of natural gas for Ukrainian gas market, at the beginning of March 2008. Public declarations, which accompanied the conflict, affirmed, that the conflict would not affect the obligations of both sides towards the companies transmitting the gas through Ukraine. After two days during which the supplies to Ukraine were severely limited, the conflict was solved and agreements on clearing the debt for supplied gas, as well as on changes in the supply model, were concluded. Transmission through Slovakia ran in the relevant period smoothly without any limitations.

Inspections, preventive repairs and maintenance of gas facilities in compliance with the defined criteria were performed with the aim to provide integrity, reliability and safety of the transmission network in the Slovak Republic. The maintenance was performed on the basis of diagnostic studies for compressor stations and line sections of network which quality was corresponding with European standards. The same goes for troubleshooting checked by internal and external inspection of pipelines as repairs or reconstruction of gas facilities.

At the date of 1.1.2008 the transmission network included almost 2 270 km gas pipelines and 4 compressor stations. The transmission capacity exceeds 90 billion m<sup>3</sup> yearly. The Slovak transmission network is an important part of the European gas network and represents a reliable and safe transmission route for natural gas transportation to the Central and Western Europe. In case of higher interests in transport it is possible to increase the actual transport capacity with relatively lower costs compared to new projects. No important extension of the transmission network capacity is expected during the next 3 years.

On March 17, 2008, there was an extraordinary situation reported – explosion of high-pressure gas pipeline and a consequent fire near to village Slanec, in the region of Eastern Slovakia. With the aim of prevention of injuries and material damages, the supply was interrupted for 6633 consumers, mainly in households, in 38 villages. Approximately 10 hours after the explosion the supply was reopened to 4906 consumers in 27 villages, the rest of the consumers were reconnected after inevitable technical measures were taken. Within 2 and half days the supply was reopened for all of the concerned area.

During the concerned period also some short and temporary restricted (several hours) local outages in gas supply occurred, because of safety reasons.

Within the distribution network of the distribution network operator – the SPP distribúcia, a.s., composed of gas distribution facility complex including gas piping system and technology facilities, there were inspections performed, preventive repairs and maintenance of gas facilities in compliance of defined criteria that contributed to network's integrity, reliability and safety. An elimination of defaults found during the internal and external inspections of pipelines or during reconstruction of gas facilities, was realized.

At the date of 1.1.2008 the following state of the distribution network was registered: high-pressure (VTL) gas lines, with the length of 6 364 km, medium-pressure (STL) and low-pressure (NTL) gas lines with the length of 25280 km and 1 886 regulation stations were in operation.

In order to achieve safe and effective operation of regulation stations are these equipped with monitoring systems for data transmission to the gas control center. The monitoring system allows in case of failure or emergency an immediate intervention with optimized network management until the fault clearing.

The distribution network will be during the next period minimally extended. Expected is an extension by ca. 300 km where the planned capacity extension inside of the distribution network equals to 100 mil. m<sup>3</sup>/year.

The gas was supplied to 2219 communities from the 2 891 communities of the Slovak Republic.

SR disposes of underground gas storage facilities located in the south-western region of the country and take an important part in compensation of unbalance between gas supply and consumption as well as in case of peak consumptions. The operators of underground gas storage facilities provide services in storing the natural gas even for foreign gas companies.

The total storage capacity in the territory of the Slovak Republic equals to ca. 2,6 billion m<sup>3</sup>, where the max. daily production capacity equals to ca. 32 mil. m<sup>3</sup>, max. daily injection capacity equals to ca. 27 mil. m<sup>3</sup>. For the Slovak Republic 1,5 billion m<sup>3</sup> are used.

Used is also the underground storage facility located in the territory of the Czech Republic (Dolní Bojanovice – used capacity 0,5 billion m<sup>3</sup>) connected directly with the gas system of the Slovak Republic. During 2007 no substantial failures, having impact on the operation of the underground storages, were registered.

Company POZAGAS, a. s. plans to expand the capacity of its storage facility by approx. 0,02 bil. m<sup>3</sup> in the period of the next three years (for the needs of the market with interruptible capacity), company NAFTA a.s. plans to expand the capacity of its storage facility. by approx. 0,15 bil. m<sup>3</sup> in the next three years.

#### ***Measures for covering peaks, outages of one or several sources***

The distribution network in the delimited territory of the Slovak Republic is controlled by the gas control center responsible for the operative management of the distribution network. The responsibilities of the gas control center in the delimited territory of the Slovak Republic are managed upon the decision of the Ministry of Economy SR by the control center of the distribution network operator – SPP distribúcia, a.s.

The gas control center in the delimited territory of the Slovak Republic fulfills the following responsibilities:

- Manages operatively its own distribution network and distribution of gas into the hubs of the following distribution networks,
- Manages interconnected transfer and distribution networks in the delimited territory during emergency state and during activities preventing immediately its creation,
- manages technically the distribution of sources of gas at the entry points into the interconnected distribution networks,
- Declares restrictive measures for the state of emergency,
- Defines measures necessary for the elimination of the state of emergency.

The distribution network operator not fulfilling the responsibilities of the gas control center can provide the fulfillment of control responsibilities by an already established gas control center of the distribution network operator, who exercises the responsibilities of the gas control center. Such control center fulfills the same responsibilities on the delimited territory of the distribution network operator as a gas dispatch center.

An important role in the peak consumption plays the underground gas storage facilities.

### **5.2.2 Prevention and congestion management in the transmission network**

Will the sum of the required transmission capacities be higher than the technical capacity of the concerned entry/exit point of the transfer network, the congestion in the transfer network occurs. The operator of the transmission network prevents the congestion by the following means:

- by assessment of applications for access to the transmission network and subsequent restrictions in the provision of the transmission capacity in compliance with conditions of the transmission network operator,
- by coordination during the preparation of repair and maintenance plans taking the network user requirements concerning terms, duration and extent of work into account,
- by nomination of gas transmission within the agreed and accessible transmission capacities,
- by providing the opportunity to each gas market stakeholder to offer his own free transmission capacity to another gas market stakeholder.

The shortage in free transmission capacity handles the transmission network operator by gas transmission contracts with breakable transmission capacity with gas market stakeholder.

### **5.2.3. Prevention and congestion management in the distribution network**

Will the sum of the required distribution capacities be higher than the technical capacity of the distribution network, a congestion in the network occurs.

The distribution network operator prevents the congestion by assessment of applications for access to the distribution network and subsequent restriction in the provision of the distribution capacity in compliance with conditions of the distribution network operator, requirements for extension of the existing contracts on the gas distribution without increasing of the agreed distribution capacity and with requirements of the gas consumers in the households.

Will the sum of the required distribution capacities be higher than the technical capacity of the distribution network, the distribution network operator calls on the gas market participants for correction of the required capacity in their application for access to the distribution network.

Will the sum of the required distribution capacities in applications for access to the distribution network be still higher than the technical capacity of the distribution network, assigns the distribution network operator the remaining distribution capacity in a non-discriminatory way in proportion to the amounts required by the applicants. If the required capacity of an applicant exceeds the real remaining capacity, the required capacity is decreased accordingly to the proportion.

### **5.2.4 Network balancing**

The physical network balancing includes a set of activities by which the network operator manages the network operation in a delimited territory in real time and with provision of gas transmission in any moment from entry network points in the delimited territory to exit network points in order to operate the network correctly, safely and non-discriminatory for all gas market participants and assign the operating costs fairly to individual gas market participants.

The commercial balancing represents keeping the balance between amount of gas entering the network and the amount of gas consumed. Not-adherence to the balance and deviations are fined. The commercial balancing provides support to the network operator during physical balancing. The principles of commercial balancing are already set in the concluded

interconnection agreements with some transmission network operators and the remaining agreements are soon to be finalized and concluded with the remaining operators. These agreements comply with the European standards (Guidelines for Good Practice).

The network operator is responsible for physical balancing of the network. He also assesses the commercial balancing and billing of deviations.

The gas market participant will be responsible for the deviation and he can transfer this deviation responsibility incl. all financial obligations contractually to his supplier in compliance with conditions of the network operator. The gas producer can transfer his deviation responsibility incl. all financial obligations contractually to his consumer in compliance with conditions of the network operator.

The distribution network operator is responsible for the physical balancing of the network and billing of deviations on a delimited territory.

In the case when there are more distribution system operators on the delimited territory of the Slovak Republic, the one responsible for balancing is the one who performs responsibilities of gas control centre on the delimited territory. Other distribution system operators conclude an agreement with the one performing the responsibilities of the control center, based on which the interconnection of distribution systems and exchange of information needed for system balancing are ensured.

Distribution system operator has a reserved portion of capacity of storage facility especially for covering daily deviations of the gas market stakeholders; costs for this capacity are included in the price for distribution of gas.

If the reserved capacity is not adequate for physical balancing of the distribution network, distribution network operator asks the stakeholders to adapt the amount of injected or exploited gas from the storage facility up to the level of agreed storage capacity. If this measure is not sufficient, distribution system operator recalls on the storage facility operator to provide him the free capacity of the storage facilities, needed for balancing of the distribution system. If the technical conditions enable this, storage facility operator meets the requirement.

#### **5.2.4 Management of the states of emergency**

The Amendment to the Energy Law ( in effect from April 1, 2008) defines the state of emergency in the energy as sudden or threatening deficiency in supply of respective energies that can induce reduction or interruption of energy supplies or disable energy facilities or lead to endangering of humans lives and health in the delimited territory of the Slovak Republic or in the part of this delimited territory as a consequence of states defined by the law.

State of emergency in the delimited territory of the Slovak Republic or in the part of this delimited territory declares and cancels the distribution network operator, who, on the basis of the decisions of the Ministry of Economy of the Slovak Republic, fulfills the responsibilities of the of the gas dispatch center on a delimited territory. When the state of emergency is declared, the energy market stakeholders are obliged to participate on remedial works and consequences of the state of emergency incl. renewing supplies of gas.

During the state of emergency all market participants must comply with restricting measures, for state of emergency prevention and measures provided for canceling the state of emergency. The restricting measures are applied in the following order:

- a) restriction of energy off-take at production, or energy intensive businesses
- b) restriction of energy supplies for consumers as per a),
- c) restriction and interruption of energy supplies for other consumer except for households, and public service facilities,
- d) restriction and interruption of energy supplies for public service facilities
- e) restriction and interruption of energy supply for households

See the Ordinance of the Ministry of Economy No. 206/2005 Coll. for details in the procedure of the emergency state declaration, declarations on restricting measures for state of emergency and measures for cancellation of the state of emergency. This Ordinance was amended by the Ordinance No. 465/2006 Coll. of the Ministry of Economy.

The Ordinance sets standard for security of gas supply, in which the secure and reliable gas supply for end-users is meant, in the following cases:

- a) Of interruption or limitation of gas supplies in the period of 10 weeks in the scope of 30% from the total sum of daily amount of gas supplied on the basis of all contracts of gas supply to end-users or on the basis of contracts on purchase of gas from the producer or from the supplier from the EU members states or from a third state,
- b) Of gas consumption in 5 following days, when the measured temperatures are extremely low; a day with extremely low temperature is deemed to be a day, when the average daily temperature in a delimited territory is lower than  $-12^{\circ}\text{C}$ ,
- c) of the necessity of covering the consumption of gas on a delimited territory caused by development of low temperatures in the coldest period in the past 20 years prior to the period from October 1 to March 31.

It further determines, that distribution system operator, with the aim of managing the state of emergency and preventing the state of emergency, ensures the standard of security of supply for gas consumers in the households by gas stored in the storage facilities. Gas supplier, with the aim of managing the state of emergency and preventing the state of emergency, ensures the standard of security of gas supplies for gas consumers except for consumers in the households. End consumer of gas, who takes off gas from EU member states' territory, or from the territory of third states, ensures himself the standard of security of gas supply, with the aim of managing the state of emergency and preventing the state of emergency. Gas supplier for consumers besides households and end user, who takes off gas from EU member states' territory, or from the territory of third states, can use in order to achieve the standards of security of supply of gas, mainly the tools mentioned in the Annex to the Directive No. 2004/67/EC.

## 6. General economic interest

### Electricity

In order to guarantee security and reliability of operation of the Slovak Republic electricity network, on May 4, 2005, the Government of the Slovak Republic approved the general economic interest of utilization of domestic coal in electricity generation. The general economic interest is possible to be applied when it achieves the share of electricity generated from domestic coal in the amount of up to 15% on the overall national electricity consumption. However, in relation to the national electricity consumption, this share can be in fact of 8% maximum. At the same time, the Government of the Slovak Republic ordered the Minister of Economy to impose obligations, within the general economic interest, to electricity stakeholders to secure generation of electricity generated from domestic coal.

At present, the utilization of this energy source is related to an electricity producer who, by using CHP plants, secures also provision of ancillary services, generation of regulated electricity and central heat supply. The electricity network management analysis of the Slovak Republic for the first quarter of 2005 showed, that it is necessary to include the blocks of the CHP plant Nováky into the regulatory framework as well, in order to provide ancillary services. After decommissioning of the Nuclear power plant V1 Jaslovské Bohunice, it will be necessary to operate the CHP plant Nováky more extensively to guarantee security and reliability of the electricity system.

The reservoirs of brown coal are the only significant and perspective fuel source in Slovakia. Domestic brown energy coal is mainly being burned in the CHP plant Nováky which is operated by Slovenské elektrárne, a. s. company, and that has been built due to the local fuel understructure. The consumption of brown coal of the CHP plant Nováky has been on the level of 2400 kt of coal in the recent years. The share of electricity generation from brown coal on the overall generation in the Slovak Republic reached 5, 1% in 2006 and 2007.

On 10 October 2006, The Ministry issued a decision in the general economic interest for 2007:

- for Slovenské elektrárne, a.s., to produce electricity from domestic coal in 2007 in the amount of 1 603 GWh and to provide electricity supply generated from domestic coal in 2007 in the amount of 1 375 GWh; and, at the same time, to meet the share of electricity generated from domestic coal within 15% maximum on the overall national consumption of electricity and to meet the price of electricity generated from domestic coal which is defined by the Regulatory Office for Network Industries,
- for Slovenská prenosová elektrizačná sústava, a.s., to guarantee preferential access and preferential transmission of electricity generated from domestic coal and, at the same time, to monitor the share of electricity generated from domestic coal on the overall national electricity consumption,
- for Západoslovenská energetika, a.s., Stredoslovenská energetika, a.s., and Východoslovenská energetika, a.s., to guarantee preferential access and preferential distribution of electricity generated from domestic coal in the defined volume.

On 15 October 2007, the Ministry issued the decisions in the general economic interest for the year 2008 as well:

- for Slovenské elektrárne, a.s., to produce electricity from domestic coal in 2008 in the amount of 1 957 GWh and to provide electricity supply generated from domestic coal in 2008 in the amount of 1 717 GWh; at the same time, to meet the share of electricity generated from domestic coal within 15% maximum on the overall national consumption of electricity and to meet the price of electricity generated from domestic coal which is defined by the Regulatory Office for Network Industries,
- for SEPS, a.s., to guarantee preferential access and preferential transmission of electricity generated from domestic coal in the restricted territory and, at the same time, to monitor the share of electricity generated from domestic coal on the overall national electricity consumption,
- for ZSE distribúcia, a.s., Stredoslovenská energetika - Distribúcia, a.s. and Východoslovenská distribučná, a.s., to guarantee preferential access and preferential distribution of electricity generated from domestic coal in the defined volume,
- for ZSE Energia, a.s., Stredoslovenská energetika, a.s. and Východoslovenská energetika, a.s., to preferentially provide supply of electricity generated from domestic coal in the defined volume.

In order to protect and secure electricity supply for household electricity customers and small businesses, on 2 July 2008, the Government of the Slovak Republic approved the general economic interest in energy sector to secure electricity supply, including the price of electricity supply for households and small businesses, for the period from 2009 until the economic indicator „the share of energy costs on the overall household incomes“ is balanced with the EU member states' average as an obligation for an electricity producer to provide electricity supply in the amount of at least 6 TWh for the price defined by the Regulatory Office for Network Industries for households and small businesses with the amount of electricity consumption mentioned below:

- households without electric heating, up to the consumption of 5000 kWh/ year,
- households with electric heating, up to the consumption of 20 000 kWh/year,
- small businesses up to the consumption of 30 000 kWh/year.

The current increase of electricity consumption in the neighboring countries, the highest unemployment rate among EU countries and a threatening insufficiency of capacities for electricity generation, as well as an insufficiently developed competition environment on the electricity market with a significant dominant position of the largest electricity producer- Slovenské elektrárne, a.s., who directly and indirectly guarantees electricity generation which covers more than 60% of electricity consumption in Slovakia, create conditions for further increase of influence of this dominant electricity producer. Within the access process to the European Union, the Slovak Republic was committed to decommission two units of the V-1 Nuclear power plant in Jaslovské Bohunice. The Slovak Republic has turned from a net electricity exporter into its importer. The price of electricity itself and especially the price for households and small businesses are negatively influenced by the fact that the electricity market, in relation to the absence of sources in the Slovak Republic, does not exist. As a result, the security of electricity supplies with an emphasis on the price of electricity supply focused on households and small businesses, is violated.

In order to adopt relevant measures to protect household electricity customers and small businesses, and thus to secure adequate guarantees for vulnerable customers protection, the Slovak Republic is trying to ensure through the general economic interest, so that the household

electricity customers and small businesses would have the right to be supplied with electricity in a defined quality for comparable, transparent, available and fair prices.

On 3 July 2008, the Ministry imposed in the general economic interest and in order to guarantee security of electricity supply including the prices of electricity supplies for household electricity customers and small businesses for the period of 2009 and 2010 to the electricity producer- the Slovenské elektrárne, a.s. company, the following obligations:

- a) to provide electricity supply in the amount of at least 6 TWh for the price determined by the Regulatory Office for Network Industries for household electricity customers and small businesses with the amount of electricity consumption as follows:
  1. households without electric heating with a consumption of up to 5000 kWh/year,
  2. households with electric heating with a consumption of up to 20 000 kWh/year,
  3. small businesses with a consumption of up to 30 000 kWh/year.
- b) To provide electricity supply according to letter a) to household electricity end-customers and small businesses under the condition that these suppliers will provide such purchased electricity in 2009 and 2010 explicitly for the purposes according to letter a).

## **6.1 Universal service**

The Act on Energy defines universal service as a service for households and small businesses provided by an electricity supplier based on the contract on electricity supply and which includes both electricity distribution and electricity supply and adoption of responsibility for deviations. The price of electricity for households is regulated by the Regulatory Office for Network Industries. This kind of regulation does not have any influence on national or international competition. A household electricity customer has the right to conclude a contract on electricity supply with a household electricity end- supplier who provides universal service under the conditions defined in the Act, which are in compliance with the conditions defined in the Annex of the Directive 2003/54/EC. According to the conditions defined by the Office and according to meeting the price or the methodology of its calculation determined by the Office, a distribution system operator is, within the restricted territory, obliged to secure connection of household electricity customers to the network if both technical and business conditions are met. The contract on connection must include a term, within which a distribution system operator is obliged to secure connection to electricity off take facility.

### ***Combined generation of power and heat***

An electricity producer operating a generation device for combined generation with an overall installed power capacity of up to 5 MW, has the right to be preferred in electricity transmission or distribution if the technical conditions of the network are appropriate; this does not relate to a connection line.

A preferential right for electricity transmission or distribution related to combined generation with an overall installed power capacity of more than 5 MW includes only generation of electricity which emanates concurrently with production of heat which is being produced in order to provide heat supply to physical or legal persons or for technological purposes.

### ***Generation of electricity from renewable energy sources***

Producer generating electricity from renewable energy sources, has the preferential right for electricity transmission, distribution and supply if the generation device determined for generation

of electricity from renewable energy sources meets technical and business conditions. The preferential right for electricity transmission does not relate to transmission of electricity through a connection line.

### Gas industry

The general economic interest in energy sector is a subject to the Government' s approval upon the Ministry' s proposal. The Ministry may, in the general economic interest, impose obligations to a gas network operator, a gas supplier and a gas storage operator to guarantee, besides others, security, regularity, quality and price of gas supply. Such imposed obligations must be unambiguous, applicable, controllable, transparent, and non-discriminatory and they must secure equality of access for gas companies in the EU member countries to end- customers within a restricted territory of the Slovak Republic.

On 2 July 2008, the Government of SR discussed and approved the proposal for securing gas supply including the price of gas supply for household gas customers and the price of gas supply for household heat production in the general economic interest.

The Ministry subsequently, in the form of a decision, imposed concrete obligations to the gas supplier.

The price of gas for households is a subject of the Office's regulation and is stipulated as a maximum price for gas supply. The mentioned price of gas for households does not influence the national nor international competition.

The Government of the Slovak Republic approved, in the form of Resolution No. 456/2008, the general economic interest for securing gas supply including the price of gas supply for household gas customers and the price of gas supply for household heat production for the period from 2009 until the economic indicator „the share of energy costs on overall household incomes“ is balanced with the EU member states' average.

The reason for announcement of the general economic interest related to securing gas supply including the price of gas supply for household gas customers and the price of gas supply for household heat production is to protect and secure gas supplies for household gas customers and household heat supplies.

The current increase of oil price having a direct relation to the increase of the price of natural gas, an insufficiently developed competition environment on the gas market with a significantly dominant position of the gas supplier- Slovenský plynárenský priemysel, a.s.- as well as non-utilization of legislative conditions enabling transparent and wide gas market opening in the Slovak Republic, create conditions for setting measures to achieve the objectives of social and economic cohesion. The unpredictable increase of the price of natural gas, being closely connected with oil price in the global markets, can result in increase of the price of gas supplies for household gas end- customers. The price of natural gas which is purchased by the gas supplier in order to secure gas supply for Slovak customers represents approx. 56% of the final price for household gas supply. In connection with the further increase of the price for gas supply, it is necessary to become aware of the share of Slovak households energy costs which are necessary for a day-to-day household management and the amount of real incomes of the Slovak Republic households.

In order to adopt relevant measures to protect household gas customers and the household heat producers, and thus to secure adequate guarantees for protection of vulnerable customers, the

Slovak Republic is trying to ensure, so that the household gas customers and household heat producers would have the right to be supplied with gas in a determined quality for affordable and fair prices.

The Ministry imposed to the gas supplier- Slovenský plynárenský priemysel, a.s.- the obligations mentioned below in the form of a decision in the general economic interest and with the aim to secure gas supplies including the price of gas supplies for household gas customers and the price of gas supplies for household heat production for the period of 2009 and 2010:

- a) To provide gas supply to household gas customers with a gas consumption of less than 6 500 m<sup>3</sup> /year for the price defined by the Regulatory Office for Network Industries,
- b) To provide gas supply to heat producers for household heat production for the price defined by the Regulatory Office for Network industries,
- c) To provide gas supply according to letter b) to heat producers under the condition that these heat producers will use such purchased gas explicitly for the purposes defined in letter b) in the period of 2009 and 2010.