

National Report
to the European Commission

The President
of the Energy Regulatory Office
in Poland

2010

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Acronyms and Abbreviations

CNG	Compressed Natural Gas
n/d	no data
DSO	Distribution System Operator
EMA SA	Energy Market Agency SA
ERO	Energy Regulatory Office
ERO President	The President of Energy Regulatory Office
EU	European Union
GK PGNiG SA	Polish Oil and Gas Company SA Capital Group
IRiESD	Distribution Grid Code
IRiESP	Transmission Grid Code
LNG	Liquefied Natural Gas
LT PPAs	Long Term Power Purchase Agreements
NES	National Electricity System
OGP Gaz-System SA	Operator of Gas Transmission Pipelines Gaz-System SA
PGNiG SA	Polish Oil and Gas Company SA
PSE SA	Polish Power Grid Company SA
PSE Operator SA	Polish Power Grid Operator Company SA
RES	Renewable Energy Sources
SSO	Storage System Operator
TSO	Transmission System Operator
TPA	Third Party Access
UCTE	Union for the Co-ordination of Transmission of Electricity
UOKiK	Office of Competition and Consumer Protection (OCCP)

1. FOREWORD

Regulation of Polish energy sector in 2009 was predominantly affected by the implications of continued consolidation in the power sector and recentralization of trade in the gas sector, with adverse impact on development of competition in these markets. Regulatory tools that the President of ERO was able to apply turned out to be insufficient in order to prevent negative developments in an effective manner. Therefore, in order to promote competition, the Regulator concentrated on building of energy and fuel consumer awareness, especially with regard to consumer rights. In that context, the ERO President continued to promote new regulations that were already proposed in 2008, with many new initiatives in this field. Some of these initiatives were reflected in the latest amendment to the Energy Law¹⁾. However, it appears, that only with the new scope of the ERO President's mandate to be introduced on the wave of implementation of the third energy package into the country legal system, the nominal opening of the market will become reality, and the right to choose the supplier will turn into a normal practice.

This Report presents an analysis of actions pursued by the President of ERO based on the application of all appropriate means that were available in the legislation. Leaving aside the issue of insufficient regulatory tools set out by the legislation, in order to pursue regulatory tasks the Regulator needs, first and foremost, a throughout knowledge of the condition and structure of as well as the developments in the energy sector, its sub-sectors, and the performance of energy markets. Such knowledge is based on the information collected and processed in the Energy Regulatory Office, obtained through statistical reports and based on regular monitoring of energy system operation.

The document presented to the European Commission is the sixth report prepared by the President of Energy Regulatory Office, who has thus complied with the obligation specified in the Energy Law, and in the Directives 2003/54/EC and 2003/55/EC.



¹⁾ Law dated January 8, 2010, amending the Energy Law and some other laws (Journal of Laws of the Republic of Poland, February 8, 2010, no 21, item 104).

2. MAIN DEVELOPMENTS IN ELECTRICITY AND NATURAL GAS MARKETS

In 2009 there were no fundamental developments in electricity and natural gas markets. The current status quo is still far from full competition.

Wholesale market

Electricity generation and wholesale market remains highly concentrated due to the presence of four vertically consolidated energy capital groups. In 2009, the share of those four energy groups in the generation amounted to 62%. In 2009, HHI²⁾ measured according to net installed capacity changed only slightly compared to 2008, and the same is true when net production is taken into account. Three leading producers had more than 50% of the total installed capacity and they accounted for 55% of the total electricity generation. The number of producers with at least 5% market share has not changed. In 2009 *PGE Polska Grupa Energetyczna SA* had a biggest share in the generation market as well as in the wholesale market.

Trade on wholesale electricity market was highly concentrated, especially within the vertically consolidated energy groups. In 2009, the total turnover within the four energy groups represented 58.31% of the entire wholesale trade.

As in previous years, bilateral contracts continued to dominate trade on the wholesale electricity market. During 2009, over 90% of electricity sold by generators to trading companies was sold within the framework of bilateral contracts. The remaining portion of sales was carried out on the balancing market (including the need to ensure NES security of supply) and, to a very small extent, on spot markets (power exchange, internet platforms for electricity trade). In 2009 the significance of exchange market transactions remained rather low. Despite a 45% increase in comparison to 2008, the level of sales on the Polish Power Exchange (*TGE SA*) was equivalent to 3.07 TWh. This accounted for only 2.07% of total electricity consumption in 2009. The volume of electricity sales on the Internet Electricity Trading Platform (*POEE*), an organized electricity trade market run by one of market participants was actually greater than on the power exchange. The volume of *POEE* sales in 2009 reached 4.36 TWh, i.e. 2.93% of the total domestic consumption of electricity.

Despite the termination of LT PPAs and the introduction of state aid program for stranded costs, the structure of electricity sales by generators did not change towards effective and pro-competitive electricity market mechanisms. Twelve electricity generators are eligible for such state aid; in 2007 eight of those twelve became members of vertically consolidated energy groups and they started selling electricity to their own trading companies. This significant change in the market structure, that resulted from vertical consolidation, has been the main reason for underdevelopment of competition and created additional constraints as regards state aid issues. The situation may change for the better, to a certain extent, once – starting from the second half of 2010 – the entities eligible for the forementioned state aid will be obliged to start trade electricity on the power exchange market, through tenders, contracts with final customers or on trade platforms operating on transparent and non-discriminatory rules.

There were no significant developments in the power sector as far as the transmission capacity on cross-border inter-connectors is concerned. The volume of cross-border exchange was influenced by technical barriers, such as insufficient transmission capacity on synchronic connections with

²⁾ HHI is a sum of squares of individual market shares of all enterprises that are active in particular economic segment.

neighboring countries and consistently high electricity loop flows resulting from wind generation in Northern Germany. On the other hand, there were no constraints resulting from discriminatory transmission capacity allocation rules or lack of proper supervision over TSO performance.

Unsatisfying level of competition on the electricity wholesale market was subject to close scrutiny of the ERO President: a diagnosis of underlying reasons was performed and a series of measures was initiated as a result. The ERO President put forward a package of recommendations regarding Energy Law amendments³⁾. In particular, the ERO President focused on ensuring greater transparency and liquidity of wholesale trade by, *inter alia*, introducing an obligation upon generators to sell electricity through the power exchange, and implementing a template of the so-called general distribution agreement that regulates the rules of cooperation between distribution system operators and suppliers who operate in their area.

In 2009 there were no major developments as regards the structure of gas wholesale market. PGNiG SA, an enterprise, in which Polish state holds a majority share, has a dominant position on this market. This is partly due to the fact that PGNiG is the main gas importer to Poland and in the same time the main domestic gas producer, and it owns all underground gas storage installations.

Interestingly enough, the current structure of the gas wholesale market in Poland is becoming more and more divergent from the structure observed in the majority of EU member states, where natural gas wholesale trade is carried out on the natural gas exchanges or in trade hubs. Consequently, there is no gas market liquidity in Poland in the circumstances when commercial transactions are carried out only and exclusively within the framework of long term or open-ended bilateral contracts.

In that context, it should be pointed out that the usual breakdown into wholesale and retail segments of natural gas sales is becoming less relevant. As a result of recentralization of trade within PGNiG Group, one can observe very limited diversification between prices offered to wholesale and retail customers.

To add to the description of wholesale market, one should mention insufficient integration of domestic transmission system with the systems that belong to EU member states, and a 100% reservation of transmission capacity at „entry” points for PGNiG SA, which results in the lack of activity in the field of cross-border exchange among domestic (independent of PGNiG Group) and foreign trade companies.

Taking advantage of available administrative tools, the ERO President has consistently monitored terms and conditions of access to the gas system in order to promote competition. In January 2009, the ERO President issued a decision whereby PGNiG SA was not exempted from the provision of storage services for other gas companies and was required to make such storage services available, effective as of July 1, 2009⁴⁾.

Moreover, the ERO President notified TSO of the guidelines regarding changes in the grid code, with the purpose to promote competition on the wholesale market. These changes are related to a different approach to technical specification of one of storage facilities – UGS Mogilno, which is responsible, among other things, for transmission grid balancing, and to modifications in transmission capacity allocation rules so that the gas stream can be divided at delivery at one metering point on the basis of several contracts. Furthermore, the President of ERO urged Gaz-System SA to take action in order to implement a system in which imbalance would be cleared in energy units according to accredited methods, and to introduce 24 h transmission service and the option to execute ‘reverse’ contracts⁵⁾.

³⁾ During 2009 there was ongoing legislative work on Energy Law amendments. The amendment was adopted in January 2010, and it came into force on March 11, 2010.

⁴⁾ In response to storage service packages of total capacity of 627 million cubic meters presented to potential market players during the period of one month, only PGNiG SA Gas Trade Unit replied, and reserved storage capacity in UGS Mogilno (until 31 March, 2013) and in the virtual facility based on the operation of UGS Wierzchowice and UGS Husów (until 31 March, 2014).

⁵⁾ In the new transmission tariff approved by the President of ERO on May 17, 2010, charge rates for reverse transmission service provision were included.

Retail market

In 2009 there was no significant progress as far as the promotion of competition on electricity retail market is concerned. Taking that into consideration, the President of ERO upheld the obligation to submit tariffs for approval with regard to tariff group G, which predominantly consists of household consumers. Analogically to previous years, retail market players include end users (households as well as enterprises), distribution system administrators (DSOs), and electricity suppliers (trading companies). The biggest share in electricity sales was achieved by the fourteen 'incumbent' suppliers who remained as parties to 'common service agreements' (agreements that combine the terms of a sell agreement and distribution agreement) after the unbundling of distribution system operators. They act as default suppliers to the households which had not taken a decision to switch to a new supplier. There are also other suppliers present on the market (about twenty active players) not derived from the structure of former distribution companies. About 200 other suppliers are vertically integrated industrial power companies (of local significance), which provide distribution services with their sales. In total, there are about 310 entities licensed to trade in electricity.

Consumer activity expressed in the application of the right to switch the supplier is still very low. The share of large and medium size industrial enterprises which have switched their supplier has risen only slightly. The share of users from tariff group G that have switched the supplier is marginal (0.007%). In total, as of the end of 2009, there were 2 599 consumers – of which 1 062 were household consumers – who entered into sales agreement with a supplier other than the sale company unbundled from the vertically integrated company operating in the area of a DSO to whose network those consumers are connected.

The volume of electricity purchased in that way in 2009 was higher by only 2%, approximately, compared to 2008, and it amounted to 12 920 GWh, or 11.0% of total supply to end consumers.

Electricity prices for consumers who did not choose to use the right to switch the supplier went up between the fourth quarter of 2008 and the fourth quarter of 2009 by 31.7%. The highest increase was observed in the category of small industrial customers – by 39.3%, and the lowest one in the category of households – by 24.0%. As for consumers who decided to switch the supplier, the price of electricity is determined in bilateral contracts.

In a way similar to the wholesale market, one could hardly describe the 2009 as a breakthrough year in natural gas retail trade. PGNiG SA continues to hold a dominant position on this market. Operations of the remaining retail sale companies mostly consist in the re-sale of natural gas purchased from PGNiG SA to final customers.

In 2009 there was a 5% drop in the volume of sales resulting from, first and foremost, a decrease in the demand for natural gas by leading industrial customers, i.e. nitrogen and petrochemical plants, as well as other major customers who consume more than 25 mcm annually.

Until the end of 2009, gas prices for all customers were regulated. In comparison to 2008, the average supply price for natural high-methane gas decreased by 3.3%: in the case of household customers (depending on the tariff group) the decrease was between 0.5÷0.9%, in the case of industrial customers connected to the distribution network – 0.9÷6.5%, and in the case of industrial customers connected to the transmission network it varied from 4.3% to 7.3%.

Current structure of gas market in Poland is reflected in a zero indicator of supplier change, and in consequence it allows PGNiG SA to enter into the so-called 'common service agreements', which include clauses pertaining to the sales agreement, transmission and distribution service provision, and storage service provision.

Conclusions: general status of markets

Progressive vertical consolidation of the power sector resulted in the establishment of a limited number of energy groups with significant market power. There were no major changes in 2009 as far as the market structure is concerned. Elimination of long term contracts from electricity market did not bring expected consequences, such as greater competition, market liquidity and transparency. Almost entire electricity volume has been sold via bilateral contracts. Likewise, competition on the retail market continues to be extremely limited. Price differences among trading companies have not been sufficiently attractive to encourage customers to switch the supplier.

Moving on to the gas market, its current performance assessment results from the absence of the ultimate gas market model in Poland and consistent policy approach towards this sector. To put that issue in a broader context, there is a need for a fundamental change in policy towards gas industry. Such a policy should be re-focused from an intervention-based approach, driven by the need to ensure adequate level of security, towards a market-oriented approach. Effective competition mechanisms would improve the efficiency of business performance to the benefit of natural gas consumers and ensure an adequate, from the standpoint of security of supplies, level of network infrastructure development.

During the first stage of liberalization, priority should be given to supplier competition within the framework of long-term contracts. Commercial transactions should be isolated from actual gas flows through the network. In practical terms, gas would be sold in many locations on the network (or on 'entry' and 'exit' points). In the subsequent stage, proper conditions for the development of spot market transactions should be secured, with the purpose to diversify transactions, disclose transactional prices, develop balancing services and risk management.

In order to facilitate development of competition, some legal regulations including the obligation to maintain compulsory stocks of natural gas, licensing rules, and diversification requirement placed upon gas companies ought to be amended.

Public service obligations and consumer protection issues

In view of unsatisfactory development of competition on Polish electricity market, the ERO President took intense efforts in 2009 to improve customer position. These actions that were aimed at ensuring appropriate position of customers on the market are related to Regulator's mission which consists in balancing the interests of different market players. The Regulator has been consistently focused on that task by initiating and implementing steps aimed at simplifying supplier switching procedure, by getting involved in government actions to develop support mechanism for vulnerable customers, by launching educational and communication campaigns connected with consumer issues, and by actively promoting the cause of smart metering with the main purpose to provide consumers with the information on their current energy consumption in almost real time in order to improve energy efficiency. Those efforts certainly need to be continued.

In 2009, the President of ERO continued efforts aiming at developing competitive market relations. Many of those efforts belong to the category of the so-called 'soft' actions, which are not directly required by the legislation, but which the ERO President regards as necessary. Those actions focused on proposing framework and timeline necessary for full market liberalization, as presented in the document entitled: „Roadmap of price liberalization for all electricity consumers. Towards consumer rights and effective competition in the power sector”⁶⁾. Among many other projects, the following should be listed here: updating the ERO website, maintaining call center dedicated to free energy market and supplier switching issues, presenting information on the idea of liberalized energy market in the press and in dedicated publications.

⁶⁾ Published in January 2008.

In the course of legislative work related to the Energy Law amendment, thanks to the efforts made by the President of ERO (already mentioned draft legislation package put forward by the ERO President) amendments were introduced with regard to customer right to switch the supplier without additional costs other than those set forth in the agreement. Furthermore, energy suppliers are now required to place the information on sales prices and the terms of their application on their websites and disclose it as public information in their premises, which will certainly contribute to the transparency of their operation. On the other hand, the attempt to introduce the concept of arbitration courts functioning under the auspices of the Regulator with the purpose to resolve consumer disputes without involvement of judiciary system had been unsuccessful.

The involvement of the President of ERO in the legislative process related to the preparation of background assumptions for the draft law regarding support for vulnerable customers consisted in putting forward the proposal of the solution based on social policy system as the most optimal approach. However, this view was not shared by all actors involved in the process, and this proposal was not adopted. There is an urgent need to find the solution, since in 2009 there was an almost a 30% increase in the number of customers disconnected from the network due to unpaid bills. Nevertheless, until the issue of protection for vulnerable customers is legally resolved, maintaining regulated price of electricity for households will remain a necessity in order to provide protection against potential excessive rise in electricity prices.

Upward trend in the number of customers issues submitted to the ERO President was observed in 2009 as well. This is mostly due to unfavorable structural changes in the energy sector and, *inter alia*, relatively more convenient online communication with the Regulator. 'Complaints' and 'inquiries' from customers which are received by mail, online, by telephone, by fax or directly in person are processed by relevant departments, including regional branches and the an office of the Spokesman for Fuel and Energy Customers, whose main task is to provide information on fuel and electricity consumer rights and obligations.

Infrastructure

As regards the role of regulator in maintenance of transmission and distribution infrastructure, the President of ERO approves DSO and TSO's network investment development plans. This procedure is closely related to decisions concerning tariff approval in power and gas sector, and it also allows for the verification of planned expenses from the standpoint of their financing potential from resources collected from customers (customer payment potential).

The new version of draft TSO development plan for the period 2010-2025 was prepared in view of the need to modify investment plans due to changes in: capacity and energy demand, need to connect RES to the network, nuclear power plant construction plans, increase of cross-border interconnectors' capacity and increasing of security of electricity supply. On the basis of this analyses, the operator (*PSE Operator SA*) identified risks concerning transmission network performance and the need to immediately expand transmission network, which has not been anticipated in the previously agreed draft development plan or in its updated version. Draft plan was divided into three planning cycles (2010-2015; 2016-2020; 2021-2025), according to which investment plans determining the security of operation and the potential for further development of transmission network are presented.

In December 2007, the Regulator approved the draft development plans of the fourteen distribution system operators for 2008-2011, as regards their parts dealing with satisfying current and future electricity demand needs.

As regards nine distribution system operators, their plans were approved in 2007 and remained valid in 2009. Five remaining operators submitted updates of their plans to the President of ERO, and those updates were subsequently approved.

There were no developments in 2009 as far as the number and location of cross-border interconnectors is concerned.

Compared to 2008, interconnector capacity volume has improved, but it should continue to increase in order to allow market players to get more involved in energy trade. Elimination of transmission congestion on synchronic connectors with EU countries is carried out according to market principles – in the process of coordinated, explicit auctions⁷⁾. Availability of export and import transmission capacity is administered by *PSE Operator SA* by means of annual, monthly and daily auctions. Transmission capacity offered for the annual auction amounted to 0 MW. This was due to significant Transmission Reliability Margin (TRM) resulting from, *inter alia*, substantial loop flows from German territory (in consequence of dynamic development of wind energy generation).

In view of the fact that investment process is typically quite lengthy, more effective use of existing infrastructure becomes a priority. This is possible thanks to the cooperation of all the stakeholders, which is carried out within the framework of ERGEG Regional Initiatives. In consequence of such joint efforts, fully coordinated transmission capacity auctions should be introduced in Central and Eastern Europe region (CEE) in 2010, with capacity determined according to flow based methods.

In the gas sector in 2009, the work started back in 2007 on the approval for Gaz-System SA transmission network operator development plan until 2014, was completed. The majority of the approved investment tasks relate to north-western Poland and are connected with the elimination of the so-called 'bottlenecks' in the transmission system and the construction of LNG terminal in Świnoujście.

When calculating DSOs and TSO tariffs 2009 investment expenses in the amount of PLN 1 705 464 have been taken into account. The amount of those investments exceeds the 2008 levels by 39%.

Some significant changes from the standpoint of the functioning of gas transmission system were made with regard to transmission capacity allocation rules included in the grid code that is valid until December 31, 2012, following its extension. Changes relate to the points in which LNG installation is connected to the transmission network, with the purpose to facilitate the execution of transmission contracts for companies which obtain access to LNG terminal.

It is the opinion of the Regulator that an increase in TSO investment levels should be perceived in a positive light. According to the approved development plans, investment projects are focused on further improvement in the security and quality of network services. On the other hand, however, subsequent changes regarding the allocation of transmission capacity are indispensable, so that consumers may decide about the division of gas stream flow among individual suppliers and contractual capacity can be ordered in the course of gas year.

In 2009, none of energy undertakings was released from the obligation to provide TPA services with the application of new network infrastructure, pursuant to Article 7, Regulation 1228/2003, or Article 16, Resolution 1775/2005 and Article 22, Directive 2003/55/EC.

⁷⁾ Currently, five transmission system operators are involved in coordinated auctions for cross-border interconnector transmission capacity, namely: VE-T and E.ON (Germany), CEPS (Czech Republic), SEPS (Slovakia), PSE Operator SA (Poland).

Security of electricity and natural gas supplies

Security of supplies is defined as a provision of access to energy for consumers, guaranteed at a specified time, with specified quality and at transparent, cost-related prices. Pursuant to the Energy Law, this area is monitored by the ERO President based on information obtained from energy undertakings, their customers, as well as national and international institutions that deal with sector statistics and gas supply issues. Such analyses focus on access to fuel at the source and its reserves, price affordability, diversification of supplies in terms of country of origin of the fuel, its supply routes, performance of transmission and distribution networks, status of reserves, and economic standing of gas companies, with many other factors also taken into account. A comprehensive monitoring system consist of all those elements.

In compliance with the statutory obligation set out in Article 23, paragraph 2, point 20f of the Energy Law, the Regulator monitors the terms and conditions of supply of various energy carriers, including electricity. The security of electricity supplies is a complex issue, which includes a series of efforts set forth in the Article quoted above as well as other regulatory tools.

Investment issues are presented in detail in Section 5.

As far as electricity market is concerned, there was no risk of imbalance between demand and supply in 2009 (for more details cf. Section 5). For many years electricity generation has been based predominantly on hard coal and lignite coal, and these fuels are supposed to remain key energy sources used for electricity generation in the future. Economic condition of the sector appears to be stable, which thus provides energy undertakings with the resources needed for investment projects. There were no significant delays as regards the implementation of investment projects, either with regard to new generation capacity or power grid, interconnectors included. The introduction of nuclear energy in Poland will represent a new development. Apart from the advantage of zero CO₂ emissions, this technology of energy generation should contribute to better energy balance, ensure independence from traditional directions of energy source acquisition, and thus improve the level of national energy security.

In general, in 2009 there were no threats regarding the security of electricity supply.

Basic elements of the national strategy for the security of natural gas supply, which consist in, *inter alia*, the tendency to balance supplies from the east with greater volume of gas imports from other directions, have not been altered. In 2009 gas undertakings continued the investment projects aiming at diversification of supply sources. The construction of LNG terminal in Świnoujście, that is planned to be launch in June 2014, is the biggest project carried out in Poland in that regard. In connection with this project, PGNiG SA signed a contract for twenty years for the supply of 1 million tons of LNG annually with Qatargas Operating Company. Another project intended to increase import capacity, in a relatively short time perspective, has been carried out by Gaz-System SA and it is connected with increasing an import capacity at “entry” point in Lasów from 0.9 to 1.9 billion cubic meters.

Market screening procedure carried out by TSO in 2009 with the purpose to check to what extent gas companies might be interested in interconnector construction has been completed without taking investment decisions on interconnectors with Denmark, Lithuania and Germany, but it came to a successful conclusion in the case on investment project on Polish-Czech border nearby the town of Cieszyn. Thanks to the new pipeline, a joint investment of Gaz-System SA and RWE Transgas Net, with approximately 0.5 billion cubic meters transmission capacity, other gas companies apart from PGNiG Group will also be able to execute their commercial contracts⁸⁾.

Domestic gas consumption has remained on a stable level for several years now, of more than 13 billion cubic meters. Relative to 2008, total gas consumption went down by 4.3% and imports fell

⁸⁾ Contracts for the provision of transmission services by TSO were signed with Handen Sp. z o.o. and KRI SA.

by 12.3%, while domestic production, which satisfies almost 31% of domestic demand, increased by 0.7%. Additional natural gas supplies were realized from the east (61%) and west (8%) direction.

Furthermore, in order to ensure security of gas supplies to domestic customers, underground storage facilities for high-methane gas are used, with working capacity of 1.6 billion cubic meters, which represents about 12% of annual gas consumption by domestic customers.

In the opinion of the Regulator, the January 2009 gas crisis once again highlighted weak points of the isolated transmission system, i.e. an insufficient number of interconnectors with EU member states and insufficient transmission capacity of existing interconnectors. Due to this, there is still a need to have in place appropriate 'legal framework', i.e. regulations and procedures to be applied in case of supply limitations including the ERO President's decisions such as: the plans to introduce limitations, the volume of compulsory stocks of natural gas, as well as grid codes and tariffs specifying the rules of cooperation in case of limitations⁹⁾.

Transmission and distribution system of underground gas storage facilities worked very efficiently during the crisis. One should note the significance of Mogilno high-methane gas storage installation which, due to its location and technical characteristics played a strategic role in ensuring network flow stability during winter season. That is why it seems extremely important to support the implementation of PGNiG SA plans regarding further development of that facility as well as storage installations in Husów, Strachocina and Wierzchowice.

Continued development is also required with respect to transmission system, especially in the regions with transmission capacity congestion. Compared to 2008, only a slight increase of several kilometers in transmission network length was observed. Moreover, in order to satisfy the demand for gas it is necessary to continue efforts aiming at increasing domestic production, the level of which did not change over recent years. The status may improve, given the growing number of licenses for natural gas exploration issued by the Minister of Environment in 2009. Domestic gas production may also be affected by the outcome of work carried out by more than Polish and foreign companies under 44 licenses for prospecting for unconventional reserves of natural gas.

Regulation and unbundling

Scope of duties of the President of ERO are strictly connected with the state policy, towards energy sector as well as external requirements (obligation of implementation of *aquis communautaire*). The activities undertaken by the regulatory body concern the fulfillment of goals set up by the legislator, with the aim to create conditions for sustainable development of the country, ensure energy security, economical and rational use of fuels and energy, development of competition, preventing adverse effects of natural monopolies, taking into account requirements of environmental protection, obligations coming out from international agreements as well as balancing the interests of energy undertakings and energy consumers.

A full list of tasks performed by the ERO President includes competencies ensuing from Article 23, paragraph 2 of the Energy Law, as well as the competencies defined in the provisions of other laws. Detailed tasks of the ERO President set out for implementation in 2009 by the legislator were included in six different laws¹⁰⁾.

⁹⁾ Regulation of the Council of Ministers dated 19 September 2007 on the manner and mode of introducing limitations in natural gas (Journal of Laws of the Republic of Poland 2007, no 178, item 1252) and the act on compulsory stocks of natural gas.

¹⁰⁾ 1) Energy Law, dated April 10, 1997,

2) Law on bio-components and liquid fuels, dated August 25, 2006,

3) Law on stocks of crude oil, petroleum products and natural gas, the principles of proceeding in circumstances of a threat to the fuel security of the State and disruption on the petroleum market, dated February 16, 2007,

4) Law on the principles governing the reimbursement of costs incurred by generators in consequence of premature termination of long-term agreements for the sale of capacity and electricity, dated 29 June, 2007,

5) Public Procurement Law, dated January 29, 2004,

6) Law on public statistics, dated June 29, 1995.

The ERO President actions towards the energy undertakings and towards consumers that create the regulatory process, are regulated not only by the Energy Law but also by the Code of Administrative Proceedings. This is a guarantee of transparency, openness and equal treatment of all parties taking part in the proceedings. The proceedings initiated before the President of ERO are finished by issuing of an administrative decision – it refers to licensing, tariffs, imposing of fines and settlement of disputes. An interested party can revoke from these decisions to the Regional Court in Warsaw – The Court for Protection of Competition and Consumers.

The competencies of the ERO President in the scope of imposing fines are based on article 56 of the Energy Law. They concern the lack of action or inadequate steps taken as regards duties imposed on the market participants by the act as well as *aquis communautaire*. Financial penalty can be imposed on the energy undertaking, and also on the manager of company.

Power transmission system operator is responsible for the security of the system operation. With this aim it has at its disposal the operation of production units connected to the transmission network as well as it arranges the counter trading and re-dispatching with the scope of ensuring of temporary balance between demand and production of electricity. The above activities are performed day and night as an element of planning and operating the work of the system. At the same time TSO manages the balancing mechanism, by determining rules of participation in the balancing market, the settlement rules for imbalances and conditions of cooperation between TSO and the participants of the market. The balancing mechanisms allow the day ahead scheduling, as well as the organization of cross border exchange in the same manner.

In 2009 some significant changes were made to the balancing market: among other things, the rules governing the specification of settlement prices have been modified, servicing of commercial transaction notifications concluded on intra-day market was introduced, with the aim to further develop balancing market, the time of verification of metering and clearing data submitted by DSOs was extended by one hour, the deadline for clearing adjustments for subsequent decades of the month was shifted to enable the implementation of independent balancing of network losses by DSOs. As of January 1, 2009, the transmission grid code was modified in that the scope of information provided to market participants by TSO was substantially extended. Intra-day market was launched on December 1, 2009. The power exchange is an entity independent from TSO, yet the rules governing its operation are closely linked to system balancing rules.

Among other duties, gas transmission system operator is responsible for balancing the operation of transmission network. In the grid code, the mechanism of balancing foresees physical balancing based on the accumulation of the transmission system and storage capacity reserved for the TSO for balancing. Due to the market structure which results in the lack of competitive offers, the use of market mechanisms of physical balancing was not foreseen. Balancing rules are based on the settlement by the TSO with parties that have concluded transmission contracts, based on the accuracy nomination.

The process of restructuring in the power and gas sectors leading to DSO's independence in terms of compliance with formal and legal requirements was completed. In 2009 all legally unbundled DSOs, based on the ERO President's decision, had DSO status valid until the end of their electricity distribution license.

In 2009 there was no change as far as the power transmission system operator is concerned. There is only one TSO: PSE Operator SA – a State Treasury owned joint stock company and the owner of transmission assets. As for distribution, there were 20 DSOs, including 14 unbundled legally from former distribution companies and six so-called local operators. Majority of legally unbundled DSOs operate within capital groups which represent vertically integrated energy undertakings which also

own leading electricity generators¹¹⁾. That is why the process of complete and real independence of DSOs, in contrast to mere compliance with formal and legal requirements, has been slow. Operator's independence does not always go hand in hand with the goal of maximum benefits for the group. However, the Regulator notes significant progress in operators' understanding of their important role in ensuring equal treatment for all power system users and the need for full implementation of the principle of equal access to the network for all market participants.

In the scope of unbundling gas transmission system operators, there have been no changes. According to the regulations, gas TSO: Gaz-System SA remained a joint stock company owned by the State Treasury. All gas distribution system operators that function within vertically integrated company structures must be independent in terms of their legal and organizational form as well as decision-taking process in the case when they service more than 100 thousand consumers and sell more than 100 million cubic meters of natural gas annually.

In formal terms, the process of gas DSOs unbundling – from the standpoint of their legal and organizational form – has been completed. Currently, there are six gas distribution system operators and one operator for natural gas storage.

Considering the fact that power as well as gas DSOs remain within the structures of vertically integrated companies, i.e. within capital groups which carry out the entire chain of energy processes, including electricity generation and trade, it is necessary, in the opinion of the Regulator, to ensure constant monitoring of DSOs independence. To date, the ERO President has had no effective tools for intervention in the case when DSOs independence is infringed. Relevant legislative efforts in that regard were undertaken in 2008 and continued in 2009.

The above-mentioned Energy Law amendment included unbundling regulations as well. After the modification, supervision over PSE Operator SA, the power transmission system operator, was taken over by the Minister of Economy, responsible for the country's energy security. This solution should exert positive influence on the status of national energy security, enable proper policy making as far as network connections are concerned, and be conducive to the development of competitive market and new investments.

Conclusions

Bearing in mind that the electricity and gas markets are still far from being fully competitive, and in view of limited currently available legal tools to change this situation, the President of ERO supports in full the solutions presented within the Third EU Legislation Package. Polish Regulator has particularly high expectations with respect to the implementation of the concept of independence of the regulatory institution and relevant regulatory tools that can be applied in reaction to energy undertakings' behavior. Consequently, the Regulator makes efforts to ensure possibly expedient implementation of the new regulations into the Polish legal system.

¹¹⁾ In 2010 further consolidation is planned with regard to, *inter alia*, generation activity in the biggest energy group.

3. REGULATION AND PERFORMANCE OF THE ELECTRICITY MARKET

3.1. Regulatory Issues [Art. 23(1) except „h”]

The energy market in Poland is supervised by the following government administration bodies:

- 1) The ERO President, who represents the main supervisory body for electricity and fuel market. The ERO President is responsible for tasks related to fuel and energy management, as well as promotion of competition,
- 2) The President of the Office of Competition and Consumer Protection (OCCP), pursuant to the law, is competent for fuel and energy market as regards issues related to, *inter alia*, monitoring business compliance with competition and consumer protection law, analyzing market concentration indicators and market behavior of enterprises, counteracting practices that have adverse impact on competition, and business concentration or fragmentation. In such cases, the President of OCCP can impose fines,
- 3) The Minister of Economy, who is competent for the overall design of long-term national energy security policy,
- 4) The Minister of State Treasury, who is competent as regards ownership supervision and ownership changes in the power sector,
- 5) Polish Financial Supervision Authority, whose supervisory prerogatives over energy market are two-fold. First, these are supervisory duties that apply to energy companies (listed public companies), such as: disclosure requirements, prohibition of financial instrument manipulation, and access to confidential information. Second, with regard to marketing of derivative property rights the price of which is directly or indirectly linked to the price of electricity (underlying instrument), supervision includes the obligation to submit to the Authority the so-called issue and trade terms for the derivative right in question.

Contents of the Report focus on tasks performed by energy market regulator, i.e. the ERO President, but the details concerning the activities of other government administration entities (especially the OCCP President) are also described, when applicable.

3.1.1. Interconnector capacity management and allocation, and congestion management mechanisms

Congestion status review

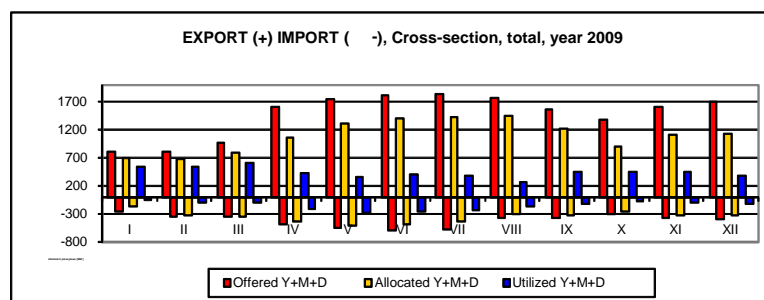
In 2009 there were no significant developments as regards network congestion within the National Electricity System (NES), as compared to 2008.

Network congestion in Polish transmission system is caused by historic factors, such as, for example, the exploitation of some elements of 110 kV network as transmission grid, as well as uneven geographic structure of generation sources (big concentration in the southern part of the country, a small number of generation sources in the north-east). Majority of network congestions consist in congestion that forces the work of generation units or groups of units supplying specific nodes within transmission grid. Some of those limitations are permanent, which means that the work of two power stations is required (must run generation) for those limitations to be removed (*Ostrołęka* and *Dolna Odra*). The remaining congestion is removed by Transmission System Operator (TSO) thanks to re-dispatching of generation units and the use of generators' offer on the basis of free balancing offers or with must run generation price (counter trading).

In comparison to 2008, there were no developments with regard to cross-border interconnector status in 2009. Due to high demand for transmission capacity at the National Electricity System synchronous connections, which is greater than the actual technical capacity, the nature of such congestion may be described as structural. Transmission congestion at synchronous connections with other EU member states is dealt with on a market basis – by virtue of coordinated auctions¹²⁾.

Access to export transmission capacity was provided by PSE Operator SA during monthly and daily auctions, and access to import transmission capacity was provided by PSE Operator SA during daily auctions. With respect to monthly auction mode, Operator provided export capacity under monthly auctions of up to 700 MW (on average, 492 MW in a year), and under daily auctions of up to 1200 MW (on average, 978 MW in a year). In 2009 market players exhibited similar level of interest in export and import auctions, as can be concluded from the level of reserved transmission capacity in both directions, relative to the capacity offered by the operator, as presented in Fig. 3.1.

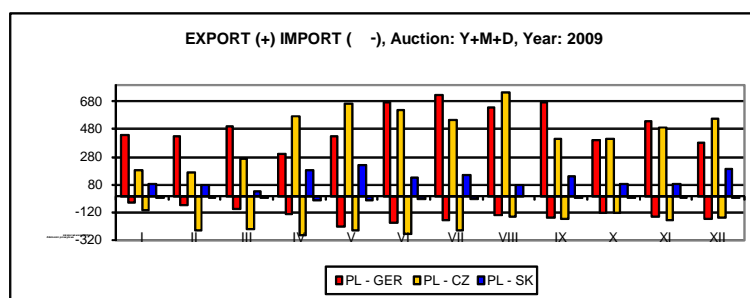
Figure 3.1. Offered, reserved and utilized transmission capacity



Source: ERO, on the basis of data provided by PSE Operator SA

The biggest amount of transmission capacity was reserved by market participants on the German and Czech border. In total, in 2009 on all synchronous connections with European Union member states 5 846 MW were reserved on monthly export auctions and 7 390 MW were reserved¹²⁾ on daily export auctions, and 4 212 MW were reserved on daily import auctions, as presented in Fig. 3.2.

Figure 3.2. Transmission capacity reservation



Source: ERO, on the basis of data provided by PSE Operator SA.

Congestion management principles and access to information

There were no major developments as regards the principles governing the allocation of cross-border interconnector transmission capacity among Poland, Germany, Czech Republic, and Slovakia. Cross-border transmission capacities are allocated by the way of coordinated, explicit auctions among

¹²⁾ Currently, five transmission system operators are involved in cross-border transmission capacity coordinated auctions, namely: 50 Hertz and Transpower (Germany), CEPS (Czech Republic), SEPS (Slovakia), PSE Operator SA (Poland).

five transmission system operators from those countries, organized by the Prague auction office¹³⁾. Ultimately, Austria, Hungary and Slovenia should also follow common transmission capacity allocation rules. Transmission capacity amounts offered on an auction are determined independently by transmission system operators from individual countries, in accordance with the rules approved by national regulators. To determine transmission capacity for interconnector exchange has been developed and the principles approved by national regulators. The mechanism applied currently by PSE Operator SA to determine interconnector exchange transmission capacity has been developed by ETSO and UCTE. Technical parameters of transmission capacity are determined separately for electricity export and import.

A detailed catalog of information to be published by transmission system operators is included in congestion management guidelines, attached to the regulation 1228/2003/EC. The ERO President has monitored compliance with that requirement by participation in ERGEG work on Compliance Monitoring Report. Furthermore, within the framework of ERGEG Electricity Regional Initiatives, representatives of regulators have prepared monitoring reports regarding the implementation of the following items by transmission system operators, respectively: ERGEG NE ERI Transparency Monitoring Report and ERGEG CEE ERI Transparency Monitoring Report.

Polish transmission system operator published information on interconnector exchange on its website (www.PSE-Operator.pl), and on the website of Prague auction office (currently Freising, ww.central-ao.com), with the following information disclosed, in particular:

- Principles governing transmission capacity auctions;
- Estimated volume of annual, monthly and daily total transmission capacity (TTC), net transmission capacity (NTC), and available transmission capacity (ATC);
- Offered and allocated transmission capacity;
- Transmission capacity prices;
- Number of auction participants;
- Number of bids submitted by auction participants in relation to trade profile;
- Price curves for transmission capacity bids submitted in the annual auction.

Information regarding performance of National Electricity System is compiled and published by transmission system operator in the form of Annual Coordination Plans (*PKR*), Monthly Coordination Plans (*PKM*), and Daily Coordination Plans (*BTHD*, *WPKD*, *PKD*), as well as the information on projected interconnector exchange on synchronous connections. Then, there are monthly and annual reports on the performance of NES, and daily information on morning and evening peak capacity balance and N E S capacity demand, as well as the information of cross-border market exchange with Sweden and actual energy flows on synchronous connections and DC connection with Sweden. Additionally, TSO publishes information on balancing market rules, contract templates, and data on balancing market performance, such as: clearing prices for unbalancing, energy volumes (in daily and hourly cycles), side by side with balancing market costs. Market information is exchanged between TSO and balancing market participants on operator's website and by means of WIRE system for energy market information sharing. *SOWE* system (power station cooperation system) is used to exchange technical information with generators in order to enable the operation of national electricity system.

The 2009 report on compliance with provisions set forth in regulation 1228/2003/EC (*Compliance Monitoring Report, 2008*, www.energy-regulators.eu) has disclosed certain irregularities in terms of compliance with the obligations set out in congestion management guidelines with regard to synchronous connections, mostly in scope of disclosure requirements concerning performance of N E S. The grid code modification pertaining to system balancing and system congestion management,

¹³⁾ Since the beginning of 2010, transmission capacity allocation by the five transmission system operators has been administered by Freising auction office (www.central-ao.com).

which was approved by the ERO President's decision as of 1 January 2009, eliminated those irregularities. At present, PSE Operator SA also publishes information on National Electricity System generation resources:

- Information on planned maintenance or outages of a generation units,
- Forecasted network congestion, in the form of data on the minimum required capacity (number of generation units) and maximum capacity allowed (number of generation units) in each generation node of the transmission network,
- *Ex post* capacity shortage in individual generation units,
- Balancing offers in terms of prices and energy volumes offered, accepted on balancing market for generation units.

Information on planned investments included in PSE Operator SA development plans are published as of June 2010, once the plans are updated.

Yet another grid code modification, effective as of December 1, 2009 (approved based on the decision dated November 30, 2009), has enabled clearing of intraday transactions on the balancing market. Thus, potential barriers on the Polish side with regard to the introduction of regionally coordinated transmission congestion management intraday mechanisms have been removed.

Relationship between congestion management and wholesale market

Cross-border exchange is integrated with the wholesale market through the balancing market. In 2009 no significant developments were observed in that area, in comparison to 2008. In accordance with the principles governing the execution of cross-border exchange commercial contracts, market participants have to submit their nominations – both in scope of annual auction and monthly ones – by 7:45 a.m. That way, TSO is able to make an estimation of available transmission capacity and offer it on a daily auction (UIOLI procedure). Such information is published by 9:45 a.m. at the latest, while auction results are announced after 10:00 a.m. Transmission capacity reservation under daily auction is linked to nomination obligation. Market participants have to notify the operator about commercial contracts by 1:00 p.m., i.e. the Gate Closure time on the balancing market. In view of the fact that on Polish electricity market wholesale trade in electricity is carried out mostly under bilateral contracts, cross-border exchange is currently performed on the basis of transmission capacity auctions (explicit auctions.)

Future outlook on congestion management

In 2009, members of ERGEG Electricity Regional Initiative Central Eastern Europe continued their work on the document defining common principles for transmission capacity allocation on the borders of Germany, Poland, Czech Republic, Slovakia, Hungary, Austria and Slovenia. The requirement to have such principles established is set forth in Regulation 1228/2003/EC, and in the guidelines on the management and allocation of available interconnector transmission capacity between country systems, attached to the above-said regulation. Throughout 2009, four meetings of the Implementation Group and two meetings of the Regional Coordination Committee were held within regional initiative framework.

According to draft congestion management mechanism, transmission capacity will be allocated to system users on the basis of the model of actual electricity flows in networks administered by transmission system operators (Flow Based Allocation – FBA). Transmission capacity will be allocated by the way of explicit auctions. Central Allocation Office (CAO), established in July 2008 by transmission system operators in Freising, Germany, will be responsible for arranging and running the auctions. Transmission capacity will be provided irrespective of border sections, i.e. across

particular pricing areas represented by countries from the region, e.g. from Poland to Slovenia (source-sink bidding)¹⁴). Transmission capacity will be allocated according to social welfare criterion. It is the opinion of Polish Regulator that those congestion management rules are, in principle, compliant with the requirements set forth in the Regulation 1228/2003.

Between October 1, 2009 and November 6, 2009, the process of public consultations pertaining to new transmission capacity allocation rules was held. Based on comments submitted by market participants during consultations a report was developed, which was then sent to transmission system operators and to the Central Allocation Office.

At present, the development and implementation of new congestion management principles is conditioned by the completion of work on a fully coordinated, flow based mechanism to determine transmission capacity in the region. In that respect, problem issues were identified mostly with regard to the overload of some transmission lines in the region, which might be a consequence of excessive safety margins adopted by operators. Due to the above, the March 2010 deadline planned for the implementation of new congestion management principles applicable on the borders of countries that belong to Central and Eastern Europe market has been moved forward. Transmission system operators from the region decided to perform additional efficiency analysis.

In the opinion of Polish Regulator, flow-based congestion management mechanism represents the most optimal way to determine transmission capacity which will then be allocated to market participants, with a guarantee of security of electricity supplies in the territory of each individual transmission system operator. At the same time, in view of the fact that the changes should first and foremost meet the expectations of market participants, the implementation of flow based mechanism should not result in substantial limitation in transmission capacity provided to those participants, as is the case now. Polish Regulator believes that the latter issue is the cause of delays in the implementation of the new congestion management mechanism for Central and Eastern Europe. Work carried out under efficiency analysis is focused on getting the above-mentioned problem issue resolved. It is the opinion of Polish Regulator that the root of such problems lies predominantly in the simplification of assumptions adopted in the model, connected with the establishment of common price areas, and failure to take into account certain limitations within national power systems, *inter alia*. Even if it was assumed that market integration between some selected member states is conducive to competition promotion in those countries, and it is not in conflict with community law, it may cause certain problems as far as market integration in the regions is concerned. Solutions pursued in the course of efficiency analysis are based on further model simplifications, with a very pronounced inclination towards bilateral interventions undertaken by grid operators rather than fully coordinated actions. Thus, what we observe is a pursuit of acceptable compromise between flow-based mechanism and NTC (bilateral) mechanism, which does not help eliminate basic problem causes but rather alleviates those by adopting further simplifications. Additionally, Polish Regulator believes that certain decisions regarding market integration between some selected member states go beyond exclusive competence of national energy regulators. As a result of such oversimplifications and ensuing mitigating interventions undertaken within the framework of bilateral agreements between transmission system operators, it may turn out that the cost of market integration will be distributed among all electricity consumers in an uneven way, which may be socially unacceptable.

Having said that, Polish Regulator believes that once the fully coordinated flow-based model is implemented with regard to explicit auctions, one should strive to implement implicit auctions for short-term allocations on the basis of that coordinated model. Some initial action steps in that regard have already been taken, as manifested by CEEPEX material presented during the workshop held in Vienna on April 12, 2010.

¹⁴) One exception would be Germany and Austria, which together make up a common price area. Similar assumptions were preliminarily adopted for the Czech Republic and Slovakia.

In 2009, members of Northern Region Electricity Market Initiative worked on ERGEG NE 2nd Transparency Monitoring Report, focused predominantly on the issues of access to certain information on electricity generation available to market participants, and on the kick-off report for the Implementation Group on the Integration of Balancing Markets, with the purpose to initiate and support actions aiming at the development of cross-border balancing markets. From the standpoint of Polish Regulator, the introduction of market-based congestion management mechanisms on the SwePol Link DC interconnector represents a serious problem issue to be resolved. In view of the fact that there can be no official appointment of transmission system operator on that interconnector due to the lack of legal tools at the discretion of Polish Regulator, all efforts in that area could be pursued assuming voluntary commitment of interested parties. As a result of Energy Law amendments, pursuant to which Polish Regulator is authorized to assign transmission system operator on that interconnector based on ex officio decision (when there is no request made by network owner), there was some progress in 2010 as far as the implementation of market mechanisms for transmission capacity allocation on that interconnector is concerned. It is planned that the mechanism will come into effect in November 2010. Polish Regulator supports the view that the integration between Polish and Swedish electricity market should be performed by means of implicit auctions, with the purpose to ensure coordination in the region.

Review of transmission capacity calculations

Within the framework of coordinated congestion management mechanism, PSE Operator SA determines Net Transmission Capacity (NTC) and Transmission Reliability Margin (TRM). Transmission capacity is determined on the basis of technical profile, i.e. as a sum of border profiles of systems managed by operators from Poland as well as Germany, Czech Republic and Slovakia. Such a solution is an implication of significant loop flows in the National Electricity System, and resulting substantial interdependence of available transmission capacity at each border. The model also helps maximize transmission capacity towards the strongest pricing signals and it affects transmission capacity demand. When calculating available transmission capacity, PSE Operator SA follows the criterion of system reliability, including „n-1” criterion (switching-off one cross-border line, national power line or a neighboring country power line must not trigger system failure), taking into account forecasted weather conditions, German wind farm generation, „not agreed” balancing flows, actions taken by market participants, unexpected events, modeling and calculation errors. Available transmission capacity is determined according to annual, monthly, weekly and daily schedule.

Export transmission capacity was offered under monthly and daily auctions, and the annual auction level was set at 0 MW. Export transmission capacity at monthly auctions offered by PSE Operator SA increased substantially in comparison to 2008, and its average value was equivalent to 492 MW (at the maximum, 700 MW.) The volume of transmission capacity offered under daily auctions has also gone up. As far as export direction is concerned, its average level in 2009 was 978 MW (in 2008 – 319 MW), and as far as import direction – 410 MW (in 2008 – 154 MW, which applies only to the period of 3 months, because in the remaining period such capacity was not available.)

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

Network tariffs

There has been no change with regard to the scope of data collected. Existing reporting database was used (in the format of uniform DTA(1A) sheets), with the information regarding costs, revenues

and financial results of distribution companies in the breakdown according to types of activities. The data was submitted by energy companies in the first and second half of 2009, respectively. Reliability of data was verified mainly from the standpoint of correctness and accuracy against the data presented in generally applicable statistical records.

Furthermore, energy companies were submitting monthly reports regarding their costs, revenues and financial results in the breakdown according to types of activity and tariff groups. Monitoring based on the sheets supplied was used predominantly to verify the accuracy of assumptions adopted in electricity tariff approval applications, and to perform ongoing assessment of financial condition.

In the process of approving tariffs for fourteen DSOs in 2009, methodology applied by the President of Energy Regulatory Office was based on cap regulation approach. Comparative analysis methods were applied – just like in previous years – for the assessment of a fair level of operating costs, network losses and investment outlays.

With regard to transmission system operator, methodological approach based on cost of service regulation was continued in 2009. Comparative methods could not be used due to the absence of other companies with similar characteristics (there is only one transmission system operator in Poland). TSO tariff is approved for a one-year period.

In 2009, the fourteen DSOs were subject to a 3-year regulation period set by the ERO President, which came into effect on 1 January, 2008. A fair level of operating costs, network losses and investment outlays was specified for that time horizon. To that end, benchmarking had been carried out with econometric tools and comparative analyses. Thus, the process of approving tariffs in 2009 was still based on models applied in the evaluation of operational efficiency, fair level of network losses and investment outlays.

In comparison to last year, there were no modifications in the approach to the assessment of a fair level of other regulated revenue components not included in the evaluation involving econometric models, such as depreciation, taxes and return on capital. Assessment was performed by means of a comparative analysis (between companies as well as from the standpoint of changes of such regulated revenue components in time.)

In light of the need to secure the return on capital invested in network operation for distribution companies (DSOs) and the TSO, the President of Energy Regulatory Office determines the fair level of such return in subsequent tariffs, on the basis of Regulatory Assets Base and the cost of capital, taking into account model amounts of investment outlays. In 2009 a new method for network assets reimbursement was adopted, consistently across all fourteen leading DSOs, with due consideration for regulatory efficiency criterion and the need to preserve appropriate level of security regarding NES energy supplies. Tariff year 2010 is the first year when the new Regulatory Assets Base rules comes into effect.

Capital rate of return calculation formula applied by the Regulator leaves room for incentives. When the volume of company investments has exceeded the level agreed in the development plan, financial implications of such investments will be taken into account in subsequent tariffs.

The Regulator designs methodology, understood as guidelines for tariff calculation and applied, among other things, to determine the fair level of regulated revenue of energy companies. Energy companies prepare tariffs with prices and rates of charges, and then submit those tariffs for approval to the President of Energy Regulatory Office. Structure of the tariff prepared by the company, however, depends on the type of company operation, and it is rooted directly in relevant legal provisions. In that respect, the role of regulatory body is to make sure that composition of the tariff is compliant with formal requirements.

Energy companies dealing with transmission or distribution (i.e., power grid companies), must provide users with electricity supply of appropriate quality and, at the same time, minimize their outlays and costs. The Regulator's role is to supervise grid companies from the standpoint of

compliance with customer service quality standards and, upon consumer's request, monitor electricity quality parameters¹⁵⁾.

At this point is worth noting that upon the ERO President initiative and with the ERO President institutional support, the Energy Institute Research and Development – branch office in Gdańsk carried out a pioneering study in Poland, under a project financed from European Union resources¹⁶⁾.

The first national benchmarking report – prepared on the basis of survey research of the level of detail unprecedented in Poland – helps assess compliance with customer service quality standards and electricity supply quality parameters by transmission system operator and fourteen major distribution system operators, whose joint operation covers the entire territory of the country. Research into the quality of electricity supply to users was carried out in the breakdown according to four study areas: commercial quality, voltage quality, continuity of electricity supply (parameters), and impact of extremely adverse weather conditions. Thanks to the focus on quality parameters that are measurable and modifiable by energy companies, the ERO President will be able to perform an annual inspection more effectively than before – based on monitoring and efficient benchmarking methodology for the verification of qualitative data – as regards grid company compliance with qualitative standards of electricity supplied to electricity consumers across the country.

Application of benchmarking studies as a uniform approach to evaluate the level of electricity quality is meant to enable verification of qualitative data provided by grid companies – at present, the data cannot be compared as they are not consistently uniform; therefore the development of applied techniques in line with the best European practice paves the way for comparisons with other countries.

A well-defined and well-set quality level may serve as the basis for comparative analyses between grid companies, and it may be used to determine the level of electricity supplies to users in our country as compared to the levels observed in other countries. Moreover, publication of reliable information on electricity supplies to users in the area of grid company operation represents one of quality regulation instruments, and it may be the first step towards the application of more sophisticated techniques in that regard.

Currently, pursuant to binding legal regulations, transmission system operator and the fourteen major distribution system operators publish on their websites the information on the continuity of supplies on the basis of SAIDI, SAIFI indices for long lasting outages, whether planned or unplanned, with extremely adverse weather conditions, and MAIFI index for short outages.

Nevertheless, preliminary verification of information regarding electricity supply quality published by grid companies indicates that further harmonization of qualitative data collection approach is required across individual grid companies. Thus, it would definitely be premature at this stage to link quality level with the level of tariffs approved by the Regulator.

Balancing

Analogically to previous years, TSO PSE Operator SA managed transmission system balancing and congestion in accordance with the Grid Code, the section devoted to system balancing and congestion management, as approved by the decision of the President of Energy Regulatory Office dated 10 February, 2006, with further amendments. Throughout 2009, President's decision was modified three times. Those modifications pertained to the following areas, *inter alia*:

¹⁵⁾ Pursuant to Energy Law (Journal of Laws of the Republic of Poland, 2006, no 89, item 625, as amended).

¹⁶⁾ Within the framework of *Transition Facility* PL-2006/018-180.02.04 „Implementation of Competitive Energy Market” Component 2, Part B, Energy Institute carried out a project called „National benchmarking report concerning the quality of electricity supply for users connected to transmission and distribution networks, and preparation of a set of data and information for European benchmarking report”. The task was programmed on the basis of information obtained during the work of the Task Force for the Quality of Customer Service and Electricity Supply (CEER EQS TF), operating as a part of Central European Energy Regulators Electricity Working Group (CEER EWG).

- Introduction of commercial transaction clearing on the balancing market for transactions concluded on intraday market – those transactions add to the development of balancing market and enhance the array of solutions applied to date,
- The process of sending metering and billing data supplied to DSOs by adding one extra hour for data verification. Thanks to that modification DSOs may settle their imbalances together with traders within the scheduled consumption units,
- Moving the deadline for adjustments regarding billing for each subsequent decade of the month, so that the mechanism of independent balancing of network losses by DSOs can be introduced.

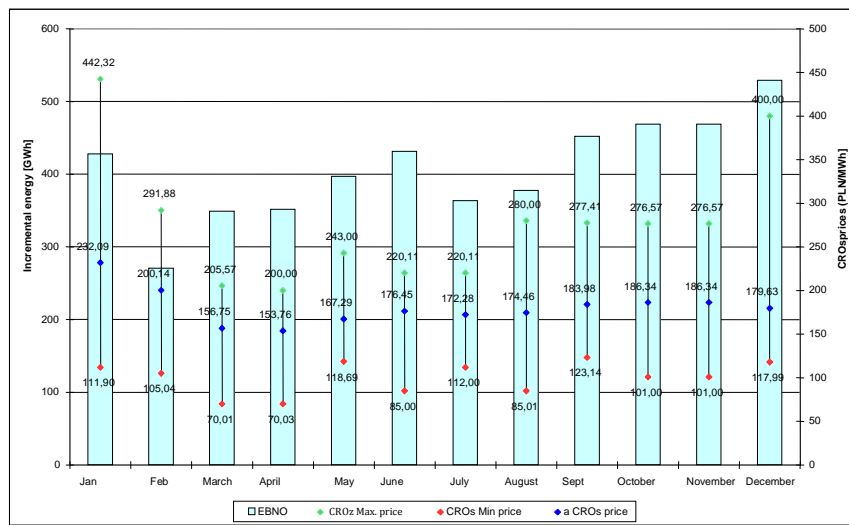
Settlement of imbalance on the balancing market has been performed on the basis of spread prices, but starting from January 1, 2009, CROs and CROz prices (cf. Table 3.1) have not been adjusted according to additional components which were previously supposed to motivate balancing market participants to do the balancing in competitive market segments. In 2009, pricing methodology for the Balancing Market was changed – currently, it is based on marginal prices from utilized balancing offers submitted by generators (previously: average weighted prices.) Thanks to marginal price formula, electricity pricing is now fully market-based and clearing of electricity supplied by the balancing market is aligned with terms and conditions created by incomplete price liberalization. Furthermore, with marginal price formula in place, undesirable behavior on the competitive market is discouraged, such as, for example, switching the trade from base segments to the balancing market. The basic clearing unit for imbalancing is 1 kWh, which allows for small balancing groups, especially for small users. Table 3.1. presents overall description of balancing rules.

Table 3.1. Balancing – description

Indicator	Functional description
Period	60 minutes
Area	One, centrally – at transmission network level
Balancing market gate closure for contracts regarding electricity sale to the balancing market	1:00 p.m.
Typical balancing service fees	For users (set for each hour): CROz – balancing market electricity purchase clearing price, calculated as the highest price for electricity generation in the current daily balanced coordination plan, specified disregarding all system limitations, at the time h , decreased by a fixed balancing component ΔB (in 2009, $\Delta B = \text{PLN } 0/\text{MWh}$) CROs – balancing market electricity sale clearing price, calculated as the highest price for electricity generation in the current daily balanced coordination plan, specified disregarding all system limitations, at the time h , increased by a fixed balancing component ΔB (in 2009, $\Delta B = \text{PLN } 0/\text{MWh}$)

Source: ERO.

Fig. 3.3. presents average monthly electricity volumes and prices for imbalance on the balancing market (electric power obtained from balancing market).

Figure 3.3. 2009 trade volume (EBNO) and electricity prices on the balancing market (CROs)

Source: ERO, based on the data provided by PSE Operator SA.

Balancing bids submitted by generators participating in balancing mechanism are submitted individually for particular centrally dispatched generation units (CDGUs). To a certain extent, that prevents excessive concentration in that market segment, although one cannot guarantee that dominating market participants would not use their market power, operating along the lines of the strategy of consolidated companies. Generators with CDGUs are obliged to file bids. Energy settlement mechanism under forced generation conditions is used to curtail market power – among other things, it is used to prevent a very high level of balancing bid prices, not justified by market conditions. It is applied when balancing bid cannot be used at a bidding price, provided that the bid is indispensable from the standpoint of reliability and safety of N T S operation. In connection with the fact that in 2009 there was a decrease in NES demand, and the number of maintenance works went down, the volume of capacity reserves available for transmission system operator increased by 35% (in annual averages), compared to 2008. As a result, the 2009 context was not conducive to the abuse of market power, in contrast to 2008, when PSE Operator SA reported the possibility of such action by generators (i.e. economic withdrawal of generation units from the market.)

3.1.3. Effective unbundling

In the effort of transposition of energy directives to the national law, Polish legislator decided that system operators, upon infrastructure owner's request, shall be appointed by the President of Energy Regulator Office by the way of administrative decision. (Art. 9h par. 1 of the Energy Law)¹⁷.

In 2009 all legally separated DSOs, upon the decision of the President of Energy Regulatory Office, enjoyed DSO status valid throughout the period of electricity distribution license.

As of the end of 2009, there was one TSO in Poland – PSE Operator SA, which is a company fully owned by the State Treasury, and the owner of transmission assets. Operator has attempted to build

¹⁷ Transposition of European Parliament and Council Directives dated 26 June 2003: 2003/54/EC on common principles governing electricity internal market, and 2003/55/EC on common principles governing natural gas internal market to Polish law was carried out pursuant to Energy Law amendment dated 4 March 2005. Those provisions came into effect on 3 May, 2005. Furthermore, Energy Law amendment which became effective as of March 11, 2010, set forth a number of restrictions in scope of DSO activity. Those requirements pertain to the independence as far as company legal and organizational form is concerned, and independence in decision-making in scope of operator function (Article 9d, paragraphs 1 and 2, Energy Law).

an independent image: in the middle of June of 2008 it relocated to its own office building and its website contains no links to the companies it used to be affiliated with before.

In distribution, there were 20 distribution company operators: 14 of those had been separated in legal terms from former distribution companies, and 6 were the so-called local operators, not subject to organizational and legal unbundling. (With regard to the six local operators, the principle of 100 000 consumers has been applied -in that case, unbundling is not required.) Majority of separated DSOs operate within corporate groups, i.e. vertically integrated energy companies. Ownership supervision over DSOs is performed mostly by the State Treasury – indirectly through State Treasury-owned holding companies or through parent companies: operator activity had been taken out of those companies and transferred to new companies. Only two DSOs are owned by the companies whose major shareholders are foreign companies.

Table 3.2. Unbundling description, status as of 31 December 2009

Specification	Quantity
DSO – ownership unbundling	1*
DSO – ownership unbundling	0
DSO – legal unbundling, with assets (grid)	1**
DSO – legal unbundling, no assets (grid)	0
DSO – legal unbundling, with assets (grid)	14
DSO – legal unbundling, no assets (grid)	0

* Starting from January 1, 2007.

** Starting from January 1, 2008.

Source: ERO.

The process leading to full operator independence has been rather slow. One major obstacle to that process is the fact that operators remain within vertically-integrated structures and well-developed corporate group structures, where operator's independence does not go hand in hand with the objective of maximum benefits for the group. Even though a formal evaluation – based on the assessment of DSO compliance with legal provisions – leaves no room for reservations in most cases, an evaluation of actual DSO independence – for example, based on the attempts to create an individual image – gives rise to some doubts.

Many operators are involved in economic activity which is not directly linked to operator function. Such activity consists in, *inter alia*, street lighting maintenance, leasing or renting out real estate property or means of transport, technical, IT and telecommunications services. Operator's involvement in any activity not related to gaseous fuel or electricity transmission or distribution is, in principle, in conflict with the provisions set forth in Article 9d, Energy Law. However, as one can learn from operator declarations, economic activity referred to above is necessary for them to perform their operator functions. All those operators present revenue and cost accounting in a way that enables separate treatment of costs not related to operator function.

DSO decision-making procedures pertaining to grid assets management, and in particular those related to grid construction, maintenance, renovation or extension, are mostly carried out in accordance with distribution grid code, development plan, instructions for investment and renovation task planning. There were no cases reported when DSO current operation would be subject to decisions taken by management of a vertically integrated company. At the same time, however, a substantial number of DSOs have their subsidiaries which get involved in training, tourism, catering and printing business, and various service and maintenance activity. Four operators have shares/stock in other energy companies, and four DSOs own shares/stock in other companies.

All operators have systems in place for sensitive data protection. Client personal data is stored, *inter alia*, on the local network on servers owned by DSOs, with access restricted for authorized personnel only.

Further advancement of TPA principle is largely affected by the development of DSO image, so that users do not perceive operator entity as identical with the trading company unbundled from the vertically integrated company. According to survey results, ten DSOs have separated system operator's premises from the premises of their trading company. In the remaining four cases, one operator declares a separated area for the trading company. Three operators continue to share the same premises with trading companies. Names of most operators are still strongly associated with the names of default suppliers operating in their territory. One must also disapprove the fact that in two cases operators' names were changed in such a way that the association between operator's name and group name has been reinforced.

Nine operators have established their own customer service centers – the number of such centers for particular DSO areas varies from 1 to 34. At the same time, there are operators who provide comprehensive retail customer service, understood as both distribution- and sales-related services. Establishment of comprehensive customer service centers is certainly purposeful from client standpoint and from the standpoint of vertically integrated companies, but such centers cannot be located within DSO structures, since that has adverse impact on their independence.

Research results have shown that despite the two and a half year period during which DSOs attempted to pursue effective unbundling of network operations from generation and trade activity, the fact that those operators function within capital groups is not conducive to their true independence, and in consequence to compliance with the principle of equal treatment for all power system users and TPA rule. It appears that an ownership structure separation model would be the solution that would guarantee full factual independence of distribution system operator.

3.2. Competition Protection and Promotion Issues [Article 23(8) and 23(1)(h)]

3.2.1. Description of the wholesale market

Structure of the sector is a consequence of the implementation of „Program for the Power Sector”, approved by the Council of Ministers in 2006. As a result, four vertically integrated energy groups were established, namely: Tauron, Polska Grupa Energetyczna (PGE), ENERGA and ENEA. PGE SA has the biggest share in generation subsector.

The status of competition on electricity market is presented predominantly by means of indicators which measure concentration level.

Table 3.3. Concentration status in generation sub-sector*

Year	Number of companies with at least 5% share in net installed capacity	Number of companies with at least 5% share in net output	Net installed capacity in three biggest companies	Net output in three biggest companies	HHI index	
					Net installed capacity	Net output
2008	5	5	57.5	55.9	1 592.6	1 622.1
2009	5	5	58.3	55.1	1 617.6	1 565.1

* For all entities operating in generation sector which are subject to statistical records obligation, including installed capacity and output from wind and hydrological sources.

Source: ERO, on the basis of data provided by Energy Market Agency (ARE SA).

In 2009, HHI index measured according to net installed capacity changed only slightly compared to 2008, and the same is true as far as the measurement according to net output is concerned. Three leading generators had more than half of capacity installed, and were responsible for 55% of power output.

Level of concentration on wholesale trade market is much greater than in generation sub-sector. In 2009, market share of three leading trading companies amounted to 75.2% and, in comparison to 2008, it was lower by 1.2 percentage points. The share of PGE group in the wholesale market in 2008 reached 48%, while in the case of the second biggest TAURON group (in terms of turnover) – 19.8% (the only entities with more than 10% market share). High level of concentration manifests itself, first and foremost, in HHI index, the value of which is much higher than the floor of high market concentration level (1 800). Although in 2009 the index value went down, it should be emphasized that the market is still highly concentrated, as demonstrated by over 75% market share of three major entities.

Table 3.4. Concentration status in wholesale trade

Year	Number of companies with at least 5% share in the volume of sales to wholesale customers	Sales to wholesale customers by three biggest companies	HHI index
2008	5	76.7	3 632.6
2009	5	75.2	2 850.6

Source: ERO, on the basis of data provided by Energy Market Agency (ARE SA).

Analogically to previous years, bilateral contracts remained the key form of wholesale trade in electricity. In 2009, over 90% of electricity was sold by generators to trading companies on the basis of such contracts (cf. Table 3.5). The remaining sales were carried out on the balancing market (including sales required in order to ensure NES operation security) and, to a small extent, on spot markets (Power Exchange, Internet Platform for Power Trade.) Structure of transactions on the wholesale market remained basically the same as in 2008.

Table 3.5. Electricity sales directions – generators [TWh]

	End users	Trading companies	Power Exchange	Balancing market	Export	Other sales**	Total
2008	2.6	124.3*	0.3	9.1	0.01	0.7	137.0
2009	3.0	126.1	0.3	8.5	0.01	2.0	139.9

* Including sales on the basis of long-term contracts in force in the 1st quarter of 2008.

** Other sales include, among others, electricity volume sold to TSO and DSO.

Source: ERO, on the basis of data provided by Energy Market Agency (ARE SA).

Tabela 3.6. Electricity purchase directions – trading companies [TWh]

	End users	Trading companies	Power Exchange	Balancing market	Import	Other purchase	Total
2008	122.9	198.1	2.0	3.6	4.3	0.1	330.9
2009	127.0	183.5	3.3	4.4	2.9	0.1	321.2

Source: ERO, on the basis of data provided by Energy Market Agency (ARE SA) (2008.) and ERO research (2009).

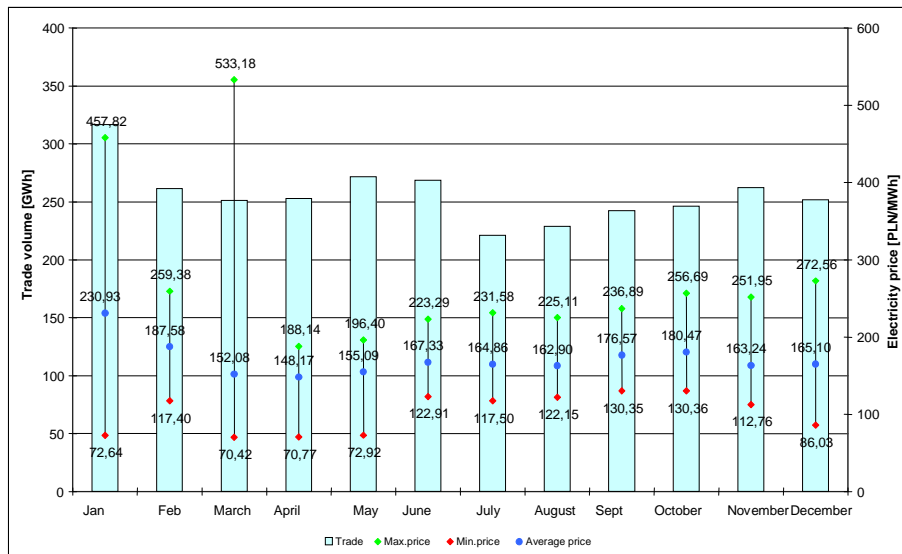
Tabela 3.7. Electricity sales directions – trading companies in 2009 [TWh]

	End users	Trading companies	Power Exchange	Balancing market	Export	Other sales*	Total
2008	119.0	192.1	1.7	2.5	3.5	12.2	331.0
2009	107.9	179.2	3.2	6.3	4.2	19.3	320.1

* Other sales include, among others, electricity volume sold to TSO, DSOs and generators.

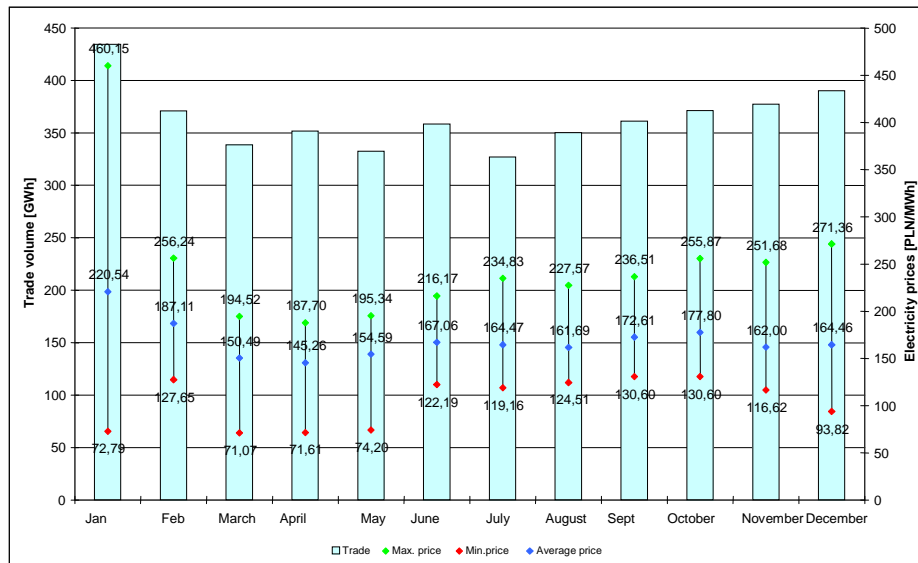
Source: ERO, on the basis of data provided by Energy Market Agency (ARE SA).

In 2009, the significance of power exchange transactions remained quite small. Trade volume on the Polish Power Exchange (TGE SA) amounted to 3.07 TWh. Compared to total electricity consumption in 2009, this represents only 2.07%. Nevertheless, there was a 45% increase in comparison to 2008 status. The following factors can be put forward as the reasons behind the growing share of exchange trade transactions: 1) change in the way balancing market prices are determined (introduction of marginal prices), 2) pressure exerted on energy companies to increase the share of sales made in an open and competitive manner, including legislative work on the introduction of the so-called 'power exchange obligation', 3) changing economic situation in the country, including greater stability in electricity prices, 4) re-contracting of market players (trading companies, suppliers.) Status observed on the Polish Power Exchange is presented in Fig. 3.4.

Figure 3.4. Polish Power Exchange electricity trade volume and prices

Source: ERO, on the basis of data provided by Energy Market Agency (ARE SA).

Volume of trade on the Internet Platform for Power Trade (IPPT)) – an organized electricity trade market run by a market participant – is not much higher than that observed on the power exchange. In 2009, IPPT trade volume was at the level of 4.36 TWh, i.e. 2.93% of national electricity consumption. Average electricity prices and trade volume in spot transactions are presented in Fig. 3.5 (PoDeek index).

Figure 3.5. Internet Platform for Electric Power Trade trade volume and prices

Source: ERO, on the basis of data provided by Internet Platform for Electric Power Trade.

Structure of electricity sales on the wholesale market indicates the dominance of bilateral contracts. In combination with concentration of trade within vertically-integrated groups (in 2009, total volume of trade within the four groups amounted to 58.3% of total wholesale trade), one can observe limited liquidity and lack of transparency on Polish electricity market. In consequence, it is not possible to determine reliable benchmarking price for transactions on physical electricity supplies market. In 2009, the volume of trade on the spot market (including power exchange) went up relative to total electricity trade volume, thus improving the liquidity of wholesale trade, but it remains still at a relatively low level.

Electricity forward market on the Polish Power Exchange was launched towards the end of 2008. The first transactions were concluded in 2009. There are four types of instruments on PPE, divided according to their maturity period: weekly, monthly, quarterly and annual. There are BASE and PEAK contracts. Total trade volume reached 658.19 GWh (which represented 0.4% of 2009 output), and the structure according to types of instruments referred to above was as follows: weekly – 13.815 GWh, monthly – 137.46 GWh, quarterly – 400.187 GWh, and annual – 106.725 GWh. Due to small number of forward market transactions and an almost negligible trade volume, it would not be possible to specify reliable price of electricity in the long term (the so-called new entry price). For the same reason, it would not be possible to perform a detailed analysis of futures market indicators, such as open interest, and the spread between bids and offers on the exchange market.

The key factor for the integration of Polish power market with the markets from neighboring countries is the coordination of cross-border transmission capacity management mechanism, and adequate interconnectors. Transmission congestion management on the borders between Poland and Germany, the Czech Republic and Slovakia is carried out in a coordinated manner, even though a coordinated mechanism for the provision of access to cross-border transmission capacity throughout Central Eastern Europe region has not yet been implemented. In the course of cooperation with TSO under the auspices of ERGEG Regional Initiatives, common draft Auction Rules were prepared for a fully coordinated congestion management mechanism for the entire region. These rules are expected to become effective in 2010. Looking at the situation from that standpoint, one could claim that the character of Polish market is sub-regional.

One major limitation for the integration between Polish market and the neighboring markets is insufficient level of cross-border transmission capacity. To a growing extent, the already mentioned increasing rate of wind generation in Northern Germany exacerbates optimum utilization of existing cross-border interconnectors due to increasing loop flows, which are difficult to forecast.

When discussing interconnectors with other member states, and in particular the interconnector with Sweden, it must be noted that a recommendation for regulators and transmission system operators was developed within the framework of ERGEG Northern Market Regional Initiative, arguing that the integration between Polish and Scandinavian markets should be fostered by virtue of market coupling. Under Energy Law amendment dated January 8, 2010, the ERO President will be able to assign a transmission system operator for SwePol Link interconnector, even in the case when network owner does not submit a motion to that point. This should allow for the implementation of market-based transmission capacity allocation principles on that interconnector.

Cross-border interconnection with Lithuania is currently in preliminary stage of execution, thus one cannot determine the extent of integration between Polish and Lithuanian market.

Another barrier to continuing cross-border integration is the lack of adequate liquidity of Polish exchange market, which has particular bearing in light of the introduction of implicit auctions. In order to boost liquidity of Polish exchange market, legislative effort was initiated aiming at the introduction of mandatory sale of electric power through the exchange or other forms organized market (trade platforms) for selected group of generators. This effort was finalized with the introduction of the Energy Law amendment effective as of March 11, 2010.

3.2.2. Description of retail market sales

Retail market is the market of end users who purchase fuel and electricity to satisfy their own needs. Apart from end users (in households as well as businesses), retail market participants include distribution network operators (DSOs) and power suppliers (electricity trade companies). The number of products offered by trading companies to end users is extremely varied across companies. Products may vary from standard ones (e.g. day time and night time product), through products that support the development of renewable energy sources, up to customized products offered to individual end users.

On the demand side of retail electricity market there are about 16 million end users, of which households make up slightly over 85%. At the same time, the volume of power sales for that group is not high and it represent approximately, on aggregate, 24% of the total electricity sales.

In 2009, 28 companies were involved in sales to end users, of which 18 companies were domestic capital based. Twenty suppliers have capital links with DSOs.

In 2009, the biggest share in electricity sales was achieved by incumbent suppliers, established on the basis of former distribution system operators (fourteen entities), as parties to common service agreements which combine the provisions of electricity sales contract and electricity distribution contract concluded with users. Incumbent suppliers are default suppliers for those household consumers who did not decide to switch to a new supplier. There are also other suppliers active on power market (about 200 active market players) which are not based on the structure of former distribution companies. About 200 other suppliers represent vertically integrated industrial power sector companies, with locally monopolistic position, which provide distribution service side by side with the sales. Overall, there are about 310 entities which hold electricity sales license.

Consumers continue to be 'attached' to their suppliers from the past, and the scale of supplier switching is still very small (Table 3.8).

Table 3.8. Electricity sales to final customers

Consumer groups by consumption criterion [in MWh]	Total number of consumers in 2009	Total sales volume in 2009 [in MWh]	Number of TPA consumers according to tariff groups		TPA sales volume according to tariff groups [MWh]	
			A, B, C	G	A, B, C	G
> 2 000	4 374	51 742 976	232	0	11 584 935	0
50 – 2 000	96 352	21 967 765	563	0	252 525	0
< 50	16 292 339	42 776 390	742	1 062	8 400	3 378
Razem	16 393 065	116 487 132	1 537	1 062	11 845 859	3 378

Source: ERO, on the basis of data provided by DSOs.

Table 3.9. Profile of retail market suppliers

Year	Suppliers with more than 5% market share	Share of three leading companies in the market of		
		Large industrial consumers [%]	Mid-size industrial and commercial consumers [%]	Small business and household consumers [%]
2007	6	41.1	47.1	48.8
2008	6	40.0	46.6	48.9
2009	6	35.0	49.4	45.0

Source: ERO.

According to the data, the share of three major trade companies in the sales to large consumers went down in 2009 by 5 percentage points, and was equivalent to 35.0%, whereas the share in the sales to medium industrial and commercial consumers went up only slightly. There was a decrease in the share of sales to small consumers and households achieved by the biggest trade companies.

Table 3.10 presents electricity sales directions for five leading suppliers.

Table 3.10. Structure of sales of major suppliers (status as of the end of 2009)

Suppliers	Share in sales to final consumers [in %]		
	≥ 2 GWh	50 MWh – 2 GWh	≤ 50 MWh
ENERGA-Obrót SA	9.2	20.2	18.3
ENEA SA	12.5	18.1	12.4
ENION Energia Sp. z o.o.	11.9	9.9	14.2
EnergiaPro Gigawat Sp. z o.o.	10.7	11.1	9.7
RWE Polska SA	5.3	8.6	5.0
Vattenfall Sales Poland SA	4.9	5.9	6.5

Source: ERO.

Supplier switch

The 2009 power retail market cannot be described as 'active'. Although more and more electricity consumers do switch supplier, the number of such decisions is still rather low. Household consumers tend to be particularly inactive in that regard – as they do not have sufficient knowledge on the way the market operates, they do not look for a more favorable market offer.

Supplier switch procedure in Poland is regulated by distribution grid codes, in the section dedicated to system balancing and congestion management, approved by the President of Energy Regulator Office. According to distribution grid code, supplier switch procedure cannot take more than 30 days in the case of the first switch, and it cannot take more than 14 days in the case of each

subsequent change. Slightly different rules were set forth for three operators, namely: Vattenfall Distribution Poland SA, RWE Stoen Operator Sp. z o.o. and POLENERGIA Dystrybucja Sp. z o.o. With regard to those operators, supplier switch procedures are performed with the use of specialized software called 'Information Exchange Platform'. The platform provides simple and efficient customer service for clients who cooperate with these operators, but it requires solutions that are somewhat different from those presented in the grid code. With this procedure, supplier switch is possible from the first day of the month directly following the month in which notification was made, provided that the notification was made before the tenth day of the month – otherwise supplier switch will be effective as of the end of the subsequent month.

According to approved procedures, the user is obliged to enter into agreement with the new supplier and settle the accounts with the old supplier. All remaining formalities, including termination of contract with the old supplier, can be taken care of by the new supplier provided there is relevant authorization submitted by the consumer. There are no limitations as to the number of supplier switch decisions.

Moreover, as set forth in the grid code, operators are obliged to draft and place on their websites templates of supplier switch applications. Additionally, pursuant to the Energy Law amendment from January 8, 2010, distribution system operators have to: 1) publish a list of suppliers with whom they have entered into general distribution service agreements, which are a pre-requisite for supplier activity in operator's area, and 2) publish templates of agreements concluded between the operator and system users. These obligations will certainly make it easier for the users to take advantage of supplier switch procedure.

Furthermore, according to the grid code, operators must inform consumers about consumer rights, the terms and conditions of distribution service provision, and about the option of electricity supplier switch, including the switching procedure.

A telephone information center has been launched in ERO to provide consumer with the information on the right to switch their electricity supplier – users are instructed on who to do the switch, step by step.

Currently binding supplier switch procedures in the power sector do not constitute a barrier to the development of competitive market. User effort required is limited to the minimum (choosing the supplier, signing the agreement and clearing billing record with the previous supplier.) Time needed for the switch is short, and its further curtailment in the future is conditioned by the barrier of time needed to read the meter and exchange information.

Despite simplified supplier switch procedure, it is true that only some consumers see the benefits of supplier choice. Insufficient number of competitive energy sale offers has been an overriding reason behind low consumer interest. Other barriers include time-consuming process of signing distribution service agreements and unfair modifications in the terms of service provision once the consumer has exercised the right to switch supplier. When such cases were reported to the Regulator, adequate measures were taken and, to date, those measures have been successful in ensuring that consumer's rights in relation to service provision are satisfied in due time.

Moreover, consumers still require more knowledge, especially households, as far as the option of supplier switch is concerned. The ERO President has initiated educational campaign, placing the information on ERO website and launching information center dedicated to supplier switch issues.

As far as household consumers are concerned, they usually sign common service agreements involving electricity distribution and sale, which are typically concluded for an open-ended term, with notice period of 30 days, in a vast majority of cases.

The level of consumer activity understood as the execution of supplier switch right, which was granted to all consumers three years ago, remains extremely low. The share of large and medium-sized industrial entities that switched supplier has gone up, relative to 2008. Still, the share of domestic (household) consumers switching supplier has been almost negligible (0,007%.)

That point is illustrated by quantitative data pertaining to supplier switch, presented in Table 3.11.

Table 3.11. Supplier switch

Year	Consumers who switched supplier – by number of metering points (1)			The share of consumers who switched supplier – by energy consumption (2)			Number of renegotiated agreements *
	Large consumers	Medium-sized industrial and commercial consumers	Small business and domestic consumers	Large consumers	Medium-sized industrial and commercial consumers	Small business and domestic consumers	
2007	no data**	no data**	no data**	16.95	0.128	0.001	44
2008	no data**	no data**	no data**	15.95	0.309	0.005	no data
2009	no data**	no data**	no data**	22.39	1.150	0.03	no data

* Renegotiation of agreement is understood as modification in the terms of agreement with the previous supplier.

** Data in a different format (Table 3.12).

Source: (1) EMA (ARE SA), (2) ERO.

Data pertaining to consumers who switched supplier is presented according to the criterion of energy consumption, without information on the number of metering points (Table 3.12).

Table 3.12. Number of consumers who switched supplier (status as of the end of the year)

Consumer groups by consumption criterion [in MWh]	Number of consumers who switched supplier, according to energy consumption			
	Large and medium-sized industrial consumers and small business		Large and medium-sized industrial consumers and small business	
	2008	2009	2008	2009
> 2 000	56	232	–	–
50 – 2 000	13	563	–	–
< 50	16	742	905	1 062
Total	85	1 537	905	1 062

Source: ERO.

As can be inferred from the tables above, in 2009 there was a substantial increase in the number of supplier switch decisions made by users, as compared to 2008. According to the data, large and medium sized industrial consumers have been much more active than household consumers. To a great extent, this results from price liberalization that took place in that market segment.

The volume of trading companies electricity sales under TPA principle in 2009 was higher by only 2% in comparison to 2008, and reached 12 920 GWh (11.0% of total supplies to end users provided by distribution companies).

Table 3.13. Application of TPA rule

Year	Number of consumers who use TPA rule	Electricity supplied to TPA customers [in GWh]	Percentage share of electricity under TPA in relation to total electricity supplied
2007	604	8 815	7.8
2008	990	8 980	8.6
2009	2 599	12 920	11.0

Source: ERO.

All in all, as of the end of 2009 there were 2 599 consumers, 1 062 of whom were domestic (household) consumers, who entered into sales agreement with a supplier other than the trading company separated from a vertically integrated company operating in the area of DSO whose network those customers have been connected to.

Most DSOs reported that the way in which supplier switch procedure has been applied in reality is compliant with distribution grid code, section dedicated to system balancing and congestion management. Extended period of time needed for supplier switch was a consequence of hitherto binding common service agreements.

Several consumers have filed supplier switch complaints. Those complaints have been rejected since the customers' metering systems did not meet the requirements set forth in the distribution network code (IRiESD). In several other cases DSOs rejected supplier switch notification, since supplier identification data contained therein was incorrect. The reasons behind the few supplier switch adjustments were related to the change in billing amounts, billing system errors, or reading adjustments, among other things.

Retail prices

Below are presented average prices of electricity in the breakdown according to particular consumer categories and average price increase as of the end of 2009, in comparison to the end of 2008. Tariff category G refers to domestic (household) users, category C – to institutional users connected at low voltage, category B – to institutional users connected at medium voltage, category A – to institutional users connected at high voltage.

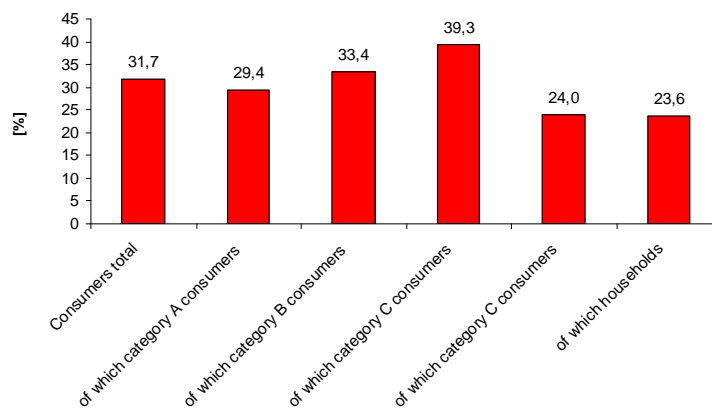
Data presented in Table 3.14 and in Figure 3.6 applies to actual prices of electric power (excluding distribution charges), rather than the prices approved in tariffs or those featured on the bills for users charged on the basis of consumption projections.

Electricity prices applied with regard to users who did not exercise the right to switch the supplier went up by 31.7% between Q 4, 2008 and Q 4, 2009. The biggest increase was observed in category C consumers – 39.3%, and the lowest in category G consumers – 24.0%. As far as the consumers who used the right to switch the supplier are concerned, their price of electricity is determined within the framework of bilateral contracts.

Table 3.14. Electricity prices for consumers with common service

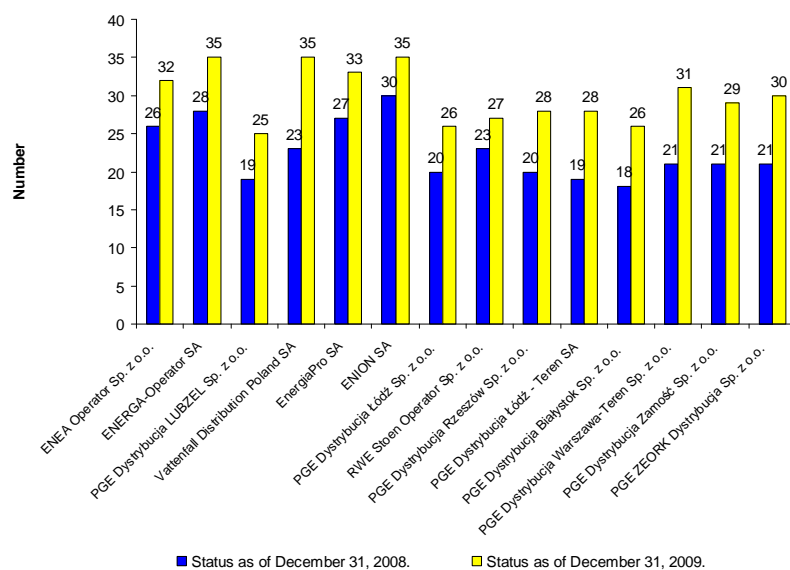
Specification	Price of electricity		Change [%]
	Quarter 4, 2008 [PLN/MWh]	Quarter 4, 2009 [PLN/MWh]	
Consumers total	202.53	266.83	31.7
Of which: Tariff category A consumers	189.64	245.42	29.4
Tariff category B consumers	204.61	273.05	33.4
Tariff category C consumers	215.36	299.91	39.3
Tariff category G consumers	195.37	242.20	24.0
Of which: households	195.72	241.99	23.6

Source: EMA (ARE SA).

Figure 3.6. Change in electricity prices – comparison of Q 4, 2009 and Q 4, 2008

Source: EMA (ARE SA).

The number of electricity distribution service agreements signed by distribution system operators with suppliers (so-called general distribution agreements, or GUD), testifies to the development of competition on retail market. Those agreements define the terms of cooperation between the operator and the supplier; they are a pre-requisite for supplier activity in the area of a given system operator. In 2009, DSOs associated in Polish Power Transmission and Distribution Association and suppliers associated in Energy Trade Association prepared a joint template of general distribution agreement. Association authorities recommended the template for common use. As reflected in monitoring activity carried out in 2009, total number of general distribution agreements signed, compared to 2008, went up by one third, on average. As of the end of December 2009, three operators had the biggest number of agreements, i.e. 35: ENERGA-OPERATOR SA, Vattenfall Distribution Poland SA and ENION SA. Many other agreements are in negotiation phase. At the same time, all operators have entered into general distribution agreements with companies that act as default suppliers in operators' areas. A set of general distribution agreements pertaining to individual operators – signed and pending negotiation – is presented in Fig. 3.7 below.

Figure 3.7. The number of general distribution agreements (GUD) signed, status as of December 31, 2009

Source: ERO, based on data provided by DSOs.

The growing trend in the process of signing general distribution agreements continues. However, taking into account both monitoring results and a wider knowledge of the Regulator, a shade of doubt seems to be justified as to whether this progress in terms of quantity is not achieved at the expense of quality, i.e. whether both parties involved in negotiations of general distribution agreements have an equally powerful position, and whether concluded agreements take into account – on equal terms – the best interest of both parties.

Measures to promote customer education and information

In 2009, the ERO President continued intense efforts in disseminating knowledge about market competition and consumer rights. The ERO President was taking steps aiming at strengthening user position on power market. The ERO President initiated work on changing the conditions of market operation, and got involved in educational and promotional efforts targeted in particular at households, which have difficult access to specialized and quite sophisticated knowledge on the way energy market works. During that time, special ERO call center¹⁸⁾ for users interested in supplier switch was operational. In order to improve access to consultations, additional telephone lines were operated in all local branches of Energy Regulatory Office.

The ERO President has cooperated with dedicated institutions and organizations, such as *powiat* (county) and municipal Consumer Ombudsmen, Polish Consumers Association or Consumer Federation, with regard to many issues related to the position of energy consumers. Over the last two years, ERO organizational units, including local branches, held workshops for consumer ombudsmen, representatives of local and regional self-government units, social welfare center employees, consumer organizations and NGOs throughout the country. During those training sessions the intricacies of energy market were disclosed, economic and legal aspects of supplier switch procedure were explained, and energy market conditions and liberalization status were discussed, side by side with efficiency in energy consumption.

A comprehensive communication program for the benefit of energy consumers was launched by the ERO President towards the end of 2008 under the „Consumer Zone” project¹⁹⁾. This initiative has become a consumer forum focused on identifying and solving common problem issues encountered by fuel and energy consumers, developing good practices and adopting joint approaches, as well as creating consumer market in individual sectors. In 2009 nine cycles of meetings and workshops were held in different Polish cities within the framework of „Consumer Zone”, with the participation of representatives from energy companies, consumer organizations and public administration representatives involved in those issues²⁰⁾. Meetings were dedicated to problems encountered by small users – households and small and medium businesses – such as, for example, insufficient transparency and complicated procedures of supplier switch, insufficient consumer awareness and difficult access to information and education, non-transparent and incomprehensible billing.

In 2009, the same way as in previous years, ERO was the beneficiary of the so-called *Transition Facility* within the framework of a program called ‘Implementation of Competitive Energy Market’ – TF 2006 allocation. Under that program, the implementation of Component 3: tariff calculator and the

¹⁸⁾ Since 2008, ERO staff has been able to assist in several thousand consultations, explanations and clarifications regarding supplier switch procedures and legal provisions, as well as related benefits, via that telephone information center.

¹⁹⁾ There has been an effective addition to the ‘Consumer Zone’ – ERO e-manual – in operation since April 2009. In 2009 itself, the virtual ‘Consumer Zone’ was viewed by several thousand visitors.

²⁰⁾ Within the framework of ‘Consumer Zone’, the ERO has cooperated, *inter alia*, with Municipal Consumer Ombudsmen, Polish Consumers Association, Consumer Federation, power sector associations (e.g. Polish Power Transmission and Distribution Association Energy Trade Association, Gas Sector Chamber of Commerce), higher education facilities (e.g. *Uniwersytet Warmińsko-Mazurski*), Verivox and *nasza-energia.pl* internet portals, real estate administrators, heating companies, state administration organs and regional and local authorities.

code of good practice for energy sector, executed by *ITTI Sp. z o.o.* from the city of Poznań, was continued. Component 3 is supposed to support Regulator actions aimed at ensuring compliance with the requirements of electricity and gas market liberalization for household users by developing a consistent code of conduct for electricity and gas suppliers and system operators. In November 2009, the project entitled: *'Internet portal with electricity and natural gas calculator and the development of a code of good practice for the power and gas sectors'*, to be implemented after consultations with market users, was approved by ERO, and thus the execution stage of the project was completed.

As mentioned earlier, starting from July 1, 2007, a telephone information center was established at ERO central office and its local branches, to provide users with information on the right to electricity supplier switch – consumers who call the line are instructed how to switch the supplier, step by step, they can also ask for consultation and advice on any issue related to free energy market.

Customer complaints and enquiries

In 2009 the growing trend in the number of electricity-related cases brought to the attention of the ERO President was maintained, compared to 2008. There are several reasons behind that. One of those reasons has been the growing awareness of the presence of a special office of the Spokesman for Fuel and Energy Customers within Regulator's structure, and relatively easier access via the internet. Another factor accounting for such an increase is related to consumer problems resulting from structural changes in the sector and in energy companies. The proportion between the number of 'Complaints' and 'Inquiries' speaks a lot about the role of the Spokesman for Fuel and Energy Customers as an institution which supports consumers mostly by spreading true-to-fact information.

Consumer complaints and enquiries brought to the attention of the ERO President by regular mail, e-mail, telephone, fax, or during personal appointments are processed by relevant organizational units, including local branches and the Spokesman for Fuel and Energy Customers, whose tasks consist in, first and foremost, communicating with the consumers who report problems, informing them about their rights, explaining them how those problems can be solved, and which organizational units are competent to address the case in question.

Responses are provided in the form of written explanations, telephone consultations and during face-to-face appointments in the office. A significant proportion of issues brought to the attention of the ERO President does not fall within the mandate of the Regulator, e.g. civil law disputes with companies that can only be resolved in court. In each and every case, however, the consumer applying to the ERO President receive complete communication on how the problem can be solved and which institution is competent to address the case in question.

Tables 3.15. and 3.16. present detailed data regarding the volume of cases, in the breakdown according to reasons.

Table 3.17. Complaints*

Specification	Number of cases
Price	18
Metering systems and installations	40
Customer service	55
Commercial practices	1
Misleading advertising	0
Terms of contract	74
Billing	101
Supplier switch issues	25
Supply issues related to payments, e.g. disconnection	69
Supply issues related to technical problems	76
Connection refusal	73
Other	178
Total	710

* A complaint is understood as every problem faced by the consumer in the relation with energy company, which is brought to the attention of the ERO President.

Source: ERO.

Table 3.16. Enquiries*

Specification	Number of cases
Price	279
Metering systems and installations	127
Customer service	136
Commercial practices	3
Misleading advertising	0
Terms of contract	30
Billing	419
Supplier switch issues	31
Supply issues related to payments, e.g. disconnection	77
Supply issues related to technical problems	18
Connection refusal	2
Other	630
Total	1 752

* An enquiry is understood as consumer's enquiry with a request for information directed at the ERO President.

Source: ERO.

One important factor which affected the number of cases has been a relatively high extent of ambiguity in electricity bills, due to new electricity charge components and the number of changes in rates and prices in course of the year. This is especially conspicuous given that in the current specification, unlike in 2008 specification, two separate items have been distinguished, namely: 'Price' and 'Billing'. With a more detailed description of the cause behind a complaint or enquiry, consumer issues can be identified with more accuracy, and the ERO President may take more effective regulatory action or initiate solutions beneficial to customers with other institutions. One should pay special attention to the 'Billing' category, which includes cases related to incorrect electricity bills, explanation of legal grounds behind those bills, and tariff rules, as well as to the 'Price' item, involving rates and prices. The next most numerous category of cases falls within the definition of 'Metering systems and installations' together with 'Supply issues related to payments, e.g. disconnection' – the former category applies to technical conditions required for metering and billing equipment as well as to the way billing is performed when billing equipment is faulty; the latter includes cases of disconnection from electricity supply due to various reasons, such as, for example, falling in arrears with payments for consumed energy. Another high priority item is related to 'Customer service', including both the incidents of low quality customer service and unsatisfactory quality parameters of supplied electricity. Interestingly enough, there are relatively few cases of 'Supplier switch issues' reported, which results from the lack of economic conditions (tariffs for household users) for exercising that right rather than from successful operation of the market.

3.2.3. Measures to avoid abuse of dominance on the market

Measures to avoid abuse of dominance on the markets dedicated to the power sector fall within the competence of the President of the Office for Competition and Consumer Protection (OCCP) the antimonopoly agency entrusted with the tasks set forth in Competition and Consumer Protection Law. The OCCP President has oversight with regard to the concentration status in that sector. ERO President, as the regulatory body, is entrusted with monitoring and promotion of competition in the power sector, in scope of prerogatives set forth in the Energy Law. Ownership supervision and restructuring in the sector fall within the competence of the Ministry of State Treasury.

Monitoring generators' performance

Transparency

As far as transparency is concerned – i.e. the principles governing disclosure of information regarding available generation capacity, the period elapsing between placing the order and order execution, and forecasted level of output capacity and capacity demand – there were no major developments in that field relative to 2008. Those principles have been implemented within the framework of capacity demand forecast and projected level of generation capacity and output capacity available. National capacity demand forecast is prepared within the framework of coordination planning. Three-year plans and annual plans are published on PSE Operator SA website by the end of November of the preceding year. Monthly plans are disseminated among market participants by the 26th of the preceding month. Daily plans are disseminated electronically among energy market participants by 4:00 p.m. on the day directly preceding the day of energy supply. Plans for the particular day are forwarded to all participants upon plan calculation. Additionally, the operator discloses on their website projected NES operation data in Daily Coordination Plans.

Information about sales offers

In 2009, analogically to 2008, more than 90% of electricity sales transactions were carried out within the framework of bilateral contracts. Moreover, in line with the strategy of consolidated power sector groups, sales of electricity by generators from within the group can be performed only and exclusively within the group (no direct sales outside of the group). In 2009 generators were practically excluded from exchange market transactions. The only way to access offer data would be explicit auction sales, but it must be emphasized that the volume of energy sold through that channel has been quite small.

The situation should improve once the amended Energy Law provisions come into effect (as of August 9, 2010): electricity generators will be obliged to sell energy²¹⁾ on the energy exchange, on regulated market or in bids organized by those companies or by users.

Energy companies are not required under the law to publish their sales offers in the case of electricity sales to consumers other than end users.

Given that electricity generators have been exempt from tariff obligation (since 2001), continuous monitoring of electricity market performance is the basic measure in which the ERO President can execute the mandate. The ERO President monitors contracts concluded by market participants and

²¹⁾ 100% of energy generated in a given year – state aid beneficiaries due to termination of long-term contracts, 15% – remaining generators.

publishes, by March 31 each year, average price of electricity traded on competitive market valid for preceding calendar year.

In connection with central balancing mechanism, a big role in ongoing monitoring of generators' behavior is played by transmission system operator, who has adequate resources to pursue this task. If some irregularities are identified, e.g. as regards the abuse of dominance, the operator notifies the ERO President. This was the case in 2008, when there was a suspicion of economic withdrawal of generation units.

In Poland there are no virtual power stations or any other virtual solutions for trading generation capacity.

Traders' activity

Transparency of operations and disclosure requirements

In 2009 there was no legal obligation to publish sales offers.

Analogically to previous year, trading companies typically published their sales offers on the internet. Some suppliers additionally included detailed offer (e.g. in the breakdown according to wholesale and retail consumers) and commercial operator's offer. Few websites included contract templates. Some trading companies publish on their websites the so-called tariff calculators to help potential consumers compare their offers against competition.

On the internet portal of Energy Trade Association, an organization of trading companies, one can find updated exchange market and balancing market quotations, a historical outline of the principle of supplier choice, and a description of present day barriers towards achieving free energy market in Poland.

The status is going to change in 2010. The Energy Law amendment which came into force in March obligates companies that trade in gaseous fuels or electricity and sell them to end users connected to the distribution network to disclose the information regarding the prices and related terms and conditions on their websites, and to make such information publicly available at their premises.

Structure of contracts

Typically, traders present their offer to final customers on individual basis. Prices and other contractual terms are negotiated with a business partner each and every time, and they may vary depending on the period of supply, deviations and consumption profile. Some traders also offer assistance in negotiating transmission service agreements.

Generally speaking, contracts between trading companies and their clients are short-term contracts, concluded for the period of one day (spot), several days, a month, six months, and the longest ones for a period of a year. They usually come as framework agreements, encompassing each transactional agreement. There may also be sales contracts with a pre-determined energy volume. Most contracts include indemnity clauses in case of non-performance or unsatisfactory performance, describing the liabilities of each party. Some traders rely on standard EFET (*European Federation of Energy Traders*) contractual forms.

Mode of payment for electricity is always specified in the contract. Traders can be very flexible in that respect. Billing may be done on a weekly basis, every ten days, twice a month, or once a month. Payment is usually made by bank transfer, within 14, 21 or 30 days from invoice issue date.

Each contract includes dispute resolution provisions. Amicable dispute resolution is preferred, followed by arbitration procedure, and when the case falls within the competence of the President of the Energy Regulatory Office, a motion to initiate administrative proceeding is filed.

After unbundling from the structure of vertically integrated companies, distribution companies enter into distribution service agreements or common service electricity supply agreements with final consumers. Users are charged for electricity supplied and distribution services provided in accordance with prices and rates set for tariff groups included in approved electricity tariffs.

Billing for electricity supplied or distribution services provided is carried out according to billing periods determined separately in the tariffs of individual suppliers.

Steps taken by the President of the Office of Competition and Consumer Protection with regard to energy companies²²⁾

Powers of the OCCP President with regard to companies from the power sector, including electricity generators and suppliers, consist in the oversight in scope of compliance with Competition and Consumer Protection Law, and in particular in preventing and counteracting the practices which hinder competition, such as anti-competition agreements and abuse of dominance cases, as well as in oversight with respect to mergers. This means that whenever there is a suspicion of anti-competition practices attempted by the companies, the OCCP President may initiate the proceeding with the purpose to eliminate potential market irregularities. Administrative decisions are issued in that regard.

Due to unique market characteristics of the power sector, and especially the presence of a natural monopoly in the area of grid operations, a vast majority of anti-trust proceedings relates to abuse of dominance (in 2008, all the cases). This also applies to proceedings carried out in 2009. During that year, the OCCP President did not carry out any anti-trust proceeding against electricity generators or suppliers but conducted six anti-trust proceedings against energy companies dealing with power distribution. In three cases, final decisions were issued, and three proceedings are still pending.

In one case (decision no RWR 2/2010, dated 22 February 2010), the OCCP President decided that a practice performed by *EnergiaPro SA* energy company which consisted in the abuse of dominance on power network connections market by imposing burdensome terms of contract on energy consumers through charging them with the cost of drafting notary deeds regarding the easement of a piece of land situated along the track of a power line was unlawful, and determined that the practice had been discontinued on September 22, 2009.

According to the anti-trust agency, charging connected entities with fees other than the connection fee, such as, for example, the costs of notary deeds drafted in relation to the easement of a piece of land situated along the power line, has been unfounded and should not have taken place. In the course of proceeding it was determined that the average cost of the above-said notary deed covered by the connected entity amounted to more than PLN 520. According to the anti-trust agency, such an amount was a burdensome and additional charge for the budgets of connected entities which sought to get connected to company power network. *Nota bene*, the easement for the benefit of energy company was established for an open-ended period and free of charge, so the connected entity had no ensuing benefits. The company, however, was granted the right to use the property to the extent corresponding with the purpose of transmission equipment, for example to maintain and renovate the equipment, without any additional costs.

The practice described above was temporary in nature. Energy company does not charge those costs upon their business partners any more. The President of OCCP decided to sanction the company with a fine for the abuse of dominance. The decision is final.

In another case, the OCCP President issued a decision no RŁO 5/2009, dated March 20, 2009, whereby the practice carried out by *PGE Zakłady Energetyczne Okręgu Radomsko-Kieleckiego Dystrybucja Sp. z o.o.* which consisted in the abuse of dominance on regional power distribution market was declared as a practice that hinders competition. As a result of that practice, entities

²²⁾ This section of the Report was drafted by OCCP.

classified under Connection Group IV (i.e. entities whose equipment, installations and networks are connected directly to the network with rated voltage not greater than 1 kV and connection power not greater than 40 kW and meter security rated current not greater than 63 A) and under Connection Group V (i.e. entities whose equipment, installations and networks are connected to the network with a temporary service line, for a period up to a year) were offered burdensome terms of connection agreement, which brought unfair benefits to the company. Those terms stipulated that the entities which applied for a change in the terms of connection in scope of service line type were charged with additional fees non compliant with the binding electricity tariff. It was ruled in the decision that the practice must be discontinued. The company was fined. The decision is final.

In yet another case, the OCCP President issued a decision no RKR 32/2009 dated December 31, 2009, in which it was determined that *Enion SA* was involved in the practices that hindered competition and consisted in the abuse of dominance on local electricity distribution market in the area of energy company power grid by imposing in electricity distribution service agreements and in the distribution grid code:

- terms and conditions which disallow – by introducing an obligation for electricity trade companies to establish separate schedule units for each and every end user – joint clearing of deviations from contractual position for those users who purchase electricity from one supplier, when at the same time the energy company is exercising that right when dealing with transmission system operator,
- terms and conditions stipulating that only energy trade companies are obligated to secure financial reserve by virtue of participation in the balancing market, irrespective of the risk existing on both sides of the contract.

In consequence of anti-competition practices referred to above, the distribution company imposed unfair terms of power distribution upon trading companies. At the same time, it was determined that distribution company acted against the development of conditions required for the promotion of competition on domestic electricity trade market concerning entities eligible for the choice of supplier under TPA rules.

It was determined in the decision that such practices had been abandoned. In connection with anti-competition practices referred to above, the distribution company was fined by the President of OCCP.

In the same decision, anti-trust proceeding pertaining to the alleged practices that were supposed to consist in the abuse of dominance on domestic electricity trade market concerning entities eligible for supplier choice under TPA rules (third party access to the network), has been discontinued. Allegedly, under those practices predatory prices, i.e. the prices that were substantially lower than those presented in distribution company electricity tariff, were offered to end users eligible for the right to supplier choice under TPA rules. However, this practice was not confirmed.

Moreover, in that same decision, the President of OCCP did not determine the presence of anti-competition practices that consist in the abuse of dominance on local electric power distribution market in the area of energy company power grid by imposing upon end user an obligation to modernize metering and billing equipment in the case when the end user has decided to terminate electricity supply services and purchase electricity through the services of another trading company.

The decision is not final, the energy company appealed against the decision to Warsaw District Court– Competition and Consumer Protection Court.

In 2009 two anti-trust proceedings were initiated:

- in connection with the suspicion that distribution system operator might abuse dominance on regional electricity distribution market by actions that consisted in making it difficult for users to exercise their right to switch supplier by charging the users supplied through the lines which were not owned by the operator, in electricity distribution contracts (concluded in connection with supplier switch), with additional or increased costs of network losses on those lines despite the fact that the old contract did not include such provisions or included them to a lesser extent,

- in connection with the suspicion that distribution system operator might abuse dominance on regional electricity distribution market by actions that consisted in imposing burdensome terms and conditions in power network connection contracts, whereby connection power was decreased to the level of contractual power in the case when contractual power requested was lower than the connection power.

In 2009 there was ongoing proceeding initiated in 2006 with regard to the suspicion of abuse of dominance by:

- hindering the development of conditions required for the creation and development of competition by not allowing electricity trade companies other than the company to create composite schedules for users who use TPA principle,
- imposing a burdensome obligation upon electricity trade companies other than the incumbent company to prepare and submit separate schedule units for every final consumer who uses TPA principle, when at the same time allowing the incumbent supplier to apply composite billing approach in relations with transmission system operator, which provided incumbent supplier with unfair benefits.

During the reporting period, 24 explanatory proceedings were carried out with respect to power sector companies. Anti-trust procedure was initiated in only two cases, referred above.

Explanatory proceedings were related to issues such as, *inter alia*:

- 1) practical application of TPA rule,
- 2) provision of lightning services in the streets, public areas and roads,
- 3) imposing burdensome contractual terms by shifting upon electricity consumers the obligation to finance power grid extensions (the outcome of the proceeding could not serve as the basis for anti-trust proceeding due to individual nature of the case),
- 4) connecting individuals end users of electricity to the power grid,
- 5) introducing electricity price increases and the manner in which such price changes were communicated,
- 6) billing users billed according to a 6-month cycle,
- 7) verifying whether the principles governing the conclusion of contracts concerning connection to the power network that requires modernization and is located at user's premises, concluded by distribution system operator and consumer, do not violate the provisions of Competition and Consumer Protection Law (the outcome of the proceeding could not serve as the basis for anti-trust proceeding due to individual nature of the case),
- 8) verifying whether the actions taken by distribution system operator in scope of billing rules for user connection to the network and the terms of network connection contract do not violate the provisions of Competition and Consumer Protection Law,
- 9) verifying whether the determination of the amount of commercial fee charged from business partners generating electricity from renewable sources and the impact on pricing policy of those business partners do not have features of abuse of dominance (proceeding did not give grounds for initiating anti-competition practice action),
- 10) imposing burdensome contractual terms as regards the reconstruction of existing energy infrastructure interfering with road construction, renovation or reconstruction,
- 11) verifying whether the liquidation of transformer station and obligating the consumer to connect a cable line to another station may represent the violation of the provisions of Competition and Consumer Protection Law,
- 12) verifying whether charging users supplied through cable lines or overhead lines which are not owned by the operator with additional or increased costs in respect of network losses incurred, as observed in electricity distribution contracts (concluded with the intention to exercise the right to choose the supplier), in the case when the previous agreement did not include such a charge or included such charge to a lesser extent, and at the same time there were no technical

changes in electricity supply conditions that might justify such a modification, may represent a practice that is a barrier to electricity supplier switch,

- 13) verifying whether the refusal to sign addenda to wind farm connection agreements – in the case of alteration in the location of wind farm under design that does not result in the change of the point of connection – may represent the violation of the provisions of Competition and Consumer Protection Law,
- 14) suspicion of anti-competition practices which allegedly consist in the abuse of dominance by *Oświetlenie Uliczne i Drogowe Sp. z o.o.* company based in the town of Kalisz (hereinafter referred to as *OUID*) by directly imposing unfair (excessively high) prices for the maintenance of lightning infrastructure owned by Konin *OUID*,
- 15) suspicion of anti-competition practices which allegedly consist in directly imposing unfair (excessively high) prices for the service of lightning infrastructure maintenance,
- 16) obligating the owners (administrators) of property rented or leased out to other entities to include the following declaration in their applications for connection to the network:
„Declaration: We hereby declare that the outline presented above is true to facts. We understand that once the metering installation is checked and installed, the installations are active and no work on the installation will be done, until the exit point, without prior notification and consent of electricity supplier.”,
- 17) verifying whether sales principles applied by entities operating on domestic electricity generation and trade markets do not violate the provisions of Competition and Consumer Protection Law of February 16, 2007. Within the framework of that proceeding, the analysis of electricity wholesale market has been performed.

Competition protection and promotion policy pursued by the President of OCCP

Analogically to last year, the OCCP President monitored actions specified in a document entitled ‘Competition Policy for 2008-2012’. In the section of the document dedicated to the power sector the OCCP President put forward the following action steps, among other things: monitoring of competition in the sector, taking into account market impact of vertically integrated energy groups, and actions taken to ensure competition development; monitoring the process of liberalization in the sector from the standpoint of potential elimination of energy generation and trade tariffs; raising public awareness with respect to the opportunities brought about by liberalization in electric power sector; review of the provisions of the law on obligatory stocks from the standpoint of their impact on competition development process in the gas sector and implementation of required changes.

Concentration oversight policy pursued by the President of OCCP

In 2009 there was no substantial, continued consolidation in power market. In 2009, the OCCP President issued four approvals for mergers involving energy companies operating in the field of electric power market. Those cases are as follows:

- 1) *ENERGA Elektrownia Ostrołęka SA*, based in the town of Ostrołęka, took control over *Przedsiębiorstwo Energetyki Ciepłej Sp. z o.o.*, based in the town of Ostrołęka,
- 2) *RWE Power AG*, based in the cities of Koln and Essen (Germany), and *Kompania Węglowa SA*, based in the city of Katowice, established jointly a limited liability company with the intention to build and operate a power station located at the premises of disused ‘*Piast Ruch II*’ mine in the town of Wola in Silesia region,
- 3) *Bank Polska Kasa Opieki SA*, based in the capital city of Warsaw, took control over *Elektrownia Pątnów II Sp. z o.o.*, based in the town of Konin,

- 4) *Energetyka Sp. z o.o.*, based in the city of Lublin, took control over *Wojewódzkie Przedsiębiorstwo Energetyki Ciepłej SA*, based in the town of Legnica.

Due to absence of horizontal consolidation of energy companies that would result in significant structural changes on the markets, in 2009 anti-trust agency did not carry out a detailed research into the level of concentration on electric power markets. Concentration in electric power sub-sectors is also monitored by ERO President.

Actions taken by the Minister of State Treasury in scope of ownership changes in power sector²³⁾

Moving on to the processes of ownership changes and restructuring in power sector, there were the following cases initiated by the Minister of State Treasury as the owner in 2009:

On July 29, 2009, company capital of *Tauron Polska Energia SA* was increased by the contribution of 85% of shares in *Przedsiębiorstwo Energetyki Ciepłej SA* based in the town of Dąbrowa Górnicza, and 42.1% of shares in *Elektrociepłownia EC Nowa Sp. z o.o.*, both owned by the State Treasury. Further, pursuant to the law of September 7, 2007, on the principles governing the purchase of shares from the State Treasury in the process of consolidation of companies in power sector, resulting from the government policy presented in the 'Program for the Power Sector' approved in March 2006, the process of conversion of employee shares was carried out in *Tauron* capital group, in consequence of which the shareholders of minority companies from lower levels in the capital group structure are shifted to the shareholder group of the parent company, i.e. *Tauron Polska Energia SA* company. As a result of those changes, State Treasury currently owns 87.63% of shares in that company.

In 2009 restructuring efforts related to *GK ENERGA* companies were finalized: the work was connected with the formal unbundling of electricity trade and distribution. On March 20, 2009, fragmentation of *ENERGA-OPERATOR SA* company was registered, as a result of which asset components which could not be a part of *ENERGA-OPERATOR SA*, which performs a DSO function, were separated. Assets separated from *ENERGA-OPERATOR SA* were contributed *ENERGA SA* as a recipient company.

Furthermore, on March 11, 2010, ownership supervision over PSE Operator SA company was assigned to the Minister of the Economy. State Treasury owns 100% of company shares. The entity is not intended for privatization.

Since the shares of PGE Polska Grupa Energetyczna SA were issued and the company was listed for trade on Warsaw Stock Exchange on November 6, 2009, and the shares from increased company capital were acquired by other shareholders, State Treasury currently owns 85% share in company capital.

Minister of State Treasury exercises rights to shares with regard to the following power sector companies:

²³⁾ This section of the Report was drafted by the Ministry of Treasury.

Name of entity	Domicile	% ST	Comments
ARE SA	Warszawa	10.10	Sold 10.04.2010
Bałtycka Agencja Poszanowania Energii SA w Gdańsku	Gdańsk	4.80	
Dalkia Łódź SA	Łódź	0.43	
Elektrociepłownia Będzin SA	Będzin	5.00	
Elektrociepłownia Tychy SA	Tychy	0.13	
Elektrociepłownia Zabrze SA	Zabrze	100.00	
Elektrownia Chorzów SA	Chorzów	100.00	
Elektrownia Rybnik SA(SP-1akcja)	Rybnik	0.000002	
Elektrownia Stalowa Wola SA	Stalowa Wola	13.67	
ENEA SA	Poznań	60.43	
ENERGA Elektrownie Ostrołęka SA	Ostrołęka	0.44	
ENERGA SA	Gdańsk	86.66	
ENERGA-OPERATOR SA	Gdańsk	12.30	
EnergiaPro SA	Wrocław	13.45	
Energomix Servis Sp. z o.o.	Katowice	1.05	
ENION SA	Kraków	14.07	
ENION Zarządzanie Aktywami Sp. z o.o.	Katowice	0.77	
„NADWIŚLAŃSKA SPÓŁKA ENERGETYCZNA” Sp. z o.o.	Brzeszcze	100.00	
PGE Dystrybucja Łódź-Teren SA	Łódź	13.10	
PGE Elektrociepłownia Gorzów SA	Gorzów Wlkp.	5.89	
PGE Elektrownia Bełchatów SA	Rogowiec	0.62	
PGE Elektrownia Opole SA	Brzezie k/Opola	0.67	
PGE Elektrownia Turów SA	Bogatynia	0.38	
PGE ENERGIA SA	Lublin	3.22	
PGE Górnictwo i Energetyka SA	Łódź	13.80	
PGE Lubelskie Zakłady Energetyczne SA	Lublin	12.75	
PGE Łódzki Zakład Energetyczny SA	Łódź	10.28	
PGE Polska Grupa Energetyczna SA	Warszawa	85.00	
PGE Obrót SA	Rzeszów	12.19	
PGE Zakład Energetyczny Białystok SA	Białystok	13.59	
PGE Zakład Energetyczny Warszawa-Teren SA	Warszawa	13.92	
PGE Zakłady Energetyczne Okręgu Radomsko-Kieleckiego SA	Skarżysko Kamienna	13.80	
PGE Zamojska Korporacja Energetyczna SA	Zamość	14.32	
PGE Zespół Elektrociepłowni Bydgoszcz SA	Bydgoszcz	0.32	
PGE Zespół Elektrowni Dolna Odra SA	Nowe Czarnowo	9.03	
PSE Operator SA	Konstancin-Jeziorna	100.00	As of 11.03.2010 supervised by ME
Południowy Koncern Energetyczny SA	Katowice	12.62	
„Pomorska Agencja Poszanowania Energii” Sp. z o.o.	Bydgoszcz	33.33	
Przedsiębiorstwo Energetyki Ciepłej SA	Jastrzębie Zdrój	100.00	
Przedsiębiorstwo Energetyki Ciepłej Katowice SA	Katowice	0.17	
Przedsiębiorstwo Energetyki Ciepłej Sp. z o.o. w Chrzanowie	Chrzanów	49.00	
Przedsiębiorstwo Energetyki Ciepłej w Dąbrowie Górniczej SA	Dąbrowa Górnicza	8.18	
TAURON Polska Energia SA	Katowice	87.63	
TGE SA	Warszawa	22.34	
Wojewódzkie Przedsiębiorstwo Energetyki Ciepłej w Legnicy SA	Legnica	15.00	
Zakład Produkcyjno-Remontowy Energetyki „JEDLICZE” Sp. z o.o.	Jedlicze	15.00	
Zakłady Pomiarowo-Badawcze Energetyki ENERGOPOMIAR Sp. z o.o.	Gliwice	8.95	
Zespół Elektrociepłowni Bytom SA	Bytom	100.00	
Zespół Elektrowni „Pałnów-Adamów-Konin” SA	Konin	50.00	
Zespół Elektrowni Wodnych Niedzica SA	Niedzica	100.00	

In 2009 the first stage of privatization of *PGE Polska Grupa Energetyczna SA* was completed by the issuance of new shares and listing all shares of that company for public trading on Warsaw Stock Exchange.

With regard to remaining companies from power sector, in 2009 and during three months of 2010 Minister of State Treasury processed privatization processes pertaining to the following entities from the sector:

Company name	Domicile	Size of sold holdings [%]	Privatization completion	Comments
PGE Elektrownia Opole SA	Opole	16.04	2008	On 18.12.2008 an agreement was signed on the sale of State Treasury Shares On 17.11.09 ownership right to the shares was transferred
PGE KWB Turów SA	Turów	15.46	2008	On 18.12.2008 an agreement was signed on the sale of State Treasury Shares (On 17.11.09 ownership right to the shares was transferred)
Elektrociepłownia Kraków SA	Kraków	28.05	2009	
Vattenfall Heat Poland SA	Warszawa	25.19	2009	
Górnośląski Zakład Elektroenergetyczny SA	Gliwice	25.07	2009	
Zakład Produkcyjno-Remontowy Energetyki JEDLICZE Sp. z o.o.	Jedlicze	100.00	2009	
Wojewódzkie Przedsiębiorstwo Energetyki Ciepłej w Legnicy SA	Legnica	85.00	2009	
Agencja Poszanowania Energii i Usług Energetyczno-Górnictw „ENMAG-EG” Sp. z o.o.	Piekary Śląskie	17.23	2010	
Krajowa Agencja Poszanowania Energii SA w Warszawie	Warszawa	51.61	2010	
ENEA SA	Poznań	16.05	2010	60.43% was left after the sale
ARE SA	Warszawa	10.10	2010	

4. REGULATION AND PERFORMANCE OF THE NATURAL GAS MARKET

4.1. Regulatory Issues [Article 25(1)]

4.1.1. Management and allocation of interconnector transmission capacity and network congestion management mechanisms

The management of national transmission network is performed by Gaz-System SA, in accordance with the procedures set out in Transmission Grid Code (IRiESP). The document sets out the principles governing network congestion management in the network administered by the company. UIOLI ('Use-it-or-lose-it') procedure is designated to deal with contractual congestion, but it has not been used so far. Swap transaction have not been applied with regard to network congestion. Information regarding transmission capacity at those points, required under Regulation 1775/2005/EC, is published on Gaz-System SA websites.

Scope and location of network congestion within the national transmission system did not change in 2009, as compared to previous years. Table 4.1 contains information about network congestion observed in 2009, and about congestion management mechanisms.

Table 4.1. Managing physical congestion within the national transmission system

Location	Range of congestion	Mitigating measures	Transmission capacity at the point of congestion [in m ³ /per day]
North-western Poland	Lack of transmission capacity reserve was noticed in high methane gas system	In order to improve capacity in the north-west of Poland, <i>Goleniów – Nowogard – Płoty – Koszalin</i> transmission system has been developed, which is bound to improve Group E gas supply conditions to <i>Przymorze</i> gas mixing facility. Additionally, construction of <i>Goleniów</i> compressor station is planned in order to improve capacity in the area.	8.4 mln
<i>Częstochowa</i> region	Lack of transmission capacity reserve was noticed in high methane gas system	In order to be able to increase supplies in the region of <i>Częstochowa</i> , a gas pipeline DN 500 <i>Lubliniec – Częstochowa</i> is being built.	1.3 mln
<i>Gdańsk</i> region	Lack of transmission capacity reserve was noticed in high methane gas system	Ongoing construction of DN 500 <i>Gustorzyn – Gdańsk</i> transmission system.	1.2 mln
<i>Białystok</i> region	Lack of transmission capacity reserve was noticed in high methane gas system	Increase of <i>Tietierowka</i> supply contractual pressure related to renegotiation of contractual agreements.	0.5 mln
<i>Piotrków Trybunalski</i> region	Lack of transmission capacity reserve was noticed in high methane gas system	Completion of <i>Mory-Meszczce</i> gas pipeline construction. Increased gas transmission to <i>Łódź</i> region.	1.7 mln
<i>Jarosław</i> region	Lack of transmission capacity reserve was noticed in high methane gas system	Refurbishment of <i>Jarosław II</i> compressor station.	15.6 mln

Source: Gaz-System SA, 2010.

At all „entry” points to Polish transmission system, the share of capacity booked by *PGNiG SA* is equivalent to almost 100%. In 2009 the extent of capacity utilization was varied, from almost 100% on interconnections with German operator, to approximately 50% on remaining interconnections (annual average approach.) Significant increase in the utilization rate of *Lasów* interconnector with German ONTRAS operator, to the level close to its technical capacity, is a new development. This can be accounted for by the lack of alternative supply options which would offset transmission on low capacity pipelines, and by the absence of TPA rule with Poland's eastern neighbors.

When analyzing utilization of transmission capacity on major entry points to the national transmission system from eastern direction (*Drozdowicze, Wysokoje*), it is worth pointing out that daily utilization rates frequently exceeded the level of 90% and were close to maximum levels. This was, in part, due to a certain seasonal volatility of capacity utilization and the need to adjust to cyclical capacity limitations resulting from gas disputes between *Gazprom* and transit countries. As far as the review of transmission capacity utilization on national transmission system entry points from *Yamal* pipeline is concerned, one must note that transmission capacity volume at *Włocławek* and *Lwówek* entry points, which in total amounts to 5 431 300 000 m³/year, by far exceeds the volume of 2 800 000 000 m³/year, i.e. transmission capacity reservation in *EuRoPol-Gaz* network for domestic demand.

This translates into low level of simple reserves which might be activated through contractual congestion management mechanism, set forth in *Gaz-System's* IRiESP. Such status testifies to the demand for new supply channels, and the need to implement fully market-based rules for the use of *Yamal* pipeline.

Presence of physical congestion manifests itself in the analysis of information pertaining to cross-border interconnectors between national transmission system and other systems.

Physical congestion was observed on *Gaz-System* network connection with the transmission system of EU member states. One example would be the case of ONTRAS network *Lasów* connection on Polish-German border, referred to above, which in fact is the only connector between national transmission system and Western Europe transmission system, and has high significance from the standpoint of interconnector exchange. As noted, the level of utilization of that interconnector was at almost 100% on average annual basis, and at the level of 100% at some periods, which meant that natural gas could not be transmitted on intermittent terms. As a result, at the beginning of 2009 the provision of services of intermittent nature was stopped, as well as the process of getting new contracts signed.

Connectors between national transmission system and transmission systems that supply gas from the east were fully booked, but those reservations were not long-term in character. The only long-term transmission agreements concluded to date by *Gaz-System SA* have been connected with transmission capacity offered with regard to Czech system connection in *Podkarpacie* region, scheduled for launch in 2011. Other similar agreements are planned for new investments and may be applied in the case of *Lasów* interconnector extension, *inter alia*.

Furthermore, in 2009 the entities applying for transmission agreements were not interested in gas supply connections from eastern direction. For that reason it would be hard to classify those connections as subject to contractual congestion, despite their full reservation, although lack of available capacity is not a desirable circumstance and some initiatives are taken to change that situation.

One of the efforts targeted at creating available transmission capacity on system entry points was related to the introduction of entry-exit system. A pre-agreed, proposed draft of changes in regulations based on that methodology is supposed to be submitted to the Ministry of Economy in 2010, for further legislative processing. Those solutions, planned for implementation from 2011 onwards, are expected to rationalize contracting of transmission capacity. At present, charges for transmission services are calculated according to transmission capacity on system exit points, which

means that there is no economic incentive which would encourage limitations in the volume of contractual capacity ordered on entry points.

Another initiative undertaken to ensure greater availability of capacity consists in the construction of new system entry points, including the construction of a new interconnector with the Czech system near the town of *Cieszyn*, building LNG terminal, and extension of the existing *Lasów* interconnector with German system administered by ONTRAS company. Thanks to those steps, new market participants will be able to enter the market, among other things. It is expected that some part of currently booked capacity will be made available, as there are plans to use new networks.

Absence of demand for transmission services provided through gas supply connectors from the east, observed in 2009, may be related to diversification obligation. Pursuant to the provisions set forth in the regulation of the Council of Ministers on the minimum level of diversification of foreign gas supplies, dated October 24, 2000, the maximum share of imported natural gas from one country of origin relative to the total volume of imported gas could not exceed 72% in 2009. This requirement is particularly difficult to meet by market entrants, who have just begun their operation and have difficulty in concluding several purchase contracts in the case when sales volume is limited.

Moreover, pursuant to the law on the stocks, access to storage facilities is a pre-condition which not only paves the way for entering into transmission agreement, but also pre-conditions obtaining the license for trading natural gas with other countries. Since the regulation saying that the license for trading natural gas with other countries can only be granted provided that the entity has its own storage facility or has entered into preliminary agreement regarding the provision of storage services for mandatory natural gas reserves in the territory of the Republic of Poland has come into effect, applicants who sought to obtain those licenses could not meet the requirements necessary for the license to be granted. On the other hand, entrepreneurs who already had such licenses granted limited their own activity in order not to exceed the limit which guaranteed exemption from stock keeping obligation. In other words, demand for transmission services could thus be partially constrained. This issue was also noticed by OCCP, which called for an analysis of provisions of the law on the stocks from the standpoint of their impact on the process of development of competition in the gas sector, and making necessary amendments to those provisions. Work is currently underway on the revisions of these provisions.

Another aspect concerns the need for the implementation of TPA principle in Poland's neighboring countries. In 2009 interested parties could, in principle, enter into intermittent terms transmission agreements for transmission system connections supplying gas from the east, but lack of interest in such agreements was also affected by the lack of TPA requirement in the third countries adjacent to Poland, and the fact that alternative supplier could not be found there.

RosUkrEnergo (RUE) company, the only alternative gas supplier from the east, was excluded as a potential supplier. Even though transit through the territory of the Ukraine was resumed on January 22, 2009, the contract between *RUE* and *PGNiG SA* was not executed.

In view of the prohibition on re-export of Russian gas and the decision set forth in 2009 state budget of the Ukraine, stipulating that natural gas from Ukrainian domestic production should be channeled to satisfy internal market demand, Ukrainian *NAK Naftogaz* responded in a negative way to the request of *PGNiG SA* to increase supply. Likewise, cooperation in the area of transit did not win *NAK* support.

This means that purchasing gas and ordering transmission services in third countries represents a challenge not only for those interested in entering domestic market, but also for the incumbent company; improvement in market conditions in the countries that border EU member states should be seen as a possibility to improve the situation as well.

Table 4.2 presents information on interconnector congestion observed in 2009, and the mechanisms used to deal with congestion, as well as the information on general status of transmission capacity.

Table 4.2. Managing physical network congestion on interconnectors

Location	Range of congestion	Mitigating measures	Scope of congestion
Connectors between national transmission system and EU member states gas network	Physical transmission congestion was observed	In order to remedy the situation, the following actions were undertaken: – Construction of new entry points to the national transmission system: (1) connection with Czech RWE-Transgasnet near <i>Cieszyn</i> , (2) LNG terminal in <i>Świnoujście</i> , – Extension of the existing connection with German ONTRAS system, located in <i>Lasów</i>	Due to mutual interdependence between congestion occurring in particular connection categories, the scale was not estimated
Connectors between national transmission system and gas supply systems from the east	Full reservation of transmission capacity was observed, its character was not long-term	Introduction of entry-exit system, Construction of new entry points to the system	N/A

Source: ERO, Gaz-System SA.

National system transmission capacity deficit results from the lack of necessary investment in the development of transmission network. As a result, areas suffering from network congestion are characterized by significant number of refusals of connection to transmission and distribution networks. Moreover, in the periods of increased gas demand, there are problems with securing supplies for customers already connected to distribution network.

Data from Table 4.3 illustrates the status observed in 2009. Average time of supply interruptions per one consumer connected to transmission network was calculated on the basis of information provided by TSO.

Table 4.3. Interruptions and congestion in gas supply

	Interruptions and congestion				
	Quantity	Duration [in min]	Number of consumers without supply	Average time [in min/cons]	Quantity of fuel not supplied [in mln m ³]
Breakdowns	11	210	1	210	0.004 for one TSU*
Planned works in progress	–	–	–	–	–
Congestion	–	–	–	–	–

* TSU – Transmission Service User – PGNiG SA.

Source: Gaz-System SA.

Table 4.4 presents a description of capacity on national transmission system interconnectors and interconnector utilization.

Table 4.4. Cross-border interconnectors under cooperation between operators

System Operator's name	Operator's country	Point of connection	Direction of supplies	Types of filed nominations	Total transmission capacity* [in mln m ³ /year]	Booked transmission capacity [in mln m ³ /year]	Not booked transmission capacity [in mln m ³ /year]
ONTRAS	Germany	Lasów	Poland	day/hour	991.7	991.7	0.0
ONTRAS	Germany	Gubin	Poland	day	17.5	17.5	0.0
Severomoravske plynarenske	The Czech Republic	Branice	Poland	day	1.4	1.4	0.0
Severomoravske plynarenske	The Czech Republic	Głuchołazy	Poland	day	105.1	105.1	0.0
Ukrtransgaz	The Ukraine	Drozdowicze	Poland	day/hour	5 694.0	5 694.0	0.0
Biełtransgaz	Belarus	Tietierowka	Poland	day/hour	188.4	188.4	0.0
Biełtransgaz	Belarus	Wysokoje	Poland	day/hour	5 475.0	5 475.0	0.0
EuRoPol GAZ SA	Poland	Włocławek	Poland	day/hour	3 066.0	3 066.0	0.0
EuRoPol GAZ SA	Poland	Lwówek	Poland	day/hour	2 365.2	2 365.2	0.0
ONTRAS	Germany	Kamminke	Germany	day	112.8	112.8	0.0

* Maximum firm transmission capacity that transmission system operator may offer to network users, taking into account system integration and requirements pertaining to the maintenance of transmission grid.

Source: Gaz-System SA.

So far in Poland there have been no separate terms for transit contract conclusion, even though such a solution would be allowed pursuant to the provisions of Article 3(1), Directive 91/296. That is why *SGT EuRoPol Gaz SA* company – the owner of Polish section of ‘Yamal-Europe’ pipeline – renders transmission services only to *PGNiG SA* and *OOO Gazprom Export*, a company owned by *OAO Gazprom*. Those entities are legal successors to Company founders, who entered into the „Agreement on dispatching principles regarding transmission capacity of transit pipeline system in the territory of the Republic of Poland” with *Gas Trading SA* and *SGT EuRoPol Gaz SA*. Under the terms of that agreement, the above-mentioned entities dispatch transit pipeline transmission capacity with consideration for pipeline construction phase. Agreement governing gas transit through the territory of Poland remains in force until the end of 2019.

In 2009, the following gas volumes were transported via Polish section of ‘Yamal-Europe’ pipeline: *OOO Gazprom Export* – 25.30 bln m³, *PGNiG SA* – 2,65 bln m³. In comparison to previous year, transit through the pipeline went down by 9%, and gas collection from the pipeline at reception points in the territory of the Republic of Poland (*Lwówek Śląski*, *Włocławek*) went up by 4%. In aggregate, pipeline utilization in 2009 was equivalent to approximately 89% of its technical capacity.

Methodology for nominating maximum technical capacity, compliant with generally binding standards, was not subject to separate regulatory control.

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

Network tariffs

The mode of gaseous fuel tariff approval²⁴⁾ has not been changed since last year. It consists in the verification of tariff compliance with Energy Law provisions and Energy Law secondary legislation, including first and foremost the regulation on tariff development and calculation, referred to as the ‘tariff regulation’. Pursuant to Article 47, paragraph 2, Energy Law – the ERO President is authorized to approve of the tariff only if the tariff is in line with the above-said regulation. As far as legal

²⁴⁾ Pursuant to the Energy Law, Article 47.

regulations underlying the calculation of tariffs for gaseous fuels are concerned, there were no developments in 2009, compared to 2008.

Rates for service provision on the network owned by *EuRoPol* were distance-based, whereas *Gaz-System* transmission rates continued to be group-based ones. The same is true for distribution rates.

In 2009 (analogically to previous years), regulated revenue of gas companies was calculated according to cost-based approach. With regard to companies such as *Gaz-System SA* and *SGT EuRoPol SA* the main reason was the fact that they were not comparable to other companies operating on the Polish market, and as regards DSOs, comparative analysis approach, which may well be applied in the future²⁵⁾, could not be used this time due to the lack of comparable statistical data²⁶⁾.

In 2009 the return on capital was determined by the companies themselves pursuant to the principles set out in the tariff regulation. The President of the Energy Regulatory Office specified only three components indispensable for the calculation of the rate of return, i.e. the risk-free rate of return, equity risk premium and the *asset beta* coefficient, necessary for the definition of risk level for committed capital. Further, the President of the Energy Regulatory Office defined the ceiling of working capital compensation at the level not greater than that equivalent to 1% of fixed assets committed to licensed activity.

Rate of return on committed capital at the level allowed by country regulations was the main reason behind an increase in regulated revenue of all network gas companies in 2009, and the resulting increase in transmission and distribution rates.

Compared to previous years, in 2009 there were no significant changes in the scope of collected data. As before, grid companies were required to submit – in the course of their tariff approval process – the following information:

- Length of the network, in the breakdown according to pressure levels,
- Number and capacity of reduction stations,
- Value of fixed assets committed to network operation,
- Value of amortization of network assets,
- Level of investment outlays during the term of tariff,
- Number of connected customers and the level of connection fees,
- Number of consumers in each tariff category, the volume of gas transported to meet their demand, and the capacity ordered by those consumers,
- Gas balance,
- Volume of gas purchased to cover balance deficit,
- Volume of network losses,
- Amount of company costs by types of profiles, in the breakdown according to particular tariff categories,
- Amount of revenues in particular tariff categories.

New requirements were related to the information on the amount of working, domestic and foreign capital.

This data related to the last reporting year, i.e. the year preceding the year of tariff designation, for which financial statements have been audited in accordance with accounting provisions, and the amounts planned for the year in which the tariff submitted for approval is binding.

²⁵⁾ The analysts claim that in order to be able to employ comparative approach to determine operating costs of companies when the number of companies involved does not exceed ten entities, one would need stable statistical data covering the period of at least five years.

²⁶⁾ It was only in the middle of 2007 that DSOs started operation, taking over some obligations from trade (consequently, notwithstanding functional separation from trade activity, in effect as of January 1, 2006, cost data related to their operation was valid for only 18 months), and the assets owned by operators in 2008 were not comparable to their assets of 2007, due to the fact that a substantial share of high pressure network assets had been taken over from *Gaz-System*.

A fundamental guarantee of the reliability of data for the reporting year is a data accuracy statement, subject to the sanction of imprisonment of up to three years in the case of false data submission. The sanction described above applies to individuals authorized to represent the company in front of the Regulator. Further, it is examined whether financial data presented in the tariff application for the reporting year matches respective data from company financial statement, and whether it is consistent with the data provided for the purpose of monitoring effort undertaken by the Regulator once a quarter. It is important to note that company financial statements (irrespective of company activity profile) are reviewed by a certified auditor.

The key method of the examination of planned financial data is to compare this data to reporting year information or, when in doubt, to the data pertaining to previous years. Examination of other data required for tariff calculation, such as, for example, planned volume of gas to be supplied to customers and planned volume of capacity ordered by consumers, is carried out by the way of comparison to the reporting year data side by side with last years' trends, and by taking into account forecasted conditions in those sectors of national economy which may have influence upon gas sector. Additionally, mostly in scope of tariff categories with a large number of customers (more than 100), trend analysis pertaining to the average volume of transmitted gas per one consumer and average capacity ordered per one consumer is carried out. Moreover, consistency of gas balances and ordered capacity planned by gas system operators and gas traders is verified.

Efficiency analysis is performed mostly by the comparison of unit costs (company costs versus the volume of transmitted gas, length of the network, number of reduction stations, taking into account their technical condition), share of gas dedicated to losses, and balance deficit in the total volume of transmitted gas.

Tariffs of all key gas sector companies were approved in 2009 for a period shorter than one year. *SGT EuRoPol GAZ SA* tariff, which came into force on April 1, 2009, was supposed to stay in effect – in accordance with company application – until December 31, 2009. Effective term of tariffs for *PGNiG SA*, *Gaz-System* and DSOs, which came into force on June 1, 2009, ended on March 31, 2010. Such less-than-one-year terms were conditioned by the need to adjust tariff effective term to the following time limitations:

- In the case of *EuRoPol* – capacity contracting period (January-December),
- In the case of other key companies from the gas sector – the gas year covering the period between April 1-March 31 the following year.

Tariffs of all the other companies whose applications were processed in 2009 were approved for the period of one year, starting from tariff effective date. The role of ERO President in that respect has not changed, and it consists in the following tasks:

- Within the framework of tariff approval process, to approve of such company revenues which may ensure security of supplies and improvement in the effectiveness of network operations, measured – among other things – on the basis of average time of supply interruptions resulting from breakdowns, increased capacity of the network, and a decrease in the share of gas for balance deficit purposes,
- To evaluate network operations during the process of development plan design for subsequent years, where the reasons behind the level of planned outlays to be covered by tariff revenues are analyzed in the context of network development and security of supplies,
- To require of network companies that they include in their tariff the provisions regarding rebate amounts in respect of service quality, including rebates triggered by limitation of contractual capacity and unsatisfactory customer service quality standards.

Tariffs approved by the President of the Energy Regulatory Office and published by network companies include service fee rates and underlying principles. Additionally, companies publish on their websites information pertaining to their network coverage, types of transmitted or distributed

gaseous fuels, customer service points, branches, their contact data, sample contract and application forms, gaseous fuel transmission and distribution congestion plans, Distribution Grid Code (*IRiESD*) and Transmission Grid Code (*IRiESP*.) Furthermore, DSOs publish on their websites average monthly values of quality parameters pertaining to the gas they distribute, determined on the basis of periodic gas quality measurements performed by DSOs at selected points of the network.

In 2009, gas distribution companies reported 24 registered cases of network connection refusals²⁷⁾. Average time of supply interruptions per one consumer was calculated on the basis of data provided by distribution companies (Table 4.5).

Table 4.5. Interruptions in gaseous fuel supplies

Year	Interruptions					
	Breakdowns			Outages planned due to works		
	Duration (min.)	Number of customers without supply (#)	Average time (min./cons.)	Duration (min.)	Number of customers without supply (#)	Average time (min./cons.)
2005	43 341 809.10	109 571	395.56	79 411 583.60	194 219	408.88
2006	89 518 594.80	123 361	725.66	76 721 978.40	153 386	500.19
2007	46 707 750.34	89 218	523.52	78 061 416.00	153 083	509.93
2008	110 416 057.40	104 108	1 060.62	131 395 059.60	130 673	1 005.53
2009	81 563 843.00	102 763	793.71	130 628 780.40	151 273	863.53

Source: ERO.

Storage tariff

In 2009, in connection with the fact that *PGNiG SA* was appointed as storage system operator, the company for the first time specified its storage service charges²⁸⁾.

The rates were determined assuming that *PGNiG* would render gaseous fuel storage services in storage facilities of *KPMG Mogilno*, *PMG Husów* and *PMG Wierzchowice*. Due to differences in technical profile, and especially the fact that *KPMG Mogilno* is a cavern storage facility, whereas the remaining ones are reservoir storage facilities, storage service was offered – in packages of 1 mln m³ active capacity, including adequate injection and reception capacity, different for cavern and reservoir installations, respectively – separately for the cavern storage facility and the reservoir storage facility. For tariff purposes, *PMG Husów* and *PMG Wierzchowice* have been consolidated into one installation, a virtual storage facility (*WIM*), where one can purchase additional reception capacity, and where storage services may be provided continuously or intermittently.

In line with the range of service provision, *PGNiG SA* developed three tariff groups: for those who contract storage service with *KPMG Mogilno*, and for those who contract storage service with the virtual storage facility on continuous or intermittent terms, respectively.

Total number of packages included in the offer amounts to 1 582, of which 352 packages are allocated to *KPMG Mogilno* (including 50 packages for *Gaz-System*.) Out of 1 230 packages on offer in the virtual storage facility, 905 have been allocated to production needs.

Company revenues by virtue of storage service provided are obtained through fixed charges (for active capacity reservation, for reception capacity, subscription fee), and variable charges (for injection and reception.) The rates were calculated based on the assumption of 5% share of variable

²⁷⁾ Article 7, paragraph 1, Energy Law.

²⁸⁾ They came into effect on July 1, 2009.

charges in total planned revenues from storage service provision, which reflects the structure of fixed and variable costs of storage activity.

Balancing

Balancing of gas transmission system is managed by *Gaz-System SA*, in accordance with principles set out in the Grid Code. In comparison to 2008, the details of that mechanism have not changed.

Table 4.6 presents characteristics of balancing mechanism and the charges.

Table 4.6. Balancing – description

Indicator	Description
Period	24 hours
Area	Balancing is performed within one area – at the level of national transmission system
Gate closure time	12:00 day n-1
Impact of ordered capacity volume on the limits	<i>Criterion $K_m=15\,000\text{ m}^3/\text{h}$ was adopted in order to determine the volume of permitted unbalancing limits as the sum of contractual capacity ordered by TSU at entry points</i> <i>Quantity in brackets for K_m, respectively, above and below $5\,000\text{ m}^3/\text{h}$</i> <i>Diversification of limits is supposed to help protect small market participants as well as new entrants</i>
CHARGES:	
<i>Daily unbalancing</i>	Unbalancing within the gas day (24 hours) <i>It is a gap between the quantity designated for transmission and received from the transmission system within a single gas day (24 hours.)</i> <i>There are two permitted unbalancing limits for the gas day.</i> <i>Daily Unbalancing Limit (5% and 15%)</i> <i>Maximum Daily Unbalancing Limit (15% and 45%)</i> <i>Limit values pertain to the quantity transmitted at the entry points on a given day</i> <i>Unbalancing service regarding DUL is included in transmission charge</i> <i>Exceeding DUL and MDUL, respectively, results in additional charges</i>
<i>Maximum incremental unbalanced quantity (MIUQ)</i>	<i>Incremental unbalancing is a sum of daily unbalancing over subsequent gas days</i> <i>The value of MIUQ is set for (20% / 40%) of daily average value in a given gas month, calculated on the basis of monthly quantities for a given month in Annual Nomination.</i> <i>If MIUQ is exceeded in a given month, additional incentive charge is triggered in order to secure stable system operations.</i>
<i>Fee for failing to maintain daily nomination above the limits</i>	<i>Calculated separately for each entry and exit point if the limit is exceeded by 10%</i>
<i>Fees and rebates for failing to meet quality parameters of transmitted fuel</i>	<i>Calculated separately for each entry and exit point if the gross calorific value or other quality parameters are not met</i>

Source: ERO.

4.1.3. Effective unbundling

Legal regulations pertaining to the issue of unbundling were discussed in great detail in the section devoted to the power sector. Nevertheless, it should be noted that the obligation of legal and organizational unbundling of gas sector distribution system operators functioning in a vertically

integrated company, which came into effect on July 1, 2007, does not apply to distribution system operators in the case when the number of users connected to the network does not exceed one hundred thousand, and annual sales of gaseous fuels are not greater than 100 mln m³.

From a formal standpoint, the process of DSO unbundling – legally and organizationally – was completed towards the end of 2008.

In 2007, in view of the absence of formally signed agreement with DSO and approved IRiESD, and at the same time considering the need to fully align the scope of their economic activity to the tasks performed by the operator, six companies owned by *GK PGNiG SA* obtained DSO status only until June 30, 2008.

Eventually, upon completion of the requirements referred to above, upon ERO President's decision (one designating decision and five extension decisions with regard to the period of DSO designation) issued in the second half of 2008 and at the beginning of 2009, all gas DSOs are designated DSO until the end of the term of their gaseous fuel distribution license.

Table 4.7. Unbundling description, status as of 31 December 2009

Specification	Quantity
DSO – ownership unbundling	1
DSO – ownership unbundling	0
DSO – legal unbundling, with assets (grid)	1*
DSO – legal unbundling, no assets (grid)	0
DSO – legal unbundling, with assets (grid)	6
DSO – legal unbundling, no assets (grid)	0

* TSO owns a vast majority of grid assets – almost 92%.

As of December 31, 2009, DSO assets consist of 8 637 km transmission network, 714 gas stations and all (14) compressor stations in the system, but – upon Operational Leasing Agreement concluded with *PGNiG SA* – TSO administers 1 072 km transmission network and operates 119 gas stations.

In 2009 State Treasury continued the process of transferring to *Gaz-System SA*, as contribution in kind, subsequent elements of leased transmission assets taken from *PGNiG SA* in the form of non-monetary dividend. At the end of 2009 company assets represented almost 92% of the value of all transmission assets administered by TSO.

In Poland there is gaseous fuel storage system operator – *PGNiG SA* – designated as operator on December 31, 2008.

4.2. Competition Issues [Article 25(1)(h)]

4.2.1. Description of the wholesale market

In 2009, total natural gas consumption in Poland amounted to 145.7 TWh/year, of which almost 30% came from domestic sources with total production capacity of 48.7 TWh/year. Domestic production was supplemented by import supplies, which reached almost 110 TWh/year. In comparison to 2008, total gas consumption fell by 4.3%, imports by more than 12%, and national production increased by 0.7%.

Technical capacity of Polish gas system is presented in Table 4.8.

Table 4.8. National production capacity in 2009*

Production capacity [in bln m ³ /year]	Production capacity [in mln m ³ /day]
	Natural gas
4.4	13.3

- * Production capacity was determined based on 90% maximum daily production capacity of 365 days, taking into account operational downtime of mining facilities. The difference between production capacity and natural gas production is connected with seasonal variations in the demand for nitrified natural gas in summer and winter season. At peak time in terms of demand for nitrified natural gas (significant winter temperature drops), production capacity is utilized to the maximum, and during summer season demand for that type of gas utilization is much smaller. Production capacity of the mines that extract high-methane natural gas are utilized to the maximum throughout the entire year.

Source: PGNiG SA.

Foreign supplies in 2009 included imports from Russia, the Ukraine and Central Asia countries, as well as supplies from Germany and the Czech Republic. The biggest share of imports came from Russia, within the framework of a long-term contract concluded by and between PGNiG SA and Gazprom Export. In 2009, the amount of 82 TWh was purchased under that contract, which represents 89% of entire gas supply to the territory of Poland, while the volume of natural gas transit via Polish section of 'Yamal-Europe' pipeline amounted to 277.5 TWh/year. The volume of liquefied natural gas sales has been rather modest – about 14 thousand tons.

Table 4.9. Structure of gas supplies in 2009

Specification	Quantity [in mln m ³]
Imports, of which:	9 135.9
– The 'Yamal' contract	7 474.7
Purchases within the EU / country of origin	
a) Czech Republic	0.3
b) Germany	993.7
Other imports / country of origin	
a) Ukraine	5.0
b) Turkmenistan	662.5
Domestic production	4 105.2
Gas storage (change in stock)	231.9

Source: PGNiG SA.

High level of concentration on gas wholesale market results in a very small share of active, independent market participants – their share stays at approx. 2% (Table 4.10.) By and large, those entities purchase gas from PGNiG SA.

Table 4.10. Number of major companies and their market share in 2009

Number of companies with gas market share above 5%	Share of the three biggest companies in gaseous fuel supply [in %]	Share of the three biggest trade companies [in %]	Number of foreign capital companies active on the market	Foreign capital companies market share [in %]
1	100	97.4	12	1.34

Source: ERO.

Gas trade is carried out only and exclusively on the basis of bilateral contracts. There is no gas exchange or trade in gas hubs. Gas prices do not vary depending on the fact whether the consumer will use the gas to satisfy their own needs or whether they will resell the gas – price depends on ordered capacity, treated individually for each point of delivery. Sales volume does not affect price diversification in a direct way.

100% of underground gas storage capacity is owned by PGNiG SA. Under bilateral agreement, the company makes 50 mln m³ of gas available to Gaz-System SA, in view of the fact that Gaz-System SA performs the function of transmission system operator. Remaining storage capacity has been utilized

exclusively by *PGNiG SA*, since other entities have not been interested in entering into storage agreements under available capacity procedure²⁹⁾.

In 2009, active capacity of underground gas storage facilities was equivalent to, approximately, 17.9 TWh. Storage characteristics are presented in Table 4.11.

Table 4.11. Underground gas storage

Item	Name of storage facility	Type of storage facility	Working capacity [in mln m ³]	Volume of gas withdrawn from the facility [in mln m ³]	Volume of gas injected to the facility [in mln m ³]	Minimum storage level [in mln m ³]	Maximum storage level [in mln m ³]	Level at the end of reporting period [in mln m ³]
1	Wierchowice	Depleted natural gas field	575.00	545.825	458.938	130.793	589,731	386,564
2	Brzeźnica	Depleted natural gas field	65.00	79.522	65.540	5.801	71,341	41,153
3	Strachocina	Depleted natural gas field	150.00	149.890	142.542	16.920	159,410	98,964
4	Swarzów	Depleted natural gas field	90.00	103.325	86.487	3.521	90,000	49,521
5	Husów	Depleted natural gas field	350.00	384.264	324.072	101.324	375,396	270,313
6	Mogilno	Salt cavern	370.00	267.488	195.042	232.364	375,000	302,308
7	Daszewo	Depleted natural gas field	30.00	0.381	9.206	0.000	9,206	8,825
TOTAL			1 630,00	1 530,695	1 281,827	490,723	1 670,084	1 157,648

Source: *PGNiG SA*.

Gaz-System SA regional cooperation is carried out pursuant to agreements concluded by operators, i.e. with the Ukrainian operator *Ukrtransgaz*, German operator *Ontras-VNG Gastransport GmbH*, and *Bieltransgaz* from Belarus.

4.2.2. Description of the retail market

Retail market is still a one supplier market. Apart from *PGNiG SA*, a few dozen other entities are involved in retail trade: they resell natural gas – purchased from *PGNiG SA* – to final customers, but their market share is about 2%. A vast majority of those companies sell gas via their own, local distribution networks. From the standpoint of sales volume, the following companies are the leaders: *ENESTA SA*, *G.EN. Gaz Energia SA*, *KRI SA* and *EWE energia Sp. z o.o.*

The most numerous category of *PGNiG SA* customers is composed of domestic gas consumers (households) – 97.5% of all customers. Their share in 2009 sales volume reached 28%. Industrial users had the biggest share in the volume of natural gas sales by *PGNiG SA* – equivalent to 58.2%, with nitrogen plants, refineries and petrochemical companies taking the lead. On top of that, *PGNiG SA* sells gas to *Gaz-System SA* and *PGNiG SA* distribution system operators – for internal needs and system balancing purposes. In 2009, technological demand (losses and internal consumption) of *Gaz-System SA* and *PGNiG SA* capital group distribution system operators amounted to 211.2 mln m³. Table 4.12 presents the volume and structure of gas sales to final customers.

²⁹⁾ As of July 1, 2009, *PGNiG SA* Storage System Operator (*Oddział Operator Systemu Magazynowego*) started the process of sharing storage capacity with third parties. In compliance with statutory obligation, SSO published on their website *Storage Service Rules*, together with application forms for gaseous fuel storage services and the information on the capacity of gaseous fuel storage capacity available. Yet, during the period in which interested parties could apply for gaseous fuel storage capacity – i.e. between July 1 and 31, 2009 – only one application for storage service was received, *PGNiG SA* Gas Trading (*Oddział Obrotu Gazem*).

Table 4.12. Volume and structure of gas sales to final customers

Specification	Volume	Number of customers
TOTAL	13 284.0	6 592 755
1. Wholesale customers*, of which	222.0	71
within the CG PGNiG SA	0.0	0
outside the CG PGNiG SA	222.0	65
2. TSO – (Gaz-System SA)	84.5	17
3. DSOs	126.8	13
4. Export	38.9	1
5. End users – industry, of which	7 735.4	39 278
Fertilizer plants	2 017.0	20
CHPs	1 039.0	296
Heat stations	288.2	1 732
Other small customers (up to 1 mln m ³ /year consumption)	831.9	36 675
Other mid-size customers (consumption above 1 mln m ³ and up to 25 mln m ³ /year)	1 919.5	534
Other large customers (consumption above 25 mln m ³ /year)	1 639.8	21
6. End users – commerce and services, of which	1 352.1	147 152
Small customers (up to 1 mln m ³ /year consumption)	1 217.3	147 093
Mid-size customers (consumption above 1 mln m ³ and up to 25 mln m ³ /year)	134.8	59
Large customers (consumption above 25 mln m ³ /year)	0.0	0
7. Households	3 724.3	6 406 229

* Customers who purchase gas for resale.

Source: PGNiG SA.

Solution based on the integration of retail trade together with continued production and exploration activity within PGNiG SA actually means that the *status quo* is preserved, and the dominant company can gain unfair advantage. Thus, it would be difficult to speak about real supplier switch opportunities. Formally, a consumer may switch gaseous fuel supplier twice a year, and supplier switch procedure is free of charge.

Under present-day gas market structure, types of contract between PGNiG SA and final customers are also pre-determined. Consequently, one can observe mostly the so-called ‘common service agreements’, which include provisions pertaining to sales, transmission and distribution, and storage service contracts. Common service agreements define, among other things, obligations of gaseous fuel suppliers and consumers, billing methodology and the procedure for filing financial complaints. Small users receive standard terms of contract. Only in the contracts with large consumers there are negotiated provisions. The charges for all users of gaseous fuel supply, as well as transmission and distribution services, are based on prices and rates relevant for particular tariff categories, included in approved gaseous fuel tariffs. Typically, common service agreements are long-term contracts with a three-year notice period.

Gaseous fuel prices

In 2009, the price of gas fuel on retail market was modified once. The change took place on June 1, 2009, and brought about a decrease in the price of gaseous fuels as a commodity and an increase in fuel delivery charges, which cover the cost of gas transportation via operators’ networks and the cost of storage. On a national scale, taking into account supplies to consumers connected to both transmission and distribution networks, there was a decrease in the average price of high methane gas supplies, equivalent to 3.3%. A decrease in average supply price was smaller for users connected to distribution networks (1.7%), and higher in the case of users connected to transmission network (6.8%).

Customer complaints and enquiries

Consumer complaints and enquiries – as described in the tables below – brought to the attention of ERO President by regular mail, e-mail, telephone, fax, or during personal appointments are processed by relevant ERO organizational units, including local branches and the Spokesman for Fuel and Energy Customers.

Cases put forward by gas consumers are processed in the same way as those coming from energy consumers. A more detailed discussion to the point can be found in the section dedicated to electricity (3.2.2.).

Tables 4.13 and 4.14 present detailed specification of cases, together with underlying causes.

Table 4.13. Complaints

Specification	Number of cases
Price	18
Metering systems and installations	9
Customer service	9
Commercial practices	0
Misleading advertising	0
Terms of contract	25
Billing	18
Supplier switch issues	1
Supply issues related to payments, e.g. disconnection	11
Supply issues related to technical problems	5
Connection refusal	31
Other	25
Total	152

Source: ERO.

Table 4.14. Enquiries

Specification	Number of cases
Price	60
Metering systems and installations	22
Customer service	33
Commercial practices	0
Misleading advertising	0
Terms of contract	41
Billing	119
Supplier switch issues	6
Supply issues related to payments, e.g. disconnection	17
Supply issues related to technical problems	2
Connection refusal	7
Other	103
Total	410

Source: ERO.

Looking at the specification of complaints and enquiries, there is a significant number of cases under the heading of 'Price' and 'Billing'. This can be accounted for by persistent, relatively high level of ambiguity in gas bills, due to complex charge components. Another quite numerous item, 'Other', includes for example cases such as illegal gas consumption, companies taking advantage of someone else's property to install electric power equipment there, gas companies failing to comply with the deadlines included in connection agreements signed. At the same time, the number of gas network connection refusals has been declining, which is a consequence of distribution network development investments. 'Customer service' item includes poor quality of customer service as well as non-compliance with quality parameters of supplied gas. Compared to 2008, there has been substantial improvement in that regard; the aggregate number of 'Complaints' has gone down, which is a result of customer service improvement policy implemented by dominant market player, *GK PGNiG SA*.

4.2.3. Measures to avoid abuse of dominance on the market

Supervision over the market and market players is performed by the President of Energy Regulatory Office, President of the Office for Competition and Consumer protection, Minister of the Economy, and other institutions, within their respective mandates (such as, for example, Polish Financial Supervision Authority, *KNF*³⁰). Cooperation between the President of the ERO and the President of the OCCP consists in notifying one another of reported issues, in accordance with their respective scope of competence, reporting law violations, again in accordance with the scope of competence of each office, sharing information and expertise.

Pursuant to Council Regulation (EC) No 1/2003 of 16 December 2002 on the implementation of the rules on competition laid down in Articles 81 and 82 of the Treaty (Regulation 1/2003), the Commission may, in accordance with Article 7, in the case of violation of the above-said provisions, apply behavioral or structural remedies in companies. Analogical prerogative has not been brought into Polish legal system with regard to the President of the ERO or the President of the OCCP. Consequently, neither of those institutions may apply such measures with respect to energy companies which operate unlawfully.

PGNiG SA is a public company, listed on Warsaw Stock Exchange. Consequently, the company has to meet certain disclosure requirements to comply with the laws that regulate financial market, i.e. an obligation to publish periodic company statements (quarterly, semi-annual and annual) with the report on company activity, and financial results. Moreover, *PGNiG SA* is obliged to immediately publish its current reports, which should include production-related data. Supervision over compliance with disclosure requirements by all public companies is performed by Polish Financial Supervision Authority. *PGNiG SA*, as a listed company, follows the principles set forth in the 'Code of Good Practice for Warsaw Stock Exchange Joint Stock Companies' (*Kodeks Dobrych Praktyk Spółek Notowanych na Giełdzie Papierów Wartościowych SA w Warszawie*), and thus it has published on its website the 'Corporate Governance Compliance Declaration' (*Oświadczenie o przestrzeganiu zasad ładu korporacyjnego*).

In view of an almost 100% share of *PGNiG SA* in domestic production subsector, and taking into account the character of contracts concluded with *Gazprom*, gas availability for non-incumbent companies or new entrants is very much limited. In practical terms, there have been no SWAP transactions, either. Furthermore, Poland has had no experience as regards the implementation of 'long-term contracts gas release program'. Neither the President of the Energy Regulatory Office nor the President of the Office for Competition and Consumer Protection have the mandate to impose such measures upon any energy company by the way of administrative decision.

Suppliers who do not belong to the Capital Group of the dominant gas supplier in Poland, *PGNiG SA* (whose retail market share is about 98%), sell natural gas only and exclusively via their own distribution networks and do not resell gas to other consumers on the basis of TPA rule. In an overwhelming majority of cases, those companies purchase gas from *PGNiG SA*. In turn, *PGNiG SA* does not have an offer targeted at consumers located at the networks owned by those entrepreneurs. Consequently, despite the formal implementation of pro-competition provisions, at present the actual gas supplier switch could not be performed.

Within the framework of project financed from Transition Facility PL2006/018-180.02.04 – 'Implementation of Competitive Energy Market' – in 2009 ERO prepared 'Best Practices for Gaseous Fuel Suppliers and Distribution System Operators'. Currently, the document is going through a second round of consultations. When the consultations are over, 'Best Practices' will be recommended by ERO

³⁰ In Poland gas is sold under bilateral agreements, it is not sold on any commodity exchange, and no derivative instruments are structured on gas price; Polish Financial Supervision Authority (KNF) is competent for the oversight of issues related to *PGNiG SA* stock trading, but not with regard to gas trade. If the status of gas market in Poland is altered and gas trade is carried out on a commodity exchange or commodity trade platform, and there are derivative instruments based on gas price or other gas-related indicators, KNF will perform statutory oversight over those transactions.

President for use by energy companies working on their 'Best Practices Codes'. 'Contract templates' will be drafted in a similar manner.

'Poland's Energy Policy until 2030', approved by the Council of Ministers in November 2009 as a strategic document at a country level, lays down the following objective, among many others: changing regulatory mechanisms supporting competition on gas market and introducing market-based methods for gas price development. As a result, ERO President intends to prepare in 2010 a 'Road Map' with proposed action steps aiming at market liberalization and effective competition in the gas sector.

The President of the Energy Regulatory Office has statutory obligation to cooperate with relevant institutions in scope of counteracting anti-competition practices of energy companies. In 2009 ERO President submitted to the President of OCCP the information obtained from system users, with a request to get involved in the issue of contract update provisions proposed by *PGNiG SA*. User reservations were mostly connected with the length of contract termination period, sanctions in the case when the amount of delivered gaseous fuel is smaller or greater than previously specified, and the level of security the establishment of which will increase production costs and thus make the company uncompetitive on European or global market. Another frequent issue was the lack of real possibility to negotiate particular draft contract clauses in view of barriers to exercise the right to freedom of contract and equality of parties to the contract, which should be the basis for cooperation between entities.

In 2009 OCCP President conducted one proceeding in the field of anti-competition practices on natural gas market.

The proceeding was connected with the practice that consists in abuse of dominance on gaseous fuel distribution regional market covering south-western part of Poland (Dolnośląskie and Lubuskie regions) by *Dolnośląska Spółka Gazownictwa Sp. z o.o.* by imposing a declaration in gas network connection agreements whereby future gas consumers applying for the above-said connection were obliged to pay an advance payment by virtue of connection charge in the amount equivalent to 100% charge amount, which represents a burdensome condition in gas network connection agreement bringing unfair benefits to the company operating under DSG company; OCCP President determined that such practice had been discontinued on May 21, 2008. The practice was temporary in nature, since as of May 21, 2008, DSG collects the charge only upon terminal line completion. OCCP President fined DSG for abuse of dominance in the amount of PLN 178 647.47. The decision is not final.

In the circumstances of that case, the burdensome nature of gas network connection agreement with the requirement of advance payment by virtue of connection charge equivalent to 100% charge amount is indisputable, because the average time needed for DSG terminal line completion was 258 days (i.e. more than 8 months), and almost 20% of terminal lines installed by the company took more than 400 days to complete. Advance payments collected by DSG in the amount of 100% value of connection charge were in fact interest-free loans extended to the company by future gas consumers.

In 2009 OCCP President did not process any merger cases involving companies operating on natural gas market.

5. SECURITY OF SUPPLIES

In a document entitled: 'Poland's Energy Policy until 2030' (*'Polityka energetyczna Polski do 2030 roku'*), security of supply was defined as securing stable fuel and electricity supply at the level which guarantees that national needs will be met, and at a price acceptable to the economy and general public, assuming maximum utilization of domestic resources of energy material and diversification of sources and supply directions of oil as well as liquid and gaseous fuels.

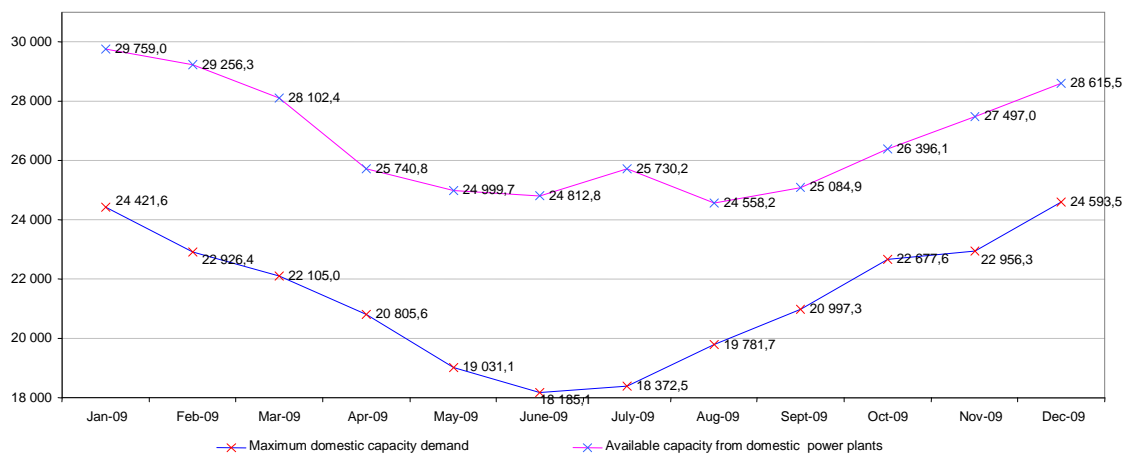
Energy security is affected by many different factors. The significance of those factors from the standpoint of electricity and fuel demand-supply balance depends on both internal circumstances observed within the country, and on global market situation. Important factors include diversification of the mix of energy carriers that contribute to national balance, the level of diversification of supply sources, technical condition and efficiency of equipment and systems used for transmission and distribution of fuels and energy.

For obvious reasons, all these elements are subject to extensive monitoring effort with regard to the security of electricity and gas supply, leading to appropriate regulatory measures. Monitoring the security of electricity and gas supplies is among the tasks performed by the President of the Energy Regulatory Office.

5.1. Electricity [Article 4]

First and foremost, energy security depends on the fact whether peak demand for electricity and related capacity can be met, and on present-day and future structure of fuel consumption in the process of electricity generation. In the monitoring process dedicated to security of supplies, special focus was put on the verification of the following aspects: generation adequacy (sufficiency), system operational security, and availability of equipment. In 2009, analogically to previous year, the amount of installed capacity remained at a relatively high level, exceeding 35 GW. In 2009, the status of available capacity in relation to capacity demand was stable (Fig. 5.1.).

Figure 5.1. Available capacity of domestic power stations and maximum domestic capacity demand at evening peak capacity demand in average values from business days in a month



Source: PSE Operator SA.

There was sufficient surplus of capacity in the National Electricity System to safely satisfy the demand. From that standpoint, it is important to analyze the structure of capacity surplus, as well as

the losses caused by faulty generation units. In 2009 capacity reserve went up – year to year – by about 30% in comparison to the last year. Particularly high increase in capacity reserves was observed in thermal sources. Furthermore, there has been improvement in capacity losses caused by faulty generation units – improvement rate was approximately 18%.

Table 5.1 illustrates the status of total capacity, taking into account technological structure in particular segments of the power system.

Table 5.1. Available capacity status as of the end of the year

Specification	December		Dynamics index [in %]
	2008	2009	
	[in MW]		
Public plants *	33 022.8	33 075.2	100.16
hard coal	20 828.8	20 920.6	100.44
lignite	9 053.0	9 013.0	99.56
gas	874.3	874.3	100.00
water:	2 260.5	2 261.0	100.02
pumped storage**	1 406.0	1 406.0	100.00
river power station	854.5	855.0	100.06
Electricity selfproducers	1 644.5	1 691.8	102.87
hard coal	1 551.3	1 573.3	101.42
gas	60.5	83.9	138.62
biogas	1.2	1.2	100.00
biomass	31.5	33.4	106.03
water	0.0	0.0	0.00
Remaining, independent power plants	678.7	870.9	128.32
water	78.3	80.9	103.42
wind	544.2	720.4	132.38
biogas	45.6	54.6	119.92
biomass	10.6	14.8	139.85
Total	35 346.0	35 637.8	100.83

* Public power plants and independent thermal plants.

** Pumped storage power stations include the following facilities: Żar, Żarnowiec, Żydowo.

Source: Energy Market Agency (Agencja Rynku Energii SA.)

The level of generation capacity installed in the system is expected to reach, according to the Ministry of Economy³¹⁾, 36 684 MW in 2010 and 38 973 MW in 2015. Considering TSO forecasts in scope of demand for capacity (Table 5.2) and electric power (Table 5.3) in the National Electricity System, it can be concluded that over the next four to five years the level of generation capacity available in Poland will be sufficient to fully secure electric power supply, at least during normal NES operation. In the long term, however, it is hard to predict the course of development of new generation sources as it is affected by a number of economic, social and political factors which are difficult to forecast. Still, it appears that subsequent cabinets have consistently taken steps to ensure positive climate for investments in new generation capacity.

³¹⁾ Poland's Energy Policy until 2030 – resolution of the Council of Ministers No 202/2009 of November 10, 2009.

Table 5.2. Peak demand in the years 2009 -2014

Year	Peak demand [in GW]
2009	24 593
2010*	26 150
2011*	26 578
2012*	27 013
2013*	27 456
2014*	27 906

* Forecast.

Source: PSE Operator SA.

Table 5.3. NES electricity demand

	Year					
	2009	2010*	2011*	2012*	2013*	2014*
Electricity [in TWh]	148.7	159.9	162.8	165.7	168.5	171.2

* Forecast.

Source: PSE Operator SA.

Investments in new network infrastructure

An important factor in the security of electricity supply is the amount of power grid capacity and grid technical condition. In that light, investments carried out by transmission system operator gain particular significance. Investment effort initiated by TSO in scope of national transmission network is two-fold: its purpose is to ensure security of electricity supply and to promote free trade in electricity, including trade on the common market (interconnectors.) Investment decisions are made by the TSO on the basis of periodic analyses and assessment of technical criteria, mainly related to the reliability and quality of supply, as well as the evaluation of effectiveness of projects under design.

Long-term investment tasks are included in the development plan of national transmission network. The Table below presents a list of investment projects in scope of construction and development of stations and power lines included in TSO development plan for 2010-2025, agreed with the President of the Energy Regulatory Office for 2010.

Table 5.4. Types of TSO investment tasks and project timelines

Item	Project name	Investment kick-off/completion year	Comments
1	Construction of 400 kV substation in <i>Pątnów</i> station	2008/2010	Project completion date is moved forward due to extension in project scope
2	400 kV and 220 kV network coupling in <i>Byczyna</i> station	2006/2012	Work in progress
3	Construction of 400 kV line from <i>Ostrów</i> station to <i>Rogowiec-Trębaczew</i> line	2004/2008	Completed
4	Construction of 400 kV line in <i>Pasikowice-Świebodzice</i> section	2006/2012	Project completion date is moved forward since implementation schedule was updated
5	Construction of 400 kV <i>Kromolice-Pątnów</i> line	2006/2011	Project completion date is moved forward since implementation schedule was updated

6	Construction of 400 kV substation in <i>Morzyczyn</i> station	2006/2011	Project completion date is moved forward since implementation schedule was updated
7	Development and modernization of 220/110 kV <i>Lubocza</i> station	2009/2012	Investment preparation phase
8	Construction of 220 kV line in <i>Glinki-Reclaw-Morzyczyn</i> section	2008/2013	Investment preparation phase
9	Installation of ATR 400/110 kV in <i>Krajnik</i> station	2010/2010	Project completed
10	Construction of 400 kV line in <i>Pątnów-Grudziądz</i> section	2008/2015	Investment preparation phase
11	Installation of additional ATR NN/110 in National Transmission Network	2006/2009	-
12	Development and modernization of <i>Lagisza</i> node	2007/2010	Project completion date is moved forward since implementation schedule was updated
13	Program for the construction of voltage level regulation systems in transmission network	2007/2010	Work in progress
14	Construction of 400/220/110 kV <i>Ołtarzew</i> station	2009/2013	Investment preparation phase
15	Construction of 400 kV line from 400/110 kV <i>Czarna</i> station to 220/110 kV <i>Polkowice</i> station	2009/2015	Investment preparation phase
16	Development and modernization of <i>Moszczenica</i> station	2008/2010	Work in progress
17	Installation of 400/110 kV transformer in <i>Płock</i> station	2009/2011	Project completion date is moved forward since implementation schedule was updated
18	Transmission network operation remote control and supervision system	2004/2011	Work in progress

Source: TSO draft development plan.

In the short term, investments pursued by *PSE Operator SA* are based on annual capital investment plans. *PSE Operator SA* 2009 capital investment plan was adopted with the resolution of *PSE Operator SA* Management Board No 658/96/2008, dated December 11, 2008, and approved with the resolution of *PSE Operator* Supervisory Board No 94/II/2008, dated December 22, 2008. According to *PSE Operator SA* 2009 capital investment plan, investment outlays are equivalent to PLN 837.4 mln. Execution was at the level of PLN 744.1 mln, i.e. 88.9% of planned outlays.

In compliance with statutory requirements, *PSE Operator SA* drafts development plans in scope of current and future electric power demand. Development plans encompass long-term company objectives with regard to necessary development of national transmission grid and cross-border interconnectors. In 2009 a document entitled: 'Development Plan for Current and Future Electricity Demand for 2010-2025' was prepared and submitted to the President of the ERO for further processing. This draft document presents investment needs pertaining to the development of cross-border interconnectors and necessary development of domestic transmission infrastructure, together with a discussion of their impact on long-term cross-border transmission capacity to and from the Polish system. Draft development plan has been agreed by the President of the ERO in December 2009. Information included in the plan was also presented in the 'Summary Development Plan for 2010-2025', submitted to the President of the ERO in March 2010 and drafted in connection with the

motion to the President of the ERO regarding development plan disclosure by power system operators. Information pertaining to long-term projections of cross-border exchange capacity between Polish system and adjacent systems are regularly presented and published in the 'System Adequacy Forecast' report prepared by the organization of European transmission system operators ENTSO-E, where *PSE Operator SA* is a member.

In 2009 the following investment tasks of high significance for NES performance and impact on increasing transmission capacity, including interconnector capacity, were being implemented:

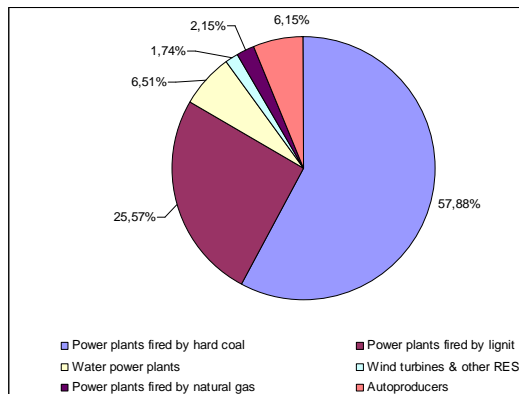
- 1) As regards connecting new generation capacity to transmission network:
 - 'Connecting a new 400 kV unit to NES in Łagisza power station' – task related to connecting to the transmission network a 460 MW unit in Łagisza power station,
 - 'Development of 400/110 kV *Trębaczew* station' – task related to connecting to the transmission network a 833 MW unit in *Bełchatów* power station,
 - 'Development and modernization of 220/110 kV *Moszczenica* station' – task related to the reconstruction of *Vattenfall Distribution Poland SA* terminal line,
 - 'Connecting *STORA ENSO POLAND SA* to 220/110 kV *Ostrołęka* station'.

Of the tasks referred to above, in 2009 one investment task – connecting a new 400 kV unit in *Łagisza* power station to transmission network – was completed;
- 2) As regards preparation of new investment tasks encompassing works on the following investment tasks:
 - 'Connecting to transmission network a 480 MW unit in *EC Siekierki* heat and power plant, together with the construction of 220 kV substation and 220/110 kV transformer station in *EC Siekierki*, and construction of 220 kV *Piaseczno – EC Siekierki* line',
 - 'Connecting *Kukowo-Dargoleza* wind farm to the national transmission system',
 - 'Connecting *Margonin* wind farm",
 - 'Connecting unit no 11 in *Kozienice* power plant to transmission network',
 - 'Connecting 110/15 kV transformer stations to 110 kV substation in *Plewiska* station';
- 3) Moreover, in 2009 the following investment tasks connected with transmission capacity extensions were carried out:
 - Construction of 400 kV line from *SE Ostrów* to *Rogowiec-Trębaczew* line,
 - Construction of 400 kV *Rokitnica-Łagisza* line,
 - Construction of 400/110 kV *Ostrów* station – phase 2,
 - Development and modernization of 220/110 kV *Łagisza* station, including construction of 400 kV substation, installation of ATR 400/220 kV 500 MVA and ATR 400/110 kV 330 MVA,
 - Installation of another ATR 400/220 kV in *SE Krajnik*,
 - Installation of additional ATR in SE 220/110 *Bieruń*,
 - Installation of capacitors directly connected to 110 kV (220 kV) rails of electric power substations in the following stations: *Mory, Plewiska, Narew, Włocławek Azoty, Toruń Elana*.

Investments in new generation capacity

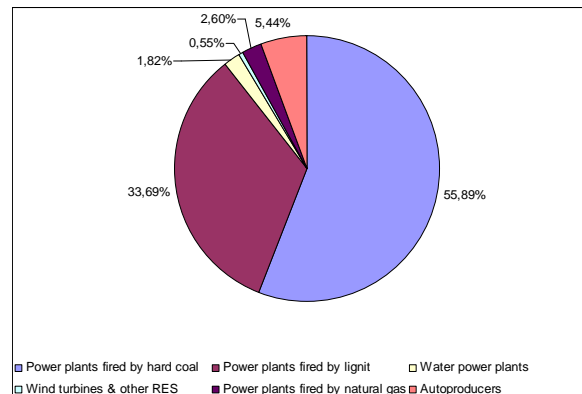
Electricity generation has been based mainly on hard coal and on lignite, and those fuels should remain major energy carriers utilized for the purpose of electricity generation in the future. *Status quo* is described in Figures 5.2 and 5.3.

Figure 5.2. Percentage structure of National Electricity System total capacity, status as of 31.12.2009



Source: PSE Operator SA.

Figure 5.3. Structure of domestic generation of electricity in individual groups of power plants, in the breakdown according to types of fuel in 2009 r.



Source: PSE Operator SA.

Tables 5.5 and 5.6 present the structure of capacity installed in the power sector (without renewable energy sources) from the standpoint of generation technology (fuel), in the breakdown according to capacity released for and withdrawn from operation in 2009.

Table 5.5. Installed capacity released for operation in 2009

Installed capacity released for operation	[MW]
coal/oil	12.7
gas	17.4
other	1.9
Total	32.0

Source: ERO, on the basis of data provided by Energy Market Agency (ARE SA).

Table 5.6. Installed capacity withdrawn from operation in 2009

Installed capacity withdrawn from operation	[MW]
coal/oil	-75.9
gas	-4.7
other	0.0
Total	-80.6

Source: ERO, on the basis of data provided by Energy Market Agency (ARE SA).

Introduction of nuclear energy represents a new direction of development in Poland. Apart from the advantage of no CO₂ emissions, nuclear energy will help fill up energy balance and gain independence from typical energy sources, and thus it will help improve country energy security. According to the objectives set out in the draft of 'Poland's Energy Policy until 2030', gross electricity generation capacity [MW] from atom sources will reach the following values: 1 600 MW in 2020, 3 200 MW in 2025, and 4 800 MW in 2030.

Regulatory determinants of new generation unit launch, including renewable energy sources and CHP

The President of the Energy Regulatory Office issues energy generation license (license commitment letter), which contains a requirement to report modifications regarding the scope and terms of economic activity, which in turn results in a license change.

In 2009, the President of the Energy Regulatory Office issued 102 licenses for electricity generation, including 93 licenses for generation from renewable sources, and made 176 license modifications (of which 108 were RES-related.) License modifications were caused by the following, by and large:

- extension or limitation in the scope of activity,
- change in the name or domicile of license holder,
- change in the terms of operation,
- extension of license term, pursuant to Article 39, Energy Law.

Under Energy Law, any energy company which generates electricity from renewable sources or in cogeneration, irrespective of capacity installed, has to apply to the President of the Energy Regulatory Office for a license required for such economic activity. With the purpose to make it easier for companies to launch energy generation economic activity, the information helpful in the licensing process is published on ERO website.

Besides that, ERO website contains numerous memos and announcements to remind energy companies of their obligations, and to clarify any doubts as to how those obligations should be met. Moreover, the website contains sample certificate of origin applications and cogeneration certificate of origin applications, side by side with the guidelines as to what attachments are required together with the application to obtain certificates of origin (RES) and cogeneration certificates of origin (CHP).

Within the framework of Transition Facility 2006/018-180.02.04: 'Implementation of Competitive Energy Market', co-financed from Polish and European Union resources, a project called 'Design and dissemination of regulatory tools and procedures applied with regard to the sector of renewable energy sources and electric power produced in cogeneration' was carried out in ERO. The goal is to provide better access to 'statistical' knowledge on renewable energy sources situated in the territory of Poland, to be achieved by designing and placing on ERO website an interactive map of Poland featuring installations generating electricity from renewable sources. The map provides quick access to data regarding the type and capacity of sources in the area, in the breakdown according to regions (voivodships) and counties (poviats.) The map was designed with the option to produce summary tables specifying capacity installed in licensed RES installations, among other things.

In 2009, the level of new capacity installed in renewable sources increased by about 315 MW, compared to 2008. The biggest increase was observed in wind farms.

Table 5.7. Capacity installed in renewable energy sources

RES type	2008	2009
	Installed capacity [in MW]	Installed capacity [in MW]
Biogas plants	54.615	70.888
Biomass plants	231.990	252.490
Solar plants	0.000	0.001
Wind farms	451.090	724.657
Water power stations (including pumped storage)	940.576	945.210
Total	1 678.271	1 993.246

Source: ERO.

Currently in Poland there are no formal mechanisms supporting the construction of new generation capacity which would serve as incentives to foster investment decisions. One exception is the preferential principles for connecting renewable energy sources and CHP units with installed capacity below 1 MW, whereby only half of the connection fee determined on the basis of actual cost is required, and 50% of investments outlays is covered by the DSO or TSO. Other generators have to pay the fee calculated on the basis of 100% outlays on connection investment.

The number of NES interconnectors with adjacent power systems has not changed, relative to status as of the end of 2008. It should also be noted that in 2009 there were no limitations in transmission capacity offered within the framework of cross-border interconnector exchange due to lack of capacity or network breakdowns.

In 2009, cross-border exchange with third countries was carried out on the interconnector with the Ukraine, and it amounted to 199.5 GWh. This volume applies to electricity imports and includes the supply via 220 kV *Zamość – Dobrotwór* lines. It was substantially decreased in comparison to 2008. The main reason is an imperfect condition of interconnectors with third countries. Cross-border interconnectors with third countries are not made available to market participants on a market basis, and the volume of electricity imports from the third countries represented a marginal share in total gross domestic electricity consumption. Given the small scale of electricity imports from third countries, it has limited social and environmental impact.

Conclusions

The analysis of end user electricity supply security status has shown that there was an improvement in the level of generation capacity versus generation capacity demand in 2009, in comparison to 2008. Network breakdowns observed in 2009, caused by extreme weather conditions, have highlighted the need to revise procedures related to the maintenance and monitoring of technical condition of grid assets. The amendment to the Energy Law which allows the President of the ERO to influence the contents of all *IRiESP* sections, as well as distribution ones, will present an excellent opportunity to address these issues.

Speaking about adequacy of generation system in relation to capacity and electricity demand, it should also be remembered that the relationship between capacity and electricity supply and demand has improved, *inter alia*, in consequence of economic crisis that started towards the end of 2007. All through 2007 NES was struggling with shortage of generation capacity. Paradoxically, economic crisis has improved the security of NES performance and 'bought' some precious time needed to develop new capacity. At present, future security of electricity supplies is first and foremost dependent on the determination of political decision-makers, with the Minister of Economy taking the lead, in disciplining electric power sector to achieve the objectives presented in the government document entitled 'Poland's Energy Policy until 2030', and on government fulfilling the promises to make legislative changes targeted at simplifying the implementation of infrastructure investments in the power sector.

5.2. Gas [Article 5] and 2004/67/EC [Article 5]

Gas consumption forecast³²⁾

In 2009, total natural gas consumption in Poland was equivalent to 13 284 mln m³ (13.9 Mtoe.) It is forecasted that in the coming years the role of natural gas in Poland's energy balance will grow, considering its use for the purpose of electricity generation, expected development of high performance sources in combined cycle technology, and in view of gradual increase in end user gas consumption. Table 5.8 illustrates gas demand forecast by 2019.

³²⁾ Facts and figures presented in Section 5.2 are presented according to standard conditions in compliance with the methodology applied by EU member states, i.e. for temp.=15°C, dry gas with vapor fraction moisture < 0,001 and pressure of 101.325 kPa, converted into heat of combustion of 39.5 MJ/m³ (except for 'Storage capacity' subsection').

Table 5.8. Natural gas demand forecast for 2010-2019

Year	Natural gas demand forecast	
	[mld m ³]	[MToe]
2010	15.27	14.58
2015	18.37	17.55
2019	18.44	17.62

Source: PGNiG SA.

In 2009, *Gaz-System* provided operator service by transmitting, respectively: 12.507 bln m³ of high-methane gas and 1.227 bln m³ of nitrified gas volume.

Table 5.9 presents TSO forecast regarding the increase in the volume of transmitted gas in the years 2010-2019³³⁾.

Table 5.9. Forecast of growth in the volume of transmitted gas in 2010-2019

High methane natural gas

	Year	[MToe]	[mld m ³]
Volume of transmitted gas (actual)	2009	11.949	12.507
	2010	12.062	12.626
Expected demand levels (forecast)	2011	13.665	14.303
	2012	14.309	14.978
	2019	19.681	20.600

Nitrified natural gas

	Rok	[MToe]	[mld m ³]
Volume of transmitted gas (actual)	2009	1.172	1.227
	2010	0.947	0.991
Expected demand levels (forecast)	2011	0.968	1.013
	2012	1.028	1.076
	2019	1.108	1.160

Source: *Gaz-System SA*.

According to TSO, projected increase in the volume of gaseous fuel supplied may be related to the continuous process of making new user connections to distribution networks, mostly small business customers, and large industrial consumer connections to transmission network. By the end of 2014, expected increase in the transmission of gaseous fuel in the system will be covered mostly by means of supplies from already existing gas import „entry” points.

Resources, domestic production, imports

At present, documented domestic resources of recoverable natural gas amount to, in terms of high-methane gas, approximately 101.2 bln m³, 60% of which is located in the Polish Lowlands (*Niż Polski*), and the remainder in the vicinity of the Carpathians³⁴⁾. This represents about 0.2% of documented European gas deposits, estimated at 54 bln m³. In other words, assuming present-day level of natural gas production, domestic resources will suffice for about 25-30 years.

In 2009, domestic production amounted to about 4,1 bln m³ of natural gas (approx. 29 mln boe), which represents about 30% of its annual consumption. Supplementary supply was secured by PGNiG

³³⁾ The volume of gaseous fuel transmitted in 2009, as well as the forecast for subsequent years, do not include gas volumes transmitted to and from underground gas storage facilities. Expected volumes were presented in accordance with the forecast made in respect of TSO development plan for 2009-2014. Division was made in proportion to the flows observed in 2009. According to the development plan, by the end of September 2009, transmission of gaseous fuel from „Ls” subgroup was replaced with the transmission of gaseous fuel from the „E” subgroup.

³⁴⁾ The forecast does not take into account the so-called unconventional gas (shale gas, tight gas). Confirmed data on unconventional gas resources will be available after thorough research into this field, i.e. in about 4 years from now.

SA by gas imports of 9.635 bln m³, within the framework of agreements and contracts referred to below, i.e. the long-term import contract with Russia and three mid-term supply contracts with Germany and Central Asia countries, respectively:

- Long-term contract for Russian gas supply with *OOO Gazprom Eksprom*, effective until 31 December 2022. In 2009, annual contractual volume reached 7 884.3 mln m³,
- Gas import agreement concluded with *VNG-Verbundnetz Gas AG*, effective until 1 October 2016. Over the first two years, supply amounted to 527.4 mln m³ a year, and as of 1 October 2008 gas supply volume is equivalent to 422 mln m³ a year.

Furthermore, within the framework of local supply for Hrubieszów area, *PGNiG SA* has imported gas under the long-term agreement concluded on 26 October 2004 with *NAK Naftogaz Ukrainy*, effective until 2020.

The other major gas importer, *EWE energia Sp. z o.o.*, in 2009 imported from Germany approx. 35.65 mln m³ of gas under the terms of agreement signed with *EWE AG*.

Gas production prospects

In accordance with the document entitled 'Poland's Energy Policy until 2030', adopted by the Council of Ministers at the end of 2009, implementation of investments leading to increased natural gas extraction in the territory of Poland is one of key objectives pertaining to natural gas area.

As of December 31, 2009, there were 225 gas prospecting, exploration and extraction licenses in force in Poland. *PGNiG SA* and *Petrobaltic SA* are two leading companies involved in natural gas and petroleum prospecting and extraction in Poland. *PGNiG SA* holds 82 licenses for prospecting and exploration of hydrocarbons in Poland. Additionally, there are several dozen other companies, domestic as well as foreign, involved in prospecting and extraction activity in Poland, such as, for example: *FX Energy*, *Maraton Oil Corporation*, *ExxonMobil*, *RWE Dea*, *DVP*, *Chevron*, *Energia Karpaty*.

With the purpose to satisfy gas demand, prospecting activity targeted at gas extraction from the so-called unconventional resources was intensified in Poland as well. Considering increasing number of prospecting licenses (44) issued by the Minister of Environment in 2009, it is possible that in a few years from now recoverable deposits of unconventional gas, i.e. shale gas and tight gas, will be estimated and confirmed and, in consequence, gas production will go up.

In 2009 *PGNiG SA* followed the strategy adopted in 2008, according to which domestic gas extraction will increase to the level of 6.54 mld m³ a year in 2015, including 1.58 mld m³ of foreign extraction.

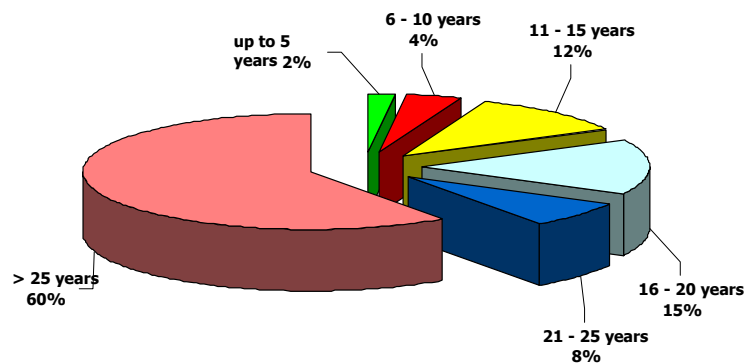
In 2009, natural gas production was equal to 4.11 mld m³, in terms of high-methane gas (E). Compared to the forecast, with production projected at 4.535 mld m³, this was a decrease by 0.211 mld m³. Such production decrease vis-à-vis the forecast in 2009 was caused by the delayed launch of 'Grodzisk' de-nitrification station, as well as technical issues during technological start-up of this installation, smaller demand for nitrified natural gas, which determines the volume of production from deposits, and an investment delay at one of nitrified natural gas deposits. Despite that, *PGNiG SA* developed several natural gas deposits. Seventeen wells were put into operation. Total increase in natural gas extraction capacity amounted to, approximately, 1.371 mln m³/d. New wells were put into operation in connection with the launch of the following deposits: *Łukowa*, *Chałupki Dębniańskie*, *Pilzno* and *Wołyń*, as well as *Nowy Tomyśl*, *Kalej*, *Roszków*, *Radlin* and *Wysocko Małe*.

At the same time, the company estimates, based on the analysis of past and planned mining operation, that in 2010 and 2011 gas production will reach, respectively, about 4.535 mld m³.

Infrastructure and planned investments increasing the security of natural gas supply (source diversification)

Transmission infrastructure is of key importance for the security of natural gas supply. In 2009 there were no major objections regarding transmission system operation, despite its unfavorable age structure (Figure 5.4.) It should be remembered that substantial exploitation of pipelines may pose a threat to the continuity of supply in the future or generate high operational costs and create a barrier to modern transmission grid management. Almost 60% of pipelines have been operated for more 25 years and large financial outlays are required for their maintenance and restoration. In spite of investment efforts, pipelines built nowadays will not be sufficient to make up for ageing transmission network. Notwithstanding the fact that in recent years some of the ancillary equipment in gas compressor stations was renovated, replaced or upgraded, technical condition of some facilities requires further substantial modernization effort.

Figure 5.4. Age structure of gas transmission pipelines

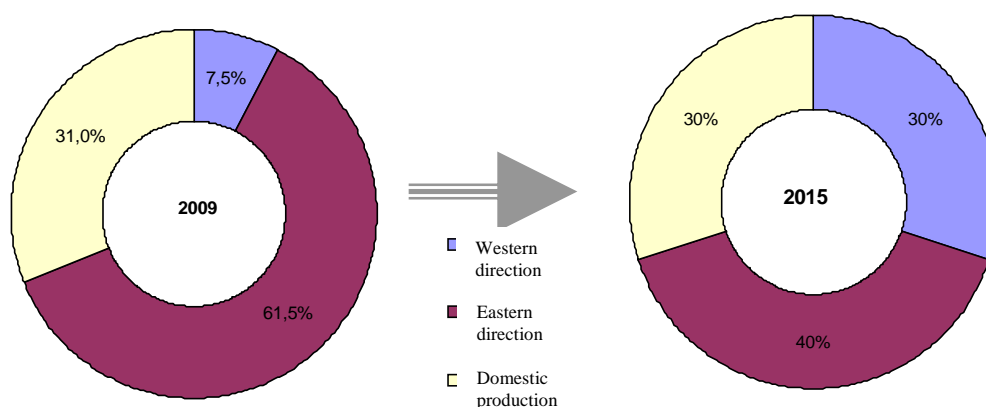


Source: Gaz-System SA.

Anticipated increase in gas demand in Poland, which is included in the policy advocating increased share of ecological fuels in the national balance of primary fuels and results from expected economic development of Poland, heralds the need to mobilize additional sources of gas. On the other hand, in view of a high degree of Polish economic dependence on gas supplies from one direction, and the problems suppliers had in recent years with ensuring continuity of supply, there is need for measures aimed at mitigating the impact of such events on domestic gas market. Thus, work has been carried out in Poland to make sure that – in the near term – new, systemic gas sources are connected and there is physical diversification of gas import directions. There is a number of potential areas for implementation of new investment projects – the interconnectors. In view of diversification actions steps referred to in ‘Natural Gas Industry Policy’ (‘Polityka dla przemysłu gazu ziemnego’), currently the main focus is on the tasks that pave the way for system cooperation and reception of supplies from LNG terminal located in northern Poland. To date, preliminary identification of investment tasks required for gas reception from new sources has been completed. It is expected that, as a result of those tasks, ultimately, a northern trunk pipeline ring will be created, which will represent a part of highly secure and reliable transmission system owing to evenly distributed source connections. Construction of the following pipelines has been continued as a part of gas reception and distribution ring from that source: Świnoujście – Szczecin (DN 800), Szczecin – Lwówek (DN 700), Włocławek-Gdynia (DN 500) and Szczecin – Gdańsk (DN 700). Transmission system in central part of Poland also

needs to be modernized. To that end, Rembelszczyzna – Gustorzyn pipeline construction has been carried out. Moreover, to enable increased cross-border transmission between EU member states, through existing transmission system entry points, there are plans to increase flow capacity of existing cross-border interconnectors, including, among other things, modernization of Lasów node (supplies from Germany) and modernization of Jarosław node and compressor station (supplies from the Ukraine).

Figure 5.5. Current structure of gas supplies and structure preferred in 2015 (Source: PGNiG SA)



Security of supplies will be improved thanks to the construction of Świnoujście LNG import terminal, implemented by *Polskie LNG Sp. z o.o.* company. On June 23, 2009, the company initiated Świnoujście LNG Terminal Access Procedure, which was supposed to identify entities interested in provision of re-gasification services. By the end of 2009 no contract was signed under this procedure.

Storage capacity ³⁵⁾

As far as storage is concerned, 100% of underground storage capacity was owned by PGNiG SA in 2009. The company operates seven underground gas storage facilities of total working capacity equal to 1.630 mld m³, including 50 mln m³ made available to *OGP Gaz-System SA* in connection with transmission system operator function performed by that company. The remaining capacity was utilized for PGNiG SA needs. At the end of 2009 *Daszewo* nitrified gas storage facility was launched. This is the first storage facility in Poland based on the capacity of depleted crude oil and gas deposit. Its launch helped deal with gas shortages and pressure drops in Coastal Belt (*Pas Nadmorski*) area pipelines, and it allowed for rational use of potential of local gas deposits by their evenly structured depletion.

Table 5.10 illustrates storage status between 1.10.2009 and 28.02.2010, together with relevant technical details.

³⁵⁾ Facts and figures are presented according to conditions compliant with PGNiG SA tariff, i.e. for temp.=0°C, dry gas with vapor molar fraction moisture < 0,001 and pressure of 101.325 kPa.

Table 5.10. Description of underground gas storage facilities

	<i>Wierz- chowice</i>	<i>Brzeźnica</i>	<i>Stracho- cina</i>	<i>Swarzów</i>	<i>Husów</i>	<i>Mogilno</i>	<i>Daszewo</i>	Total
Working capacity [in mln m ³]	575.000	65.000	150.000	90.000	350.000	370.000	30.000	1630.000
Working capacity status as of 1.10.2008 [in mln m ³]	589.731	71.341	159.462	90.000	375.396	375.000	9.205	1670.135
Working capacity status as of 28.02.2009. [in mln m ³]	147.237	14.322	37.002	10.250	53.029	208.556	8.845	479.241
Withdrawal capacity [in mln m ³ /day]	4.80 – 1.08	0.93 – 0.48	1.50 – 0.74	1.00 – 0.34	5.76 – 1.15	2064 – 0.96	0.38 – 0.15	

Source: PGNiG SA.

Security of supply standards

In 2009 security of gas supplies in Poland was ensured in compliance with the requirements of Directive 2004/67/EC and with due consideration for country regulations, i.e. the law on natural gas stocks and the principles of proceedings in circumstances of a threat to supply security³⁶⁾ and secondary regulations. The law referred to above, in effect since 2007, provides a normative basis for annual development of the system ensuring security of natural gas supply.

Pursuant to the law, the following gas supply security mechanisms were in force:

1. Companies involved in gas trade with other countries and natural gas importers were obliged to maintain the stocks of gaseous fuel in the territory of Poland in the amount equivalent to 11 days of average daily imports of natural gas in the period prior to September 31, 2009 and then in the amount equivalent to 15 days in the period between October 1, 2009, and September 30, 2010. The volume of stocks was verified by the President of the ERO on the basis of 2009 gas imports projection.

2. Energy companies involved in gas trade and the entities which commissioned transmission service were obliged to prepare relevant procedures in case of threat to continuity of supplies.

3. Gas transmission system operators, distribution system operators were obliged to prepare plans for the introduction of restrictions in natural gas consumption, specifying maximum hourly and daily volumes of natural gas consumption by each consumer connected to the network, for each degree of supply³⁷⁾. Restriction plans are introduced and, concurrently, compulsory gas stocks are launched upon the motion of the minister competent for economy.

4. If the steps taken by the operator should turn out to be inadequate and the threat to the security of natural gas supplies would continue, the operator would have to notify the Minister of Economy, who might apply to the Council of Ministers to take action and notify the Head of Gas Coordination Group³⁸⁾.

5. The President of the ERO controls energy companies involved in gas trade and gas imports from other countries, as well as gas storage, in scope of compliance with the obligation to maintain compulsory gas stocks.

³⁶⁾ The Act on stocks of crude oil, petroleum products and natural gas, the principles of proceedings in circumstances of a threat to fuel security of the State and disruption on petroleum market, dated 16 February 2007, Journal of Laws of the Republic of Poland 2007, no 53, item 343.

³⁷⁾ The President of the ERO, in 2009 decisions, approved of restriction plan submitted by gas transmission system operator – *OGP Gaz-System SA* – and of relevant plans presented by six gas distribution system operators.

³⁸⁾ Gas Coordination Group was established to streamline coordination at the EU level as regards measures taken in the circumstances of substantial disruption of supplies.

In 2009, the mechanisms referred to above were applied in the following way:

1. Energy companies involved in gas trade and natural gas imports from other countries, as well as in gaseous fuel storage, were obliged to apply to the President of the ERO to obtain a decision on the volume of compulsory fuel stocks for 2009. The President of the ERO determined the volume of stocks on the basis of gaseous fuel imports quantity during statutory period. In 2009, *PGNiG SA* maintained compulsory gas stocks in the volume determined in the decisions issued by the President of the ERO and compliant with the provisions of the law on stocks. The other energy companies subject to compulsory stocks requirement did not have to maintain such stocks due to the fact that they did not start trading natural gas with other countries, or took advantage of the exemption from that obligation upon the decisions issued by the Minister of Economy. Minister of Economy received five applications with requests for exemption from the obligation to maintain compulsory gas stocks. In four cases, the Minister of Economy issued decisions which granted such an exemption.

2. Energy companies involved in gas trade with other countries and the entities that commission provision of transmission or distribution services, according to their internally developed procedures, took action to obtain additional fuel supplies from other sources and to reduce natural gas consumption by users, pursuant to agreements concluded with the users.

3. Minister competent for the economy activated compulsory stocks and applied to the Council of Ministers to introduce restrictions in natural gas consumption, which were launched concurrently or sequentially, according to the criterion of contractual capacity, excluding households as well as small and medium enterprises from potential restrictions. In 2009 the Council of Ministers, upon request from the Minister of Economy, by the way of regulations issued on January 6 and February 10, 2009, introduced restrictions in natural gas consumption in the territory of Poland, for a specified period of time.

4. Since country mechanisms worked as expected, there was no need to resort to Community mechanisms.

5. The President of the ERO did two inspections in scope of compulsory fuel stocks status, on May 30 and September 30, 2009 respectively. Inspections have shown that all the entities obliged to maintain such stocks maintained the required volume of stocks.

In the opinion of the President of the Energy Regulatory Office, in spite of increased daily demand for gas supplies caused by significant temperature drops during 2008/2009 winter season, and the Russian-Ukrainian conflict which affected restrictions in gas supplies to Poland on the eastern border, gas supplies to end users were maintained at the right level thanks to a well-performing gas system. Mechanisms for the acquisition of additional fuel supplies from other sources worked properly, except for the areas affected by disruptions on the eastern border, sufficient gas reception capacity from storage facilities, and use of contractual restrictions in gas consumption by some entities. During that period, flexibility of domestic extraction was also put into use, to the extent required to maintain gas supplies. Gas system operation at the national level was properly coordinated by the unit placed within the structure of transmission operator – National Gas Dispatch Center (*Krajowa Dyspozycja Gazu/KDG.*) Moreover, KDG cooperated in a flawless way with transmission system operators from neighboring countries, i.e. *Ukrtransgaz NAK Naftogaz Ukrainy*, *OAO Bieltransgaz* in Belarus, *ONTRAS-VNG Gastransport GmbH*.

In view of cyclical disruptions in gas supplies to Poland in 2009, a decision was made regarding urgent adoption of the law on LNG terminal investment implementation, together with associated investments, which would streamline investment process in the projects of strategic importance from the standpoint of gas supplies.

Incentives for new investments

National regulations include a relevant set of actions (incentives) for new investments. The Energy Law contains a mechanism enabling the President of the ERO to discharge enterprises from the obligation to provide services on the basis of TPA rule and present tariffs for approval in the case when those services are rendered on the basis of gas system and gas installations elements the construction of which was not completed before August 4, 2003, or was commenced after that date. In 2009 no company applied for such a decision.

Furthermore, the catalog of incentives for new investments included items such as the following:

1. Investment co-financing from EU support funds. Gas sector was included in two priorities: Priority IX – Environment-Friendly Energy Infrastructure and Energy Efficiency and Priority X – Energy Security, including diversification of energy sources. Within those two priorities, the sector used, in total, EUR 22.4 mln in 2009.
2. Justified cost related to the construction, development or modernization of gaseous fuel storage facilities may be reimbursed, together with a fair return on equity committed to that investment, in the amount not smaller than a 6% rate of return. In 2009 *PGNiG SA* obtained in the tariff a 9% rate of return on equity.
3. Justified cost incurred by transmission and distribution system operators in relation to the performance of their tasks. In 2009, the rate of return on equity for transmission system operator was equal to 9%, and average rate of return for six distribution operators was 8.6%.
4. Elimination of legal barriers concerning implementation of power sector line investments. Measures that facilitate the implementation of energy investments directly translate into better energy security of the state, improved quality of services in scope of supplies of natural gas, to end users, *inter alia*, and accelerated disbursement of EU funds. In 2009 the draft law on public utility transmission corridors was subject to consultations – the law is meant to facilitate investments in gas transmission pipelines, among other things. Adoption of this law is a pre-requisite for streamlining the process of investment task execution. The law aims to bring solutions for the execution of public utility tasks, including gaseous fuel and petroleum supplies. The law will also apply to the corridors established on existing transmission facilities, in view of public utility purpose, as well as the new ones.
5. Adoption of investment law in scope of re-gasification terminal for liquefied natural gas in the town of *Świnoujście*. The law sets forth the rules for terminal investment preparation and funding, required due to important state security interest at stake, and associated investments.

In the opinion of the President of the ERO, in 2009 significant barriers to the implementation of new investments were still present. As positive steps towards facilitating the implementation of investments, both those of strategic importance for national security and those that seek to ensure ongoing security of gas supplies to end users, one should mention urgent adoption of the investment law concerning re-gasification terminal, which is bound to simplify and reduce administrative procedures connected with terminal construction and associated investments, and the launch of extensive work on the law on public utility transmission corridors.

Country regulations regarding the so-called 'new infrastructure'

Regulations regarding new infrastructure are included in Article 4, the Energy Law. According to the provisions of that Article, the President of the Energy Regulatory Office, upon a substantiated request from the energy company in question, may decide that the company shall not be obliged to follow TPA rule with regard to specified infrastructure or submit tariffs for approval in the situation when such service provision is performed by means of the so-called 'new infrastructure', i.e. the

elements of gas system or gas installations the construction of which was not completed by August 4, 2003, or was started after that date.

The President of the Energy Regulatory Office grants the exemption when the following conditions are met jointly:

- new infrastructure contributes to competitiveness in scope of gaseous fuel supply and the security of supply,
- because of the risk related to infrastructure construction, it would never be initiated without such exemption,
- new infrastructure is/will be owned, at least in legal terms, by an entity independent from gas system operator in whose system the new infrastructure was/will be built,
- there are infrastructure usage fees charged from new infrastructure users,
- the exemption in question will not result in the deterioration of the conditions of competition and efficiency of operation of gaseous fuel market or gas system in which the new infrastructure has been/will be built.

In order to obtain information about the demand for cross-border transmission capacity in 2009 OGP *Gaz-System SA* carried out 'Open Season' procedures for the following investments:

- connection between Poland and Lithuania in the vicinity of the town of *Suwałki* (with *AB Lietuvos Dujos* system),
- connection between Poland and Denmark in the vicinity of the village of *Niechorze* (with *Energinet.dk* system)

In view of the fact that no binding orders for gas transmission via planned connections have been submitted by previously interested entities within deadline, 'Open Season' procedures for those connections were closed without any investment decisions being taken. At the same time, *Gaz-System SA* transmission system operator communicated the possibility of another 'Open Season' procedure in case market interest in the implementation of new gas connections becomes apparent³⁹⁾,

- connection between Poland and the Czech Republic in the vicinity of *Podbeskidzie* region (with *RWE Trangas Net* system)

The procedure was related to investment project encompassing construction of a pipeline from Polish-Czech border in the vicinity of the town of *Cieszyn*, where a new entry point to transmission system is located, to *Skoczów* area, where it should be connected with the existing transmission system. Procedure for the provision of interconnector capacity in *Podbeskidzie* area was successfully completed at the beginning of 2010 – gas transmission agreements were signed with three entities. Interconnector pipeline is planned for launch in 2011, and that is when transmission service provision is expected to start as well.

- Construction of *Świnoujście* LNG terminal. Similar effort was initiated by *PLNG Sp. z o.o.* company, with the purpose to define the demand for services which will be provided in the new LNG terminal for imported gas, currently under construction, i.e. the service of re-gasification and additional services with access to newly built infrastructure. Investment completion is planned for 2014.

Initiatives taken by the entities responsible for gas infrastructure development, using available procedures – both the 'Preliminary Market Research' (*Wstępne Badanie Rynku*) and 'Open Season' procedure – should be evaluated in a positive way, from the standpoint of non-discriminatory rules for available capacity provision as well as the economics and optimization of efficiency of

³⁹⁾ Commencement of construction of Poland-Denmark interconnector near *Niechorze* was conditioned by investment decisions regarding *Skanded* pipeline, which was supposed to run along the southern coast of Norway and bifurcate into Danish and Swedish branches. Upon completion of another sea pipeline called the Baltic Pipe, there was a possibility to connect Danish gas system with Polish coast in *Niechorze*. In April 2009, due to the fact that economic conditions had changed and there was no way to ensure fuel supplies, the consortium which was supposed to run *Skanded* project decided to have it suspended.

implemented investment projects. The approach to obtaining market information about transmission capacity demand, adopted by gas companies, appears to be satisfying. and it will be used in future investment projects.

Infrastructure projects within the framework of trans-European energy networks (Decision no 364/2006/EC)

Addendum no 1 to the Decision no 1364/2006/EC describes LNG terminal in *Świnoujście* for the reception of liquefied natural gas by sea as infrastructure project 'of European interest'. The construction of LNG terminal in *Świnoujście* is planned for completion in 2014. Terminal reception capacity should amount to 5-7,5 bln m³ natural gas a year.

Relationship with „third countries” gas producers and exporters

Relationship between Poland and third countries in the area of natural gas market can be divided into two categories:

1. Technical relations involving cooperation between transmission system operators

Gaz-System SA Transmission System Operator, within the framework of company operation, cooperated with the operators from neighboring countries. Such operators' cooperation is related to transmission system management in borderline areas and infrastructural objects which represent system interconnectors. TSO has entered into official agreements on operators' cooperation with *Ukrtransgaz NAK Naftogaz Ukrainy*, *OAO Bieltransgaz* in Belarus and *ONTRAS-VNG Gastransport GmbH*. These agreements involve cooperation in dispatching control of gas flows at border points of *Drozdowicze* (the Ukraine), *Wysokoje Tietierowka* (Belarus) and *Lasów, Gubin* and *Kamminke* (Germany.) At the same time, those agreements specify technical conditions of border stations where gas quantity and quality measurements are taken, side by side with the manner and procedures for information exchange among operators, and rules of conduct in emergency. Additionally, contacts were maintained as regards the possibility of increasing transmission capacity at border points, for example in *Lasów*. Furthermore, at the regulatory level, within the framework of the Regional Coordinating Committee for Southern and South-Eastern Market Gas Regional Initiative, talks were held on the interconnector with the Czech Republic near the town of *Cieszyn*, which will be used to supply to Poland natural gas in the annual volume of about 0.5 bln m³.

2. Commercial relations involving gaseous fuel trade

- Considering the relationship with the companies that export gas to Poland, one must note the failure to execute, since the beginning of 2009, by *RosUkrEnergo* company, mid-term agreement for the supply of natural gas, signed in November 2007. *RosUkrEnergo* company, owned in half by *Gazprom*, was obliged to supply to Poland 2.3 bln m³ of gas a year, in accordance with the terms of contract effective until the end of 2009. However, on January 20, 2009, that company was eliminated from commercial intermediation in terms of gas trade between Russia and the Ukraine, which resulted in the failure to deliver gas supplies to Poland in the volume specified in the contract. The supplies were partially compensated for by *Gazprom Export* company. Owing to high gas consumption during winter season and due to limited capacity of underground gas storage facilities, *PGNiG SA* had to sign a short-term contract with *Gazprom Export*. Pursuant to the agreement signed on June 1, 2009, 1 bln m³ of gas was supplied by September 30, 2009. Yet, until the end of 2009 subsequent contracts ensuring gas supplies to Poland in projected quantities have not been signed. This was a result of the fact that the Russian side conditioned the conclusion of commercial contract upon signing a government-level agreement regulating a number of issues not related in a direct way to gas supplies to Poland,

- As an effort to diversify gas supplies to Poland, on June 29, 2009, *PGNiG SA* and *Qatargas Operating Company Ltd* signed an agreement concerning the sale and supply of liquefied natural gas (LNG) from Qatar to Poland. The agreement involves the annual supply of 1 mln ton of LNG, over the period of 20 years, starting in 2014. If more supplies are necessary, *PGNiG SA* will resort to short- and mid-term contracts to ensure bigger gas supply.

PGNiG SA has been also involved in production activity on Norwegian continental shelf – in Norway and in Denmark. This initiative is closely related to a project called ‘Skanded’, i.e. the construction of a gas pipeline from gas terminal in *Karsto* (Norway) to Sweden and Denmark, and to another project, the ‘Baltic Pipe’. Yet, in April 2009, despite *PGNiG SA* efforts to implement ‘Skanded’ project, members of the consortium decided to suspend project execution. Decisions made by the members of the consortium do not translate into project termination or discontinuance. The parties agreed that in light of ongoing global crisis and the decisions regarding deposit management made by Norwegian authorities, the project is temporarily withheld. In consequence, Baltic Pipe project run by *Gaz-System SA* was suspended as well, because ‘Skanded’ pipeline was supposed to be used for transmission of Baltic Pipe fuel, connecting Danish and Polish systems.

In 2009 *PGNiG SA* was involved in the talks with Ukrainian company called *NAK Naftogaz Ukrainy* regarding supplies via Ukrainian transmission system, and the possibility of direct supplies via *Drozdowicze* interconnector point. The subject of gas supplies through Ukrainian gas system was also related to gas transmission under tripartite supplies scheme (under Slovak and Ukrainian contracts.) At the same time, cooperation included measures taken to enable export of Ukrainian gas to Poland via *Zosin-Ustiuług* point. As a result of those efforts, at the turn of 2009/2010, natural gas supplies in the vicinity of *Hrubieszów* continued without any disruptions. In view of the prohibition on re-export of Russian gas and the decision set forth in 2009 state budget of the Ukraine stipulating that natural gas from Ukrainian domestic production should be channeled to satisfy internal market demand, Ukrainian *NAK Naftogaz* responded in a negative way to the request of *PGNiG SA* to increase supply. Likewise, cooperation in the area of transit did not win *NAK* support. This means that purchasing gas and ordering transmission services in third countries represents a challenge not only for those interested in entering domestic market, but also for the incumbent company; improvement in market conditions in the countries that border EU member states should be seen as a possibility to improve the situation as well.

Conclusions

In the analysis of individual measures taken in 2009 in order to ensure security of gas supplies, the following conclusions can be drawn:

1. Procedures regarding mitigation of negative implications of deficit of gas supply to users worked properly in the circumstances of Russian-Ukrainian conflict and significant temperature drops during 2008/2009 winter season. The entire ‘legal framework’ has been developed, i.e. provisions and procedures in case of limitation of supplies and decisions of the President of the ERO, such as: plans to introduce restrictions, volume of compulsory gas stocks, side by side with IRIESP Transmission Grid Code, IRIESD Distribution Grid Code, and tariffs which set out rules for cooperation in case of restrictions. Additionally, suppliers have introduced procedures required pursuant to the law on the stocks, including, *inter alia*, contractual restrictions mechanism.

2. Technical preparation of infrastructure in case of restrictions in gas supply has indicated shortages and the need to secure additional supply channels. In the opinion of the Regulator, infrastructure needs to be developed, especially in terms of increasing working capacity of underground natural gas storage facilities, which ensure continuity of supplies in case of supply

disruptions. Present-day capacity is not sufficient, and due to limited injection and reception capabilities users can be serviced only partially during the time of increased demand. Continuous development is also required with regard to transmission system, especially in the regions with flow capacity restrictions. Moreover, in order to meet gas demand, work aimed at increasing domestic extraction must be continued – the level of domestic extraction did not change over the last few years.

3. As can be concluded from the review of activities performed by energy companies operating on the gas market in 2009, system efficiency did not give rise to any concern, and all stakeholders responsible for gas supply have met their statutory obligations – they carried out modernization and investment projects in order to increase system efficiency and provide new supply channels (construction of LNG terminal for the reception of liquefied natural gas by sea, construction of a pipeline connecting Polish and Czech gas system under available capacity procedure in *Podbeskidzie* region.) It should be underlined that despite the fact that gas system was efficient and investment tasks were continued in 2009, the urgent need to modernize and develop the system to maintain security of gas supplies is still present in Poland. Existing legal and administrative barriers significantly delay required changes.

4. Infrastructure development measures continued in 2009 should be evaluated in a positive way. However, due to investment cycle schedule, works aimed at securing supplies from new directions have not been completed yet (potential effects will be visible in the future.) In other words, there was no real possibility to purchase natural gas from the east from suppliers other than *Gazprom*.

5. In the absence of legal possibility to designate operator at the Polish section of ‘Yamal-Europe’ pipeline, the President of the ERO had no administrative instruments to force *EuRoPol-Gaz SA* to comply with the obligations that have bearing on security of supplies, e.g. congestion management rules. In July 2009 the President of the ERO informed Ministry of Economy about these problems, putting special emphasis on the need to take steps aimed at regulating these issues.

6. Due to inadequate mechanisms for cooperation with Poland’s neighboring countries which are not EU members, there is certain level of risk attached to fuel supplies, and the level of security is lower. This is true of Belarus as well as the Ukraine. Consequently, it is difficult to fully exploit transmission capacity on *Gaz-System* network interconnectors with the networks of Belarus and Ukrainian operators, which translates into difficulties in securing gas supplies from eastern direction from entities other than *Gazprom*.

6. PUBLIC SERVICE ISSUES [ARTICLE 3(9) ELECTRICITY AND 3(6) GAS]

Public service issues are at the core of electricity and gas market liberalization. Fundamental public service objectives are as follows: ensuring security of supply, network reliability, adequate quality and price of service, together with regard for environmental as well as company energy efficiency improvement obligations. Those obligations are rooted in the requirements set forth in Polish legal regulations (the Energy Law and secondary legislation), and in licensing terms and conditions, to be obeyed by the stakeholders of energy and gaseous fuels market. Pursuant to Article 56, paragraph 1, point 12 of the Energy Law, when an energy company fails to meet the requirements set out in the license, it is subject to a financial penalty administered by the President of the Energy Regulatory Office. Moreover, if an entrepreneur blatantly violates terms of license or other requirements related to licensed economic activity, as set out in the law, the President of the Energy Regulatory Office shall revoke their license, pursuant to Article 41, paragraph 3 of the Energy Law.

Certificates of origin

The President of the Energy Regulatory Office confirms the fact of electricity generation from renewable sources by means of certificates of origin. The system of issuing (and then redeeming) certificates of origin has been fully operational since the beginning of 2005 (Articles 9a and 9e of the Energy Law). Upon this regulation, electricity generated from renewable sources can be branded in the breakdown according to the following generation technologies: biogas, biomass, wind, water, and cogeneration (Table 6.1.) Certificates of origin are issued by the President of the Energy Regulatory Office upon a motion from the generator (license holder), certified by the power system operator in scope of output volume for the period in question.

Table 6.1. Electricity generation and certificates of origin in the period 2008-2009. Status as of 30.03.2010

Type of renewable energy source	2008	2009
	Electricity volume [in MWh]	Electricity volume [in MWh]
Biogas plants	220 882.924	293 105.386
Biomass plants	560 967.435	525 919.895
Wind farms	806 079.751	1 028 862.054
Water power stations	2 152 821.687	2 374 643.314
Cogeneration	2 751 954.127	4 073 590.057*
Total	6 492 705.924	8 296 120.706

* Including solar power plants.

Source: ERO.

In the Polish system, two types of certificates of origin are issued for electricity from cogeneration:

- 1) certificates of origin for electricity generated in installations fuelled by gas, or with installed capacity below 1 MW (known as 'yellow certificates'),
- 2) certificates of origin for electricity generated in the remaining cogeneration sources (known as 'red certificates').

Table 6.2. Electricity generation and CHP certificates of origin in 2008 and 2009. Status as of 30.03.2010.

Type of cogeneration unit	2008	2009
	Electricity volume [in MWh]	Electricity volume [in MWh]
'Yellow'	2 977 398.975	3 069 754.644
'Red'	20 842 105.739	21 060 012.576

Source: ERO.

Generators who have obtained certificates of origin or CHP certificates of origin may sell those certificates on the Polish Power Exchange to stakeholders who are obligated to purchase certificates, thus earning additional income from electricity generation activity.

The system of support for renewable sources and CHP would be 'incomplete' without legal provisions which foresee that financial penalties may be imposed upon those companies which have not fulfilled their obligation to purchase a required quantity of certificates of origin or CHP certificates of origin, or have not paid a relevant fee instead.

An obligation to purchase certificates of origin and CHP certificates of origin and present them for redemption, or to pay a fee instead, was imposed upon companies dealing in electricity generation or trade and selling such electricity to final customers.

In order to meet this requirement, said companies may:

- redeem appropriate certificates of origin,
- pay a fee to the account of National Fund for Environmental Protection and Water Management, which should be dedicated to supporting renewable energy and cogeneration sources located in the territory of the Republic of Poland.

According to the law, the President of the Energy Regulatory Office should verify compliance of energy companies with the obligations referred to above. Verification is performed after the end of each calendar year (after March 31.)

Implementation of the criteria from Annex A to Directives 2003/54/EC and 2003/55/EC

Criteria from Annex A to Directives 2003/54/EC and 2003/55/EC were implemented in 2005 with the law amending the Energy Law, dated March 4, 2005, and with the Environmental Protection Law (Journal of Laws of the Republic of Poland, 2006. No 62, item 552.) It should be underlined that a majority of the criteria laid down in those Annexes were introduced as statutory level provisions. The criteria are so detailed, however, that some of them had to be included in appropriate secondary legislation. Detailed implementation of electric power market criteria was performed on the basis of the regulation of the Minister of Economy of July 2, 2007, on detailed principles governing the development and calculation of tariffs and financial settlements in electric power trade, including provisions regarding customer service quality standards and handling complaints, among other things.

In 2009, work was carried out on the regulation of the Minister of Economy concerning detailed conditions of gas system operation, the contents of which were communicated to the European Commission on February 1, 2010. The above-said regulation includes provisions implementing the criteria referred to above, such as, *inter alia*, those pertaining to customer service quality standards and dealing with complaints.

In 2009 Energy Law amendments were finalized. The law of January 8, 2010, amending the Energy Law and some other laws (Journal of Laws of the Republic of Poland, 2010, No 21, item 104) came into effect, for the most part, on March 11, 2010. With this law, a customer may switch supplier without any additional costs over and above the cost specified in the contract. Further, gaseous fuel suppliers who sell such fuels to end users connected to distribution or transmission network and electricity suppliers who sell electricity to end users connected to distribution network have to

publish the information on gaseous fuel or electricity sales prices and price-related conditions on their websites, and make such information publicly available at their premises.

Support for socially vulnerable customers

Issues connected with 'socially vulnerable' customers have not been yet addressed at a statutory level, despite that fact that an increase in electricity and gas prices has become a social issue which generates poverty, including fuel poverty. According to the outcome of research commissioned by the President of the Energy Regulatory Office, a 10% rise in the price of electricity triggers an increase in the number of fuel poor households to the level of more than 1 million⁴⁰).

Although work on the definition of a 'vulnerable' customer and support mechanisms for that category of users does not fall directly within the mandate of the President of the Energy Regulatory Office, the Regulator was the first to do research in that field⁴¹), and thus initiated inter-departmental effort with the purpose to develop a system-based solution to that issue in Poland.

In 2009 the Ministry of Economy worked on a strategic document entitled 'Poland's Energy Policy until 2030' and an accompanying document entitled 'Action Plan for 2009-2012'. Eventually, 'Poland's Energy Policy until 2030' was approved by the Polish Government on November 10, 2009. It describes many efforts, including protection of the most vulnerable electricity consumers against the implications of electricity price rises. The task will be implemented through the development of a system-based solution for socially vulnerable customers within the framework of national system of social assistance, and through the introduction of an additional consumer support mechanism under Corporate Social Responsibility (CSR) schemes prepared by energy companies. According to the schedule laid down in the documents, those tasks should be performed in 2010.

Concurrently with the work on 'Poland's Energy Policy until 2030', with the ordinance no 01/09 issued on July 20, 2009 by the Chair of the Steering Committee for the Implementation of the Program for the Power Sector, a Working Group was established to develop draft legal solution regarding support for socially vulnerable household consumers of electricity when the market becomes competitive within the framework of national system of social assistance. The Group worked under the leadership of the representative of the Ministry of Economy. ERO President's representative was among Group members. The Group was expected to prepare, by December 31, 2009, necessary proposals for the contents of the solution, with due consideration for consistency between national and EU legal systems, and including explanation behind each particular provision as well as assessment of their implications.

Within the framework of that project, the President of the ERO repeatedly advocated that the model of support for socially vulnerable consumers should be based on three pillars:

- 1) electricity is regarded as public service good,
- 2) support mechanism for vulnerable customers is financed from public resources,
- 3) program implementation is carried out within the structure of Polish social assistance system.

In December 2009 the Minister of Economy submitted to the Committee of the Council of Ministers a draft on the „Assumptions for the acts introducing a system of support for socially vulnerable electricity consumers” for consideration at the meeting of the Standing Committee of the Council of Ministers. In the draft, the Ministry of Economy presented support mechanism for socially vulnerable customers which is not based on social assistance system, but on the support provided by

⁴⁰) In Poland there is a total of almost 14 mln domestic (household) consumers.

⁴¹) A special Team for Vulnerable Customer Research was established in ERO structure in 2008. The outcome of Team's effort was a model for vulnerable customer support and suggested amendments to existing legislation, indispensable for the model to be implemented. The Team cooperated with the Institute of Labor and Social Studies. As a result, a unique attempt at estimating the impact of electricity price rises on the scale of poverty increase was made.

energy companies (default suppliers) through the system of earmarked grants. The President of the ERO believes that such a solution would not be appropriate, since it would effectively bind the vulnerable customer with the existing supplier. This solution may represent a potential barrier for users who might want to change suppliers.

Other efforts made in 2009 by the President of the ERO for the benefit of socially vulnerable customers included the work of specially assigned teams: the team dedicated to the issue of corporate social responsibility of energy companies and the 'Customer Zone' consumer forum.

In Poland the system of social tariffs has been non-existent. The President of the Energy Regulatory Office believes that social tariff system interferes with price transparency and shifts the burden of vulnerable customer protection on other users, adversely affecting their financial standing. That is why the President of the ERO advocates that vulnerable customers should be supported with social policy instruments.

Default suppliers – obligations, selection mode

Starting from 1 July 2007, 14 companies began to operate on electricity market dealing only with electric power distribution – they were established on the basis of 14 biggest incumbent companies which, until that point in time, had been involved in electricity distribution and trade. By the way of administrative decision, the President of the Energy Regulatory Office appointed them as distribution system operators (DSOs). In consequence of those changes, electricity market saw the emergence of suppliers who were parties to common service agreements. At present, they function as default suppliers for municipal and household customers who did not decide to switch to a new supplier. There are also other suppliers on the market, who have not been established on the basis of energy companies. Approximately 200 other suppliers are vertically integrated industrial energy sector companies, involved in sales and distribution activities. Pursuant to the Energy Law, default supplier is selected in a bid for tender procedure. Until the tender is announced, that function is performed by „incumbent” suppliers. In 2009, no tenders were held. Electricity consumers have entered into the so-called common service agreements with default suppliers, which include the provisions of a sales contract side by side with those typical of a transmission or distribution service contract. Moreover, a default supplier is obliged to provide comprehensive services and enter into comprehensive common service agreement on equal terms with a household consumer who did not decide to switch the supplier and who is connected to the network of energy company indicated in default supplier license. It is worth noting that a household consumer who decides to terminate common service agreement with contractual notice period cannot be charged with any additional costs in that regard by the default supplier.

Number of disconnections and regulation of electricity and gas prices for end users

The number of customer disconnections for non-payment is presented in Table 6.3 below.

Table 6.3. Total number of electricity and gas disconnections

Year	Electricity			Gas		
	Disconnections total	Consumers total	[in %]	Disconnections total	Consumers total	[in %]
2004	236 012	15 661 600	1.5	46 451	6 337 536	0.73
2005	239 289	15 761 619	1.5	44 957	6 386 160	0.70
2006	190 936	15 817 289	1.2	33 815	6 396 234	0.53
2007	160 860	16 064 750	1.0	31 006	6 493 775	0.48
2008	174 445	16 201 598	1.1	43 319	6 594 867	0.66
2008	174 445	16 201 598	1.1	53 236	6 641 066	0.80
2009	224 961	16 363 511	1.4	53 236	6 641 066	0.80

Source: ERO.

The issue of disconnections for non-payment is regulated by the Energy Law. Energy company may discontinue to supply electricity in the case when the consumer is at least one month late with payment (after payment deadline), despite prior written notification communicating the intention to terminate the contract and despite an additional, two-week deadline for payment of all outstanding and current liabilities. Once the payment is made, the company has to resume supply immediately. There are no additional regulations, however, with regard to disconnections for non-payment during winter time.

End user price regulation

Electricity

In 2008, the system for approving end user energy prices was changed, and the new mechanism was continued in 2009. The requirement to submit electricity tariffs for approval was upheld with regard to 'G' tariff category consumers connected to the network of distribution system operator who have not switched supplier. This groups consists of household users, by and large. In this case it may be concluded that the share of consumers in individual retail market segments serviced by suppliers who submit their prices for approval to the President of the Energy Regulatory Office was equivalent to, respectively:

- household consumers – 100%⁴²⁾,
- business consumers – 0%,
- industrial consumers – 0%.

Table 6.4. 2010 tariff price and rate increases

	Increase in electricity distribution rates for all consumer categories	Increase in electricity distribution rates for household consumers	Increase in electricity price for household consumers	Total increase in fees for household consumers
			[%]	
Average increase in approved tariffs	4.80	5.4	5.8	5.8

Source: ERO.

Average increase in electricity prices for household users and total increase in fees (trade and distribution) for household users are calculated without the share of the two companies which failed to submit their household consumers electricity trade tariff (cf. footnote 42).

Energy companies introduce new tariffs between 14 and 45 days from the moment of tariff publication by the President of the ERO. All tariff decisions are announced in Electric Power Industry Bulletins (*Biuletyny Branżowe dla Energii Elektrycznej*). Approved tariffs will be in force until the end of 2010.

There is a possibility for increasing approved prices upon a company or ERO request if some external circumstances change. One of the factors which may trigger such cost increase, for example, is an increase in the price of electricity on the wholesale market.

⁴²⁾ In Poland, where electricity price regulation is limited to companies which act as default suppliers, two out of fourteen suppliers failed to submit their trade tariffs for approval to the President of the ERO, and they have been applying unapproved prices. This case is subject to a separate court proceeding. In the calculation herein, consumers from those two companies have been included as regulated price consumers.

Table 6.5. Regulation of prices for final customers in 2009

Specification	Electricity		
	The biggest customers (according to the volume of electricity supply)	Small and medium business	Households
Tariff regulation supply (T/N)	N	N	T
% tariff customers (supply)	-	-	100

Source: ERO.

There are no legal regulations which would allow for potential cost compensation to the supplier who is obliged to sell energy to users at regulated prices.

Gas

As far as gas sector regulation is concerned, there were no new developments in 2009, as compared to 2008. In 2009, network activity related to gaseous fuel supply (transmission and distribution) and trade were both regulated. Regulation applied not only to small (municipal and domestic) consumers, but as well to large ones. Either category had their gas supplied under common service agreements, and more than 90% of sales for end users was accomplished by one company – *PGNiG SA*. Furthermore, other companies operating on the gas market purchase gaseous fuel from *PGNiG*, by and large. Under the circumstances, the President of the Energy Regulatory Office could not decide that any company involved in gas trade was operating in competitive environment, and thus could be released from the obligation to submit tariff for approval.

In 2009 gas prices were modified only once, when a new tariff of *PGNiG SA* came into effect on June 1. Following the change of that tariff, the tariffs of other gas companies were changed as well.

In view of the number of consumers serviced by *PGNiG SA*, as compared to the entire population of gas consumer in Poland, one can safely assume that average gas prices for *PGNiG SA* consumers are equivalent to average gas prices for the entire country. Below one can see a specification of average prices for domestic (household) consumers with regard to high methane gas trade (GZ-50), as well as average prices of high methane gas supply (including not only gas as a commodity, but also the cost of gas transportation via transmission and distribution grid and the cost of storage.)

Tariff category symbol	Average gas price GZ-50 in PLN/m ³	
	In the period	
	since 1.11.2008	since 1.06.2009
	in trade	
W-1	1.4716	1.3867
W-2	1.1838	1.0945
W-3	1.0627	0.9669
	total (trade + transportation + storage)	
W-1	2.3343	2.3353
W-2	1.8404	1.8164
W-3	1.5977	1.5760

W-1 – annual consumption up to 300 m³,

W-2 – annual consumption above 300 m³ and up to 1 200 m³,

W-3 – annual consumption above 1 200 m³ and up to 8 000 m³.

Source: ERO.

There are no legal regulations which would allow for potential cost compensation to the supplier who is obliged to sell energy to users at regulated prices.

Initiatives of the Regulator taken with the purpose to ensure transparency of energy supply contracts, taking into account the division of powers between the Government, the Regulator, and other public agencies

Enforcement of transparency requirements pertaining to energy supply contracts is addressed on the platform of:

- legislation by the bodies empowered with legislative initiative, the Government, the Parliament, and the President

The President of the Energy Regulatory Office is involved in legislative process, but is not competent to determine final contents of the regulations and is not empowered to initiate legislation – the President of the ERO participates in consultations, puts forward recommendations and expresses opinions;

- law enforcement (in particular, the President of the Energy Regulatory Office, the President of the Office of Competition and Consumer Protection, Competition and Consumer Protection Court)

The law. Contents of electricity and gas supply contracts are regulated by the Energy Law and by secondary legislation, i.e. the regulations which specify the so-called ‘necessary items’ of such contracts.

Certain legal provisions to that point are included in the Law on Competition and Consumer Protection, dated February 16, 2007, which prohibits onerous or inconsistent contractual terms in similar contracts with third parties, conditional contract execution dependent on the fact whether the other party will accept or provide a benefit which has no material or customary relation to the subject of contract, onerous contractual terms imposed by the enterprise which may result in unfair benefits for the enterprise, direct or indirect enforcement of other unfair contractual provisions, such as extended payment deadlines or other conditions pertaining to the sale or purchase of goods. Contract transparency in that regard is supervised by the President of the OCCP. Any abuse of above-mentioned prohibitions may be regarded as abuse of market dominance, or as anti-competition conduct. General provisions regarding contractual obligations, including sample contracts, may be found in the Civil Code as well (Articles 384 through 396.) Those provisions regulate the subject of contracts and sample contracts. Under these regulations, provisions of an agreement concluded with a consumer which were not agreed upon on individual basis shall not be binding for the consumer if they present consumer rights and obligations in contradiction to good practice and blatantly violate customer interest (forbidden contractual clauses.) This does not apply to provisions describing key services of the parties as long as they were phrased in an unambiguous way. Dispute resolution in that regard rests within the competence of the common court.

Application of the law. Under the Energy Law, the President of the Energy Regulatory Office is not empowered with the tools that would enable the President to impact the contents of electricity or gas supply contracts in a direct manner, e.g. by contract form approval procedure, or by imposing the requirement whereby energy companies would have to put in certain clauses the contracts, such as not required under the law, but regarded as the best practice. In consequence, it is understood that the company is only required to follow the rules set out in the law.

In particular cases of dispute (Energy Law, Article 8, paragraph 1), the President of the Energy Regulatory Office may affect the contents of an agreement between the energy company and the consumer, but always within the limits defined in the request for assistance in getting the issue in question resolved. Under such circumstances, energy company obligations can also be found in the Energy Law and secondary legislation. To apply the best practice principles, the agreements would sometimes have to be amended to the extent beyond the regulations directly rooted in Energy Law provisions. Thus, it must be concluded that the criterion of contract transparency, with the purpose to provide the customers with adequate information on the level of prices, service quality and the terms of service provision, or changes to those terms, has been implemented by energy

companies of their own accord, or – indirectly – by the President of the Energy Regulatory Office, through properly structured tariffs and license conditions.

Initiatives made directly by the Regulator. In an effort to boost competition on electric power market, the President of the ERO was involved in negotiations between distribution system operators associated in the Polish Electric Power Transmission and Distribution Association (PTPiREE) and trade companies associated in Energy Trade Association (TOE), focused on the subject of a standard template of the so-called general distribution agreement. That agreement governs the cooperation between distribution system operators and suppliers who operate in their respective territories. As a result, in December 2009 a common template of general distribution agreement was developed and recommended for widespread use. With this template, hitherto controversial issues pertaining to supplier obligation to cover the cost of meter reading in the case of supplier switch have been addressed and resolved. Moreover, under the new template, DSOs should not collect charges for taking metering and billing equipment readings in supplier switch cases, or for discontinuing and resuming electricity supply upon supplier request. In the opinion of the Regulator, thanks to one common template the number of agreements concluded by distribution system companies and trading companies will increase, and thus market competition will be fostered.