Activity Report 2005 of the President of the URE

A Message from the President of the Energy Regulatory Office

Joining the European Union's internal energy market creates new prospects for the energy sector in Poland but it is also an incentive for many changes in this field. The Polish government has succeeded in moving national legislation toward the energy market model existing in the EU. It has managed to initiate privatisation and present for discussion amendments to the Energy Law, passed in March this year, which transpose EU's Directives into the national legislation, paving the way for a competitive market. Firm decisions however, are not expected until the victorious political parties form a coalition government.

Competition in the power sector is still hindered by long term power purchase agreements (PPA) which tie up about 50% of the power production. In contrast, only 1,5% of energy generated in Poland is traded on the power exchange which has been in operation for three years. The present situation, which involves voluntary termination of the PPA contracts has recently been debated in parliament. Although it is now the third attempt to resolve this problem, there was not enough time to pass it into law before the parliamentary elections.

Another hotly debated issue at the moment is the extent to which generation companies can be allowed to consolidate their activities with distribution operators. Although in the past such vertical integration was prohibited, the former government made a decision to draw up a plan of government-run consolidation. This move, welcomed by some market participants, mostly energy producers, has spurred opposition from others who believe that it may slow down the process of building a fully competitive energy market in Poland.

I encourage you to visit our web site on a regular basis for more information about the Energy Regulatory Office, as well as key issues and challenges facing the Polish power sector. We will keep you updated of all new developments in the months ahead.

The structure of primary energy carriers in Poland (2003)

Source: Electricity Information IEA/OECD, Paris 2004

1. Powers and responsibilities of the President of the URE

The regulatory framework for the Polish energy sector was defined in the Act - Energy Law developed with particular consideration to its conformity with the European Union law, among others, with Directive 96/92/EC on common rules for the Internal Energy Market.

The regulatory authority represented by the President of the Energy Regulatory Office was established in order to implement and supervise the energy markets' liberalisation process. Its establishment was closely connected with the creation of the competitive European energy market – to ensure security of energy supplies, improvement of competitiveness of the economy, as well as the environmental protection against negative impact of energy processes.

The regulatory authority has been created with the aim of supporting, among other things, uniformity of solutions in the field of energy regulation, adoption of the relevant EU standards and thus facilitating appropriate structural and system transformations in energy undertakings.

The Energy Law was adopted on 10 April 1997. Since the adoption of the Act, it has been amended several times and updated to ensure further harmonisation of the Polish law with the European law, including provisions of Directive 98/30/EC 1998 on common rules for gas market, and, recently, with the Directives 2003/54/EC, 2003/55/EC and other relevant acts.

The Energy law, as well as regulations issued on its basis include instruments of competitiveness promotion and protection against monopoly abuse. They include *licensing* procedures to be applied to energy undertakings, which means that such control of access to market is reserved to the State by means of an authorisation (in form of a licence) for carrying out certain energy activities. This way the reliability of entrepreneurs entering the energy market is verified.

The key elements of the regulation are the approval of *tariffs* and the requirement of keeping accounting records in accordance with the standards which ensure cost transparency and cross-subsidies elimination. It is closely connected with long-term energy planning and co-ordination of energy enterprises' *investment plans*.

The regulatory authority has a powerful tool to create market behaviours – the power to exempt energy undertakings operating in a competitive environment, from mandatory submission of tariffs for approval. Therefore, in particular circumstances, the regulation consists of continuous monitoring of markets and behaviour of their participants. The broadly understood control of entrepreneurs operating on the market allows the Regulator to intervene by reintroducing the obligation of tariffs to be approved, or, in case any

irregularities appear, by imposing penalties. Moreover, as a mediator, the Regulator settles disputes between individual market participants, in particular – between suppliers and customers.

The powers and responsibilities of the President of the URE include: supervision of quality parameters of supplies and customer-oriented services in the field of trade in gaseous fuels and electricity, imposition of penalties accordingly to the rules defined in the Act, co-operation with competent bodies in counteracting energy undertakings' monopolistic practices, and publication of information that contributes to higher efficiency of energy consumption.

The President of the Energy Regulatory Office is dr Leszek Juchniewicz, performing his function since the very beginning, i.e since June 1997 (appointed for a second term in June 2002 by the Prime Minister). Since April 1998 the Vice-President has been Wiesław Wójcik, and the regional (local) representatives of the Regulator are directors of 9 field offices. The administrative structure of the Energy Regulatory Authority is presented in Chapter 7.

2. The activities of the President of URE with regard to the energy sector

2.1. The electricity market in Poland

In 2004, total amount of electricity generated in Poland was on the level of 154 TWh, and import amounted to 3,1 TWh. Most of that, up to 94.5% of gross national production, was generated in system power stations. The gross national consumption of electricity amounted to 145 TWh, and export amounted to 12,4 TWh.

Electricity production

The sector of *electricity producers* consists of power stations and combined heat-and-power plants (CHP), producing electricity mainly from fossil fuels, as well as producers of electricity from renewable energy sources.

POLAND	
Area: 312,7 km^2	
Population: 38,2 mln	
GDP: 804 bln PLN.	
Electricity	
Electricity production: 154 TWh	
Domestic consumption 145 TWh	
Generating capacity (MW)	34 715
Capacity as a percentage of EU's total cpacity (%)	5,76
Number of generating plants*)	12
Employment per 1 000 MW of generating capacity **)	1092

Electricity consumption (kWh per capita)	3 790
Number of transmission companies	1
Number of distribution companies	14
*) large system generators **) large system generators	

Source: Main Statistical Office

The market of electricity in Poland (power stations, system and industrial combined heat-and-power plants) is divided into two main parts: sales of energy within long-term contracts (non-competitive part) and sales beyond long-term contracts (subject to competition mechanisms).

Segments of the electricity market in Polnad (2004)

Source: URE

In order to release the energy currently being traded under long-term contracts into competitive market, their restructuring is being prepared, which should cause an adjustment of prices in this segment of the market to the level achieved in bilateral market contracts. The implementation of the governmental programme of elimination of long-term power purchasing agreements (PPAs) lies in the simultaneous cancellation of all PPAs and introducing a compensation mechanism.

Network operations

The group of undertakings that deals with *transmission and distribution* of electricity by grids consists of Polskie Sieci Elektroenergetyczne S.A. (Polish Power Grids Company), acting as a transmission system operator, 14 distribution companies simultaneously acting as distribution system operators in the national electric power system, PKP Energetyka Sp. z o.o., whose scope of operations can be compared to the distribution company activities, as well as producers operating in transmission and distribution on a small scale, for example in factories, mines or special economic zones, exploiting local transforming stations and delivering energy to customers located in their region or in adjacent areas.

Wholesale and retail trade operations are carried out by both distribution companies and undertakings dealing exclusively in electricity trade. At the beginning, the trade undertakings were buying electricity only from generation undertakings, only later the trade undertakings set mutual trade contacts and contacts with distribution companies.

The daily/hourly *Balancing Market* is a part of the electricity market, where the transmission system operator, in an hour cycle, obtains a balance of production and demand, taking into account contracts and transactions concluded earlier by market participants in its other segments and submitted balancing offers with 24 hour advance notice. That segment has started operation in September 2001.

Monitoring of the balancing market and the power exchange shows that currently these segments are in a stabilisation phase.

It has been also noticed that the stock exchange may lose in competition with the development of so called on-line transactions (via Internet platforms) on the local market (most frequently through acquisition from combined heat-and-power plants), or via "call-up" on the beyond-stock market.

Operations of the Internet trade platforms in electricity do not require licensing. Energy trade is carried out by means of matching submitted offers. Concluded contracts are then standardised (basic, ordinary, business week and weekend contracts). On the Polish electricity market operate Internetowa Hurtownia Energii (The Internet Energy Wholesale), Platforma Obrotu Energią Elektryczną (The Platform of Electricity Trade) and Kantor Energii (The Energy House).

2.2. Regulatory procedures

New Capacities

From two different solutions of the introduction of *new capacities* provided for in Directive 96/92/EC – authorisation and tendering, Poland chose the first one. It is worth highlighting that it applies to all kinds of operations subject to licensing (the catalogue of possible forms of availability has been developed in order to adjust the Polish solutions to the guidelines of Directive 2003/54/EC). It allows not only to control the entry on the energy market and to define individual terms and conditions of a licensed operator's activity, but also to monitor its proceedings which may determine (in case of law enforcement) possible licence withdrawal.

Licenses

The Polish legal regulations impose an obligation of getting a *licence* for on entrepreneurs who carry out energy activities in the field of generation of electricity in sources of equal or higher than 5 MW of capacity, transmission and distribution of electricity, trade in electricity with exclusion of trade through consumer-owned installations of voltage below 1 kV, as well as trade at the power exchange.

The licensed undertakings are subject to subsequent regulatory regimes, in particular price regulation enforced by the obligation of developing tariffs and submitting them to the President of the URE for approval.

The provisions of the Energy Law define the scope of licensing, terms of issuing and refusal

to issue a licence, content of application forms, required documents, scope of a licence and terms of its extension, change of terms and conditions and license withdrawal.

Setting up legal frames of business operations and the terms aiming at ensuring security of supplies for customers, has a very stabilising impact on energy undertakings, mainly because of the need to take on actions increasing quality and reliability of the rendered services. The licensing terms are binding to the energy undertakings in terms of keeping their facilities and installations in appropriate condition, possessing of metering-accounting devices, observance of the provisions of environmental protection, fire protection, etc.

To some extent, the provisions of a licence also shape the economic sphere of energy activities, through *inter alia* the ban on subsidising other kinds of activities. The terms of a licence also obligate to reduce the level of economically justified costs in order to set bounds to unjustified increase of prices.

In case of electricity, from three systems of *access to grid* (negotiated, regulated or single supplier) provided in the EU directives, as far as the Polish law is concerned, a sort of mixed negotiation-regulation approach was adopted. It imposes an obligation on network companies to guarantee access on conditions agreed by the parties (these conditions include technical and economic criteria). Nevertheless, the Energy Law authorises the President of the URE to regulate charges for access and settle disputes concerning conditions of access in order to prevent blocking it by distribution companies.

Following the EU practise, Poland adopted a system of gradual introduction of the *Third Party Access (TPA)* rule to enable both undertakings and customers of electricity and gas to adjust themselves to new conditions. In the years 2002 - 2003 only those customers were authorised to using transmission services that in the previous year acquired electricity for their own use in amount not less than 10 GWh. Therefore, in 2003, the estimated number of authorised customers (641) did not differ from the number of 2002. Similarly, their total acquisition of electricity can be estimated at 38 TWh in 2003, which means about 37% of the market opening. Since 1 January 2004, the authorised customers became those who in 2003 acquired electricity for their own use in accordance with the same criteria, in amount not less than 1 GWh. The number was estimated for more than 6 000 and thus total acquisition of electricity - at 53 TWh, which equals over 50% of the market opening. Now all non-household customers are eligible. Their number reaches 1,7 mln and total electricity consumption about 80%.

Total yearly acquisitions of electricity within the right to choose a supplier (TPA) amounts to 10% of total distribution companies' sales for final customers. Despite the criticism related to the rate of competitive energy market's progress in Poland, such amount doesn't differ from other EU countries and most of the US States at this stage of market development.

Nevertheless, the TPA rule that is to pave the way for a competitive market in electricity is still functioning only to a very small extent. and the progress in approaching the competitive market encounters some barriers. The following are worth being noticed:

1. Using of transmission services generates additional liabilities and costs related to customer's activities on the electricity market (the need of planning and drawing up timetables, high costs resulting from metering systems replacement and development of data transmission links, considerably more difficult method of clearing, employment of adequately qualified personnel, the need of maintaining strict discipline on energy consumption).

2. Costs related to modernisation of metering-accounting systems, to setting up data transmission links to a distribution system operator, as well as to the development of the IT system to support market operations, are very high.

3. An alternative to major customers benefiting from TPA rule might be to achieve a status of the Immediate Participant of the Balancing Market in Electricity, but so-called extending market area procedure also stipulates the need of developing costly IT and network infrastructure. In order to mitigate this problem, it is being proposed to introduce accounting based on load profiles for identified groups of customers.

4. The accuracy of the agreements notified by customers benefiting from the TPA rule is one of the crucial problems of participation in the balancing market. The rules of procedure of the balancing market operated by PSE S.A. stipulates notification of sale agreements for each hour of the day with an accuracy to 1 MWh. Direct transferring of these regulations by distribution companies onto the level of final customers, effectively discourages customers consuming 10 – 40 GWh per year for whom the exactness is not sufficient.

5. There is lack of price competitiveness in the field of electricity generation, as well as small producers' interest in direct sales to customers, with respect to too narrow bands of ordered capacity, as well as too poor development of the market in electricity, limited by long term power purchase agreements and mandatory acquisitions of co-generated electricity. . This barrier will be removed after the termination of the long term PPAs.

6. The trade undertakings underline that they have no opportunity to participate in the balancing market with so-called open contractual position (notifying non-balanced offers), which prevents them from full participation in the Energy Power Exchange and practically means that the trade undertakings are unable to fully participate in the electricity market.

7. There is lack of provisions defining participation of non-tariff customers in mandatory acquisitions of electricity from unconventional and renewable sources as well as generated in association with heat.

8. The majority of the market participants highlights the need for current updating of legal regulations and documents regulating the terms of energy acquisition and transmission services, such as the following: guidelines on operation and maintenance of distribution networks together with procedures for integration of metering systems. The President of the Energy Regulatory Office is authorised to approve the Grid Code in the part referred to balancing and congestion management.

9. The non-energy related reason is bad financial standing of the significant part of eligible customers, possibly interested in changing their supplier. However, the latter are not ready to bear the risk of electricity supplies for customers unable to keep their financial liquidity.

The Polish legislator puts emphasis on the issue of *unbundling of accounts*. The Energy Law imposes an obligation on energy undertakings to keep accounts separated in the manner that enables estimation of fixed and variable costs and revenues of each kind of activity – generation and transmission for each kind of fuel and energy carriers, as well as for each kind of tariffs.

Tariffs

In view of *tariff regulation*, Polish solutions provide for the ex-ante regulation that – in comparison with the ex-post type of regulation, allow to provide more effective control of monopolistic companies. Effective regulation of tariffs on access and use of networks is the initial condition to suppress monopolistic position of network companies.

Approval of the tariffs of energy undertaking by the Regulator should ensure:

1) covering eligible costs of energy undertakings in view of: generation, processing, storage, transmission, distribution or trade in fuels and energy, modernisation costs, costs of development and protection of the environment;

2) protecting customers' interests against unjustified rise of prices;

The Regulator's objective is to minimise costs of energy undertakings and of fuel and energy customers. Therefore, on one hand, reasonable financial conditions for energy undertakings have to be created and, on the other hand, customer's protection against unjustified level of prices is to be ensured. It is implemented by means of decisions on tariffs.

In the course of the tariff approval process, one of the tariff assessment criteria is the impact that it has on the increase in payments for electricity, both to groups of customers and individual customers. To this end, energy suppliers draw up simulations of payments for the representative group of customers, including final customers.

It has to be noticed that in some cases where there are no regulatory constraints, the most desirable strategy for undertakings might be excessive pricing, which has an effect on profit optimisation. Without the intervention of the Regulator, it would be impossible to reduce prices to the level reflecting justified costs only. Activity of the Regulator causes that customers are not threatened by abuse of monopolistic position of the energy undertakings.

The President of the URE has the right to establish correction indicators (efficiency factors), defining the designed improvement in undertaking's performance and change of conditions

of carrying out business activities, as well as fixing the period for which the correction indicators are binding.

Totally, within the regulation period longer than one year, there are 4 distribution companies operating out of 214.

For companies, the regulation period which is longer than one year means the lack of an annual cost review, which encourages them to improve efficiency to the extent wider then expected by the Regulator while establishing the correction indicators for the subsequent years. Savings, above the level enforced by the decision on tariffs, remain in undertakings until the next review of tariffs that establishes new reference levels related to operational costs.

Distribution consolidation

After consolidation, out of 29 distribution companies operating in 2002, only 14 remained on the market.

In order to protect customers' interests, the process of standardisation of prices and charge rates for the whole area of the undertaking's activity was extended for a period of several years. Changes in tariffs aimed at their gradual standardisation has been introduced on the basis of an assumption that increase in customers' payments as well as in other distribution companies is moderate.

Small industrial energy companies

Except for system energy undertakings, the group of operators which must have their tariffs on electricity approved consists of so-called *industrial undertakings*, for which supplying electricity is an additional activity (in most cases revenues from sales are marginal).

Taking into account that the President of the URE could not – according to *the Energy Law* - exempt these undertakings from the obligation of submitting tariffs for approval, because none of the undertakings dealing with transmission and distribution of electricity operates on the competitive market, in the course of approving tariffs the following rule was applied: the customer payments calculated on the basis of prices and charges proposed in the tariff could not be higher than charges which a customer of that undertaking would bear as a customer of a distribution company from which the undertaking buys electricity.

On the other hand, entrepreneurs having a licence for production or trade in electricity since 1 July 2001 have been exempted by the President of the URE from the obligation of submitting tariffs for approval. The reason of that exemption was advanced implementation of competitive market mechanisms in those subsectors.

Co-generation

In 2004, tariffs on electricity generated in full association with generation of heat were approved for 40 undertakings that had fixed prices of electricity subject to the obligatory acquisition.

Similarly to the previous tariffs, in some undertakings the approved prices for energy were diversified with respect to the level of voltage in the network to which the source was connected. Comparison of prices in these undertakings shows their substantial diversification, ranging from 90.19 zl/MW to 190.47 zl/MW.

In 2003, a part of combined heat and power plants came out with requests for approval of prices of electricity on the level exceeding the level of prices approved in the hitherto existing tariffs, considering the present level of inflation. Expectations of combined heat and power plants as for increase in prices ranged from 1.17% to 35.97%.

While minimising prices of energy generated in CHPs, The President of the URE was taking into account not only the need of improvement of the combined heat and power plants' efficiency, but also provisions of article 45 of the Energy Law, *inter alia*, customer's protection against unjustified level of prices.

Renewable energy sources

The regulatory competencies of the President of the Energy Regulatory Office that relate to *renewable energy sources* emerge both from governmental documents and legal acts. The Energy Law includes the obligation to purchase electricity generated in renewable sources imposed on energy undertakings having licences for trade in electricity. This obligation is the fundamental tool stimulating the development of the "green" energy sector.

More detailed version of the legal provisions is the ordinance of the Minister of Economy of 30 May 2003, where the mandatory limits of the "green" energy sales ,,by undertakings dealing with trade in electricity were laid down. The limits have been defined as the percentage of renewable energy sold to customers using energy for their own use in relation to total sales of energy to those customers, and they are fluctuating from 2.65% in 2003 to 7.5% in 2010.

Hydropower plants of capacity over 5 MW are the main suppliers of energy from renewable sources to the National Electricity System. In 2002 they had a 68.4% share in the "green" energy market. Small power plants of capacity below 5 MW delivered 26.2% of renewable energy. In 2002, according to data of the URE, in the national hydropower plants (including small hydropower plants) in total 872 MW were installed. They generated and transmitted

to the network 2 249 724 MWh. Unfortunately, in the same year a reversal of the 2000 - 2001 upward trend occurred, which caused decline in production by about 72 000 MWh in relation to this period. The fact should be associated with worsening of the water condition in the Polish rivers. Such a disadvantageous situation took place in 2003. In 2005 the situation looks much better. In the first half of this year hydropower stations generated about 1,4 TWh of energy.

Another renewable source of energy in Poland are biogas installations, more and more frequently emerging on dumping grounds. Although the quantity of electricity generated by them is still small, but what is advantageous – this way emissions of gases from dumping grounds are significantly limited. Renewable sources using broadly understood biomass are dynamically developing. To this end wooden waste from forests and sawmills are being regained. Also cultivation of energy plants is being undertaken, for example, fast growing energy willows. For the purposes of heating, also surpluses of straw are being burnt. In 2000, power plants based on biogases and biomass produced 30 800 MWh, after 4 year almost 9 times more, over 280 000 KWh.

Wind power plants are finding numerous new investors. It is related to the occurrence of energetically useful wind on significant area of the country. In the course of last three years capacities installed in wind turbines have grown about ten times. In 2000 wind power plants generated 5 400 MWh of electricity, in 2005 - 69 000 MWh. Further investment plans have already been declared. Projects of wind installations to be developed on the Polish territorial waters of the Baltic Sea are to be assessed. There are reasons to believe that in the coming years a significant increase in capacities installed in wind power plants will occur.

As it was mentioned earlier, the obligation to purchase electricity from renewable sources, imposed on undertakings licensed for trade in electricity appears to be the basic mechanism of supporting the “green” energy sub-sector development. However, provisions of the regulation don’t indicate, neither from what exactly source the undertaking dealing with trade is to purchase energy, nor for what price. Therefore, the price of an energy unit acquired from renewable sources is shaped by means of negotiations between the producer of energy and the customer or within open tendering on energy supply. The average price of energy from renewable sources was in 2004 on the level of 239 PLN.

It is expected that in 2005 the way of executing the energy purchases from renewable sources will be modified, in relation to the introduction of certificates of origin which issuance is mandatory for all Member States of the European Union.

One of the basic obstacles hampering the competitive market development is efficiency of networks connecting the national transmission systems with the sources of renewable energy, located mainly in remote areas.

Network investment

Polish legal solutions for *investments of network companies'* adopted the form of imposing on an undertaking an obligation to agree draft development plans with the President of the URE. The procedure of agreeing creates the opportunity of encouraging companies to exclude limitations in access to networks (TPA) and, this way, to promote competitiveness in energy generation and transmission.

The aim of agreeing draft plans of development is to ensure conformity with the law, as well as conformity with the governmental assumptions of the policy in the energy sector. The provisions of the Energy Law impose numerous obligations on the network energy undertakings. Considering the applied procedure for preparing and agreeing draft plans of development, the most important obligations are as follows:

- maintaining the ability of facilities, installations and networks to accomplish supplies of energy in a continuous and reliable way, alongside with binding quality requirements being kept and rendering transmission services ensured;

- concluding of sales and transmission agreements, fulfilling requisite technical requirements of electricity supplies, ensuring implementation and financing of the network's construction and upgrading;

- required producing of evidence that costs of modernisation, development and environmental protection are justified.

From the Regulator's point of view, the most important element of the draft plans drawn up by network undertakings are investment plans for actions related to modernisation and development, as well as predictable way of their financing. It results from the fact that the plans relate to activities of the capital-drawing nature. Many years' cycle of investing and commitment of significant financial measures cause long-term financial consequences for an undertaking and its customers. They have direct transposition to establishment of the level of desirable revenues, and therefore, further tariffs of the undertaking.

Taking into account the above, information originated from draft plans of development, in particular concerning the planned way of investment financing, is also used in the course of approving tariffs that are being drawn up by the network energy undertakings.

The undertakings obliged to agreeing their draft plans of development within a separate procedure can be divided into three groups:

- undertakings carrying out network activities in the area of the whole country and being of great importance for the security of energy supply: Polskie Sieci Elektroenergetyczne S.A. (The Polish Power Grid Company)

- energy plants and distribution companies, basically carrying out network activities in the area of several voivodships (provinces)

- other undertakings carrying out activities on the local scale (most often on industrial, community or several community grounds).

Before the final agreement on the inputs level, an assessment of their impact on projection of necessary revenues must be carried out. It has to be noted that the Energy Law obliges energy undertakings to such planning of the timetable of investment accomplishments that the implementation of the plan is possible to achieve without any need of increase in prices and rates of transmission charges in relation to the need of ensuring an increased inflow of financial means to the undertaking.

3. Activities of the President of the URE with regard to the gas sector

3.1. The gas market in Poland

In Poland, the demand for gas is fulfilled by supplies originated in import – about 9,3 bcm (billion of cubic meters), and, to a smaller extent, by national supplies – about 4,3 bcm. At present the consumption of gas amounts to about 13,6 bcm per year and for several years has been on the constant level. Gas is distributed by 17 500 km long network, of which 15 500 km is the network used to transmit of the high-methane gas, and 2 000 km - low methane.

Market structure

In 2005, the *structure of the Polish gas market* consists of operators carrying out activities in the fields of exploration and mining (the sphere that remains beyond the regulations of the Energy Law), gaseous fuels production, transmission, distribution and trading.

POLAND	
Area: 312,700 km^2	
Population: 38,2 mln	
GDP: 804 bln PLN	
Gas Production	
Domestic production: 4,3 bcm	
Consumption: 13,6 bcm	
Consumption as a percentage of total EU consumption (%)	2,85
Export and import (bcm)	eksport 0,04 import 9,3
A share of imported gas in domestic consumption (%)	70
Network length: – Transmission (km) – Distribution (km)	 17 500 109 800
Storage capacity (bcm)	1,486

Source: Statistical Office

In the same year, the structure of the gas market was still highly monopolised. It resulted

from the dominance of the PGNiG S.A group. (the Polish Oil and Gas Company S.A.), that directly or through subsidiaries carried out all the above mentioned kinds of activities. PGNiG S.A. was still the only undertaking operating in the area of imports and wholesale trade in natural gas.

In the sphere of extraction, apart from the PGNiG S.A., the Petrobaltic Ltd. Was also significantly active in production. There were also other companies dealing with those activities, including: RWE-DEA, Apache Corp., Medusa Oil & Gas CalEnergy.

In the subsectors of transmission and distribution, apart from PGNiG S.A., there are active gas companies separated from PGNiG S.A., that took over distribution networks and fragments of the transmission network, as well as nearly 30 market operators.

Moreover, as a result of restructuring of the PGNiG S.A., service companies have begun to operate, providing services and other activities in favour of gas undertakings, e.g. geophysical and seismic studies, prospecting drillings, repair works, readings of gas-meters, invoicing etc. Among them, there are companies separated from PGNiG S.A., privatised or designated to privatisation, operating in competitive environment.

Unbundling of distribution companies within one capital group created a new quality in establishing tariffs for the newly created operators, which resulted in opportunities to carry out thorough analysis of their economic and financial situation, as well as to allocate costs correctly and transparently to different kinds of activities.

The introduction of new tariffs has shown that transparency of the structure enforces reasonable actions, which allow a gas undertaking and the Regulator to investigate thoroughly the sources of revenues and costs. He is also prompting them to create daughter companies, leading to creation of new, competitive undertakings.

Another complicated problem of the year 2003 was related to the transfer of transmission assets to distribution sub-sector and development of the system metering equipment for purposes of commercial accounting. At the first stage, 2 000 km of the network and 252 reduction-metering stations were brought in distribution companies. In 2003, the second stage of gas pipelines transfer to distribution sub-sector was to be continued. As a result of the analysis of investment needs, it appeared that there was a shortage of financial means for this action. In relation to the above, the second stage of assets transfer was suspended. At the moment of the final settlement over the ownership of fixed assets to the Head Division of the PGNiG S.A. and distribution companies, there will arise conditions for carrying out a comparative analysis, both among these companies and the remaining local distribution companies. For all of these companies, it will enable to settle the cap revenues for the three year period, as it is the practice in case of electric energy companies.

Network access

In the gas sector, effective implementation of the rule for the *Third Party Access*, both for eligible customers and undertakings operating in the field of exploration, mining, storage and trading in gas, is the condition for the introduction of competition mechanisms

In relation to the above, a list of necessary actions to be undertaken was defined in order to introduce the TPA. To eliminate the monopolistic structure of the gas sector, unbundling of the network activity from exploration, mining and trading in gas activities will occur. It is necessary to divide the network into transmission and distribution networks according to the criterion of their functionality, not only of their technical condition taking into account only one parameter – pressure. The already concluded import agreements will be analysed with regard to their flexibility, in particular, as regards renegotiations of the "*take or pay*" clauses and the ban of re-exports of gas. The system will be provided in metering equipment, the transmission capacity of the system or its parts will be increased and so will be the system interconnections.

According to the legal provisions in force, in 2005 the customers authorised to benefit from the right to freely choose a supplier were:
• All non – household customers (About 1,7 mln out of over 6 mln total)
None of the undertakings applied for benefiting from the TPA rule.

The following tasks will be imposed on the operators of the systems: implementation of the indispensable investment of undertakings related to furnishing the transmission and distribution networks with metering equipment, availing of the expertise of other branches, working out the network's code, development of the uniform telemetric and IT standards for efficient data transmission, which will be binding for the market participants, and implementation of the procedures enabling benefiting from the TPA rule, upgrading the gas network and the cross-border interconnections to the needed extent, especially with the UE countries. The system of the market information exchange will be built, so that the information flow would be reliable and will allow predicting further trends on the market, as well as monitoring of the security of gas supplies. Within this system, a user-addressed sub-system will be created to inform users about its functioning and of the rights they have. Further gradual elimination of cross - subsidies, provided for within the procedures of tariffs approval will come next.

3.2. The regulatory procedures

Licenses

In Poland, legal regulations in force impose an obligation of getting a *licence* by entrepreneurs carrying out energy business activities in the field of gaseous fuels production (with the exception of production of gaseous fuels from liquid gas), the storage

of gaseous fuels (with the exception of: local storage of liquid gas in installation of less than 1MJ/s capacity, as well as storage of liquid gas in retail trade), transmission and distribution of gaseous fuels in networks of less than 1 MJ/s), trade in gaseous fuels.

Licences authorising to carry out business activities in the field of trade in natural gas with foreign partners are issued with respect to diversification of gas sources and security of gas energy supply.

Tariffs

In the gas sector, the key issue is the *tariff* of the transmission–storage company - Polskie Górnictwo Naftowe i Gazowe S.A. (PGNiG) (Polish Oil and Gas Company), in which all the distribution companies belonging to the capital group PGNiG, covering with their services over 0.7 to 1.4 million of customers, local distribution undertakings (each of them rendering services for about 4 thousand customers), small gas enterprises (supplying gas for a few to a dozen of customers), as well as major gas customers – provide themselves with high-methane and low-methane natural gas.

The new tariff of PGNiG entered into force on 1 October 2005. In this tariff, prices of gaseous fuels were fixed with significantly closer connection with their actual combustion heat. Such an approach will enable collecting charges for gaseous fuel in amounts adequate to its combustion heat, not only from customers of industrial character, but also from household customers.

On the scale of the overall capital group PGNiG, the average increase in prices of gas fuels for final customers (including those, who provide themselves from the network of the transmission-storage company), introduced by tariffs that entered in force on 1 October 2005, is estimated at 5,5 – 6,5%.

As for companies, increases from 2,8 to 3,5% in average prices for community-household customers followed. Simultaneously, the higher these increases, the lower the consumption of gas.

Network investment

Like in the case of the energy market the draft *plans of development* drawn up by the network gas undertakings (in the scope of satisfying the current and further demand for gas) are to be accepted by the President of the URE. After Poland’s accession to UE – the country both on the level of government administration and operators of gas and electricity transmission systems, has been obliged to co-operate with the European Commission in the issues related to supporting the trans-European transmission networks.

The undertakings obliged to agreeing their draft plans of development within a separate

procedure can be divided into three groups

- undertakings carrying out network activities in the area of the whole country, having crucial importance for security of gas supply: PGNiG S.A.

- gas plants and distribution companies, basically carrying out network activities in the area up to several voivodships (provinces)

- other undertakings carrying out activities on the local scale (most often on industrial or community level).

4. Activities of the President of URE with regard to the district heating (DH) sector

District heat supply constitutes to be one of the most important sectors in the Polish energy economy, as approx. 50% of primary energy is utilised for heat production. Simultaneously, space heating and domestic warm water constitutes approx. 80% of energy consumption in housing.

Dominance of solid fuels in the energy balance was of basic importance for district heating (DH) development in Poland. It also created conditions for the development of co-generation of heat and power in CHP plants. Heat demands of cities are mainly covered by the DH systems with thermal capacity about 46 000 MW, and DH networks length estimated for over 18 000 km.

The scope of DH systems is local, but they play a significant role in the national economy. Heat production and distribution are important in energy balances of the cities. Approx. 70% of heat demands in towns is covered through DH networks supplied from CHP and heat only boilers (HOB). However in rural areas and small towns heat demands are covered mainly by local (often - individual) heat sources.

Market evolution

Fundamental changes started in the DH systems since 1990, when the parliament issued important acts, which created a legal base for ownership changes in the DH sector, shifting the responsibility for heat supply from central to local authorities. Those acts defined among others the principles of taking over, by the municipalities, of the state owned assets. According to those acts, heat supply started to be one of the commune’s own tasks and local authorities had to choose the organisational and legal form of an economic activity in that field. Simultaneously, the parliament issued an act on the privatisation of the state-owned companies, which, among others, determined the principles of commercialisation and privatisation of the industrial heat sources (including CHP plants in the power sector).

According to the general principles of economic transformation, a company restructurisation aimed first at market activity (commercialisation), then at its privatisation

and the creation of competitive conditions, wherever it is possible and economically justified. At the beginning, restructuring of the DH sector was impeded because the compulsory provisions were not adjusted to economic changes occurring in Poland. Specifically, they were not adapted to transformation to the market economy and overtaking of heat supply obligation by the municipalities.

The process of ownership and organisational transformations in the DH sector is slow and has not been finished yet. The majority of communes have already taken over DH system assets and created its own organisational units in the form of limited liability company, joint stock companies or budgetary entities. In some communes, DH companies were privatised (with participation of national or foreign capital), and a few companies are listed at the stock exchange.

The ownership and organisational changes constitute only the beginning of the DH sector restructuring process, which includes economic transformation and related technical activities. These aim at improving energy use efficiency, decrease of environmental pollution, increase of heat supply reliability, improvement of the customer services quality etc.

Unfortunately, untill 1997, the energy sector had remained regulated by old legislation, issued in the former economic system and inadequate in the new social and economic situation. This was a serious obstacle for energy sector transformation. The most difficult situation was in the DH sector, which is not as consolidated as the power and gas sectors. It is necessary to stress that particular elements of the Polish DH systems (heat sources, DH networks and substations) are owned by different entities.

In some DH systems heat sources, owned by several different companies, supply DH networks owned by another DH company. Thus development and modernisation as well as restructuring of the DH sector is a very complicated process and its proper realisation needed a change of existed legislation in favour of a market oriented economic framework.

The change of the legal framework was initiated by the Energy Law of 1997. It has to be underlined, however, that the implementation of the Energy Law was possible only after several ordinances were issued and amended – according to the present, economic situation.

The Energy Law with its secondary legislation determines a new quality of operational rules for DH companies acting under market economy conditions.

District heating regulation

The responsibilities of the President of URE concerning the *DH sector* include licensing (according to the Energy Law provisions a licence is obligatory for *heat production* in heat

sources with total capacity over 1 MW; *heat transmission and distribution* in a DH network if heat demands of connected customers exceed 1 MW and *heat trade*), approving and supervising of heat tariffs, dispute settlement, co-operation with proper bodies in counteraction against DH companies monopolistic practices. Since May 2005 the limit is 5MW for production, transmission, distribution and trade.

Licensed DH companies are obliged to send their applications for heat tariffs approval to the President of the URE. The President of the URE shall approve a tariff or refuses it in case of non-compliance with the principles and provisions of the Energy Law and secondary legislation. The approved tariff is published (at the expense of energy company). Tariffs for heat are published in an adequate voivodeship official journal.

The first step in the procedure of heat tariff approval includes analyses of its accordance with regulations in force (including costs accounting, unit cost as well as prices and rates, calculation etc.). The second step of the heat tariff approval procedure is connected with verification of planned fixed and variable costs (including costs of modernisation, development and environmental protection) as well as the level of the average index prices and rates. It usually takes time because some additional information or answers to the President of the ERA questions have to be prepared by DH companies

The final steps of the tariff approval process are investigations of the financial effect of the new tariff on particular customer groups as well as defining the correcting indicators, which are the main tool of the heat price regulation. The correcting indicator and the yearly inflation rate in the previous year determine the permissible increase of the average index heat prices or rates for tariffs approved for more than 24 months.

At the beginning of the process of approving heat tariffs, the tariffs were approved by the President of the URE for period not longer than 24 months. At that time in practice all DH companies did not implement proper cost accounting for different kinds of economic activity and customer groups and cross subsidising existed. This caused the necessity of analysing hundreds of heat tariffs and deciding about their approval or refusal.

Number of heat tariffs approved during years 1999 – 2004

Year	Number of approved heat tariffs						
	I tariff	II tariff	III tariff	IV tariff	V tariff	VI tariff	TOTAL
1999	406	-	-	-	-	-	406
2000	193	220	-	-	-	-	413
2001	173	281	177	-	-	-	631
2002	111	114	186	95	-	-	506
2003	66	112	133	147	49	-	507
2004	36	59	71	123	104	35	428

Source: URE

Since 2001, after two years of practising energy regulation, after DH companies had improved their costs accounting procedures and cross-subsidies had been eliminated in some of the companies, the President of the URE started to approve heat tariffs for periods longer than 24 months. In 2001, those tariffs amounted to less than 10 %, but in 2002 the share of extended-period tariffs increased to about 20 %. DH companies can after every 12 months adapt prices and rates fixed for a first year of tariff implementation to the changed conditions of heat supply without the necessity to apply for the President of the URE approval. In this way, the President of the URE is not involved in heat tariff approval each year for those DH companies.

Describing the President's of the URE regulatory activity, it is necessary to stress that the organisation of heat supply in different towns (municipalities) is very diversified, because of various nature of the DH company's economic activity. The greater part (approx. 64 %) of the licensed DH companies has a license for heat production and a license for heat transmission and distribution. This means that those companies operate their own heat sources and DH networks. About 12 % of the licensed DH companies have as well a license for heat trade. Those companies transmit and distribute heat produced in their own heat sources and heat purchased from other DH companies. DH companies having a license for only heat production constitute approx. 14 % of the total amount of the licensed DH companies. The remaining DH companies have a license for heat transmission and a license for heat trade (they transmit and distribute heat purchased from other DH companies).

It is worth mentioning that the territory of DH companies activity is also differentiated. The DH companies usually operate in one commune (town), but there are also DH companies operating in more than one commune on the territory of one voivodeship (province). Several DH companies operate in many communes located on different voivodeship (province) territory.

The size of DH companies is also very differentiated. In Poland, small and middle size DH companies constitute the largest part (about 90 %) of the licensed DH companies, but yearly sale of heat by those companies amounts to only approx. 30 % of the total heat sale by all licensed DH companies. The smallest DH companies (with yearly heat sale up to 100 TJ) constitute about 50 % of all licensed DH companies, but their yearly heat sale amounts approx. 4 % of the total heat sale by licensed DH companies. By contrast, the share of the biggest Warsaw DH company in total yearly heat sale by licensed DH companies amounts to approx. 15 %.

The size of the DH companies has usually a substantial influence on the level of the heat price (because of economy of scale) and heat supply costs are higher in smaller DH companies. But the level of the heat price depends mainly on kind of fuel used for heat production.

The average weighted heat price differentiation depending on the kind of fuel in 2004

Kind of fuel	small hard coal	lignite	other solid fuels	natural gas	light oil	heavy oil	another fuels	all fuels (average)
Price [PLN/GJ]	22,98	15,04	41,27	30,75	48,45	25,34	22,05	23,43

Small hard coal is a dominating fuel, which is used in Poland for heat production. The structure of heat sale by DH companies depending on the sort of basic fuel used for heat production is shown in table 3.

The structure of heat sale depending on the sort of basic fuel used for heat production in 2004

Kind of fuel	small hard coal	lignite	other solid fuels	natural gas	light oil	heavy oil	another fuels
Share [%]	91,15	1,25	0,43	4,62	0,40	1,05	1,10

The average weighted heat prices in particular regions of Poland depend on the structure of heat sale from various heat sources (using different fuels). Differentiation of the average weighted heat prices within the country territory is pictured below. The numbers on the picture indicate the heat price in PLN/GJ (excluding VAT) which is calculated for the first year of application of the tariffs approved in 2004 for DH companies operating on territory of a particular province (voivodeship).

Differentiation of the average weighted heat prices within the country territory (PLN/GJ) 2004

The level of charges for heat transmission services depends mainly on the kind and parameters of a heat carrier (hot water or steam) and scope of the services (place of heat delivery). There are various types of DH networks, which transport different heat carriers (transmitting heat) from heat sources to the heat transfer substations connected with receiving installations in customers' buildings. Most common is a municipal DH network with hot water as a heat carrier, which temperature changes according to the weather conditions. There are also DH networks, which are transmitting heat to industrial customers by steam (with different parameters) as well as DH networks transmitting heat by hot water with constant temperature.

The customers' buildings are connected to the DH network by different types of heat transfer substations, which in general can be divided into single-function substations (usually only space heating) and multifunctional ones (usually space heating and domestic warm water). In some industrial and public facilities the multifunctional heat transfer substations supply also ventilation and technological needs. Heat transfer substations can be individual (a substation is connected with receiving installations in a single building) and group ones (a substation is connected with receiving installations supplying more than one

building).

The customers own receiving installations in buildings (being an integral part of it), while the heat transfer substations as well as parts of receiving installations between a group substation and buildings can be owned by a DH company or by a customer.

The heat transmission and distribution costs are usually differentiated according to a scope of services performed by a DH company for different customers (groups of customers). The costs of heat transmission and distribution to the heat transfer substations depend on the total costs of DH network operation and maintenance as well as costs of heat and water losses in the network, which occurred during heat carrier transportation to the customers. Differentiation of heat transmission and distribution costs depends on the organisation of heat supply, ownership of substations and other local circumstances and has to be reflected in the heat tariff. The costs of heat transmission and distribution are lower for customers operating their own substations and higher for those who operate only receiving installations in buildings.

5. Activities of the President of the URE with regard to the liquid fuels sector

There are seven oil refineries in the national oil sector, three of which belong to one group – PKN ORLEN S.A., which has a dominant position on the market of liquid fuels. Large quantities of oils are also processed by Rafineria Gdańska S.A. Due to the fact that the category of fuel production includes also their blending (a process which is less advanced in the technological context) it was possible for a large group of other undertakings to enter that sub-sector, mainly because they owned capital allowing to finance this type of operations.

Storage of liquid fuels is also an important activity in this sector. The entrepreneurs who carry out activities comprising of liquid fuels storage are rigorously verified due to possible threats influencing the environment.

Activities in the field of liquid fuels transmission are carried out using the networks (in this case networks of pipelines). Such operations are carried out only by the Przedsiębiorstwo Eksploatacji Rurociągów Naftowych - PERN (The Company for the Exploitation of Pipelines) because the infrastructure required for such operations is at present inaccessible to other entrepreneurs.

Due to low capital requirements the number of operators in this subsector is significantly higher than in the other subsectors. The group consists of both undertakings with Polish capital only and with foreign capital. International corporations play increasingly important role in the group. A group of companies with foreign capital, i.e. ARAL Polska Sp. z o.o., BP

Polska Sp. z o.o., Conoco Polska Sp. z o.o., Dexpol S.A., ESSO Polska Sp. z o.o., Shell Polska Sp. z o.o., Slovnaft Polska Sp. z o.o., Statoil Polska Sp. z o.o. own now over 600 fuel sales points (petrol stations). A significant number of undertakings operating in this market sector trades in LPG which is qualified as a liquid fuel.

Licenses

The regulation in the case of liquid fuels is limited to licensing, monitoring of implementation of terms and conditions, and imposing sanctions (penalties, withdrawal of licenses) on operations inconsistent with legal provisions in force and terms and conditions of licenses. A license is required for production of liquid fuels; storage of liquid fuels, except for storage of liquid fuels in retail trade; transfer and distribution of fuels; trade in fuels and energy.

On 31 December 2004, fuel undertakings had a total of 7211 licenses for liquid fuels, including 6961 trade licenses.

In the course of administrative procedures the activities of entrepreneurs trading in liquid fuels at petrol stations or using the fuel bases were verified in the context of their technical and economic efficiency ensuring adequate operations, which meant the requirement to confirm that the petrol stations and bases fulfilled technical requirements provided for in the regulations in force. Because of a great impact of those activities on the environment and a serious threat of explosion or fire, during the procedure of issuing a license considerable attention was given to verification of undertakings in the context of having all the permits required by law, authorisations to exploit the installations and equipment participating in the fuels production process. The tightness of liquid fuel tanks is very important for the security of operations – the results of relevant tests have influence on possibility of issuing or not issuing a license for liquid fuel production. Such operations are often accompanied by emission of toxic substances into the atmosphere. Before issuing a license the size of such emission is scrupulously analysed in the context of decisions regarding its admissible size for an undertaking. The problems of adequate water and sewage management are also very important.

The licensing of individual business operations on the liquid fuels market does not put administrative barriers hampering the development of free market mechanisms, but is an attempt to develop special regulation of these business operations sensitive to law enforcement, and aims – as far as the individual customers' interests are concerned – at identifying stable and reliable entrepreneurs, having strong position in the market and long-term oriented. The definition, throughout licensing of the operations' framework consisting of production or trade in liquid fuels has a broader scope and counteracts any

irregularities.

In the year 2004 signs of growing competition in the sector were particularly visible. Attempts of consolidating operations undertaken by licensees trading in liquid fuels were one of the methods of strengthening market position. In the opinion of the President of the URE this trend is desirable and leads to increased effectiveness of enterprises' operations and improved quality of services.

An important event, leading to wider competencies of the President of URE, was the signing (October 2003) by the President of the Republic of Poland of the Act on bio-components sed for liquid fuels and liquid bio-fuels generation. This act entered into force in January 2004. The Act obligates the President of the URE to monitor the market of liquid fuels, liquid bio-fuels and bio-components.

The participants of liquid fuels market expect high efficiency of the Regulator's activities in this sector. Considering such high expectations, the co-operation of the President of the URE with other state bodies is especially important. Active presence of the Regulator in this difficult sector of the market becomes especially visible in the light of future law drafts which would support increased efficiency of actions aimed at setting in order operations of the sector and the economy as a whole. It is especially important after Poland's accession into the EU.

6. The Energy Regulatory Office

6.1. Organisational structure

The Energy Regulatory Office is an executive tool of the President of the Energy Regulatory Office, under his direct management. The Office consists of four merit departments, two Offices and nine field divisions.

6.2. Budget and employment

Employment

In October 2005 the Energy Regulatory Office employed 277 people: 154 of which were women and 123 – men. 11% of the employees were civil servants. In comparison with the year 2004 the employment grew by 0,3 %. The majority of the URE personnel possesses university education (88.4 % of the employees).

The employment structure disaggregated by education is as follows: economists – 25.7%, energy engineers and electricians – 16.2%, lawyers – 14.7%, experts on environmental protection – 11.7%, mechanics – 9.4%, management experts – 6.4%, other – 15.9%.

Budget

In the Budget Law for 2005 the revenues of the URE were planned for 77 mln PLN and expenses – 33,3 mln PLN.

The revenues consist mostly of license fees and are transferred to the State Budget.

6.3. International activity

International cooperation

A very special place in the international contacts of the President of URE is reserved for cooperation with the UE institutions, of which full member Poland became in May 2004. At that time, the Polish Regulator became a full member of such European associations and institutions like the Council of European Energy Regulators (CEER). This event guarantees that the Polish energy sector will become a part of a fully integrated European energy system in the future. The President of the URE has also been invited to participate in the activities of European Regulators Group for Electricity and Gas (ERGEG), established by the decision of the European Commission in November 2003. The co-operation within the framework of The European Electricity Regulatory Forum, with its seat in Florence, and The European Gas Regulatory Forum, with its seat in Madrid, becomes also more and more important.

The President participates also in many other international initiatives (e.g. The Energy Charter and The Energy Regulators' Regional Association (ERRA) attending meetings and conferences as well as working groups.

For many years he has carried on a bilateral co-operation with foreign regulatory institutions, aimed at the exchange of information and comparison of regulatory experiences. The long-term objective is the permanent improvement of the quality of performed duties.

6.4. Information activities of the President of the URE

In the Regulator’s view the principle of transparency is of crucial importance in regulatory practise and has a decisive impact on his information activities.

As a part of this policy the URE publishes a bimonthly magazine called “The Energy Regulatory Office Bulletin”. It comprises of in-depth articles, announcements and analytical studies concerning the energy sector. In addition, information on energy undertakings applying for a license, as well as decisions concerning licensing, tariffs and dispute settlements issued by the President of the URE, are also published in the Bulletin.

The President of the URE has also founded an editorial series – "The Regulator’s Library" in order to publish analytical works on the theory and practise of Polish regulation.

Updated information on the publications is published on a regular basis on the URE’s website (www.ure.gov.pl)

6.5. Spokesman for Energy Consumers

In 2004, which was the third year of work of the Spokesman for the Energy Consumers in the URE, he was addressed with 609 petitions, mostly referring to tariffs and tariff groups, special tariffs for employees of the energy sector, connections to grids, settlements of bills and legal interpretations of the Energy Law.

Differentiation of the average weighted transmission and distribution heat charges

Number of undertakings possesing licenses (as of 31 December 2004)
Source: URE

The quantity of electric energy sold and average prices (2000-2004)
Source: URE

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