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Adaptation of the Polish Gas and Electricity Sector to the Requirements of the EU Internal Market Directives – How Far to the Competitive Electricity and Gas Market? Legal and Business Perspective

Abstract: *The main provisions of the Electricity and Gas Directives[1] mainly independent regulation of entities described as natural monopolies that take part in the process of transmission and distribution of gas and/or electricity as well as implementation and obedience of the regime on unbundling and third party access have been transposed into the Energy Act (further referred to as 'the Energy Act') on May 3, 2005 by the amendment Act dated March 4, 2005.[2] Unfortunately compatibility of the unbundling measures and third party access adopted in Poland with the Directives still remains major concern. For example the electricity transmission system operator (TSO) seems not to be properly unbundled since it focus is mainly on adopting its operations to relatively inefficient generation and transmission structure in Poland, rather than on efficient operation of the overall system and facilitation of the market changes. Distribution system operators (DSO) both in electricity and gas have not been properly functionally and legally unbundled and in general they discriminate other market players (new entrants) in favour of their own supply-companies. Accordingly this paper reviews development and the state of electricity and gas sectors' liberalisation in Poland and discusses the*

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[1] Directive 2003/54/EC of the European Parliament and Council of 26 June 2003 concerning common rules for the internal market in electricity; OJ L 176, 15.7.2003, p.37-56 – 'the Electricity Directive' and Directive 2003/55/EC of the European Parliament and Council of June 2003 concerning common rules for the internal market in natural gas; OJ L 176, 15.7.2003, p.57-78 – 'the Gas Directive'.

[2] Act of 4 March 2005 amending Energy Act and Act on Protection of Environment (Ustawa z dnia 4 marca 2005 o zmianie ustawy – Prawo Energetyczne oraz ustawy – Prawo ochrony środowiska), Dziennik Ustaw (Journal of laws), no. 62/2005, item 552.

prospects for further progress towards an integrated and liberalised European electricity and gas market in the light of remaining challenges such as: uneven unbundling, discriminatory third party access (in particular, with regard to any difference in the treatment of existing versus new contracts – problem of long-term supply contracts and storage capacity), lack of independent regulator, anticompetitive behaviour of incumbents or abuse of dominant position.

1. *Status quo* on the Polish electricity and gas market

Although the Polish energy market is not fully liberalised, in theory every household is free to purchase energy from a chosen producer or supplier. The right of a customer to freely choose his/her supplier depends on the degree of market opening. Formally, the level of liberalisation of the Polish energy market at the time of accession to the EU stood at about 51%.[3] Although this number is a positive indication in practice Polish electricity and gas sectors are still largely dominated by former monopolists. Polish Power Grid company (*Polskie Sieci Energetyczne SA* – PSE SA) has been established by the Minister of Industry as a joint stock company, with the State Treasury as its sole owner (holding both 100% of shares and votes) on 2 August 1990.[4] Under the Polish Commercial Code, the State (i.e. Ministry of Treasury) representing the owner has the full authority of the General Assembly of Shareholders. In other words PSE SA as a centralised state owned company involved in generation as well as in domestic and international electricity trade holds a monopolistic position and has a great influence on the electricity market. Recently on 9 May 2007, Ministry of Treasure as part of the consolidation process of the Polish energy sector has incorporated into PSE SA 85% shares of PGE *Energia* and BOT SA[5] and created Polish Energy Group (*Polska Grupa Energetyczna* – PGE) At this stage it is important to state that the creation of the new group has unfortunately breached the unbundling provisions of the Electricity Directive, since the PGE holding is currently present in generation, transmission, distribution and supply activities, what as a matter of fact is forbidden by the Electricity Directive. This merger and its' consequences will be discussed in more detail further on.

[3] M.Olejnik, *National Approaches to implementation – Poland* in: *Legal Aspects of EU Energy Regulation. Implementing the New Directives on Electricity and Gas Across Europe*, ed. P.Cameron, Oxford University Press 2005, p.405.

[4] See: PSE SA web page at: http://www.pse.pl

[5] PGE Energia is a company involved in generation of electricity and consist electricity generator - *Zespol Elektrowni Dolna Odra* and four combined heat and power plants – *CHP Rzeszów, CHP Wrotków, CHP Gorzów and CHP Bydgoszcz*. BOT SA is the largest Polish electricity generator made of three electricity plants *Bełchatow, Opole, Turów* and two coalmines.

The electricity generation sector is rather fragmented, however around 45% of the capacity is held between two companies BOT and PKE (*Poludniowy Koncern Energetyczny*), which were recently integrated. Around 50% of the generation capacity is tied to long term contracts or long term power purchase agreements with PSE, which in the past acted as a single buyer. The Electricity Wholesale Market (*Towarowa Giełda Energii*) is a bilateral trading market, with brokered deals, however its functionality raises many questions. In general, independent suppliers/traders in Poland do not posses adequate generation capacity, and under the assumption that cross-border exchange of electricity is largely limited suppliers depend on purchasing electricity from the *Towarowa Gielda Energii*. However, the dominance of very few producers and traders leads to assumption that its liquidity is rather low and major enhancements are needed.

Similarly, in the gas sector, the Polish Oil Mining and Gas Industry company (*Polskie Górnictwo Naftowe i Gazownictwo SA* – PGNiG SA) was established in 1976 as a fully vertically integrated monopoly responsible for the entire gas chain from exploration to retail supply to final customers. Today PGNiG SA as a state owned company and monopolists is the largest Polish company operating in oil and gas exploration,[6] production, processing, storage and trade which is the core business of PGNiG SA activities.[7] Due to requirements of the Electricity and Gas Directives on unbundling of the vertically integrated undertakings (VIU)[8] transposed into the Energy Act in Article 9d, transmission has been legally and functionally separated from the competitive activities of the VIU. Nevertheless PGNiG SA through its subsidiary – transmission system operator (Gas System) is still involved in transmission of gas. Additionally PGNiG SA is also involved in distribution of gas, which not only constitutes violation of Directives, but also hinders competition on the Polish gas market. Further on restructuring of the gas sector has been put aside by the Polish authorities and the current focus is on the electricity sector. Ministry of Economy stated very clearly that the liberalisation of the gas sector will be postponed until 2010,[9] which is not

[6] Exploration and production operations of the PGNiG SA are submitted to the requirements of the Mining and Geological Laws, and as such are not covered by the Energy Act.

[7] See: PGNiG SA web page at: http://www.pgnig.pl

[8] See: Article 9d. of the Energy Act, Dziennik Ustaw (Journal of laws), no. 89/2006, item. 625, as amended by the Act of 2006 which transposes Directives. According to this Article there has to be a separation between the management of the TSO or DSO on the one hand and the management structure of the integrated energy undertakings on the other.

[9] See: Commissions Staff Working Document. Implementation Report – SEC(2006) 1709, p.136. Accompanying document to the Communication from the Commission to the Council and the European Parliament – Prospects for the internal gas and electricity market –

allowed under the Gas Directive and no information with regard to this has been sent to the Commission for the potential transitory period. The argumentation provided by the Ministry is that Poland wants to diversify its gas supplies before enhancing competition.[10] This, however very unfortunate argumentation is out of line, since it is the competition that will cause diversification of supplies thus enhance the security of supply.

With regard to the unbundling Polish Energy Act in Article 3 paragraphs 24 and 25 distinguish between TSO – transmission system operator and DSO – distribution system operator. Additionally Article 3 paragraphs 26, 27 and 28 provide for the gas storage operator, LNG (Liquefied Natural Gas) terminal operator[11] and combined operator. Generally speaking the role of system operators is central to the electricity and gas market. They are the only entities permitted to carry out transmission, distribution or storage activities, and they must obtain a license from the *Urząd Regulacji Energetyki* (URE) – Energy Regulatory Office to carry out their business.[12] Transmission system operators are mainly responsible for the transmission[13] of energy in Poland, while distribution system operators are responsible for transmission and distribution[14] in a given area of Poland indicated in their licenses.

System operators are also obliged to grant access to their networks. Article 9 of the Energy Act delegates Ministry of Economy to issue regulations with the methodologies required to arrange for tariffs. Consequently access is granted in accordance to the binding general terms and tariffs approved by the ERO under sale, transmission or distribution agreements conducted between transmission/distribution operator and the supplier or trader. In the transmission segment system operators itself provide tariffs, whereas in distribution segment

COM(2006) 841 final. Available at: http://ec.europa.eu/energy/energy_policy/doc/10_internal_market_country_ reviews_en.pdf

[10] *Poland wants to slow down gas market liberalisation* (*Polska chce o kilka lat opóźnić liberalizację rynku gazu*), "Gazeta Wyborcza", 06.09.06.

[11] Although there are plans to build LNG facilities in the city of Szczecin, currently there is no LNG facility and operator established in Poland. Therefore as such LNG operator will not be taken under consideration in this article. The same corresponds to storage.

[12] See: Articles 32-43 of the Energy Act.

[13] Total number of electricity transmission networks (750 kV-only for connecting Polish electricity system with Ukraine, currently not used, 400 kV and 220 kV) in Poland is counted to be 13 thousands km. Additionally due to insufficiency in capacity and technological developments the distribution networks are used for the transmission purposes that is 110 kV lines, estimated at 32,5 thousands km. Transmission gas networks amount to 18,6 thousands km. See: Operational Program: Infrastructure and Environment from 29 November 2006, p.4 (Program Operacyjny Infrastruktura i Środowisko, Warszawa, 29 listopada 2006).

[14] Distribution electricity networks lower than 110 kV amount to 705 thousands km. Distribution gas networks amount to 123 thousands km.

still due to lack of distribution system operators being really unbundled the vertically integrated distribution companies provide tariffs. Refusal of access is possible but only under certain justified conditions such as serious financial or technical grounds, or due to security of supply issues. Every refusal must state reasons for it, which is subject of assessment by the dispute settlement body – the Regulator.[15] Last but not least system operators are responsible for the operation and maintenance of secure and proper conditions electricity and gas networks.[16]

2. Transmission sector

As a result of market reforms and transposition of Directives there have been two transmission system operators established on the Polish market. One for the electricity sector PSE–Operator and one for the gas sector PGNiG–*Przesył* (PGNiG–Transmission). PGNiG–Transmission in April 2005 was renamed Gas System. Creation or simply unbundling of the transmission system operators both in theory and also in practice was conducted much quicker than the establishment of the distribution system operators simply due to a fact that Directives did not envisage derogation periods, exemptions from the unbundling requirements for the TSO's. As a result, PSE-Operator was legally and functionally unbundled by its parent company – PSE SA on 1 July 2004. Under the provisions of the Energy Act – Article 9c,[17] the TSO is in particular responsible for:

- Security of supply through adequate transmission capacity and system reliability;
- Effective conduct of grid traffic in transmission network, maintaining required reliability of energy supply and quality;
- Operating and maintaining the network and connected installations;
- Ensuring the long term capability of the system to meet reasonable demand for transmission electricity;
- Managing energy flows in the system, taking into account exchanges with other interconnected systems and TSO's (cross-border exchange) with the purpose of effective functioning of the domestic and European electricity system;

[15] Article 8 of the Energy Act.

[16] Secure and proper maintenance involves: the ongoing long term operational security of the system, the use, maintenance and repair and necessary expansion of the distribution or transmission networks, including connections to other gas or electricity systems. See for instance: Article 3 recital 24 and 25 of the Energy Act.

[17] See also: Article 3 par. 24 and Article 4 of the Energy Act.

- Exchange of information with other interconnected transmission system operators regarding conditions and capacity of the transmission networks in order to avoid congestions;
- Designation of regular transmission network traffic structure;
- Purchase of electricity in order to cover transmission losses;
- Disposition (dispatching) of capacity of generating units (plants) connected to the transmission networks;
- Balancing of electricity system;
- Creation of crisis management plans in case of system failure.

Gas System (formely PGNiG-*Przesył*) was established by its parent company – PGNiG SA on 16 April 2004. It is the only gas TSO in Poland. It operates on the basis of a decision of the Regulator. Previously 100% shares of the Gas System were held by the parent company – PGNiG SA, however on 28 April 2005 PGNiG SA transferred 100% of shares in Gas System to the Ministry of Treasury in the form of a donation.[18] As a result, the State Treasury maintains direct control over the natural gas transmission system in Poland, although around 50 % of the transmission networks and other connected facilities is owned by the PGNiG SA[19] of which 85% shares belong to the State Treasury. Gas System has been legally unbundled since 1 July 2005. Under the provisions of the Energy Act – Article 9c, the TSO is responsible for:

- Security of supply through assuring secure functioning of the transmission network;
- Effective management of the network traffic - maintaining required reliability and quality of gas supply and balancing the operations of the transmission grid;
- Developing, operating and maintaining networks and any relevant connected gas installations;
- Ensuring the long-term ability of the system to meet reasonable demands for the domestic and international transmission of gas, its distribution and storage;
- Providing system users and operators of other transmission systems with current and anticipated information on transmission service terms and conditions;

[18] For more on this see Gas System webpage at: http://www.gaz-system.pl/page?mid=10

[19] The rest 40% has been recently donated through the Ministry of Treasury to the Gas System. See further at CIRE portal: *Will Gas System re-purchase gas pipelines?* (*Gaz System odkupi gazociągi?)*, available at: http://www.cire.pl/item,29628,1.html

- Providing all customers on non-discriminatory basis with transportation services that consist in delivery of natural gas from the supplier of their choice (non-discriminatory TPA);
- Designation of regular transmission network traffic structure;
- Balancing of gas system.

Additionally Polish gas market comprises other subject which fulfils some of the functions of the transmission system operator but as such it is not a TSO. *EuRoPol Gaz Transit Pipeline System* was incorporated as a joint stock company on 23 September 1993. The company consists of three shareholders: PGNiG SA (48% of shares), *Gazprom* (48% of shares) and Gas-Trading (4% of shares). Gas-Trading conducts business in the field of investment, manufacturing, trade and services as well as foreign trade. *EuRoPol Gaz* is mainly responsible for the operation and maintenance of the Jamal gas pipeline. According to the protocol signed on 18 February 1995, the Polish party is responsible for the establishment of conditions for the transportation of natural gas to Western Europe and Poland through the Jamal gas pipeline. Currently *Gazprom* is using around 90% of the Jamal pipeline capacity by sending yearly 27 billions cubic meters to Germany and around 3 billions cubic meters to PGNiG SA. In 2006 the transmission tariff amounted to 5,98 PLN for 1000 cubic meters, however it has not been accepted for approval by URE due to complaint made by the Polish side.[20] As a matter of fact agreement in tariff negotiations has not been reached yet, what might raise gas supply problems in the near future.

It is very important for the competition, market opening and proper functioning of the Internal Energy Market, that system operators have effective and independent decision making rights as well as independent management structures especially regarding access to the networks. In other words system operators should be independent from other activities not related directly to transmission or distribution. This is of particular significance especially in Poland, where Gas System although use the networks on the basis of the lease agreements, do not own them. Therefore in reality although legally and functionally unbundled gas TSO is an affiliate of the parent company PGNiG SA. Having VIU already present in the supply and/or generation chain and additionally directly or indirectly involved in transmission activities raises serious doubts regarding non-discriminatory behaviour. The following case study demonstrates this trend. At the end of 2006 trading company *Emfesz Polska* (of Hungarian origin) was denied pipeline access by the Gas-System to fulfil contract requirements of transporting 150 million cubic meters of gas

[20] For more on this see: *Russians should pay Poland more (Rosjanie powinni płacić Polsce wiecej)*, "Rzeczpospolita", 12.06.07.

from Polish border to the largest Polish fertiliser producer – ZA *Puławy*. Gas-System denial was rather on vague grounds. It was claimed in favour of PGNiG SA that *Emfesz* does not have adequate storage capacity in Poland[21] in order to secure trade (entire storage belongs to PGNiG SA). What is more, according to PGNiG SA the whole storage capacity existing in Poland is needed by the PGNiG.[22] As a result *Emfesz* lodged complaint to the Polish antimonopoly authority which upheld Gas System decision. *Emfesz* took the case to the EU (lodged complaint to the Commission) and now it is awaiting a decision. The *Emfesz* case is particular because it provides few important legal dilemmas. First of all access to storage in Poland is negotiated, which is permissible under Article 19 of the Gas Directive. However the same Article states at paragraph 2 that access procedures shall operate in accordance with objective, transparent and non-discriminatory criteria. Moreover paragraph 3 states:

'*3. In the case of negotiated access, Member States shall take the necessary measures for natural gas undertakings and eligible customers either inside or outside the territory covered by the interconnected system to be able to negotiate access to storage and linepack, when technically and/or economically necessary for providing efficient access to the system, as well as for the organisation of access to other ancillary services. The parties shall be obliged to negotiate access to storage, linepack and other ancillary services in good faith*'.

Further on since there is no need for unbundling of the storage capacities (only accounting unbundling) in practice it is the PGNiG which is in charge of the storage capacity and not TSO – Gas System or other independent body – storage system operator. In result due to the position of the incumbent, Emfesz has not been able to negotiate the access with the PGNiG, what might constitute breach of Article 19(3) of the Gas Directive. PGNiG has claimed that the whole storage capacity which is insufficient in volume is indispensable for the PGNiGs operations in Poland. In addition PGNiG

[21] Every trading company supplying on yearly basis above 50mln cubic meters of gas, imported from outside of Poland should have storage capacity in Poland for uninterrupted supply for 30 days. Recently *Emfesz* has found another solution to the obstacles set forth by the PGNiG. Namely the company had bought underground gas resources (*Antonin* in Poland) of approximately 120 million cubic meters of which 80 million cubic meters has been already exploited. Emfesz after exploiting the remaining 40 million cubic meters, plans to use the underground resources as the gas storage facilities. For more on this see: *Emfesz has strongly anchored in Poland* (*Emfesz zarzucił w Polsce mocną kotwicę*), available at CIRE portal at: http://www.cire.pl/item, 29706,1.html

[22] See: *New Gas Reserve Act gives PGNIG even stronger control over the Polish market*, "Gas Matters", May 2007, p.18.

argued that it does not plan to make its storage available to third parties, because the legislation (Act on fuel reserves)[23] is forcing it to store larger quantities of gas. The Act requires every trading company supplying on yearly basis above 50mln cubic meters of gas, imported from outside of Poland to have storage capacity in Poland for uninterrupted supply for 30 days. Whereas companies importing up to 50 million cubic meter/year to less than 100,000 customers are exempt from the necessity to maintain gas reserves in storage on Polish territory. PGNiG currently produces around 3.9 billion cubic meters/year and imports from Russia around 7.9 billion cubic meters/year and the storage capacity in Poland exceeds only 2 billion cubic meters. Therefore it is obvious that if argumentation of PGNiG is taken under consideration, one could ask why at the first place Polish authorities adopted Act on fuel reserves (with the aim to store gas on Polish territory) knowing that in practice it will be a dead law, since present storage capacity is already occupied and no additional capacity is available. As a result PGNiG which is already in control of around 95% of the Polish gas market, thanks to the Act on fuel reserves will be able to control also its competitors, e.g by denying them access to the storage. Second of all denial of access to the transmission system may constitute breach of Article 1 para. 1 of the Gas Regulation[24] which states:

'*This Regulation aims at setting non-discriminatory rules for access conditions to natural gas transmission systems (...)*'

Gas System denial of access based on lack of storage capacity; thus might be perceived as a discriminatory behaviour of TSO acting in favour of its parent company PGNiG SA which is the main gas trader in Poland.

Third of all it might be assumed that behaviour of Gas System indicates that the company has been informally granted preferential capacity for the cross-border transmission and storage of gas as the only gas TSO on the market. This however creates another legal dilemma, since the European Court of Justice in its judgment in case C-17/03 of 7 June 2005 stated that preferential access to historical long-term supply contracts and capacity reservations contracts are deem to be discriminatory thus in violation with Directive 2003/54/EC and Regulation 1228/2003.[25] Although this Court judgement was applied to electricity, it certainly due to many similarities of

[23] Act from 16 February 2007 on reserves of oil, oil products, natural gas and on procedures in case of emergency in security of fuel supply and disturbance on oil market (Ustawa z dnia 16 lutego 2007 r. o zapasach ropy naftowej, produktów naftowych i gazu ziemnego oraz zasadach postępowania w sytuacjach zagrożenia bezpieczeństwa paliwowego państwa i zakłóceń na rynku naftowym), Dziennik Ustaw (Journal of Laws), no. 52/2007, item 343.

[24] Regulation 1775/2005 of the European Parliament and Council of 28 September 2005 on conditions for access to the natural gas transmission networks; OJ L 289, 3.11.2005.

[25] C-17/03 Vereniging voor Energie v. Directeur van de Dienst, [2006] ECR I-4983.

electricity and gas markets as the network industries of the Internal Energy Market could be applicable to the grant of preferential transmission, distribution and storage capacities of natural gas thus in violation with Directive 2003/55/EC and Regulation 1775/2005. Of course Gas System being in advantageous position may argue that access for *Emfesz* has been denied on the basis of public service obligations protecting the security of supply or due to serious economic and financial difficulties with take-or-pay contracts. This however is subject to derogation being granted by the competent national regulatory authority and confirmed by the European Commission. It has not been confirmed as such by the EC. Moreover it is hard to believe that supplying of 150 million cubic meters to one company might deteriorate national security of supply.

Finally PGNiG or to be more precise Ministry of Treasury as the owner of the state monopolist might be acknowledged as breaching Article 31 of he EC Treaty. Under Article 31 of the EC Treaty, Member States are obliged to adjust any state monopolies of a commercial character so as to ensure that there is no discrimination between nationals of Member States regarding the conditions under which goods are bought and sold. To be more precise in analogues case the Commission has issued a formal request under Article 226 of the EC Treaty to Malta to adjust its monopoly for the importation, storage and wholesale of petroleum products. Malta according to Commissioner Kroes has been maintaining discriminatory measures in favour of the commercial state monopoly which stop any potential new entrants from getting into the wholesale petroleum market.[26]

Unfortunately the fact that currently, when suppliers require storage, they have to contact their competitors in order to contract their storage needs, dose not enhance market confidence and constitutes a serious barrier for new entrants. As a result even though it is not necessary to separate storage (*e.g.* combined operator) obligation to separate storage operators would certainly enable competitors and regulators to check and verify that all available storage capacity is offered to the market on transparent conditions.

Emfesz case apart from legal dilemmas has another dimension which is perhaps prevailing under present political circumstances in Poland. Polish authorities are rather against liberalisation of the gas sector because on one side it will boost the prices of subsidised gas and on the other it would allow

[26] For more on this see: IP/07/958 from June 2007 on Commission requests Malta to adjust import monopoly for petroleum products, available at:
http://europa.eu/rapid/pressReleasesAction.do?reference=IP/07/958&format=HTML&aged=1&language=EN&guiLanguage=en

companies such as *Emfesz* with Russian links (close tights to *Gazprom* and *RosUkroEnergo*) to take some control over the Polish gas market.

Further on all of this demonstrate, that even when unbundling with regard to independent decision making or separate accounting and book-keeping procedures is conducted, the threat of informal dependence of TSO on parent company still remains. Thus if the transmission unbundling is to be really effective in the Polish scenario, there should be a separation of assets ownership as was the solution adopted in the UK. Otherwise the informal relationship between transmission system operators and their parent companies will for obstacles to the full market opening.

3. Distribution sector

The situation in the Polish distribution sector seems to be a lot more complicated than in the transmission. Distribution companies are dominant in their regions. Occasionally there are new traders entering the market, however in general they are linked to one of the main generators. DSO functional and legal unbundling according to the authorities has taken place, but in practice it has not happened yet, as most of DSOs form part of distribution – supply companies without production/generation capacity, though most of them are linked to main generators. It is only recently we can observe moderate change of structure taking place on the Polish energy market. As a result there are 14 electricity and 6 gas distribution companies, in majority of cases still acting as a distribution system operators. Moreover on the gas market all 6 distribution companies are subsidiaries of the PGNiG SA. Additionally the state monopolist is also largely in control of supply (sales) of gas to end users, what unfortunately diminish the benefits of competition. Moreover Polish authorities are considering option to postpone liberalisation and restructuring of the gas sector, after the completion of the restructuring of the electricity sector. However the European Commission did not envisaged transition periods for the Polish gas sector. Therefore it is possible that the European Commission will start infringement proceedings against Poland under Article 226 TEU for the violation of provision of the Gas Directive. From 1 July 2007 out of the 6 gas distribution companies only one sales entity has been unbundled – PGNiG *Oddzial Handlowy* which as a matter of fact is under supervision of the mother company PGNiG SA. The six distribution companies (*dolnośląska*, *górnośląska*, *karpacka*, *mazowiecka*, *pomorska* and *wielkopolska*) became at least on paper distribution system operators, however strongly connected to the holding company. Such scenario rise number of questions. First of all why only one sales entity has been unbundled from 6 distribution companies, and why under the PGNiG supervision? Second of all as the spokesman of PGNiG

Tomasz Fil maintained[27] the 6 newly created DSO will be supervised by the PGNiG SA, which raises the question of competition nature and compatibility with unbundling requirements of the Gas Directive? It is hard to believe that the EC will not notice that the distribution and sales segments although in theory unbundled in practice are still under supervision and command of one vertically integrated company.

Another problem is of formal, procedural nature. In practice unbundling takes time. It is not one step, but rather lengthy officially authorised process. In this perspective the 6 above mentioned distribution companies start to unbundle their distribution activities exactly at the time when the unbundling process should have been already finalised. Therefore the deadline set forth by the Gas Directive has been breached. Perhaps PGNiG has been able to provide good reason for its delay? If not potential legal action form the Commission in this regard would certainly be justified.

The Polish electricity distribution sector is in relatively better condition than the gas sector, although the dominance of the PSE SA is still significant. For the 14 distribution companies only two RWE STOEN and GZE SA[28] are owned by foreign capital, the other 12 distribution companies are to some degree dependent on the State Treasury. Having distribution companies operating both as supply companies and distribution system operators, even though in practice possible due to derogation periods provided by the Electricity Directive (only for legal unbundling and under 100,000 customer clause), is certainly negative for the market participants. It creates the impression that the interest of the supply company is convergent with the interest of distribution system operator what in practice increases the possibility of discriminatory behaviour in third party access. This of course have a negative influence on the competition on the electricity market, not to mention that the distribution system operators might not be able to fulfil their duties *vis-à-vis* public service obligations. Furthermore, in practice the Polish energy market is currently in transition phase, thus in many cases the same management of the distribution companies is responsible for supply and distribution activities and additionally no separate premises for DSO and for supply company have been created. This indicates that the functional unbundling in the meaning of the Electricity Directive transposed into Polish Energy Law in Article 9d para. 2 has been put aside. In the Polish scenario this creates significant problem, not

[27] See: *PGNiG rozdzieli działalność handlową od dystrybucji gazu* (*PGNiG will separate supply and distribution of gas*), available at: http://www.cire.pl/item,28216,1.html

[28] GZE SA (76,4% owned by *Vattenfall*) currently has been unbundled and the following entities have been created: *Vattenfall Distribution Poland* (GZE SA), *Vattenfall Sales Poland* (GZE *Kontakt*) and *Vattenfall Heat Poland* (EW SA).

to say a violation of EU laws, since none of the distribution companies fulfil the exemption clauses of 100,000 customers where functional unbundling could be postponed. All distribution companies supply more than 100,000 customers connected to the grids. This is also true for the gas sector. The violation of provision of the Directives has been also observed by the European Commission which has begun infringement proceedings against Poland in April 2006.[29] Letter of Formal Notice has been send to Poland indicating that Poland has not provided at all or provided insufficient legal unbundling of distribution system operators guaranteeing their independence both in gas and electricity sectors. Additionally no notification of the public service obligations has been provided and preferential access for certain historical contracts in the electricity market have been maintained. Moreover preferential access to the transmission or distribution networks have been judged by the ECJ in its decision C-17/03 of 7 June 2005 as discriminatory and therefore are precluded by Directive 2003/54/EC and Regulation 1228/2003. In fact the Commission has decided on 18 September 2008 to send a reasoned opinion to Poland for failure to fully implement Gas Directive.[30] Poland has not transposed some provisions of the Gas Directive, but the Commission has decided to limit the scope of reasoned opinion to Poland's failure to designate a storage system operator. A reasoned opinion is the last step in the infringement procedure before referral to the Court of Justice.

Further on, the program of restructuring of the Polish power sector adopted by the Polish authorities, which consolidates electricity distribution companies (both DSO and supply divisions) with the assets together with generators, as part of the four newly created holdings generate several dilemmas. The first holding or simply vertically integrated undertaking has been created on the basis of PSE SA. The Ministry of Treasury has incorporated into PSE SA 85% shares of *BOT Górnictwo i Energetyka SA* (the largest Polish electricity generator) and *PGE-Energia SA* (made of *Zespoł Elektrowni Dolna Odra and Rzeszowski Zakład Energetyczny*) as well as 8 distribution companies in the east and south of Poland[31] becoming the owner

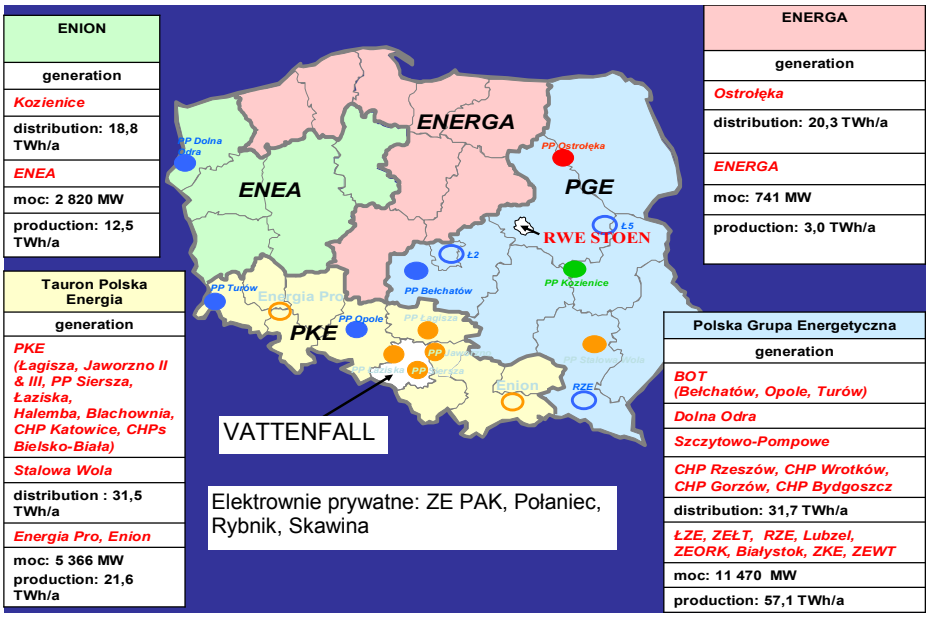
[29] See: Memo/06/152 Infringement procedures opened in the gas and electricity market sector, by Member States, Brussels, 4 April 2006 and *Poland do not obey community law* (*Polska nie przestrzega prawa unijnego)*, "Gazeta Prawna", 19.12.2006.

[30] IP/08/1374 Internal market in natural gas: the Commission sends reasoned opinion to Poland. Brussels, 18 September 2008.

[31] *Łódzki Zakład Energetyczny SA, Zakład Energetyczny Łódź-Teren SA, Zakład Energetyczny Warszawa-Teren SA, Lubelskie Zakłady Energetyczne LUBZEL SA, Zakład Energetyczny Białystok SA, Rzeszowski Zakład Energetyczny SA, Zakłady Energetyczne Okręgu Radomsko-Kieleckiego SA i Zamojska Korporacja Energetyczna SA*.

of the newly created group – *Polska Grupa Energetyczna* (PGE) – Polish Energy Group. The second created holding – *Energetyka Poludnie* – was established on the basis of *Południowy Koncern Energetyczny* (PKE), *Elektrownia Stalowa Wola* (electricity generator) and the distribution companies ENION and ENERGIA-PRO. Both holdings, although only in limited range are envisaged to debut on the Warsaw Stock Exchange in late 2008. Additionally, third conglomerate – *Grupa Energetyczna Północ* (Energy Group North) was created on the basis of generators (three power plants – the group of PAK and power plant *Ostrołęka*) and distribution company *Energa* (formerly group G-8 operating in northern Poland). ENEA covered electricity generator *Kozienice*, and distribution company *Enea* operating in *Pomorze Zachodnie, Wielkopolska* and city of Bydgoszcz. Chart 1 present four vertically integrated undertakings with their relevant market share in Poland.

Table 1. Consolidation of the electricity sector in Poland



Source: Energy Regulatory Office.

Creation of four holdings which would compete with each other on the domestic market and perhaps outside of Polish borders is in theory certainly a precious idea. Nevertheless in practice there are number of legal issues which should be taken under consideration, otherwise creation and operation

of such holdings raise the question of lack of compatibility with the provisions of Electricity Directive transposed into Polish law. Question mark should mainly be posed with regard to the issue of unbundling where there needs to be ensured separation between generation and supply on one side and distribution and transmission on the other. Getting to the point conglomerate PGE would have to be truly in practice separated e.g. by creating separate divisions on one side responsible for network activities and on the other responsible for the supply activities. This means that eight distribution companies would have to become solely supply companies without distribution system operators, which could not be a part of the holding, or reverse distribution companies would have the sell their supply activities and become solely system operators. At present, for instance *Zakład Energetyczny Warszawa - Teren SA* does not fulfil the requirements of unbundling. The main activities of the company involve generation, distribution and supply of the electricity and heating. It is visible thus that the network activities have not been unbundled. Further on the company has around 815,000 customers connected to the grid therefore the 100.000 exemption allowing for derogation from legal unbundling can not be applied, which makes the whole process more complicated. The other distribution companies from other groups are in similar position, for instance ENION and ENERGIA-PRO. Moreover, URE has granted concession for the distribution activities to all 8 distribution companies which are part of the Polish Energy Group, knowing that the unbundling has not been achieved yet.[32] Therefore it is rational to ask whether this was a political decision or sort of naive whish that the companies will be ready with unbundling by the 1 July 2007?

Summing up, it is doubtful whether consolidation of the energy sector under the state auspices is a proper step in the first place. Consolidation in Poland is rather political than market oriented step and as such it will not be beneficial for the economic performance of the holdings. Practice shows that each time when politics try to take the role of the free market mechanism, in the long run overall economic outcome is significantly jeopardised. In the Polish scenario with the history of centrally planed economy this is of particular connotation. Moreover it is doubtful whether the Polish Government has enough human and financial resources to equally equip all four new holdings in order to create potential competitive players on the European market. Scarcity of capital and resources in different branches of the economy might deteriorate success of the energy branch. Further on domestically,

[32] See: *Four entities without unbundled electricity distribution activities* (*Cztery firmy bez wydzielonej dystrybucji pradu)*, "Gazeta Prawna", 01.06.2007, available also at:
http://www.cire.pl/item,27919,1.html

consolidation might create two scenarios. It may prove to have a positive impact on the holdings or at least on certain companies within the holding in the way that it would boost the bad performing companies of the conglomerate. In other words the good performing companies will be a leverage to the bad performing companies. On the other hand opposite might happen as well. Bad performing companies will simply slow down the development thus lowering the value and overall competitiveness of the group. Consequently this would have negative impact on the market power and competitiveness of the holdings on the European market.

4. Regulatory Authority and third party access in Poland

The new market-oriented regulation for network industries in Poland requires an active and independent national regulatory authority. Independent in this context means independence of the regulator from the companies being regulated and from day to day interference of the government authorities. In Poland, URE '(...) *monitors the network performance and regulates the energy enterprises with the objective to secure final consumers' interests, and at the same time to provide the energy companies with funds necessary to maintain the stable position in the market*'.[33] Competences of the Polish regulator have changed considerably with the accession of Poland to the EU. As a result URE is the central authority of governmental administration. According to Article 21 (2a) of the Energy Act, the Chairman (President) of URE is nominated by the Minister of Economy and appointed by the Prime Minister. Until 2006, the Chairman of URE was appointed for a term of 5 years.[34] Unfortunately, the Act on state human resources and senior higher state offices of 24 August 2006[35] removed the very notion of the term in office, which in fact constitutes a violation of the requirement of independence of regulator envisaged in Electricity and Gas Directives. In doing so, the Act on state human resources removed one of the main pillars of the independent regulation. Moreover, the Act marked almost unlimited freedom of the government in shaping the structure of regulatory system.[36] Nevertheless currently, the Prime Minister may dismiss the Chairman only in one of the circumstances enumerated in law. These include continued inability to

[33] http://www.ure.gov.pl

[34] See Article 21 par. 2a of the Energy Act.

[35] Act on state human resources and senior higher state offices of 24 August 2006 (Ustawa o państwowym zasobie kadrowym i wysokich stanowiskach państwowych), Dziennik Ustaw (Journal of Laws), no. 170/2006, item 1217.

[36] See further W.Hoff, *Polish Energy Regulation in it European setting*, LKAEM Publishing House, Warsaw 2007, pp.78-82.

perform duties due to severe illness; grave violation of duty; or criminal conviction. At the first sight it might be assumed that the legislation provides the regulator with sufficient independence from the government authorities. However in practice it is rather limited autonomy and the political influence is significant.

First of all major problem concerns administrative supervision over the central administration bodies such as regulator. Ministry of Economy supervises the activities of the URE based on the Act on Council of Ministers.[37] According to the Article 34a(1) of to this Act Minister may issue biding decisions directed to dependent (subordinated) agencies. In practice all actions of the URE must be compatible with the State energy policy, what causes URE to look for the Ministry guidance. As a result the regulator is in many cases under the political pressure to act in contradiction to the market and in favour of incumbents or political goals, for instance by approving inappropriate regulated supply tariffs for gas or electricity (prices charged to end users). Regulated tariffs/prices on one side may prove to be helpful in protecting customers in specific situations for instance in the transition period towards effective competition or vulnerable customers.[38] In transition periods towards well functioning competition the coexistence of regulated and market prices may be necessary to protect customers from potential abuse of dominant positions. Unfortunately in practice the co-existence of regulated and market prices is clearly not a transitory measure *e.g.* France or Poland. Such scheme has been valid for many years and there are no clear indications that Member States with regulated prices intend to remove them and proceed towards market prices On the other side regulated prices are also an instrument of political nature. Keeping electricity or gas prices at low level certainly gives an optimistic scenario for re-election. Unfortunately price control/setting which should or at least could be declared as a public service obligation may have a very negative impact on the market structure. Electricity prices which remain constant in real terms, despite obvious raise in the cost of primary energy sources such as coal, oil or gas, certainly prevents energy demand to adapt to market oriented trend of price increases for final energy product. Similarly in the gas sector low prices are hard to reconcile with the market factors affecting prices for instance the need to move to more expensive supply sources such as LNG. As a result regulated prices are strong

[37] Act on Council of Minister of 8 September 1996 (Ustawa z 8 sierpnia 1996 r. o Radzie Ministrów), Dziennik Ustaw (Journal of Laws), no. 24/2003, item 199.

[38] However protecting vulnerable customers which fulfils requirements of public service obligations should not be confused with maintaining regulated energy prices for all categories of customers.

disincentive for investments *e.g.* in new generation capacity or energy infrastructure in general. Also those who invest in renewable energy, which is more expensive than the conventional one, are rather at a disadvantage. Moreover if regulated prices are not in line with market prices, suppliers without significant low cost generation capacities or equivalent long term contracts will not be able to make competitive offers which would cover their supply costs. Therefore in country like Poland were the long term contracts are finally being slowly abolished, maintaining the regulated prices seem to be rather dangerous step for the market in the long run. Following the above argumentation perhaps it would be justified to separate the regulator from the Ministry, and transfer the supervision of the regulator to the Parliament. This idea receives additional support in the context of indistinct division of tasks between the regulator and the Ministry of Economy since it is unclear who is in charge of guarantying functional unbundling of the network system operators, thus neither seems to be responsible for unbundling requirements.

Second of all doubts *vis-à-vis* regulators' independence should be raised regarding his financial and budgetary status, especially in case when Polish regulator is financed through appropriations from the national budget. If the regulator's budget depends on the national budget set by the government there is a potential risk of abuse of power by the government to control and influence the regulator activities, thus limiting the regulator's autonomy. Further on, in practice URE does not seem to have enough power to impose market functioning, since it had no voice over the consolidation plan proposed by the Polish government not to mention that no competence for cross-border issues significantly hampers the position of the regulator.

Finally, a transparent relationship has to be established between the regulatory body and the competition authority – *Urzad Ochrony Konsumenta i Konkurencji* (Office for Protection of Competition and Customers), where separate, autonomous institutions both have jurisdiction and are responsible for particular matter for instance with regard to abuse of market power or violations of suppliers rights in third party access. Moreover, in case of electricity and gas sectors where there are many mergers and acquisitions falling into competition law, the need for establishing the competent authority to deal with the case is very clear.

TPA in Poland has been implemented through regulated access tariffs (should not be confused with regulated supply tariffs – regulated prices) for transmission and distribution networks. Reliable tool often used to examine and measure whether third party access is operational in practice is the possibility of switching a supplier. In general high switching rate indicates that the availability of suppliers/traders to choose from is high. Suppliers/traders have fairly easy access to the networks, thus it might be

assumed that access is non-discriminatory based on well defined tariffs. If the percentage of customers switching the supplier is low it indicates that the customers remained at the regulated prices provided by the incumbents, and the number of new suppliers entering the market is rather low. In Poland according to the Commission Benchmarking Report in 2004 only 7 per cent of large consumer's switched supplier in the electricity sector and none in the gas sector.[39] In 2005 only around 20% of large industrial electricity users have changed supplier and less than 1% of smaller businesses. No gas customer switching has taken place this year.[40] In 2006, the switching rates remained low, and in general they have been confined mostly to very large users. What should not be a surprise no gas customer has switched supplier in Poland to date[41] and it is rather doubtful whether over the next year any, even minor switching will take place. Consequently possibility of switching a supplier is very limited and customers in general (around 90%) remained with the old suppliers under the regulated supply tariffs. Currently after 1 July 2007 there are 15,7 million electricity customers eligible to change supplier and 6,7 million customers in the gas sector.[42] The provisional statistics of URE suggests that in 2007 only 63 industrial customers and 541 households have changed electricity supplier. In practice complicated and costly switching procedures,[43] administrative burdens[44] as well as lack of automated system for the exchange of necessary customer information between suppliers and distributors deter customers from changing a supplier.

5. Instead of conclusions – how far to the competitive electricity and gas market in Poland?

Shortcomings of domestic market reforms result in competition in Poland being limited to vertically integrated suppliers, which are part of the *former* monopolists. Non-vertically integrated ('independent') energy producers and

[39] http://europa.eu.int/comm/energy/electricity/report_2005/doc/trade_unions/12b_epsu_psiru_report.pdf

[40] For more on this see: European Commission, Report on Progress in Creating the Internal Gas and Electricity Market, SEC(2005) 1448.

[41] See: *New Gas Reserves Act gives PGNiG even stronger control over the Polish market*, "Gas Matters", May 2007, p.18.

[42] For more on this see: Z.Zukowski, *Umowę dostawy energii będzie można wypowiedzieć*, (*A contract on energy supply can be renounced*), "Gazeta Prawna", 15.06.2007.

[43] For instance, balancing rules set up by the PSE-Operator, high costs of metering systems introduced by number of distribution companies or high costs of modernising equipment in general.

[44] For instance, demand of expensive and complicated expertise for access to the system for renewable energies in case of implicit (presumed) lack of capacity set by the operators.

suppliers have been to a large extent excluded from participating in the market and benefiting from liberalisation. As a result vertically integrated incumbents face competition only at the minimum level, with the customers having a little choice. Furthermore as from 1 July 2007 all customers may choose a supplier. However since suppliers are strongly linked to the incumbent system operators which poses the right to grant access to their networks, the real choice of suppliers offered to the customers is limited. In practice in the first part of 2007 only around 1.5% of electricity was purchased on a liberalised market and in gas sector only 1.8 % of the volume traded was purchased by entities other than distribution companies owned by PGNiG, which sell gas to customers within their distribution regions.[45] This constraint does not apply to energy trading companies that could in theory operate on the regional or national level but are put off in practice by the fact that over 55%[46] of all energy trading is blocked by the long term contracts (LTC). On competitive markets with adequate liquidity such contracts are rather an exception (e.g. the Scandinavian or British electricity market). Conversely in less liberalised markets, it happens that companies/customers are bound by long-term supply contracts obliging them to take all their electricity or gas volume from the incumbents. The problem is that special supply contracts on long-term basis might create barrier for smaller firms to expand their sales, or for potential competitors to enter the market. A dominant firm is thus likely to abuse its market position according to the Article 82 of the EC Treaty, if it ties a substantial proportion of demand with and obligation to purchase on long – term exclusive base from the market leader.[47] As a result, in general such long-term agreements have potential to prevent, restrict or distort competition and therefore vulnerable to scrutiny under Articles 81 and 82 of the EC Treaty.

In Poland long term contracts which were mostly signed in the second half of the 1990s between the electricity generators and PSE (acting as a single buyer) have been tackled already several times. Different methods and tools were designed to cancel long-term contracts, but the problem still remained unsolved. It is only recently that the Polish Government has adopted legislation (entered into force August 2007) concerning stranded costs released from the cancellation of LTC.[48] In general the new law offers a maximum of € 3.3

[45] See: *New Gas Reserves Act gives PGNiG even stronger control over the Polish market*, op.cit.

[46] See the assumptions of the Ministry of Economy on long term contracts available at: http://www.cire.pl/item,27821,1.html

[47] See: Case T-65/89 BPB v. Commission, [1993] ECR II-38968.

[48] Act on rules of coverage of the costs arisen in generation due to anticipative cancellation of long term power purchase agreements (Ustawa o zasadach pokrywania kosztów powstałych

billion[49] in compensation to both state-owned and private electricity generators as an incentive for them to voluntarily cancel their long term contracts. However in case where power producers would not take advantage of the voluntary nature of the scheme, they would leave themselves open to sanctions by the European Commission, who considers LTC a prohibited subsidies.[50] The position of the Commission under the assumption that the LTC have an influence on the price distortions (price of electricity charged under the LTC is higher than the market price) is of course justifiable. The first compensation payments are expected to start in the second quarter of 2008 and in general all 13 state owned generators are expected to cancel their contracts. The problem, however remains with the privately owned generators such as Elcho owned by CEZ, *Zielona Góra* and Krakow owned by EDF, *Polaniec* by *Electrabel* and *Nowa Sarzyna* owned by Ashmore Energy (former Enron) since it is currently unknown whether they will follow a suit or not.[51] Additionally new law on LTC envisages extra compensation of € 270 million[52] (1 billion PLN) for gas-fired combined heat and power plants which have signed their contracts before 1 May 2004. The result is that gas-fired CHP plants have higher variable costs which flow from the take-or-pay commitments for gas supply. Otherwise gas-fired plants would be at a disadvantageous position *vis-à-vis* coal-fired generators, which buy local coal under short-term contracts. Five CHP plants will be eligible for this extra compensation that is: *Zielona Góra*, *Nowa Sarzyna* and three state owned *EC Gorzow* (owned by PSE) and *EC Lublin* and *EC Rzeszow*.

Cancellation of long term contracts from the legal point of view or to be specific from the competition law point of view is justifiable and logical. LTC are considered to have negative influence on competition and market liquidity

u wytwórców w związku z przedterminowym rozwiązaniem umów długoterminowych sprzedaży mocy i energii elektrycznej), Dziennik Ustaw (Journal of Laws), no. 130/2007, item. 905.

[49] See Ministry of Economy webpage available at:
http://www.mg.gov.pl/Wiadomosci/Strona+ glowna/kdt.htm

[50] In this regard in November 2005 Commission used its competences under Article 226 EC Treaty and asked Poland to respond to its reasoned opinion regarding long term contracts. Additionally, in its decision in case C-17/03 Vereniging voor Energie,v. Directeur van de Dienst, op.cit. (concerning preferential access given by the Dutch regulator to transport capacities, for imports resulting from long-term electricity supply contracts), the ECJ considered that the existence of long term contracts, even concluded before the entry into force of the Electricity Directive, does not justify any preferential treatment and as such LTC are perceived discriminatory *vis-à-vis* other market players.

[51] The main argument used in relation to potential court suits is that contracts are valid based on *pacta sunt servanta*.

[52] *Poland's power producers to terminate PPAs*, "Energy in East Europe" no. 116/2007 (June).

and tend to distort prices of the final energy product. The cancellation mechanism is rather straightforward. Compensation which will be paid by a special body *Zarzadca Rozliczen,* unfortunately 100% owned by the transmission system operator PSE-*Przesył*, in quarterly pre-payments spread over a period of several years, will be borne by the end users by adding transitional fee to electricity bills replacing currently charged equalisation fee. Compensation will be calculated based on the difference between revenues raised from the sale of amount produced at market prices and estimated stranded costs. Even if the cancellation of LTC does not raise major legal questions it has some negative consequences from the economic or business point of view. LTC can be perceived as a financial guarantee for electricity generators seeking to invest in the infrastructure. They were and are mainly used to secure credits from banks of around € 5.3 billion,[53] (about half of which has already been repaid) to finance modernisation of the aging plants and building a new capacity. Additionally, LTC serve as a guarantee for private investors seeking to invest in the energy sector. Let us assume there is a need for a new nuclear generating capacity or capacity based on renewable resources. The return on investment in energy sector is accounted for long term, thus finding potential investor is rather difficult. Not to mention that such investment would have to be a hefty one. It is presumed that cost of 2500 MW nuclear power plant would cost around 7 billion dollars (3 million per MW opposite to 1 million per MW of conventional such as coal based power plant). As a result investor X by receiving guarantee in terms of long term contract for supply of electricity would secure his investment, thus creditability of the overall investment would be sustained. In Polish conditions where around 60% of the infrastructure demands immediate modernisation this is of particular importance. Unfortunately legal and business considerations not always go in line. As a matter of fact there is no easy way out and much depends on the banks whether they will be willing to grant credits without particular type of guarantees such as LTC or not.

Another significant factor delaying effective competition and thus market opening is a slow process of privatisation in the electricity and gas sectors in Poland. There are government and some political parties expressing the view that the energy companies should not be privatised, as they are the backbone of the energy sector, and that privatisation might deteriorate national security in energy matters.[54] Also management boards of the incumbents and labour unions maintain that privatisation can only bring crew 'lay offs' and negative

[53] *Poland's power producers to terminate PPAs*, op.cit.

[54] This is a very often mistake made by the politicians. In practice national security is achieved by the diversification of sources and routs and not by privatisation or consolidation.

consequences to the environment. As a result the electricity and gas sectors are overstaffed which has a direct impact on the cost of production of energy. Unfortunately any signs of increasing dynamism in the sectors, are generally perceived as deeply threatening to most staff. As a natural consequence labour unions rarely support or do not support at all the privatisation process which in many cases is wrongly identified as liberalisation. All of this creates a negative attitude towards privatisation and liberalisation among public opinion. The political controversy about privatisation also leads to a tendency, where the energy networks or energy network companies (system operators) should remain state owned. State-owned networks or system operators might be justified from the competition point of view, since the conditions for access to the electricity grid/gas network could be laid down independently of commercial interests. Of course, under the assumption that the state does, not have shares in generation or supply companies, or if it does, the shares are very small so the state does not have influence over operations of generator or supply company. Additionally such scheme would put an emphasis on ensuring the necessary expansion of the energy infrastructure with respect to security of supply. Therefore, the objective to secure efficient operation and development of the overall infrastructure and to ensure open and equal access for all users of the grids would be achieved. On the other hand whereas state-owned system operators might find some justification in competition, state-owned supply companies may not. In the author's opinion only privately owned supply companies directly linked to customers and exposed to free market are able to adapt their operations to the market mechanism of demand and supply when setting the electricity/gas price. Moreover, Poland does not have adequate financial and human resources equally to equip all publicly owned energy market players. Thus for the benefit of the market and consumers, supply companies should be released from the hands of the state. In different scenario where networks/network operators and supply companies are bounded under the state auspices, the problem of unbundling would be raised. Additionally public entities owing monopolistic and competitive parts of the electricity and gas chain from the business point of view would be tempted to abuse their advantageous position and discriminate competitors.

Summing up in the long run for the benefit of all market players there is a great need to ease the process of market opening in both electricity and gas markets in Poland. Bearing in mind political fears, actions of the industry Polish authorities should at the present time mainly focus on:

- development of competition in order to increase efficiency of the companies operating on the gas and electricity market;

- privatisation, or in other words providing the energy entities with vital capital and investments essential for development of technical and business infrastructure;
- strengthening competencies of the regulator *vis-à-vis* public administration. Regulator should be given power to establish the methodologies for transmission and distribution tariff calculation (which currently is the responsibility of Ministry of Economy). This step certainly would increase regulators authority over monitoring non-discriminatory and transparent network access;
- limiting market access barriers for the new entrants;
- development of networks;
- ownership unbundling;[55]

An intermediate step facilitating the electricity and gas markets liberalisation might be to develop several regional markets containing Member States of Central and Eastern Europe. For instance France, Germany; Belgium, the Netherlands and Luxembourg in June 2007 agreed to set up a regional transmission system operator which is seen by many countries as a way of improving interconnection between national energy markets and to facilitate market opening.[56]

[55] Ownership unbundling tends to be the most pro-competitive sort of unbundling, although it is not compulsory under the present Electricity and Gas Directives.. It is also the best way to prevent discrimination and to minimise the need for regulation. In ownership unbundling the legislation would demand selling of transmission or distribution assets to other none-network company, what would be done under the negotiable price. However, in the present globalised, business world, ownership unbundling might not constitute pure separation of transmission or distribution assets form vertically integrated undertaking. Instead ownership unbundling might allow a situation where for instance holding poses non-controlling share (minority interest – e.g., up to 10% of shares) in both transmission or distribution system operator and a supply or generation undertaking. Such minority shareholder could not have blocking rights in both undertakings, nor can it appoint members of their boards, nor can any person be a member of the boards of both undertakings. This way the inherent conflict of interests would be significantly diminished.

[56] S.Taylor, *Energy unbundling faces switch-off*, "European Voice", 14-21.06.2007.