

Model of competition in the energy sector.

CSAiR and URE seminars. Report

I. Introduction

In 2008 and early 2009, the President of the Polish Energy Regulatory Office (Urząd Regulacji Energetyki, URE), a central body of public administration competent in the energy field, and the Centre of Antitrust and Regulatory Studies (CSAiR), organized three seminars under the collective title “A model of competition in the energy sector”. Their aim was to act as a platform for discussion and exchange of experiences and opinions on the energy sector overall, and its regulatory aspects in particular. The seminars were attended by government officials, academics interested in sector-specific regulation, experts from law and consulting firms as well as numerous representatives of energy companies and consumer. The first seminar was opened by Prof. Alojzy Nowak, the Dean of the Warsaw University Faculty of Management, who sincerely welcomed this new forum for scientific cooperation between practitioners and researchers in the field of regulation, competition law and the energy sector.

II. First seminar

The first seminar was held on 21 February 2008 at the Warsaw University Faculty of Management. Its aim was to discuss competition and regulation related issues relevant to the energy sector. The seminar was moderated by Anna Fornalczyk, the first President of the Polish competition authority, who introduced the chances and risks associated with the development of competition in the electricity market.

The seminar started with a brief description by Dr. Mariusz Swora, the President of URE, of a recent decision taken by the energy regulator that has proven to have strongly influenced the electricity field. The decision was taken on the basis of Article 49 of the Polish Energy Law. According to this rule, the URE President may free energy suppliers from the obligation to submit their tariffs for his approval if a market analysis proves that the energy market is competitive. While the regulator analysed the relevant market and evaluated the customer service standards of the energy suppliers, the evaluation did not clearly prove that the Polish electricity market is functioning adequately. Serious doubts were caused by the position of Distribution System Operators (DSOs) within the vertically integrated structure of existing energy groups. After a thorough examination, the URE President decided that tariffs for household consumers must remain subject to his approval, however he **lifted** this requirement in relation to other tariffs. In his opinion, there is a need for a competitive and

tariff-free energy market. However, this is possible only after the implementation of a number of conditions. Dr. Swora concluded his presentation with an outline of the National Roadmap¹ developed by the URE according to the European Regulators' Group for Electricity and Gas (ERGEG) Position Paper on End-user Energy Price Regulation².

How to enhance the energy consumers' position on the energy market ?

The first panel discussion entitled "How to enhance the energy consumers' position on the energy market?" was moderated by Prof. Tadeusz Skoczny. He stressed that competition is a market phenomenon that drives prices down. He rejected the assumption that the recent rise of electricity prices was caused by the aforementioned decision **lifting** administrative controls of energy tariffs. In his opinion, the increase was due to the fact that prices were kept on an artificially low level for a long period of time. He supported the idea of reinforcing the position of energy consumers on the market. The following questions were subject to discussion by the participants of this panel: Who should take what actions in order to enhance the position of energy consumers on the market? What actions are necessary in order to support vulnerable consumers? What responsibilities does the State have towards energy consumers?

Sławomir Ulatowski (Federacja Konsumentów) and Tomasz Odziemczyk (Stowarzyszenie Konsumentów Polskich), representatives of Polish consumer associations, drew the audience's attention to the fact that Polish energy consumers are unaware of their rights. They associated this fact primarily with information deficit concerning new market possibilities such as the right to switch energy suppliers. They noted also that consumers might find it very difficult to compare electricity prices. According to the speakers, even if consumers do know how and wish to switch suppliers, they might be afraid to do so. This fear can be attributed to the fact that, in case of a dispute, consumers would have to take the case to court since there are no alternative ways to resolve disputes (ADR) in this field.

Large energy consumers, represented by Joanna Baczewska (Tramwaje Warszawskie SA), Henryk Kaliś (ZGH Bolesław SA), Andrzej Zielaskowski (PCC Rokita SA), have made it clear that they are ready and willing to switch electricity suppliers. However, they have not received any competitive offers due to their long-lasting and rigid "tariffication". They agreed that the situation has changed recently but antitrust and regulatory authorities must pay close

¹ Roadmap of prices liberalisation for all electricity consumers. Towards the customers' rights and effective competition in the power industry sector. Available at: http://www.ure.gov.pl/portal/en/1/18/Roadmap_of_prices_liberalisation_for_all_electricity_consumers.html

² End-user energy price regulation; ERGEG position paper E07-CPR-10-03, 18 July 2007.

attention to the energy market in order to protect consumers against the abuse of market power by energy companies. The speakers argued that an administrative action is needed to force electricity producers to sell more energy on the Power Exchange, rather than selling it *via* vertically integrated channels.

Grzegorz Grabowski, a representative of an electricity wholesaler (PKP Energetyka SA), stressed that the energy market is not liquid enough and that it is characterised by lack of available energy. The situation has worsened due to growing demand and lack of investments in new power plants.

Jacek Dziel (Caritas Archidiecezja Gnieźnieńska) spoke of vulnerable consumers. He noted first that it is nearly impossible to live without electricity in the modern world – electricity powers not only appliances but also all electronic information and communication devices. Thus, lack of electricity is synonymous with social exclusion. However, not all consumers are able to deal with the cost of energy. The State should therefore help them in a way that brings vulnerable consumers back to society. In his opinion, energy companies might help vulnerable consumers if they accept Corporate Social Responsibility towards the environment, their business partners and consumers.

Privatization of vertically integrated energy groups

The second panel discussion was devoted to the privatization of vertically integrated energy groups. It was led by Prof. Jan Popczyk (Politechnika Śląska) with the participation of energy companies' representatives: Jerzy Topolski (Enion SA), Piotr Gołębiowski (Vattenfall Sales Poland Sp. z o.o.) and Tadeusz Skobel (PKP Energetyka SA) as well as Daniel Borsucki, a spokesman for a large energy consumer (Katowicki Holding Węglowy SA), Prof. Tadeusz Skoczkowski, the Chairman of the Polish National Energy Conservation Agency (Krajowa Agencja Poszanowania Energii SA, KAPE SA), Grzegorz Onichimowski, the Chairman of the Polish Power Exchange SA (Towarowa Giełda Energii SA), Bartłomiej Nowak (European University Institute, Florence) and Aleksander Stawicki (Wierciński, Kwieciński Baehr Sp. Komandytowa).

Prof. Popczyk stated that the re-monopolization of the energy sector might result in a misallocation of income since the new groups might spend their profits on other things rather than additional energy generation sources. Mergers and consolidation of energy companies might not lead to the growth of the value of the groups. It is necessary to introduce reference energy prices dedicated to each energy production technology and to fully unbundle DSOs.

The participants of the panel generally agreed with the thesis proposed by Prof. Jan Popczyk. In their opinions, the energy sector is shaped by the “Energy sector program”³ which, rather than facilitating a competitive energy market, not only caused price increases but also lowered the value of the energy companies before their privatization (social packages given to their employees by the government as a price for their agreement for consolidation). In addition, the assets of the energy companies were not properly balanced. As a result, some have a surplus of energy productions while some suffer from the lack of energy sources.

In the opinion of the participants of the panel, subsequent Polish governments did not have a clear vision of the energy sector and thus their policies were never consistent. Additionally, no one has ever evaluated the undertaken actions. Currently, for instance, the DSOs have not enough independence within the vertically integrated structures of the energy groups. Moreover, due to the incorrect formulation of the integrated contracts (Polish: *umowa kompleksowa*), the DSOs are losing touch with consumers. For that reason, the position of the latter worsens because they are not treated equally, because their right to switch suppliers is being restricted and because the operational risk associated with vertically integrated energy groups is transferred to them. Thus, in order to increase competition in the energy market, it is necessary to fully unbundle DSOs from the structure of the energy groups before their privatization. The view was also formulated that the recent increase in electricity prices was unavoidable since it resulted from the rise of the total costs of energy companies, investments plans and the limitation of CO₂ emissions. Considering the market power enjoyed by the groups, their willingness to increase the final price of electricity, even with a higher limit of CO₂ emissions would not guarantee that additional income would be spend on new power generation sources or the replacement of the old ones.

National energy champions on the European energy market

Prof. Andrzej Szablewski (Polish Academy of Science) moderated the third panel discussion which was devoted to the regulation of national energy champions on the European energy market. Among the question raised by Prof. Szablewski were: how should the recent revival of “energy nationalism” in Europe be explained (governments defending existing national champion or wishing to create them)? How do national champions function in practice considering, on the one hand, market opening enforced by the EC and, on the other hand, the security of supply? Is it possible to create national champions through further consolidation of the State-owned power sector (having regard to the actions undertaken by the

³ „Energy Sector Program” – accepted by the Council of Ministers 26 March 2006.

Commission against the growing concentration of national energy markets and the declaration of the Polish governments to create a competitive energy market)? What would creating a national champion mean in the Polish context: further consolidation on the basis of the largest energy undertaking and if so, to what an extent or; would it mean the consolidation of undertakings operating in various branches of the energy sector e.g. Polish Oil and Gas Company (PGNiG) or coal mining companies? In light of a decade long experiences of vertical and horizontal consolidation, is it possible to build a Polish national champion, which would be able to compete on the regional and European market, and which would not run the risk of impeding the security of energy supply?

The aforementioned issues were discussed by Tomasz Chmal (The Sobieski Institute), Łukasz Dziekoński (Forum for Development of Economic Education - Forum Rozwoju Edukacji Ekonomicznej: FREE), Wojciech Kułagowski (Tauron Polska Energia SA), Krzysztof Rozen (Zespół Energii i Zasobów Naturalnych, KPMG) and Wojciech Tabiś (Endesa Polska). They stated that examples of successful consolidation can be found in Europe considering the Czech national champion (CEZ) in particular. Poland, one of the biggest EU countries, should also promote its energy companies in order to raise its European position. However, consolidation was so far based on political considerations and thus burdened by additional social costs making the energy groups not as effective as they should be. Still, in the opinion of the participants of the panel, consolidation should not be reversed. Instead, the vertically integrated groups should be privatized, in order to obtain the necessary development and investment resources, otherwise Poland will be threatened by the collapse of its power supply, which would clearly endanger its economic growth. Despite the positive aspects of consolidation considering the EU dimension, the opinion was voiced that its benefits are mostly invisible on the domestic market. Large energy groups might use their market power in a way which is detrimental to competition on the national markets, thus it is necessary to enforce regulatory and antitrust authorities.

On the basis of the discussion between the participants of the panels and guests, the following conclusions can be drawn:

- The regulatory concept for the Polish electricity market, adopted in the early nineties in order to increase competition, was never realized. Thus, the conditions necessary for the liberalization of electricity prices were not met. In a competitive market, energy consumers can effectively switch suppliers. However, free energy prices for industrial consumers do not mean the freedom to choose their energy supplier since they still have to face significant

difficulties arising from problems with billing and metering technologies as well as from lack of competitive offers.

- Vertically integrated groups limit the independence of DSOs. Energy suppliers without energy production sources are in a worse market position than vertically integrated energy groups due to the shortage of energy and difficulties with gaining grid access. DSOs prefer companies from their own energy groups, a fact that limits the choice of energy suppliers and thus also competition and puts pressure on prices.

- The consolidation of national energy sectors into vertical structures should be viewed within the framework of the common EC energy market based on cross-border transmission interconnection and the operation of the Union for the Coordination of Transmission of Electricity (UCTE). In this way, national champions are subject to competitive pressure (the possibility of supplying their consumers with imported energy). However, Poland does not have sufficient cross-border interconnections, a fact that strengthens the market position of its national champions.

III. Second seminar

Prof. Tadeusz Skoczny moderated the second seminar which took place on 20 May 2008. It was devoted to the priorities of the Polish energy policy until 2030 in light of the EU package 3x20. The seminar focused on financing of new investments in the energy sector and the directions of further market development.

3x20 energy and climate package

The first panel was chaired by Prof. Janusz Lewandowski (Warsaw University of Technology, Politechnika Warszawska) with the participation of: Mikołaj Budzanowski (Ministry of the Environment), Łukasz Dziekoński (FREE), Prof. Tadeusz Skoczkowski (KAPE SA), Tomasz Sommer (Globalization Institute, Instytut Globalizacji) and Wojciech Stępniewski (WWF Polska). Prof. Lewandowski opened the discussion by stating that the energy package 3x20, especially in terms of CO₂ emissions, is extremely detrimental to the Polish economy. He also noted that there is an urgent need to formulate a reliable forecast of the national economic potential in terms of renewable energy and to develop a strategy that will realize it. He pointed out that it is likely that CCS (Carbon Capture and Storage) is a blind path for energy development – planting forests seems a more effective way to reduce the level of CO₂ in the atmosphere.

Mikołaj Budzanowski emphasised that the Polish government is lobbying for a change of the allocation system of CO₂ emissions. He stressed the threat that some segments of the Polish (or more broadly the EU) economy might be relocated to other countries such as Ukraine

or Belarus. Poland is trying to convince the Commission that the energy sector should be on the list of industries which are at risk of relocation to the outside of the EU. If these efforts prove successful, Poland will be able to count on the protective system from 2013 to 2020 involving gaining at least some free allocation of allowances for CO₂ emissions as of 2013. Poland proposed that 10% of CO₂ emission allowances, which will be sold from 2013 through auctions, should be divided between the EU countries with the best reduction system comparing the national results. The revenue generated by these auctions could be used for the energy sector and its adaptation to the requirements of the new energy-climate package.

The participants of the panel stressed the dilemmas surrounding EU's implementation of rigid sustainable policies considering that other areas (e.g. USA and China) do not impose such restrictions. For that reason, they were of the opinion that it would be far more beneficial and effective to spread CCS technology among the largest CO₂ producers, such as China and India, than implementing it in the EU. An open and liberalized market was said to be the best model guarantying energy security. Considered was also "white-certification" of basic instruments to promote energy efficiency.

Financing the new investments in power sector

The second panel was led by Prof. Krzysztof Źmijewski (Politechnika Warszawska) with the participation of: Remigiusz Chlewicki (Ernst & Young), Thomas Chmal (Sobieski Institute), Piotr Łuba (PriceWaterhouseCoopers), Grzegorz Onichimowski (Polish Power Exchange SA) and Tomasz Wiczorek (Polish Society for the Certification of Energy, Polskie Towarzystwo Certyfikacji Energii). The discussion was dedicated to the financing of new investments in power sources, white/blue certificates, long-term contracts and the risk of stranded costs. Prof. Źmijewski stressed that the capacity of Polish power plants is rapidly aging (40% of power stations are more than 35 years old) but the current price level does not encourage investment. Investors expect a surplus of 16 €/MWh net (i.e. 23€/MWh gross). Domestic prices do not guarantee that the investment will automatically appear. As a result, we are threatened by the Czech syndrome where an internal price increase indeed generated a budget surplus for the Czech champion CEZ but the energy company has invested that surplus abroad. There are no investors on the horizon willing to retribute power sources, decreasing the chances for privatization. Stage III of the EU ETS (Emission Trading Scheme) drastically increases the cost of CO₂ and hence the level of investment risk (no one knows how the economy will react to a 100% or a 300% increases in energy prices).

The participants of the panel generally agreed that the market does not generate economic incentives. In their opinion, the Treasury should be more pro-active not only in

favor of energy companies but also considering consumer interests. Closer harmonization with others EU markets is necessary in relation to market products, principles of balancing and the RUS contracting rules. After the implementation of technical and commercial rules, it would be possible to introduce market coupling with Sweden or the Ukraine. Still, national solutions inconsistent with the EC model take us away from effective investments. The speakers stressed URE's role in the creation of an environment for investments in the energy sector. Blue certificates (for now, an idea to gather funds to finance investments in new power capacity) should be issued through tenders organized by the URE President (using the existing provisions of the energy law). They should make it possible to spread the cost of investments on all electricity consumers. White certificates (energy efficiency certificates) should serve as a tool to stimulate energy efficiency. They might be issued for investments aimed at: reducing energy consumption, increasing the efficiency of energy production or reducing losses in transmission and distribution systems.

Everyone agreed that the Polish energy sector was not a good environment for foreign investments. Poland tries to protect national champions and to create ways to give preferential treatment to domestic energy producers, which are still not able to exploit it in full. For example, largest European energy companies have signed contracts with suppliers of power units and thus any other company might find it difficult to buy power units on the market. Without incentives from the Polish market, these European companies, deterred from plans to build new capacity in Poland, can pursue investments in other locations, a fact which is clearly not in the Polish best interest. There is a great need to convince investors that it pays to invest in Polish energy, especially in power generation. At the same time, the Polish Transmission System Operator should be more transparent in relation to potential investors indicating the potential locations of necessary investments.

Development of the Polish energy market

The third panel was moderated by Prof. Eugeniusz Toczyłowski (Warsaw University of Technology) with the participation of: Janusz Bill (Vatenfall Poland AB SA), Robert Guzik (URE), Dr Mariusz Kaleta (Warsaw University of Technology), Marek Kulesa (Association of Energy Trading, Towarzystwo Obrotu Energią), Roman Korab Ph.D. (Politechnika Śląska), Leszek Rojczyk (Everen Sp. z o. o.) and Tomasz Sikorski (PSE Operator SA). The panel considered the further development of the Polish energy market: reserve markets, day-ahead markets, intra-day markets, nodal tariffs (taryfa węzłowa), the liquidity of power exchange and market integration through market coupling.

Prof. Toczyłowski focused everyone's attention on the fundamental risks of delaying reforms. He stressed the expectations regarding the desired market and regulatory mechanisms such as correct economic short- and long-term signals (to ensure economic efficiency, to support short-and long-term system security) and compliance with the development of the European energy market (and perhaps future IV EU energy package as a "Standard Market Design" for the EU). He identified the need to harmonize the rules for integrating national markets as a key directional action alongside the necessity of fundamental changes in the balancing market (new balancing mechanisms, limiting TSOs' liability for ensuring the security and efficiency of network use; terminating TSO's liability for the efficiency of electricity generation, creating favorable conditions for energy producers for efficient and economical planning of production). Prof. Toczyłowski stated also that it is necessary to harmonize support mechanisms for environmental objectives or effectiveness goals and to improve pro-regulatory principles of effectiveness: nodal/area tariffs, mitigation of local market power and improvement of market transparency.

In response to his arguments, the participants of the panel agreed that the averaging of prices in current tariffs (no location signals) must be perceived as barrier, with nodal tariffs as the solution. Apart from energy prices, a reference network and system model should be published. The balancing market effectively inhibits price signals (prices are stable and low). The participants agreed that a new market model is necessary. In the first stage, it is essential to run an intra-day market and to remove price regulation for household consumers. The second step should be a remodeling of the overall market, including the introduction of charge location and the market for generation capacity as well as of marginal prices. Subsidies should be abolished by the transmission tariff (settlement and quality rate as well as marginal prices).

CSAIR and URE cooperation agreement

On 1 September 2008, Dr. Mariusz Swora and Prof. Tadeusz Skoczny signed a cooperation agreement on the basis of which, CSAiR will support the URE President by initiating research and development projects concerning the regulation of the energy market. Both institutions will co-organize conferences and seminars meant to facilitate the exchange of ideas, opinions and experience between academics, public authorities and energy companies.

IV. Third seminar

Costs and benefits of a regulated and a liberalized energy market

Dr. Mariusz Swora and Prof. Tadeusz Skoczny opened the third seminar held on 28 January 2009 under the title: "Model of competition in the energy sector". It focused of

factors affecting electricity prices and the respective costs and benefits of a regulated and a liberalized energy market. The discussion was led by Prof. Krzysztof Źmijewski (Politechnika Warszawska) who compared the two alternative models stating: “we have an obvious conflict between these two worlds. On the one hand, the world of global competition operating during a time of crisis. The second world is functioning in a golden cage, not knowing the fight, danger and fear, and bearing only a heavy effort to justify its functioning”.

The URE President presented his vision of the energy regulator stating that an independent and strong public authority promotes competition. Paradoxically, the road to competition and liberalization leads through the strengthening of the regulator.

Zofia Janiszewska, the Deputy Director of the URE Competition Promotion Department, outlined the EC background regarding market regulation and liberalization. She noted that 15 EU Member States currently regulate electricity prices (at least in one segment of the market) while some are considering the possibility of returning to price regulation. In the vast majority of Member States, customers have the right to switch energy suppliers (Polish households acquire this right on 1 July 2007). She stressed that Poland is one of the few countries which has formulated and is implementing a “roadmap” (a document which describes what shall be done in order to remove tariffs) concerning administrative controls of electricity prices. Aside from Poland, only the Irish NRA and the Spanish Government fulfilled this ERGEG recommendation.

Halina Bownik-Trymucha, the Director of the URE Competition Promotion Department, presented the arguments in favor of upholding the requirement stating that all energy suppliers must present their household tariffs for approval by the URE President. She pointed out that the current market structure does not give consumers any incentives to actively participate in the market. The differences between the Polish energy market and many others in the EU is well illustrated by the switching supplier ratio: 400.000 UK households switch suppliers every month in comparison to 1018 Polish customers (households as well as medium and large industrial customers) in the whole of 2008. This is primarily caused by the strategy pursued in Poland by its vertically integrated energy companies regarding the sale of energy, which is extremely beneficial to them but limits the development of competition.

Henryk Kaliś, the Chairman of the Electricity and Gas Consumer Forum (*Forum Odbiorców Energii Elektrycznej i Gazu*), blamed the energy sector for failing to understand the market needs of its clients. He pointed out that energy in Poland is more

expensive than in other Member States. Furthermore, industrial customers in the EU do not pay the costs associated with the implementation of the State energy policy.

Grażyna Rokicka, the President of the Polish Consumer Association (*Stowarzyszenie Konsumentów Polskich*), doubted whether the higher energy bills paid by Polish consumers will be used by energy companies on investments, long since promised by the industry.

Marek Dietl Ph.D. (Sobieski Institute) noted that energy producers impose very high margins. On a well-functioning unbundled energy market, he said the price rises for final consumers are expected to go hand in hand with reductions on the production level. He stated that the market could be improved by expanding the scope of available regulatory tools such as a right for the URE President to determine maximum prices and an improved and faster supplier switching procedure.

Dr. Filip Elżanowski (an expert on energy markets) and Mirosław Barszcz (tax law expert) saw the strengthening of the regulatory tools and role of the URE President as very important factors for improving the competitiveness of the Polish energy market. They argued for the introduction of an obligation for all electricity sales to go through the power exchange. The discussion was also attended by Dr. Andrzej Pawłęga (Institute of Electric Power Engineering, Warsaw University of Technology – Instytut Elektroenergetyki Politechniki Warszawskiej), Jacek Brandt (Commodity Exchange Energy SA) and Mirosław Duda, Ph.D., from the Energy Market Agency.

V. Conclusions

All three seminars proved to be very fruitful. They gave their participants a unique opportunity to meet and exchange their opinions in order to enhance their respective knowledge and understanding of the energy sector. Their particular value is also expressed in the fact that URE's and CSAiR's initiative made it possible for all interested parties to consider the problems, opportunities and challenges of energy regulation and liberalization from various perspectives.

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