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The Ownership Unbundling of Electricity Transmission System Operators: the European Union Policy and the Case in Lithuania

Saule Milciuviene, Agne Tikniute

Mykolo Romerio University
Ateities str. 20, LT – 08303 Vilnius, saule@hydrogen.lt, agne.tikniute@mruni.lt

One of the main strategic goals of the European Union is the creation of competitive single electricity market. The effective unbundling of monopole activity of transmission of electricity from competitive activities of supply and generation of electricity is the key element of competitive electricity market. Thus the Commission proposed the model of ownership unbundling of the transmission system operator from supply and generation of electricity. The defining element of an ownership unbundling model is that the network of electricity transmission is operated and owned by one independent company, which clarifies the incentives, responsibilities and liabilities for the network.

National strategies on development of electricity markets vary considerably from country to country due to different national constraints. As Lithuania is a member of the European Union, its national energy strategy has to be consistent with the policy of the European Union. Lithuania also has to seek the best strategy to develop electricity market at the national level taking into account its national conditions. Changes in the structure of electricity supply, which will occur because of shutting down of the reactor of the Ignalina Nuclear Power Plant, have prompted the government to review its current energy policy related to development of national and regional electricity market.

The objective of the article is to analyze the consistence of recent changes in shareholding of Lithuanian electricity companies with the model of ownership unbundling of the transmission system operator.

The first part of the article is devoted to the analysis of ownership unbundling model of the transmission system operator. It discuses (i) existing models of unbundling of the transmission system operator, (ii) the necessity and objectives of ownership unbundling of the transmission system operator, (iii) the main features of ownership unbundling of the transmission system operator, (iv) the main problems and advantages of implementing ownership unbundling of the transmission system operator. The second part of the article analyses the development and changes in the ownership of shares of Lithuanian electricity companies. It discuses (i) the formation of national investor – LEO LT AB; (ii) the specific problems related to the unbundling of supply and generation of electricity from distribution and transmission of electricity.

The main conclusion is that that the creation of LEO LT AB is inconsistent with the ownership unbundling model, which is the most favored by European Commission, as future legislative policy of the European electricity market and the best for enhancement of competition in the sector.

Keywords: *transmission system operator, ownership unbundling, electricity market*.

Introduction

In September of 2007 the European Commission proposed the third legislative package for the European Union electricity market. One of the most important proposed changes is related to the unbundling of electricity transmission activities from the generation and supply of electricity.

Electricity market transformation has been undertaken in response to fundamental economic and technological changes. Globally, the world electricity consumption is expected to double in the next 25 years, and to triple in developing countries. Efficient investments are needed to support the electricity infrastructure expansion required to sustain economic growth (Chao, 2006).

The European Commission argues that the new legislation have to resolve the structural failures of the electricity market in a number of areas. For example, the current rules on separation of monopolistic network activities from the supply and production of energy do not effectively prevent a large number of network operators to discriminate against new users of the network in favor of vertically integrated supply and production companies. Consequently, new companies entering the electricity markets, who have no choice but to use the existing networks – as building their own network would be too expensive – have a hard time securing a market position due to discriminatory access conditions, lack of available network capacity and lack of transparency on network data Simply put, vertically integrated companies – that is companies that deal with supply, production and the operation of the electricity networks – have an interest to remain dominant in their national supply markets, while their networks help them retain this position.

National strategies on development of electricity markets vary considerably from country to country due to different national constraints. As Lithuania is a member of the European Union, its national energy strategy has to be consistent with the policy of the European Union[1]. Lithuania also has to seek the best strategy to develop

[1] In the enlarged European Union, there is a complex process of new transformations representing a new phase of the political, social, economic modernization. The priorities of these transformations are the further activities of integration processes in the whole space of the European Union and the intensive creation of the knowledge based society and global market oriented knowledge economy (Melnikas, 2008).

electricity market at the national level taking into account its national conditions. Changes in the structure of electricity supply, which will occur because of shutting down of the Ignalina Nuclear Power Plant, have prompted the government to review its current energy policy related to development of national and regional electricity market (Milciuviene, Milcius, Praneviciene, 2006).

The objective of the article is to analyze the consistence of recent changes in shareholding of Lithuanian electricity companies with the model of ownership unbundling of the transmission system operator.

The first part of the article is devoted to the analysis of ownership unbundling model of the transmission system operator. It discuses (i) existing models of unbundling of the transmission system operator, (ii) the main features of ownership unbundling of the transmission system operator, (iii) the necessity and objectives of ownership unbundling of the transmission system operator, (iv) the main problems and advantages of implementing ownership unbundling of the transmission system operator. The second part of the article analyses the development and changes in the ownership of shares of Lithuanian electricity companies. It discuses (i) the formation of national investor – *LEO LT AB*; (ii) the specific problems related to the unbundling of supply and generation of electricity from distribution and transmission of electricity.

In Lithuanian science this article is the first attempt to analyze the problems of the ownership unbundling model in the electricity market. **The novelty of this article** is the analysis of Lithuanian electricity companies according the European Union model of ownership unbundling. The research is not restricted to the analyses of legal norms. It joins into the logical succession the goals of legal regulation imposed by the European Union and Lithuanian legal acts and relation of those goals with the specific structure of the Lithuanian electricity market. In Lithuania the problems of the regulation of electricity market were analyzed by J. Vilemas (Andreikenas, Bui, Danaitiene, Galinis, Golovanova, Jalal, Juskas, Konstantinaviciute, Krusinskas, Linkevicius, Miskinis, Norvaisa, Rogner, Rutkauskas, Strubegger, Tarvydas, Teskeviciene, Vilemas, Ziukas, Zukauskas, 2004; Vilemas, Miskinis, 2003; Vilemas, 2002; Vilemas 2002), V. Miskinis (Andreikenas, Bui, Danaitiene, Galinis, Golovanova, Jalal, Juskas, Konstantinaviciute, Krusinskas, Linkevicius, Miskinis, Norvaisa, Rogner, Rutkauskas, Strubegger, Tarvydas, Teskeviciene, Vilemas, Ziukas, Zukauskas, 2004; Miskinis, Deksnys, 2003; Vilemas, Miskinis, 2003; Chaikovska, Shlihta, Zeltinsh, Miskinis, Rudi, 2000), A. Pazeraite (Pazeraite, 2001; Pazeraite, Krakauskas, 2005; Pazeraite, 2004), V. Jankauskas (Ciegis, Jankauskas, Streimikiene, 2002; Jankauskas, 2002).

Ownership Unbundling Policy in Electricity Sector

The single market has been the objective of the European Union from the beginning; however, the electricity sector has always been an exception. Long time after the Treaty's (the Treaty Establishing the European Community) core principles of freedom of movement of goods had been legally ratified, the Community's electricity sector was still nationally segregated, dominated by publicly owned or publicly supported electricity monopolies, with little or no cross-border trade in electricity (Walde, 2000)

The single electricity market as an accepted European Union objective has only been fully recognized relatively recently, with the acceptance of the new electricity directive 96/92/EC in 1996 (Walde, 2000). But the directive 96/92/EC has not reached the required level of electricity market unification and liberalization and was profoundly amended in 2003. But these amendments still have not been sufficient to create single electricity market.

On the 19th of September 2007 the European Commission made a proposal to change the directive (the directive of the European Parliament and of the Council amending Directive 2003/54/EC concerning common rules for the internal market in electricity). One of the main issues is the proposal to implement the ownership unbundling of the transmission system operator. The Commission has given "ownership unbundling" as its preferred option, but also made provision for a second option—the creation of an independent system operator to operate the transmission assets separately from their vertically integrated owners.

During the adoption procedure[2] of new directive the European Parliament and Council have taken different positions on the regulation of the transmission system operator.

The Council approved a solution whereby transmission network operators have to be effective separated from supply and generation activities without ownership unbundling. This model would enable companies to retain ownership of transmission networks provided that the networks were operated by a new independent transmission network operator. This option is designated to the Member States where the transmission network belongs to a vertically integrated company on the date of entry into force of the new Directive (the Council meeting Transport, Telecommunications and Energy, 2008).

The European Parliament favored the position of ownership unbundling[3]. The defining element of an ownership unbundling model is that the network of electricity transmission is operated and owned by one independent from supply and generation interests company, which reveals and undertakes the incentives, responsibilities and liabilities for the network (An ERGEG public document, 2007).

According to the European Parliament, in case where the undertaking owning a transmission system is part of a vertically integrated group, Member States have to be

[2] The adoption procedure is still in process (on the 20 of January 2009).

[3] Ownership rights under Article 295 of the EU Treaty although Article 295 of the EU Treaty stipulates that the treaty does not interfere with the regulation of ownership rights by member states, this does not mean that member states are completely free in their regulation of such rights. According to jurisprudence of the EC Court of Justice, the execution of ownership rights should comply with fundamental rules of the treaty. Examples of such fundamental rules are the non-discrimination principle, the freedom of establishment, the principle of free movement of capital, as well as the competition provisions under articles 81 and 82 of the EU Treaty. (Baarsma B., de Nooij M., Koster W., van der Weijden Divide C. *The economic and legal implications of the proposed ownership unbundling of distribution and supply companies in the Dutch electricity sector* // Energy Policy 35, 2007, p. 1785–1794).

given a choice between ownership unbundling and, only in exceptional, a right to set up the system operators independent from supply and generation interests (European Parliament legislative resolution, 2007).

Such a discussion confirms, that exists many models of unbundling of transmission system operator and is hard to find one the most suitable for all European Union countries.

The models of unbundling of the transmission system operator. There are a number of transmission ownership models in existence. Each has its supporters. One can identify at least five major models in operation (Pollitt, 2008*)*.

1. The independent transmission system operator – e.g. National Grid in the United Kingdom. This is fully unbundled from the rest of the system and owns and operates transmission assets.
2. The legally unbundled transmission system operator, e.g. in France. This is legally unbundled from the rest of system and owns and operates transmission assets. This model meets the requirements of the Directives (Directive 2003/ 54/EC) and can involve effective separation of transmission operation from the rest of the sector while transmission assets remain under the same ownership as generation or retail.
3. The independent system operator – e.g. in the United States of America. This is the system operator model where the system operator does not own the transmission assets but is ownership unbundled from the rest of the system.
4. A hybrid model where both the independent system operator and the transmission operation are ownership unbundled from the rest of the system. The independent system operator is asset-light, while the transmission operation has no system operation function. This is the case in electricity market in Chile and Argentina.
5. The vertically integrated utility, e.g. traditional utilities in Europe. This is the model that Europe has sought to move away from in successive directives, however it is still in *de fact*o operation in some European electricity markets.

The report of the European Commission about the electricity sector situation in 2008 states that that at transmission level, some Member States have gone beyond the present requirements of legal and functional unbundling (Report on progress, 2009). Ownership unbundling is implemented in 16 electricity transmission system operators: Denmark, Finland, Ireland, Italy, Netherlands, Portugal, Spain, Sweden, United Kingdom, Norway, Lithuania, Poland, Czech Republic. Romania, Slovakia, Slovenia (DG TREN Staff Working Document, 2009).

As we can see, Lithuania is listed among the countries, which have implemented the ownership unbundling of transmission system operator. However after creation of *LEO LT AB*, Lithuania does not meet the requirements of ownership unbundling.

The main issues of ownership unbundling: private and public ownership, third countries ownership. The ownership unbundling means that the same person or persons cannot exercise control over a supply or generation undertaking and, at the same time, hold any interest in or exercise any right over a transmission system operator or transmission system. This provision also applies *vice versa*, that is, control over a transmission system operator precludes the possibility of holding any interest in or exercising any right over a supply or generation undertaking (The Commission Proposal, 2007).

On the other hand, this option allows dispersed shareholding, for example a pension fund to holds non-controlling minority interests in both a transmission system operator and a supply undertaking. However, such a minority shareholder is not allowed to have blocking rights in both undertakings or appoint members of the boards, nor to be a board member of both undertakings (The Commission Proposal, 2007).

The question of "control" of a fully unbundled network operator is also relevant in the context of the debate over public versus private ownership. It is important to state that effective unbundling is necessary in the context of both public and private ownership of the networks. In principle, a public owner should be treated as any other owner. Ownership unbundling is only sufficient if it results in the independence of the control of the network operator (An ERGEG public document, 2007). Irrespective of its public or private nature, no person or group of persons should be able alone or jointly to influence the composition of the boards, the voting or decision making of either transmission system operators or the supply or production companies (The Commission Proposal, 2007).

In some Member States, vertically integrated companies are still partially or completely state-owned. According the new proposal, transmission assets are allowed to stay public but, in order to guarantee the independence of the transmission system operator towards the generation companies, different ministerial departments should be responsible for the newly separated activities (The Commission Proposal, 2007). This will ensures that where supply or production activities are in public ownership, the independence of a publicly owned transmission system operator is still guaranteed; but these proposals do not require state owned companies to sell their network to a privately owned company (The Commission Proposal, 2007). As effectiveness of unbundling in publicly owned companies will depend on the degree of management independence and therefore could be assessed on a case by case basis (An ERGEG public document, 2007).

The critics of the ownership unbundling are concerned that effective unbundling of transmission system operator may be undermined by third country companies active in both supply and network operation and, more generally, that ownership unbundling would lead to a sell-off of European networks. In order to deal this these specific problems the Commission proposed the new rules (The Commission staff working document, 2007).

1. The proposal requires the effective unbundling of transmission system operators and supply and production activities not only at national level but throughout the European Union (The Commission Proposal, 2007).
2. In the event that companies from third countries wish to acquire a significant interest or even control over the network of the European Union,

they will have to demonstrably and unequivocally comply with the same unbundling requirements as the European Union companies (The Commission Proposal, 2007). Since the independence of non European Union investors is more difficult to detect it appears necessary to require the candidate transmission system operators concerned to demonstrate their independence from supply interests (The Commission staff working document, 2007).

3. Third country individuals and entities cannot acquire control over a Community transmission system or transmission system operator unless this is permitted by an agreement between the European Union and the third country (The Commission Proposal, 2007). This approach has to take into account the international obligations of the Community and the Member States vis-à-vis third countries as well as the internal market principles of non-discrimination and the free movement of capital (The Commission staff working document, 2007).

The necessity of ownership unbundling of transmission system operator. The necessity of new regulation occurs because the existing requirement of legal unbundling does not ensure the creation of single electricity market across the Europe. Most of the problems are linked to the existence of vertically integrated companies, which not only control essential facilities but also enjoy significant market power in the wholesale and sometimes retail markets (The Commission staff working document, 2007). The main objectives of ownership unbundling are to prevent discrimination, optimize use of infrastructure, incentive economic investment and enable effective regulatory oversight of monopolistic activities (An ERGEG public document, 2007).

These objectives are not reached by existing legal unbundling rules mainly because of moral hazard occurring in groups of companies. Where the transmission system operator is a legal entity within an integrated enterprise, four types of problems arise. Firstly, the transmission system operator may treat its affiliated companies better than competing third parties. The underlying reason is that legal and functional unbundling do not solve the fundamental conflict of interest within integrated companies. The supply and production interests within the group aim to maximize their sales and market share while the network operator is obliged to offer non-discriminatory access to all competitors. Secondly, under the current unbundling rules, non-discriminatory access to information cannot be guaranteed as there is no effective means of preventing transmission system operators to release market sensitive information to the generation or supply branch of the integrated group. Thirdly, investment incentives within an integrated group are distorted. Vertically integrated network operators have no incentive to develop the network for the market and hence to facilitate the entry to new market players at generation or supply levels; on the contrary, integrated incumbents have an inherent interest to limit the investments benefiting its competitors (The Commission Proposal, 2007). Fourthly, if access charges are not properly regulated, they may give rise to a "margin squeeze", whereby the vertically integrated incumbent sets access charges at such a high level to compare to end-user prices that the margin is too small to provide an incentive for a new firm to enter the market (The Commission staff working document, 2007).

The pros and cons of ownership unbundling of transmission system operator. In this chapter the existing advantages and extra costs of ownership unbundling of transmission system operators are discussed.

Full ownership unbundling for transmission system operators solves above mentioned problems and has the following advantages: (i) it solves inherent conflict of interest, promotes transparency and inspires trust in third parties; (ii) transmission system operators focus on efficient operation and network expansion; (iii) security of supply is enhanced because investment disincentive is removed; (iv) producers focus on efficient production and on new customers e.g. outside home markets; (v) better focus increases equity value; (vi) better investment climate for new entrants is created; (vii) easier (cross-border) transmission system operator cooperation and mergers; (viii) dominant non European Union suppliers cannot purchase networks (The Commission staff working document, 2007).

These findings are supported by Copenhagen Economics research that examines electricity price trends in the EU using data for 1990-2003. They find that for electricity, higher levels of unbundling (with ownership unbundling being the highest form) lead to lower electricity prices (Pollitt, 2008).

However the implementation of ownership unbundling may also cause certain problems and additional costs: (i) may facilitate further generation mergers as sales of vertically unbundled transmission assets provide financial resources for horizontal integration; (ii) may delay privatization of network businesses because these can be retained in public ownership while generation and retail assets are privatized; (iii) may create information problems between generators and transmitters in the absence of investment in better information systems; (iv) may increase cost of capital and reduce investment if size of firms falls, or if regulatory risk is increased due to increased (and inefficient) regulatory oversight of investment decisions; (v) loss of synergy (vertical economies) benefits due to smaller size or loss of experience of operation of other segments, may be an issue if available two part tariffs are not fully efficient; (vi) sale of assets may lead to ‘strategic’ assets passing to foreigners if competition policy allows this (vii) unbundling may increase government interference in the operation of the network companies if these are kept in state ownership (Pollitt, 2008).

Despite probability of above mentioned disadvantages, ownership unbundling of electricity transmission networks is generally associated with competitive wholesale and retail markets and effective regulation of monopoly networks. It can be suggested that is the reason why it continues to be strongly resisted by incumbent companies in so many European countries is precisely because it is likely to be successful in facilitating more competition in these markets (Pollitt, 2008).

However a careful social cost benefit analysis is needed in each country case to estimate the size of the costs relative to the benefits. There is a high probability for

small countries where the scope for competition may be limited and managerial expertise is scarce the benefits of unbundling are likely to be small in relation to the costs (Pollitt, 2008).

The Development of the Structure of Electricity Market in Lithuania

Before 2002 the Lithuanian electricity sector could be described as a single vertically integrated monopoly *Lietuvos Energija AB* and *the State Enterprise Ignalina Nuclear Power Plant* as the largest electricity producer, both owned by the state (The National Control Commission for Prices and Energy, 2005).

On the 1st of January 2002 vertically integrated monopoly *Lietuvos Energija AB* was reorganized and divided into two companies producing electricity *Lietuvos Elektrine AB* and *Mazeikiai Thermal Power Plant AB*, one transmission system operator also acting as a market operator *Lietuvos Energija AB* and two distribution network companies *Rytu Skirstomieji Tinklai AB* and *VST AB* (The National Control Commission for Prices and Energy, 2005).

The controlling shareholder in *Lietuvos Energija AB* was the State of Lithuania holding 96.59 percent of shares in the company, represented by the Ministry of Economy. The remaining 3.41 percent of shares were owned by small shareholders (The National Control Commission for Prices and Energy, 2007).

The majority shareholders in *Rytu Skirstomieji Tinklai AB* were the State holding 71.35 percent of shares, E.ON Energie AG held 20.28 percent of shares. Minority shareholders held 8.37 percent of shares. The main manager of state-owned shares was the Ministry of Economy (The National Control Commission for Prices and Energy, 2007).

VST AB was privatized on the 23rd of December 2003. The major shareholder in this company was a private Lithuanian capital company *NDX Energija UAB*. It owned 97.1 percent of shares in *VST AB* and small shareholders owned 2.9 percent of shares (The National Control Commission for Prices and Energy, 2007).

The formation of national investor – LEO LT AB. On the 18th of January 2007 Seimas of the Republic of Lithuania approved the National Energy Strategy. It states that the future energy sector of Lithuania should constitute an integral part of a modern economy that will ensure a reliable and secure energy supply to all branches of the economy at economically justified prices that are affordable to consumers (do not exceed average prices in the European Union states). Also in the National Energy Strategy is stressed, that after the decommissioning of the *Ignalina Nuclear Power Plant*, a new nuclear power plant should be constructed in Lithuania with a view to avoiding heavy dependence on imports of fossil fuel whose prices are difficult to forecast, reducing pollutant emissions into the atmosphere and mitigating related economic consequences.

The Seimas of the Republic of Lithuania, implementing the National Energy Strategy and having regard to the energy policy of the European Union, on the 28th of June 2007 approved the Law on the Nuclear Power Plant. The aim of this law is to lay legal grounds for the construction and management of the new nuclear power plant and to replace the current *Ignalina Nuclear Power Plant*.

The Law on the Nuclear Power Plant legitimated the establishment of the national investor *LEO LT AB*, which would be responsible for establishment of the company in charge for the construction and management of the new nuclear power plant. Also the law states, that *LEO LT AB* forms the group of companies, which shall carry out the activities of electricity generation, transmission, distribution, supply, market operator and other activities unbundled in accordance with the procedure laid down by legal acts.

Such legal regulation is consistent the current Directive (Directive 2003/54EC) of the European Union, but may cause substantial problems, if the discussed proposal of ownership unbundling enter into force.

On the 20th of May 2008 national investor *LEO LT AB* was established. The legal form of the national investor is a public limited liability company. The Republic of Lithuania owns 61.7 percent of shares in the national investor, other part of *LEO LT AB* shares is owned by Lithuanian private company *NDX Energija UAB* (Establishment agreement).

LEO LT AB is a parent company of *Lietuvos Energija AB*, *VST AB, Rytu Skirstomieji Tinklai AB, Visagino Atomine Elektrine UAB*, *InterLinks UAB. LEO LT AB* owns:

1. 96.4 percent shares of *Lietuvos Energija AB*, a transmission system operator. The company is not engaged in activity of supply of electricity, it performs the function of market operator, which is responsible for the organization of electricity trade, including auction. Two generation companies operate as *Lietuvos Energija* AB subsidiaries, i.e. *Kruonis Pumped Storage Plant* and *Kaunas Hydro-Power Plant*. These plants ensure the balance of the electricity system, as well as constant electricity supply (National Control Commission for Prices and Energy, 2007).
2. 96.4 percent shares of *VST AB*. *VST AB* is a distribution system operator and public supplier of the western part of Lithuania (Establishment agreement).
3. 71.3 percent shares of *Rytu Skirstomieji Tinklai AB*. *Rytu Skirstomieji Tinklai AB* is a distribution system operator and public supplier of the eastern part of Lithuania (Establishment agreement).
4. 100 percent shares of *InterLinks UAB*, company responsible for the construction of interconnections with other energy systems (Establishment agreement).
5. 100 percent shares of *Visagino Atomine Elektrine UAB*, company which is responsible for preinvestment activities of new nuclear power plant (Establishment agreement).

Therefore, as a result of vertical integration, *LEO LT AB* is engaged in electricity generation, transmission, distribution and supply. The two main problems concerning unbundling of Lithuanian electricity sector may be indicated: (i) separation of supply from distribution and transmission and (ii) unbundling of generation and transmission activities.

Unbundling of supply of electricity from the activities of distribution and transmission. The case of Lithuania shows that current regulation of legal

unbundling, which is formally consistent with the directives of the European Union, does not safeguard the existence of competition in electricity market. In Lithuania there is no legal requirement for legal unbundling of electricity distribution from public supply activities, which results in cross subsidization and creation of barriers for new market entrants.

In 2007, in the electricity supply sector, 6 companies held licenses of public suppliers, 18 companies were licensed as independent suppliers, whereas 8 companies were actually engaged in the activities of the independent supplier. The main public suppliers of energy upon request to all customers within their territory are *Rytų Skirstomieji Tinklai AB* and *VST AB*. Public suppliers *Rytų Skirstomieji Tinklai AB* and *VST AB* have the major supply market share. In 2007, it accounted for 87 percent of electricity sold to domestic customers (National Control Commission for Prices and Energy, 2008).

Independent suppliers supplying energy to eligible customers are as follows: (i) *Ignalina Nuclear Power Plant*, (ii) *Mazeikiu Nafta AB*, (iii) *Prekybos Namai Giro*, (iv) *Achema AB* and (v) *Akmenes Cementas AB*. In 2007, only 6 eligible customers chose independent suppliers. *Korelita AB*, *Achema AB* and *Akmenes Cementas AB*, having the status of eligible customer, were granted licenses of the independent supplier and traded on the market as suppliers (National Control Commission for Prices and Energy, 2008).

In Lithuania according the Law on Electricity public supplier is also the supplier of the last resort, responsible for supply of electricity to all customers, which have not chosen the independent supplier of electricity. As it was already mentioned, public supply activities are not even legally unbundled form distribution activities as *VST AB* in Western part of Lithuania and *Rytu Skirstomieji Tinklai AB* in Eastern part of Lithuania have monopolistic rights of electricity public supply and distribution. Despite the law, that all electricity consumers have the right to choose the supplier the public supplier in 2007 supplied 87 percent of electricity. Only a few industry consumers switched to another supplier.

The lack of effective unbundling between electricity supply and distribution activities allows cross subsidization of competitive electricity supply activity by monopolic electricity distribution activity. Presumption of cross-subsidization between the activities of electricity distribution and activities of electricity supply is confirmed by the facts that: (i) the prices of services of electricity supply constitute only a very small share of electricity price (less than one percent); (ii) the prices of services of electricity distribution increased, while the price of services of electricity supply decreased.

To sum up the analysis, the creation of *LEO LT AB* as the integrated group of companies, engaged in all four main activities, even worsened the situation. Before the establishment of *LEO LT AB* the ownership of electricity distribution and supply company *VST AB* was unbundled. The controlling block of *VST AB* was own by private company, while the shares of electricity transmission company were owned by the state. After the creation of *LEO AB*, the *VST AB* remained only legally unbundled. For this reason now the competitive supply activity can be subsidized not only by monopolic activity of distribution of electricity but also by the monopolic activity of transmission of electricity.

Unbundling of electricity generation from distribution and transmission activities. After the reorganization of the vertically integrated company *Lietuvos Energija AB* by founding four new legal entities, i.e. two distribution network companies (*Rytu Skirstomieji Tinklai AB* and *VST AB*) and two power plants (*Lithuanian Power Plant* and *Mazeikiai Power Plant*), *Lietuvos Energija AB* has retained two hydro-power plants: *Kaunas Hydro-Power Plant* and *Kruonis Pumped Storage Plant* used for ensuring the national balance of electricity.

It was agreed that in the period of 24 month after the establishment of *LEO LT AB*, the Kruonis Pumped Storage Plant and Kaunas Hydro-Power Plant will be legally unbundled from the *Lietuvos Energija AB* and the shares will be sold to the government of Lithuania in order legally unbundle the generation activities from the electricity transmission. However the controlling owner of the shares of all four activities will actually remain the government.

LEO LT AB is the sole shareholder of *Visagino Atomine Elektrine UAB,* company which is responsible for preinvestment activities of new nuclear power plant. According the Law on the Nuclear Power Plant, *LEO LT AB* should own not less that 34 percent of the new nuclear power plant. In this case the *LEO LT AB* will own the controlling package of shares of the companies engaged in electricity transmission, distribution and supply and not less than one third of shares of the companies engaged in electricity generation.

The Development of Lithuanian Electricity Sector and the European Union Strategy

One of the main goals of the European Union is the creation of competitive electricity market. The European Union strategic documents stress that the effective ownership unbundling of electricity supply and generation from monopolic electricity transmission and distribution activities is the key element of competitive electricity market development. Therefore, the creation of *LEO LT AB* and an integrated group of companies, engaged in four main electricity market activities, is inconsistent with the European Union strategy of development of electricity market and transmission networks ownership unbundling model.

The creation of *LEO LT AB* is justified by the argument that (i) the Lithuania needs financially strong energy company, which would be able to coordinate and lead the construction of new nuclear power plant and other major energy projects, which are crucial the security of electricity supply. The competitiveness of electricity market therefore remains the secondary goal.

Whether *LEO LT AB* has been the best solution for the future development of electricity market of Lithuania is still the question for economic calculations. However it can be concluded that the creation of *LEO LT AB* is inconsistent with the ownership unbundling model, which is the most favored by the European Commission, as future legislative policy of European electricity market and the best for enhancement of competition in the sector.

Conclusions

1. The European Commission proposed the model of ownership unbundling of the transmission system operator from supply and generation of electricity. The effective unbundling of monopolic activity of transmission of electricity from the competitive activities of supply and generation of electricity is the key element of competitive electricity market.
2. The defining element of an ownership unbundling model is that the network of electricity transmission is operated and owned by one independent company, which clarifies the incentives, responsibilities and liabilities for the network.
3. The main objectives of ownership unbundling are to prevent discrimination, optimize use of infrastructure, incentive economic investment and enable effective regulatory oversight of monopolistic activities.
4. The exact costs and benefits of ownership unbundling model depend on the peculiarities of certain national or regional electricity market. Thus it is hard to find common solution of unbundling across the European Union. Despite of resistance of monopolistic market forces, it is acknowledged that ownership unbundling is the most effective regulation seeking to increase competitiveness of electricity market. However for certain Member States the costs of implementation of this model would be too high.
5. In Lithuania the formation of *LEO LT AB* created the problem of vertical integration of following activities in electricity sector: generation, transmission, distribution and supply.
6. The creation of *LEO LT AB* is justified by the argument that (i) the Lithuania needs financially strong energy company, which would be able to coordinate and lead the construction of new nuclear power plant and other major energy projects, which are crucial for the security of electricity supply. The competitiveness of electricity market therefore remains the secondary goal.
7. Whether *LEO LT AB* has been the best solution for the future development of electricity market of Lithuania is still the question for economic calculations. However it can be concluded that the creation of *LEO LT AB* is inconsistent with the ownership unbundling model, which is the most favored by European Commission, as future legislative policy of the European electricity market and the best for enhancement of competition in the sector.

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Saulė Milčiuviene, Agnė Tikniutė

Elektros perdavimo tinklo operatoriaus nuosavybės atskyrimas: Europos Sąjungos politika ir Lietuvos praktika

Santrauka

Pasaulyje vykstantys ekonominiai ir technologiniai pokyčiai sudaro prielaidas konkurencijai elektros rinkoje atsirasti. Manoma, kad pasaulyje per ateinančius dvidešimt penkerius metus elektros energijos suvartojimas padidės du kartus, o besivystančiose valstybėse – tris kartus. Siekiant užtikrint tvirtą ekonomikos vystymąsi, yra būtina tinkamai plėtoti energetikos sektoriaus infrastruktūrą.

Europos Sąjunga siekia sukurti vieningą elektros rinką, kuri veiktų remiantis laisvosios rinkos principais. Siekiant užtikrinti konkurencines sąlygas elektros rinkoje, yra būtina atskirti monopolinę elektros energijos perdavimo veiklą nuo elektros energijos tiekimo ir gamybos veiklų.

Teisinis reguliavimas, kuris numato privalomą teisinį atskyrimą, (t. y. tas pats juridinis asmuo negali verstis elektros energijos perdavimo veikla ir elektros energijos tiekimo ir (ar) gamybos veiklomis), nesudaro prielaidų vieningai elektros rinkai sukurti Europos Sąjungoje, todėl yra būtina taikyti naujus reguliavimo modelius. Europos Komisija pateikė pasiūlymą dėl naujos direktyvos, reglamentuojančios Europos Sąjungos vidaus elektros rinkos funkcionavimą, priėmimo. Jame siūloma įteisinti privalomą bendrovės, valdančios elektros energijos perdavimo tinklą,

nuosavybės atskyrimą nuo įmonių, vykdančių elektros energijos tiekimo ir gamybos veiklas.

Nuosavybės atskyrimo modelio esmė yra ta, kad perdavimo tinklo operatorius valdo nuosavybės teise elektros energijos perdavimo tinklus bei vykdo visas funkcijas, susijusias su elektros energijos perdavimu. Perdavimo tinklų bendrovė gali būti valdoma ir jos akcijas nuosavybės teise gali turėti tik tie fiziniai ar juridiniai asmenys, kurie neturi interesų elektros energijos tiekimo ir gamybos bendrovėse. Pagrindinis nuosavybės atskyrimo modelio įgyvendinimo tikslas – užkirsti kelią diskriminacijai, optimizuoti esamos elektros energijos perdavimo infrastruktūros panaudojimą, užtikrinti reikiamas investicijas į elektros energijos perdavimo tinklus ir garantuoti efektyvią monopolinių veiklų valstybinę priežiūrą.

Konkretūs kaštai ir nauda, įgyvendinant perdavimo tinklo operatoriaus nuosavybės atskyrimo modelį, priklauso nuo specifinių nacionalinės ar regioninės elektros rinkos struktūros. Dėl šios priežasties yra sudėtinga sutarti dėl vieningo elektros rinkos teisinio reguliavimo modelio visoje Europos Sąjungoje. Nors atlikti tyrimai patvirtino, kad perdavimo tinklo operatoriaus nuosavybės atskyrimas yra efektyviausias būdas elektros rinkos konkurencingumui didinti, kai kurios valstybės narės, įgyvendindamos šį modelį, patirtų didelius kaštus, palyginti su galima potencialia nauda.

Nepaisant vieningos Europos Sąjungos energetikos politikos, valstybių narių nacionalinės strategijos dėl elektros rinkos vystymo labai skiriasi. Šiuos skirtumus paprastai lemia skirtinga valstybių narių elektros rinkos struktūra. Lietuva yra Europos Sąjungos narė, todėl jos elektros rinkos vystymo strategija turi būti suderinta su Europos Sąjungos. Tačiau taip pat Lietuva turi pasirinkti elektros rinkos vystymo strategiją, kuri geriausiai atitinka jos specifinius elektros rinkos poreikius. Pokyčiai, kurie atsiras elektros energijos tiekimo sektoriuje uždarius Ignalinos atominę elektrinę, paskatino Lietuvos Respublikos Vyriausybę iš naujo apsvarstyti nacionalinės ir regioninės elektros energijos rinkos vystymo prioritetus.

Iki 2002 m. Lietuvos elektros energetikos sektorių sudarė viena vertikalios integracijos monopolinė įmonė AB „Lietuvos energija“ ir VšĮ „Ignalinos atominė elektrinė“. 2002 m. sausio 1 d. AB „Lietuvos energija“ buvo reorganizuota skaidymo būdu. Buvo įkurtos dvi elektros energijos gamybos bendrovės: AB „Lietuvos elektrinė“ ir AB „Mažeikių elektrinė“, dvi elektros energijos skirstymo ir tiekimo veiklas vykdančios bendrovės: AB „Rytų skirstomieji tinklai“ ir AB VST. AB „Lietuvos energija“ vykdė tik elektros energijos perdavimo ir rinkos operatoriaus veiklas.

Lietuvos Respublikos Seimas 2007 m. sausio 18 d. patvirtino Nacionalinę energetikos strategiją. Joje pabrėžiama, kad Lietuvos ateities energetika – modernios ekonomikos sudėtinė dalis, ekonomiškai pagrįstomis ir vartotojams prieinamomis (ne aukštesnėmis nei vidutiniškai Europos Sąjungos valstybėse) kainomis patikimai ir saugiai aprūpinanti energija visas ūkio šakas. Taip pat Nacionalinėje energetikos strategijoje minima, kad uždarius Ignalinos atominę elektrinę, siekiant išvengti per didelės priklausomybės nuo organinio kuro, kurio kainos sunkiai prognozuojamos, siekiant sumažinti teršalų išmetimą į atmosferą ir su tuo susijusius ekonominius padarinius, Lietuvoje reikia pastatyti naują atominę elektrinę.

Lietuvos Respublikos Seimas, įgyvendindamas Nacionalinę energetikos strategiją ir atsižvelgdamas į Europos Sąjungos energetikos politiką, 2007 m. birželio 28 d. priėmė Atominės elektrinės įstatymą. Šiuo įstatymu yra siekiama sudaryti teisines prielaidas naujai atominei elektrinei statyti ir valdyti, kad pakeisti dabar veikiančią Ignalinos atominę elektrinę.

Atominės elektrinės įstatymas įteisina nacionalinio investuotojo AB LEO LT įsteigimą, kuris įpareigojamas įkurti bendrovę, atsakingą už naujos atominės elektrinės statybą ir valdymą. Taip pat įstatymas numato, kad įkuriant AB LEO LT yra suformuojama įmonių grupė, vykdanti elektros energijos gamybos, perdavimo, skirstymo, tiekimo ir rinkos operatoriaus veiklas. Šios veiklos turi būti atskirtos pagal reikalavimus, numatytus teisės aktuose.

Minėta energetikos įmonių valdymo struktūra atitinka šiuo metu galiojančios Europos Sąjungos direktyvos reikalavimus, tačiau kyla klausimas, ar tokia Lietuvos energetikos politika yra suderinama su Europos Sąjungos siekiu sukurti konkurencingą vidaus elektros rinką, užtikrinant efektyvų elektros energijos perdavimo veiklos atskyrimą, bei naujai pateiktu Europos Sąjungos Komisijos pasiūlymu dėl privalomo perdavimo tinklo operatoriaus nuosavybės atskyrimo.

Straipsnio tikslas yra išanalizuoti, ar Lietuvos elektros energetikos įmonių sujungimas į įmonių grupę suderinamas su Europos Komisijos siūlomu elektros energijos perdavimo tinklo operatoriaus nuosavybės atskyrimo modeliu.

Straipsnyje nagrinėjama Lietuvos elektros energetikos sektoriaus struktūra pagal Europos Sąjungoje siūlomą elektros energijos perdavimo tinklo operatoriaus nuosavybės atskyrimo modelį. Ši problema iki šiol nei mokslininkų nei praktikų nėra išsamiai nagrinėta.

Rengiant straipsnį daugiausia remtasi dokumentiniu tyrimo metodu.

Pirmoje straipsnio dalyje analizuojamas perdavimo tinklo operatoriaus nuosavybės atskyrimo modelis. Jame aptariami: 1) egzistuojantys perdavimo tinklo operatoriaus atskyrimo modeliai; 2) pagrindiniai perdavimo tinklo operatoriaus nuosavybės atskyrimo modelio ypatumai; 3) tikslai, kurių siekiama įgyvendinant perdavimo tinklo operatoriaus nuosavybės atskyrimą; 4) pagrindinės problemos ir pranašumai, kylantys įgyvendinant perdavimo tinklo operatoriaus nuosavybės atskyrimo modelį. Antra straipsnio dalis skirta Lietuvos elektros rinkos raidos ir pokyčių analizei. Joje analizuojami: 1) nacionalinio investuotojo AB LEO LT įsteigimas; 2) specifinės problemos, kilsiančios Lietuvos elektros rinkoje įgyvendinant elektros energijos tiekimo ir gamybos veiklų atskyrimą nuo monopolinių elektros energijos skirstymo ir perdavimo veiklų.

Straipsnio pabaigoje formuluojama pagrindinė išvada, kad Lietuvoje vykstantys elektros rinkos struktūriniai ir teisinio reguliavimo pokyčiai – AB LEO LT ir įmonių grupės įkūrimas – yra nesuderinami su nuosavybės atskyrimo modelio koncepcija. Nuosavybės atskyrimo modelis numato, kad elektros energijos perdavimo tinklo operatoriaus akcijas valdantys fiziniai ar juridiniai asmenys negali turėti interesų elektros energijos tiekimo ir gamybos veikla besiverčiančiose įmonėse. Įkūrus AB LEO LT buvo suformuota integruota įmonių grupė, besiverčianti monopolinėmis elektros energijos perdavimo ir skirstymo veiklomis bei konkurencinėmis elektros energijos tiekimo ir gamybos veiklomis.

Raktažodžiai: *perdavimo tinklo operatorius, nuosavybės atskyrimas, elektros rinka*.

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