ANNUAL REPORT ON ELECTRICITY AND NATURAL GAS MARKETS IN LITHUANIA PREPARED FOR THE EUROPEAN COMMISSION

Report prepared by: National Control Commission for Prices and Energy

Vilnius, 2007

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1. FOREWORD

In 2006, the Lithuanian electricity and natural gas markets did not undergo any considerable changes. Despite constantly rising natural gas prices, electricity prices did not change and remained one of the lowest in the European Union. This was conditioned by cheap electricity supplied by Ignalina NPP satisfying 70% of the domestic market needs. Nevertheless, as a result of rising natural gas prices (gas is used by combined heat and power plants, as well as the Lithuanian Power Plant ensuring the reserve) and the increasing share of electricity generated by power plants using renewable resources, the average price of electricity generation has increased by some EUR 5/MWh from the beginning of 2007.

From the middle of 2004 all commercial customers, and from 1 July 2007 all residents became entitled to choose an electricity supplier. Unfortunately, due to the dominant Ignalina NPP supplying cheap electricity as well as rising fuel prices and higher production costs of other power plants, the share of customers purchasing electricity from independent suppliers did not increase.

Some legal issues are still pending: the public supplier has not become a supplier of last resort, and the transmission system operator has not been legally fully unbundled from other activities. This was interrupted by the formation of an investor for the construction of a new nuclear power plant uniting all transmission and distribution network companies.

So far, the common market of the Baltic States has been opening up with difficulties, since Estonia has postponed its market liberalisation until 2012, and Latvia has only recently legally unbundled generation, transmission and distribution activities. Energy regulators in the Baltic States coordinate common market development plans with transmission system operators and seek to identify and remove technical and bureaucratic obstacles.

Lithuania, like the other Baltic States and Finland, is supplied with natural gas by a single external supplier, i.e. Gazprom; these countries have neither alternative supply sources nor connections.

With a single external supplier and two suppliers within the country, which have strictly divided the national market, Lithuania has nevertheless decided to transpose all the requirements of the EU Gas Directive and to fully liberalise the natural gas market. Already in 2006, the market was legally 90% open, but customers could only be compelled to choose another supplier because due to the lack of competition its prices were 10-20% higher.

In spring 2007, the Seimas of the Republic of Lithuania passed the Law Amending the Law on Natural Gas establishing that as from 1 July 2007 all national customers shall become eligible customers. For the purpose of protecting customer interests, gas supply prices must be regulated. The Law has also adjusted licensing principles, specified the definitions of transit and transmission, as well as identified measures ensuring the security of gas supply.

This report is prepared by the NCCPE on the basis of the materials provided by electricity and gas companies and the data presented by the Ministry of Economy. The report reviews the development of the electricity and gas markets over the last period, identifies the main problems and pending issues.

Chairman of the Commission Vidmantas Jankauskas

2. SUMMARY

2.1. ORGANISATIONAL STRUCTURE OF THE REGULATOR

Composition and Tasks of the Commission

The National Control Commission for Prices and Energy (hereinafter referred to as "the NCCPE") was set up in 1997 under the Law on Energy (1995) stipulating that an independent authority should be charged with energy pricing.

In 2000, the Seimas built the legal foundation for a future liberal natural gas and electricity market. The Seimas passed the Law on Electricity and the Law on Natural Gas. Pursuant to these laws, the National Control Commission for Prices and Energy replaced the Price Commission which was responsible only for pricing policies, price setting and application and became an economic energy regulation commission performing the same functions as regulatory authorities in most Western (and other) countries.

In 2000, new activities were assigned to the competence of the NCCPE, namely, licensing and control over the operation of licensed companies. The Law on Electricity and the Law on Natural Gas emphasise that all main activities in these sectors are subject to licences which, apart from being a permit for participation in the market, have become an instrument for controlling the quality of services, the reliability of supply, and compliance with environmental and other standards. The aforementioned laws provide that the NCCPE also settles disputes relating to the right of access to networks, imposes fines for various breaches of laws, and approves eligible customers. It is noteworthy that the NCCPE has not performed the latter function since 1 July 2007 as all electricity and natural gas consumers are eligible.

On 1 July 2002, a substantially updated Law on Energy entered into force clearly and plainly defining the functions and duties of the NCCPE, responsibilities of individual members, their appointment procedure, etc. Pursuant to the new version of the Law on Energy, five members of the NCCPE are appointed by the President of the Republic, on the recommendation of the Prime Minister, for a period of five years, and the Regulations of the NCCPE are approved by the Government. This Law has established the new role of the NCCPE as the regulator of the liberalised energy market. The specific tasks of the NCCPE have been formulated in its Regulations approved by the Government. The primary task of the NCCPE is to supervise the electricity, natural gas, heating and water supply markets.

Two European Union (EU) directives – Electricity and Natural Gas Directives – foreseeing a rapid opening of the market, a more important role of energy regulators in market supervision, consumer protection etc., must have been implemented before 1 July 2004. The new version of the Law on Energy passed by the Seimas on 1 July 2004 is virtually in compliance with the provisions of the EU Electricity Directive relating to market opening and supervision. The additional functions assigned to the NCCPE cover the supervision of activities of transmission and distribution network operators (how the rules for

the allocation and regulation of transmission capacity of lines interconnecting separate systems are observed, how fast new customers are connected, how effectively accounts of different activities are unbundled, etc.), the market monitoring and supervision, as well as control over the reliability of supply and the quality of services.

In 2006, no amendments were made to laws regulating the activities of the electricity and natural gas sectors regulated by the NCCPE. The parliamentary discussions on a new version of the Law on Natural Gas started in 2004 were continued in 2006. Amendments to the Law on Natural Gas drafted in accordance with the provisions of Gas Directive 2003/55/EC and other EU legislation were passed by the Seimas only in April 2007.

Functions of the NCCPE

The basic legal act defining the functions of the NCCPE is the Law on Energy. Paragraph 5 of Article 17 of this Law provides that the NCCPE shall perform the following functions:

1) approve methodologies for setting state-regulated prices;

2) set state regulated price caps;

3) control the application of state regulated prices and tariffs;

4) approve fees for the connection of energy facilities (networks, systems and equipment);

5) have the right to unilateral introduction of state-regulated prices where energy enterprises fail to comply with the requirements for setting such prices;

6) when setting state regulated prices, evaluate the return on investment and the validity of operating expenditure;

7) approve the purchase price for electricity generated from renewable energy resources;

8) grant, suspend and revoke licences for transmission, distribution, storage and supply of energy, and control the licensed activities of energy enterprises;

9) adjust long-term asset depreciation (amortisation) norms for energy enterprises engaged in activities with regulated prices;

10) have the right to submit proposals to the Government, the Ministry of Economy and municipalities regarding the licensed activities of energy enterprises;

11) have the right to obligate energy enterprises to conclude contracts for transmission, distribution or supply of energy where energy enterprises unfoundedly refuse to provide services to a third party or to supply energy to customers;

12) perform functions provided for by other legal acts.

The functions of the NCCPE are further detailed in the Regulations of the National Control Commission for Prices and Energy approved by a resolution of the Government. This legal act lists 21 functions assigned to the NCCPE, but the list is not finite. It should be noted that in 2006 the Ministry of Economy drafted amendments and supplements to the Regulations of the NCCPE and submitted them to the Government for consideration, which were adopted in February 2007. Pursuant to the

aforementioned legal act, in addition to the other functions, the NCCPE must protect violated customer interests when hearing complaints, as well as coordinate draft rules, regulations and methodologies to be approved by the NCCPE with state institutions or agencies, the Association of Local Authorities in Lithuania, as well as consumer protection and business associations.

Independence and Accountability

The independence of the NCCPE is ensured by several conditions:

- the NCCPE is not bound with other institutions by any direct subordination relations;
- the Chairman and four members of the NCCPE are appointed by the President of the Republic, on the recommendation of the Prime Minister;
- the Chairman and members of the NCCPE are dismissed from office only upon the expiry of their term of office; upon their resignation; when the conviction against them becomes effective; when they are discovered to have committed a grave breach of the requirements for their position, as well as on other grounds provided by law;
- the NCCPE is financed from the Lithuanian State budget through appropriations in a separate budget line.

The entirety of these legal provisions ensures institutional, personal and financial independence of the NCCPE.

The Law on Energy provides for two forms of accountability, i.e. personal and institutional. Paragraph 6 of Article 17 of the Law on Energy establishes that the NCCPE shall be responsible for its decisions. Decisions are adopted by a roll-call vote. They may be appealed against in accordance with the procedure established by law.

Institutional accountability of the NCCPE for its activities is reflected in its annual reports. The NCCPE prepares its annual reports within four months after the end of each calendar year. Reports are made public and submitted to the President of the Republic, the Seimas and the Government.

Sharing Competence with Other State Institutions

The Law on Energy provides that State management of the energy sector in the Republic of Lithuania shall be carried out by the following institutions:

1) the Government or institutions authorised by it;

2) the Ministry of Economy;

3) the Ministry of Environment;

4) municipalities.

When carrying out State management of the energy sector, the Government develops and implements the State policy in the energy sector, submits the National Energy Strategy to the Seimas for approval, approves the plan and programmes for the implementation of the National Energy Strategy,

has the right to regulate the principles of price setting when prices are subject to State regulation, and performs other functions provided by laws.

The Ministry of Economy implements the State policy in the energy sector, drafts and approves legal acts regulating the security of supply, installation, operation, technical safety and efficiency of energy facilities and equipment and other technical issues, and performs other functions.

The Ministry of Environment deals with the issues relating to environmental protection and construction.

A municipality, within its territory and within the competence established by laws, regulates heat supply to customers, grants authorisations for trade in liquefied petroleum gas in accordance with the procedure approved by the Ministry of Economy, and performs other functions within its competence.

The primary task of the NCCPE is to supervise the electricity, natural gas, heating and water supply markets.

The NCCPE holds, within its competence, preliminary extra-judicial hearings of complaints concerning acts or omissions by energy enterprises in supplying, distributing, transmitting or storing energy, refusal to grant them the right of access to networks and systems, connection, balancing of energy supply flows, as well as application of prices and tariffs.

Complaints lodged by natural persons concerning the application of unfair conditions in energy purchase-sale or service contracts are heard by the State Consumer Rights Protection Authority.

Complaints concerning the malfunctioning of energy facilities, equipment and metering devices, breaches of requirements for maintenance, energy quality, accounting of energy and payment for the consumed energy, accidents, the interruption, suspension or restriction of energy supply are heard by the State Energy Inspectorate.

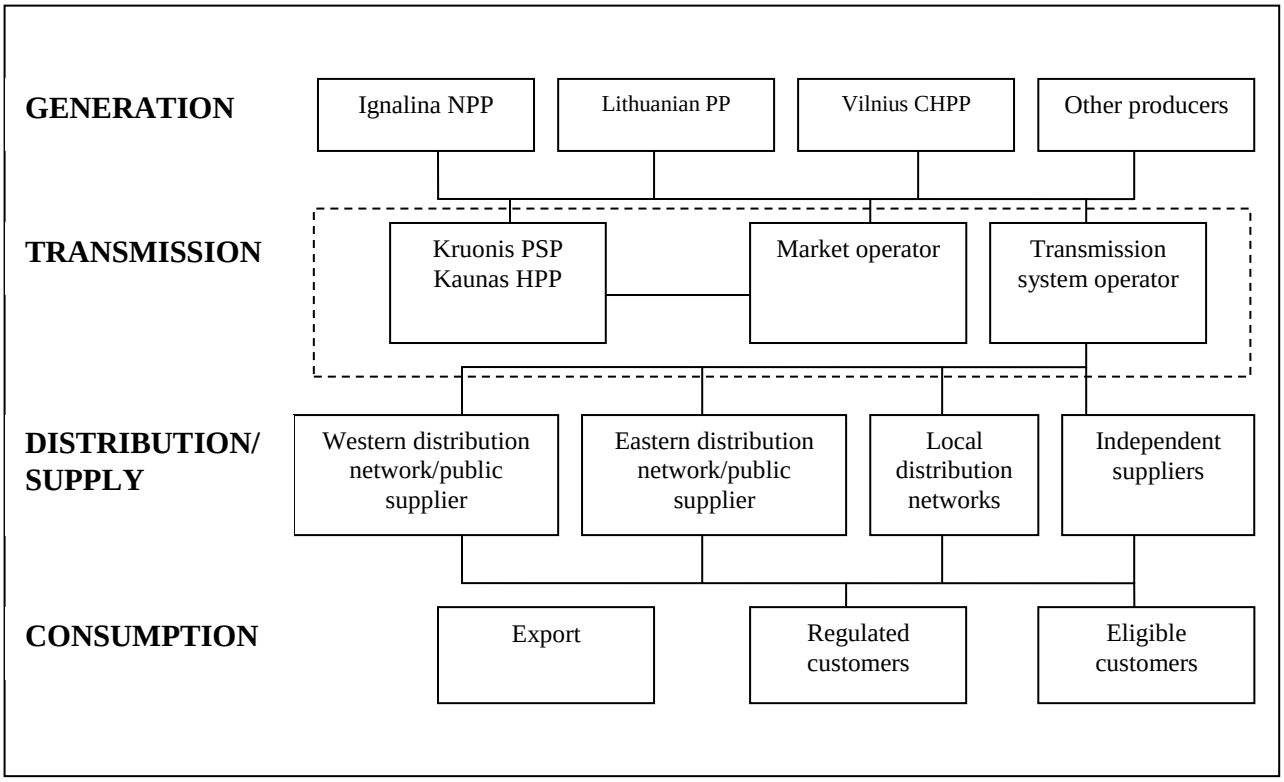
2.2. KEY EVENTS IN THE ELECTRICITY AND NATURAL GAS MARKETS

2.2.1. ELECTRICITY SECTOR

Market Structure (Mergers)

In 2006, the electricity market structure did not undergo any substantial changes, and the existing structure is virtually the wholesale market model created in 2002 (see Diagram 1). At the end of the year, Mažeikių Elektrinė AB was removed from the Register of Legal Entities and Mažeikių Nafta AB, having taken over the assets of that power plant, and began trading on the market as a producer and independent supplier. Mažeikių Elektrinė AB is the sixth in Lithuania in terms of available capacity.

Diagram 1. Electricity Market Structure



Trade in electricity on the market is carried out in accordance with the Rules for Trade in Electricity and the Rules for Trade in Electricity at Auction. Market participants may be enterprises holding licences of a public and independent supplier or authorisations to generate, import and export electricity as specified in the Law on Electricity, and registered by the market operator whose activities are carried out by a division of Lietuvos Energija AB. Suppliers are entitled to conclude direct electricity supply contracts with producers. Eligible customers may choose any supplier.

Price Dynamics

In 2006, the Lithuanian electricity sector faced new challenges: at the beginning of 2005, the first unit of Ignalina NPP was closed; hence, the second unit had to work at full capacity in order to supply the agreed electricity quantities to national electricity suppliers and to guarantee export volumes set in international agreements. With one unit operating, Ignalina NPP generated and supplied 7.9 TWh, and Lietuvos Energija AB exported 2 TWh of electricity. As a result of the successful export and import policy of Lietuvos Energija AB (cheaper electricity was imported from Russia during 80 days of repairs at Ignalina NPP), electricity generation prices in the country increased insignificantly in 2006 – only by 0.5%.

In 2006, the price for customers remained almost unchanged. Rytų Skirstomieji Tinklai AB extended the validity of its electricity prices and tariffs and their application procedure for 2006, and VST AB made only minor adjustments to prices for customers purchasing electricity from 110 kV voltage networks, which was conditioned by changes in the generation cost.

In 2006, both distribution network companies applied public electricity price differentiation according to the consumption time, customer groups, as well as allowed capacity and electricity consumption volume. Public electricity price differentiation is meant to encourage customers to increase the efficiency of use of the electricity system, to optimise the capacities of electricity networks, and to balance the electricity consumption schedule by shifting the price-wise flexible share of electricity consumption from the system peak hours to periods of lower loads.

In 2006, VST AB allowed the customers of Groups II and III receiving electricity from both medium and low voltage networks to choose one of three payment plans. Rytų Skirstomieji Tinklai AB offered three payment plans only to customers of medium voltage networks.

These two companies employed different methods for the calculation and differentiation of the price of the distribution service. Table 1 shows the average electricity prices in the western part of the country, which is served by VST AB, and in the eastern part of the country, which is served by Rytų Skirstomieji Tinklai AB.

In 2007, an increase by EUR 4.34/MWh in electricity generation prices is forecasted as a result of the growing prices of natural gas imports. This fuel is used by combined heat and power plants, and the electricity generated by these plants is purchased under the public service obligation. More expensive energy leads to more costly technological losses and own needs in networks, thus, having regard to the slightly adjusted transmission price (increased by EUR 0.26/MWh), the average electricity price for end users went up by some EUR 4.92/MWh, or EUR 5.79/MWh, including the value added tax.

Table 1. Actual and Forecasted Prices for 2005-2007, EUR/MWh

Indicators	VST AB			Rytų Skirstomieji Tinklai AB		
	2005	2006	2007	2005	2006	2007
Electricity generation price	24.1	24.56	28.9	24.1	24.56	28.9
Electricity transmission service price	9.93	10.05	10.37	9.93	10.05	10.37
Electricity supply service price	0.58	0.55	0.55	0.61	0.61	0.61
Public electricity price for customers receiving electricity from high voltage electricity networks	**34.67**	**35.16**	**39.82**	**34.7**	**35.22**	**39.88**
Price for the service of electricity distribution through medium voltage electricity networks	18.62	18.13	18.39	17.67	17.2	17.46
Public electricity price for customers receiving electricity from medium voltage electricity networks	**53.29**	**53.29**	**58.21**	**52.36**	**52.42**	**57.34**
Price for the service of electricity distribution through low voltage electricity networks	23.46	26.36	26.36	20.42	20.68	22.13
Public electricity price for customers receiving electricity from low voltage electricity networks	**76.75**	**79.65**	**84.57**	**72.78**	**73.10**	**79.47**

Market Opening in 2007

2007 is the sixth year of the functioning electricity market. The market is being opened up gradually in accordance with the Law on Energy establishing the same degree of market opening as Directive 2003/54/EC of the European Parliament and of the Council concerning common rules for the internal market in electricity. As from 1 July 2007 all customers will become eligible customers and be able to choose their supplier and purchase electricity at negotiated prices.

It is likely that in 2007, like in the previous years, the benefits offered by the electricity market will be enjoyed by 6 major Lithuanian industrial enterprises, i.e. about 13% of electricity consumption in the country. This is caused by relatively cheaper electricity sold by public suppliers as compared with electricity prices offered by independent suppliers under market conditions in the distribution network. The situation may change subject to the elimination of public electricity prices, but this may entail higher electricity prices for most customers because of non-existent competition on the internal market and even the Baltic market due to the small number of competitive producers. Electricity interconnections with Western and Scandinavian electricity systems would enhance the level of competition.

Unbundling

Electricity generation, transmission and distribution activities have been legally unbundled since 2002 already, i.e. there are separate companies. The costs of distribution and public supply activities are accounted for in separate accounts and ledgers of distribution network companies. Separate accounts are

also kept by the transmission system company for the costs of the market operator, two hydro-power plants and other activities. Further legal unbundling of the aforementioned activities is under consideration and feasibility studies on such unbundling have been commissioned.

It is noteworthy, however, that in June 2007 the Seimas passed the Law on the Nuclear Power Plant providing that Lithuania and its strategic partners would construct a new nuclear power plant to replace the current Ignalina Nuclear Power Plant. In this project, Lithuania will be represented by the State-owned national investor company comprising the State-owned Lietuvos Energija AB and Rytų Skirstomieji Tinklai AB, as well as the privatised VST AB managed by NDX Energija, i.e. transmission and distribution network companies.

Market Integration into Wholesale Markets

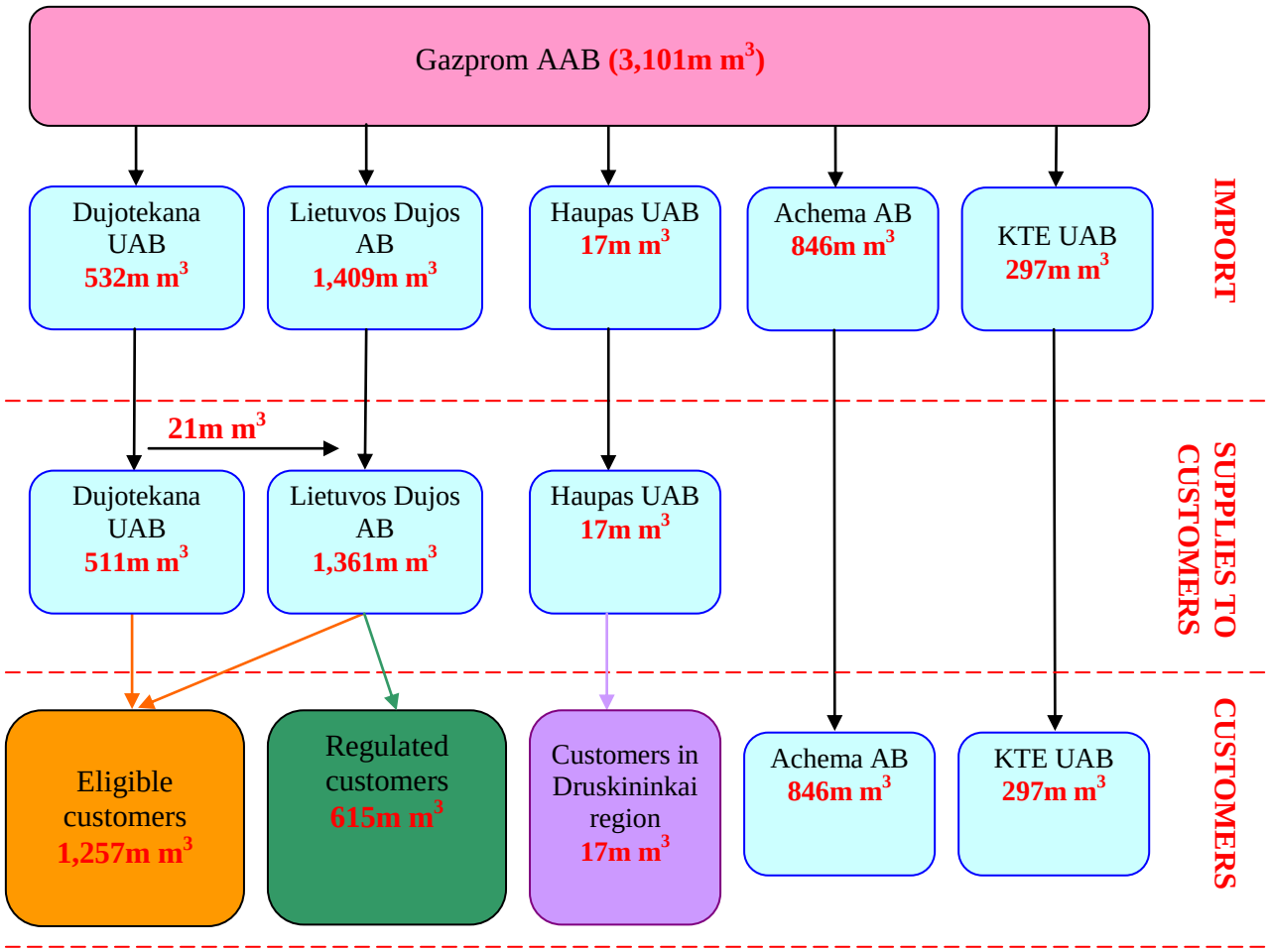
Three mini-forums of the Baltic electricity market were held in Tallinn, Riga and Vilnius in 2006. They were attended by representatives of regulatory authorities, ministries, transmission system operators from the Baltic States and other countries, the European Commission and other interested parties. The Electricity Regional Initiative Group held discussions about electricity pricing, compensation mechanism among the Baltic transmission system operators, balancing, licensing and other issues. Yet, in the absence of electricity interconnections with West European electricity systems, with the participation of just a few major producers in the region and with different degrees of market opening, the common Baltic electricity market and integration into other wholesale markets remain impossible. However, endeavours are made to achieve gradual introduction of competitive relations and integration into the single European electricity market.

2.2. NATURAL GAS SECTOR

Market Structure

In 2006, the natural gas market structure remained unchanged, as natural gas was imported to Lithuania from a single source, Gazprom AAB. Lithuanian gas importers purchased natural gas under concluded long-term gas supply contracts. Lithuanian customers were supplied with gas by two main suppliers: Lietuvos Dujos AB and Dujotekana UAB. Achema AB and the combined heat and power plant Kauno Termofikacijos Elektrinė UAB (hereinafter referred to as "KTE UAB") purchased natural gas for their own needs. Natural gas to Druskininkai region is supplied by Haupas UAB taking a very modest share of the gas supply market (Diagram 2).

Diagram 2. Natural Gas Market Structure in 2006



Natural gas consumption has been stable and virtually unchanging in the recent years. The level of natural gas consumption for household needs and energy production is forecasted to remain similar in 2007, while a rise in imports will be caused by the increasing gas needs of Achema AB.

Natural Gas Prices

In 2006, natural gas activities regulated by the NCCPE were carried out by one gas transmission company – Lietuvos Dujos AB, six gas distribution companies – Lietuvos Dujos AB, Fortum Joniškio Energija UAB, Agrofirma Josvainiai AB, Energijos Sistemų Servisas UAB, Druskininkų Dujos UAB and Intergas UAB, as well as six gas supply retail companies supplying gas to customers – Lietuvos Dujos AB, Dujotekana UAB, Haupas UAB, Fortum Joniškio Energija UAB, Agrofirma Josvainiai AB and Druskininkų Dujos UAB. Natural gas supply prices for eligible customers were not regulated in 2006. Hence, Dujotekana UAB, Lietuvos Dujos AB and Haupas UAB sold gas at negotiated prices.

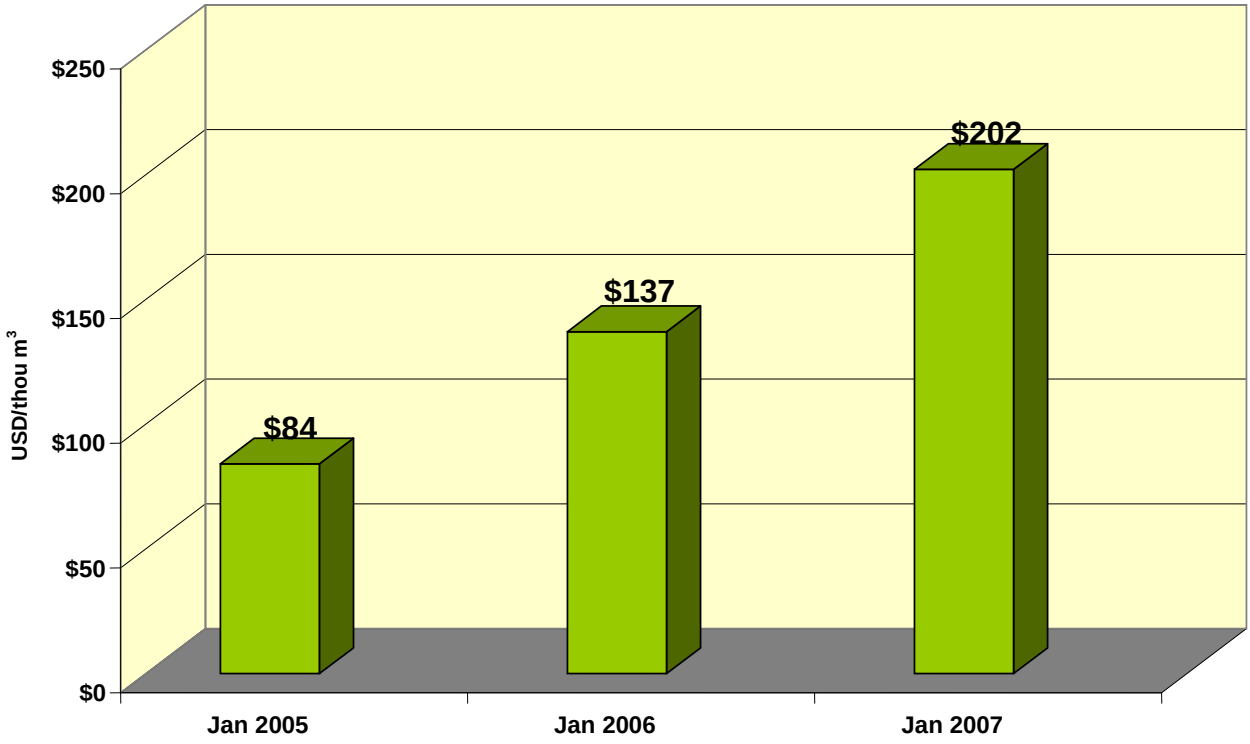
The dynamics of gas transmission and distribution price caps and gas price caps for regulated customers in 2006 is given in Table 2.

Table 2. Dynamics of Service Price Caps in 2006, LTL/thousand m^3

Service price caps	1 Jan 2006	1 Jan 2007	Change, %
Lietuvos Dujos AB			
gas transmission	28.50	31.17	9%
gas distribution	101.08	114.18	13%
gas supply to regulated customers	511.39	718.86	41%
Fortum Joniškio Energija UAB			
gas distribution	111.57	123.79	11%
gas supply to regulated customers	612.27	800.11	31%
Agrofirma Josvainiai AB			
gas distribution	43.54	41.50	-5%
gas supply to regulated customers	537.06	691.99	29%
Druskininkų Dujos UAB			
gas distribution	340.70	920.46	2.7 times
gas supply to regulated customers	966.00	1,783.23	85%
Intergas UAB			
gas distribution	61.00	57.20	-6%
Energijos Sistemų Servisas UAB			
gas distribution	-	4.18	-

The increase in natural gas price caps in 2006 was caused by a significant change in gas import prices. In order to equalise the prices for natural gas sold to Lithuania with the gas price level in Western European countries, from the beginning of 2006 Gazprom AAB started gradually increasing prices for gas sold to Lithuania. From 1 January 2006, the prices of natural gas imports to Lithuania rose by 63%, as compared with 2005, and from 1 January 2007 – by another 47%. At the beginning of 2007, the price of gas imports was 2.4 higher compared with 2005 (Diagram 3). This growth in gas import prices resulted in 30-40% higher prices for end users (Table 2).

Diagram 3. Price of Natural Gas Imports in Lithuania in 2005-2007, USD/thousand m^3



Market Opening in 2007

Pursuant to Article 23 of Directive No 2003/55/EC of the European Parliament and of the Council, all Member States must ensure that from 1 July 2004 all non-household customers are eligible customers, and from 1 July 2007 the gas market must be opened to all customers.

The Law Amending the Law on Natural Gas passed by the Seimas of the Republic of Lithuania in 2007 transposed all the requirements contained in Directive 2003/55/EC without any exceptions, as well as the provision that from 1 July 2007 the gas market shall be opened to all customers. At present, the legislation implementing this Law is being drafted. Unfortunately, given the fact that gas is imported to the country from a single external source, Gazprom AAB, allocating annual natural gas quotas for gas suppliers operating in Lithuania, such "formal" market liberalisation in order to implement the requirements of the Directive does not bring any real benefits for gas consumers.

2.3. MAIN ISSUES ADDRESSED BY THE NCCPE

2.3.1. ELECTRICITY SECTOR

Issues Related to the Electricity Market

The state enterprise Ignalina Nuclear Power Plant, which generates about 70% of electricity is still dominant on the Lithuanian electricity market. Thus, in the absence of competition in both the generation and supply sector, the actual opening of the electricity market is equal to 13% out of possible 74% of the national electricity consumption. Similar percentage is also expected in 2007, although from

1 July 2007 the market opening will equal to 100%. Hence, the regulator can hardly have any significant influence on this historical structural situation.

The elimination of public electricity tariffs and the setting of tariffs for the service of the supplier of the last resort might change the number of customers choosing another supplier, but this requires legislative amendments. Moreover, this may lead to increasing electricity prices for small, thus more vulnerable customers whose electricity consumption is usually less efficient. Whereas due to absence of competition and due to the market being too small even for the Baltic States there would be no possibility to compensate for the prices increased as a result of the recalculation of costs. It should be noted that the price of electricity sold by the state enterprise Ignalina Nuclear Power Plant is one of the lowest in the region, while connection to Western and Scandinavian electricity systems may entail increased prices. Therefore, the current situation is relatively favourable to customers because they usually expect lower electricity prices. Yet, the problem of transparency and economic incentive persists. To this end, research studies are commissioned.

As already mentioned, the regulator seeks to encourage competition not only on the domestic market but also in the neighbouring countries. To achieve this, however, there are quite a few issues to be coordinated, which could be hard to resolve without political interference. One of them is the application of the transmission and "border" tariff. The last Baltic mini-forum showed that Scandinavian countries should also be involved in addressing this problem. The next meeting is scheduled in autumn 2007.

In 2006, like in the previous years, the NCCPE made further efforts to balance every so often conflicting interests of customers and service providers.

Issues Related to Infrastructure

There were no cases relating to direct electricity lines. No amendments were made to the methodologies for electricity price calculation. As mentioned above, studies are conducted concerning the unbundling of monopolistic activities in the electricity sector from competitive activities at property level, the promotion of competitiveness in supply activities, as well as concerning obstacles to the development of the Baltic electricity market and their elimination. These studies may result in legal and methodological changes.

2.3.2. NATURAL GAS SECTOR

On 28 September 2005, the European Parliament and the Council adopted Regulation No 1775/2005 on conditions for access to the natural gas transmission networks (hereinafter referred to as "the Regulation"). The Regulation is a directly applicable legal act binding on all subjects of European Union law in its entirety and directly applicable in all Member States. It entered into force on 23 November 2005 and applies from 1 July 2006. The Regulation lays down the general rules for the

natural gas transmission system regulating the setting of tariffs, capacity allocation and trading in capacity rights, congestion management, system balancing, network services and customer information.

The Regulation also establishes that the national regulatory authorities should ensure compliance with the rules contained in the Regulation and the guidelines adopted pursuant to it. In June 2006, for the purpose of fulfilling this requirement of the Regulation, the NCCPE applied to the transmission system operator, Lietuvos Dujos AB, with the request to inform the NCCPE about the company's readiness and planned actions to comply with the requirements of the Regulation.

The transmission system operator Lietuvos Dujos AB undertook to implement the Regulation gradually:

- to publish the gas network code comprising the legal acts, procedures and rules provided for in the Regulation;
- to develop an information system allowing system users to book firm and interruptible capacities;
- to develop nomination and re-nomination procedures for firm and interruptible capacities.

In 2006, pursuant to the provisions of the Regulation, Lietuvos Dujos AB submitted to the NCCPE the list of the relevant points of the natural gas transmission system at which the company planned to publish the information required by the Regulation. Pursuant to the Regulation, a transmission system operator must make public information on technical, contractual and available capacities on the supplied services for all relevant points, including entry and exit points of the transmission system, in a user-friendly standardised manner. The relevant points of the system must be approved by the regulatory authority after consultation with system users.

With respect to this, the NCCPE checked whether the relevant points of the transmission system specified by the company were in line with the requirements set out in the guidelines adopted pursuant to the Regulation, and at the meeting in December 2006, with representatives of consumer organisations, gas distribution companies and major system users being present, approved the list of the relevant points of the transmission system submitted by the company (Table 3). At present, Lietuvos Dujos AB publishes the required technical information on its website.

Table 3. List of Relevant Points of the Natural Gas Transmission System

No	Relevant Point
Entry points	
1.	Gas metering station in Kotlovka (Lithuanian and Belarusian border)
2.	Gas metering station in Kiemėnai (Latvian and Lithuanian border)
Exit points	
1.	Gas metering station in Kiemėnai (Lithuanian and Latvian border)
2.	Gas metering station in Šakiai (transit to the Russian Federation)
3.	Gas metering station in Mažeikiai (Lietuvos Dujos AB – Intergas UAB)
4.	Gas distribution station in Jonava (Lietuvos Dujos UAB – Achema AB)
5.	Gas distribution station in Elektrėnai (Lietuvos Dujos AB – Lietuvos Elektrinė AB)
6.	Second gas distribution station in Aukštieji Paneriai (Lietuvos Dujos AB – Vilniaus Energija UAB)
7.	Gas distribution station in Kaunas (Lietuvos Dujos AB – Energijos Sistemų Servisas UAB)
8.	Gas distribution station in Grigiškės (Lietuvos Dujos AB – Grigiškės AB)
9.	Gas distribution station in Kėdainiai (Lietuvos Dujos AB – Agrofirma Josvainiai AB)
10.	Point of the transmission system near Kuršėnai (Kuršėnai-Telšiai section, in consideration of data from gas distribution stations in Klaipėda, Palanga, Telšiai, Plungė, Gargždai and Kretinga)
11.	Gas distribution station in Vilnius
12.	Gas distribution station in Šiauliai
13.	Gas distribution station in Panevėžys

In 2006, Lietuvos Dujos AB submitted the prices set by the company for interruptible and short-term natural gas transmission services to the NCCPE for agreement. Pursuant to the provisions of the Regulation, a transmission system operator must provide to system users both firm and interruptible, long-term and short-term transmission system services. Following the analysis of the justification of the submitted prices, the NCCPE approved the prices for short-term and interruptible transmission services set by Lietuvos Dujos AB. Such services will allow seasonal customers (grain drying, road repair and other companies) to pay lower prices for gas transmission services, as well as facilitate more efficient utilisation of the transmission system capacities by the transmission system operator.

3. DESCRIPTION AND REGULATION OF THE ELECTRICITY MARKET

3.1. REGULATORY ISSUES

3.1.1. OVERVIEW

The electricity market has been functioning in Lithuania since 2002. A vertically integrated company was divided into separate companies on the basis of technological phases: generation, transmission, and distribution/supply. This enabled suppliers to trade in electricity at auction and/or under bilateral contracts with producers and customers, thereby making the electricity generation and independent supply sector unregulated, except for those having 25% of the electricity sales market share. Transmission, distribution and public supply activities, as a natural monopoly, remained under regulation.

Pursuant to Article 40 of the new version of the Law of Electricity, the national electricity market was developed in stages, by gradually granting the regulated third party access right and the right to conclude a direct electricity supply contract with freely chosen independent suppliers to the following eligible customers:

1) from 1 July 2004 – all customers other than household customers;

2) not later than from 1 July 2007 – all customers.

Table 4 shows the dynamics of the declared and actual degree of the opening of the electricity market from the beginning of the market functioning.

Table 4. Degree of Market Opening

Indicator	2002	2003	Before 1 Jul 2004	From 1 Jul 2004	2005	2006	From 1 Jul 2004
Electricity consumption by eligible customers against the total electricity consumption by all customers, %	20	23	25	74	74	74	100
Electricity consumption by eligible customers who have chosen independent suppliers against the total electricity consumption by all customers, %	17	17	15	15	15	13	-

As indicated in Table 4, last year the actual degree of market opening, as compared with 2005, slightly decreased due to the bankruptcy of one eligible customer. A high percentage of customers paying for electricity according to the regulated electricity tariffs shows the ability of public suppliers to retain their customers (See Table 5).

Table 5. Share of Suppliers in the Purchased Electricity Market in 2006

Suppliers	Amount, MWh	%
Independent suppliers	1,148,680	12
VST AB	4,064,826	42
Rytų Skirstomieji Tinklai AB	4,374,229	45
Visagino Energija VĮ	61,393	1
Total	9,649,128	100

As compared with the previous year, the proportion of electricity purchased by suppliers remained almost the same due to the prices charged by public suppliers that were below the allowable price cap.

3.1.2. MANAGEMENT AND ALLOCATION OF INTERCONNECTION CAPACITY AND EQUIPMENT TO PREVENT CONGESTION

The Lithuanian electricity system as well as the Baltic energy system do not experience any congestion because of sufficient transmission capacity of electricity networks. Intersystem electricity flows, interconnection capacities, generation, consumption, export/import, the influence of transmission network outages on transmission capacities between neighbouring countries may be followed on-line on the website of the Lithuanian transmission system operator www.le.lt.

The maximum possible capacity flows at cross-border points under a normal network scheme are presented in Table 6.

Table 6. Maximum Possible Capacity Flows at Cross-Border Points

Interconnection	Capacity, MW
Lithuania – Latvia	1,500
Latvia – Lithuania	1,350
Lithuania – Belarus	2,200
Belarus – Lithuania	1,400
Lithuania – Kaliningrad	680

For the purpose of calculating the transmission capacity of the transmission network, the transmission system operator is currently applying the Methodology for the Calculation of Interconnection Capacities. This Methodology allows assessing maximum flows, dynamic stability, emergency reserves and other network status parameters (See Table 7).

Table 7. Planning and Network Transmission Capacity Management Stages

Stage	Term	Parameters to be assessed
Pre-planned	Over a week in advance	Import/export Scheduled repairs
Planning	A week in advance	Work schedule of the hydro pumped storage power plant Work schedule of the hydro power plant Network status
	A day in advance	Revision of the work schedule of the hydro pumped storage power plant Revision of the work schedule of the hydro power plant Revision of the network status
Transmission capacity management	Operation day	Operation of power plants Activation of reserves Network status

The Baltic Regional Initiative Group analyses different variants of the inter-TSO compensation mechanism for the Baltic States and follows the information of the European Commission on these issues to be able to apply general principles.

With sufficient throughput of electricity networks, congestion management has not been recently integrated into wholesale markets.

Transmission system operators did not encounter any major problems in calculating and establishing interconnection capacity.

3.1.3. REGULATION OF TRANSMISSION AND DISTRIBUTION COMPANIES

Lithuania has a single national transmission network company Lietuvos Energija AB. It functions as the owner of the electricity transmission grid (110-330 kV), system operator and market operator. As the transmission system operator, it works under the granted electricity transmission licence.

Distribution activities in Lithuania are mainly carried out by two distribution companies: Rytų Skirstomieji Tinklai AB and VST AB. Rytų Skirstomieji Tinklai AB is responsible for the maintenance, reliability and development of low and medium voltage electricity networks located in the eastern part of Lithuania, while VST AB - in the western and central part of Lithuania. Other distribution companies are small or industrial enterprises with internal networks directly connected to transmission networks within their territories. These enterprises own electricity distribution networks, i.e. low voltage (0.4 kV) and medium voltage (up to 110 kV) electricity networks. All these enterprises also perform the functions of the distribution network operator and public supplier. A public supplier is obliged to supply

electricity upon request to all customers within its territory. The costs of these activities are accounted separately. Separate accounts are kept for each licensed activity.

Pursuant to the Law of the Republic of Lithuania on Electricity, the following activities are subject to licensing: electricity market operator, electricity transmission, electricity distribution, public and independent supply. The licensing rules are approved by the Government of the Republic of Lithuania. Licences are granted and control over these licensed activities is exerted by the NCCPE.

In 2006, licensed activities in Lithuania were carried out by one electricity transmission system, two regional and five local electricity distribution network operators indicated in Table 8. Bankruptcy proceedings were initiated against one local distribution network operator (Ekranas AB). The right to manage the electricity distribution grids of Ekranas AB was granted under an agreement to Prekybos Namai Giro UAB, thereby ensuring the continuity of the licensed activity and electricity supply to customers.

Table 8. Data about Network Operators

No	Company	Type of licence	Local or national network	Main shareholders
1.	Lietuvos Energija AB	Electricity transmission	National	State
2.	Rytų Skirstomieji Tinklai AB	Electricity distribution and public supply	Regional	State
3.	VST AB	Electricity distribution and public supply	Regional	NDX Energija UAB
4.	Visagino Energija VĮ	Electricity distribution and public supply	Local	State
5.	Achema AB	Electricity distribution and public supply	Local	Private company
6.	Akmenės Cementas AB	Electricity distribution and public supply	Local	Private company
7.	Prekybos Namai Giro UAB	Electricity distribution and public supply	Local	Private company
8.	Lifosa AB	Electricity distribution and public supply	Local	Private company

The Law on Electricity provides for two types of electricity supply licences: public electricity supplier (PES) and independent electricity supplier (IES). A public electricity supplier is obliged to supply electricity to all customers and eligible customers who have not chosen an independent supplier within the territory specified in its licence. An independent electricity supplier may supply electricity to eligible customers only. The number of licensed electricity suppliers is indicated in Table 9.

Table 9. Number of Electricity Suppliers by Year

Number of granted supply licences in 2006		Performed licensed activities in 2006		Performed licensed activities in 2005		Performed licensed activities in 2004		Performed licensed activities in 2003	
PES	**IES**	**PES**	**IES**	**PES**	**IES**	**PES**	**IES**	**PES**	**IES**
7	17	7	5	7	5	7	4	7	4

Pursuant to the new version of the Law on Electricity which entered into effect from 1 July 2004, all customers, except household customers, were granted the regulated third party access right and the right to conclude a direct electricity supply contract with freely chosen independent suppliers. Upon the entry into force of the law, these customers were automatically granted the status of eligible electricity customer.

Network Tariffs

Since 2002, Lithuania has applied the principle of price caps in setting prices for electricity transmission, distribution (50/50 price and revenue cap combination) services according to voltage levels. Pursuant to the Methodology for Setting Prices for Electricity Transmission and Distribution Services and their Price Caps, price caps are set for a three-year period, with annual adjustment of the initial revenue level for respective activities by the following four correction coefficients:

1. indexation (consumer price index and efficiency);
2. unpredicted changes (external factors);
3. impact of electricity volume;
4. correction (assessing revenue surplus/deficit depending on the applied price differentiation structure in order to ensure the necessary revenue of the company, provided the company gives valid reasons behind the failure to collect the target amount).

When setting price caps and the initial revenue level, an assessment is made of the justification of costs, activity results during the previous regulatory period, market development forecasts, changes in the legal environment, etc. When setting state regulated prices, necessary expenses must be planned for the extraction of energy resources, energy production, purchasing, transmission, distribution and supply, and provisions must be made for the development of the energy sector and energy efficiency, the use of indigenous and renewable energy resources and the implementation of public service obligations, and the profit rate must be set.

Taking into account the national micro- and macro-economic indicators and the methods applied in the international practice, efficiency coefficients are set for the abovementioned period of price caps. At the end of the financial year, corporate profit is corrected by 50% and 100%, where the average profit rate for the last two years increased by 2 and 6 percentage points respectively is exceeded, taking into consideration the coefficient of electricity supply reliability and service quality, as well as the use of investments to ensure the quality requirements.

Upon the approval of the price caps by the NCCPE, the specific prices and tariffs for transmission and distribution services shall be set and changed by service providers. The weighted average of the prices and tariffs set by service providers shall not exceed the respective price caps any year of the regulatory period. The NCCPE shall publish the prices and tariffs set by the service provider within 30 calendar days from the receipt of the application of the service provider, subject to prior verification whether the prices and tariffs are non-discriminatory for customers. At the end of every year of the regulatory period, the NCCPE shall control whether the weighted average of the prices and tariffs set by the service provider has not exceeded the price caps. Should the NCCPE ascertain that the weighted average of the prices and tariffs set by the service provider exceeded the respective price cap during the previous year of the regulatory period, it shall have the right to obligate the service provider to set accordingly smaller prices and tariffs. Other state institutions fulfil the advisory function in the pricing process.

Pursuant to the forms set by methodologies for calculating electricity price caps, a transmission system operator and a distribution network operator are requested to provide the following information on a *quarterly* and *annual* basis:

1. calculation of prices for electricity transmission and distribution services and their price caps;
2. efficiency indicators;
3. electricity balances;
4. electricity tariffs applied by companies, consumption and revenue;
5. electricity sales of companies by consumer groups;
6. other data required for adequate supervision of the electricity market.

Pursuant to the Rules for Licensing Activities in the Electricity Sector, the following documents must be produced on a quarterly basis:

1. financial statements of the licensed economic-financial activities;
2. report of the market operator (free form);
3. report on supply reliability indicators.

On an *annual* basis, the following documents must be submitted in addition:

4. annual audit report on the costs of the licensed activities;
5. annual analysis of the use of the electricity network system;
6. report on the development prospects for the electricity network system;
7. annual report on complaint investigation.

According to the Monitoring Report on Supply Security in the Lithuanian Electricity Market, technical and economic data must be collected and summarised *annually*, before 31 July, by drawing conclusions on electricity supply reliability as well as internal and regional electricity market development prospects. Such information covers forecasts for the three forthcoming years and reflects the following data from various aspects and in different periods:

- electricity generation, transmission and distribution capacities, intersystem connections with the neighbouring energy systems;
- electricity capacity balances;
- electricity generation, consumption, exports and imports;
- market concentration;
- volumes of electricity purchases and sales;
- degree of market opening;
- market participants;
- dynamics of market prices;
- degree of eligible customer activity;
- forecasted volumes of electricity purchases, sales and exports;
- forecasted capacity balances;
- needs for new power capacities;
- planned development and renovation of electricity transmission and distribution networks, possible weak spots.

The conducted comparative analysis of transmission system operators in the Baltic States disclosed that data were hardly comparable due to different corporate structures and reorganisation stages.

The comparative analysis of distribution network operators in Central and Eastern European countries (members of the Energy Regulators Regional Association) carried out in 2004 revealed similar problems in this region due to different structures of companies, types of ownership and currencies in different countries; however, the comparison of efficiency is possible in a particular country, given a sufficient number of such companies. Since Lithuania has only two major distribution network companies, it employs different methods for assessing the operational efficiency of these companies.

The NCCPE has always devoted a lot of attention to the introduction of regulation of electricity supply reliability and service quality in order to ensure the minimum quality standard for customers and to assign responsibility to licensed companies for incompliance with the quality requirements. The new version of the Rules for Licensing Activities in the Electricity Sector approved by the Government and entered into force way back in May 2003 assigned additional functions to the NCCPE, namely, control over compliance with the quality requirements for licensed activities set out by the Ministry of Economy and agreed with the NCCPE, as well as monitoring of the continuity of electricity supply and the quality of services.

The requirements for the reliability of electricity supply and the quality of electricity transmission, distribution and supply services were approved by Order No 4-265 of the Minister of Economy of 15 July 2005 setting out a list of individual and common service quality requirements, rules for registering data about continuity of electricity supply and service quality, principles of indicator

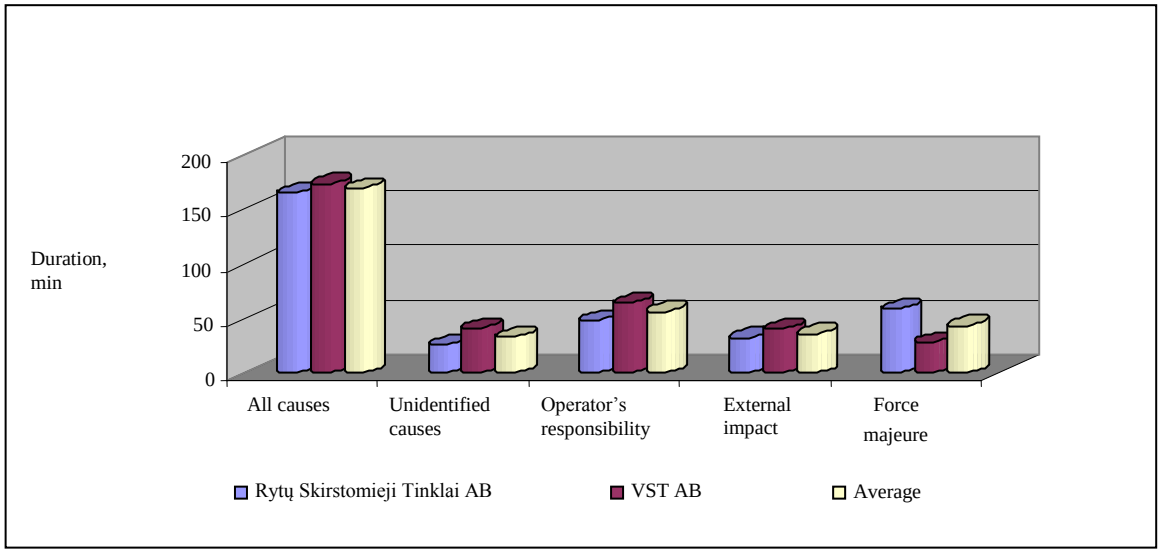
calculation and reporting, as well as the procedure for submitting reports to the NCCPE. The transmission system and distribution network operators had, by 1 January 2006, to update their databases of electricity interruptions collected pursuant to these requirements.

Under the approved requirements, the minimum level of continuity of electricity supply for transmission and distribution network operators will be set on the basis of the average indices for 2005-2007. Starting from 2008, any change in any index, compared with the minimum level, will be taken into account in setting price caps for transmission and distribution services in accordance with the procedure established by the NCCPE. Therefore, it is critical for the data provided by companies on interruptions to be reliable, calculated and structured under uniform methods and principles. Thus, from 2004 on, the NCCPE carries out inspections of major electricity companies on an annual basis, checking, analysing and evaluating how these companies register data about continuity of electricity supply and service quality, calculate indices and draw up reports submitted to the NCCPE. Should violations be discovered during the inspections, companies are obligated to eliminate them within the time period set by the NCCPE.

For the purpose of measuring continuity of electricity supply, the key indices are as follows: system average interruption duration index (SAIDI) and frequency index (SAIFI, MAIFI) per customer. The NCCPE started a comparative analysis of these indices from various aspects in 2004, when it received the first comprehensive annual data about electricity interruptions differentiated by interruption causes and territory type (urban or non-urban). Previously, some data required for measuring and analysing reliability were not registered and collected by electricity distribution and supply companies at all, and computer databases used in these companies had to be upgraded.

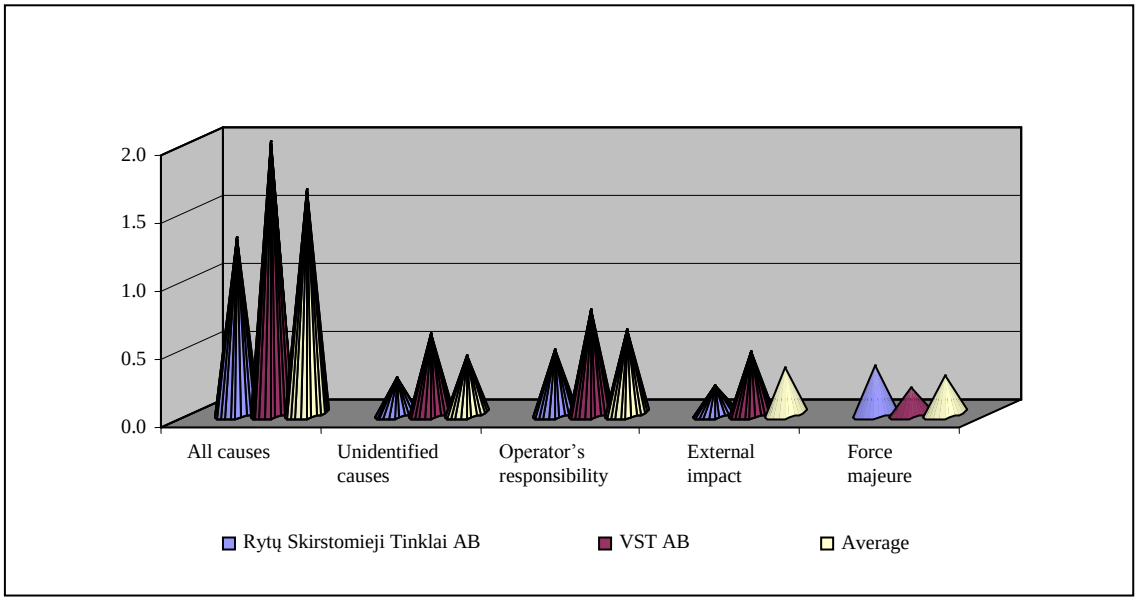
Diagrams 4-6 provide the comparison of continuity of supply indices of Rytų Skirstomieji Tinklai AB and VST AB in 2006. In 2006, the system average interruption duration index (SAIDI) of Rytų Skirstomieji Tinklai AB was 165 minutes, and SAIDI of VST totalled 173 minutes. SAIDI related to the operator’s responsibility was 48 minutes (Rytų Skirstomieji Tinklai AB) and 64 minutes (VST AB).

Diagram 4. System Average Interruption Duration Index (SAIDI) by Interruption Causes in 2006



For the purpose of measuring the average frequency of unscheduled interruptions per customer, two indices are calculated: for sustained interruptions lasting 3 minutes and longer (SAIFI), and for momentary interruptions lasting longer than network automation switch-on, but shorter than 3 minutes (MAIFI).

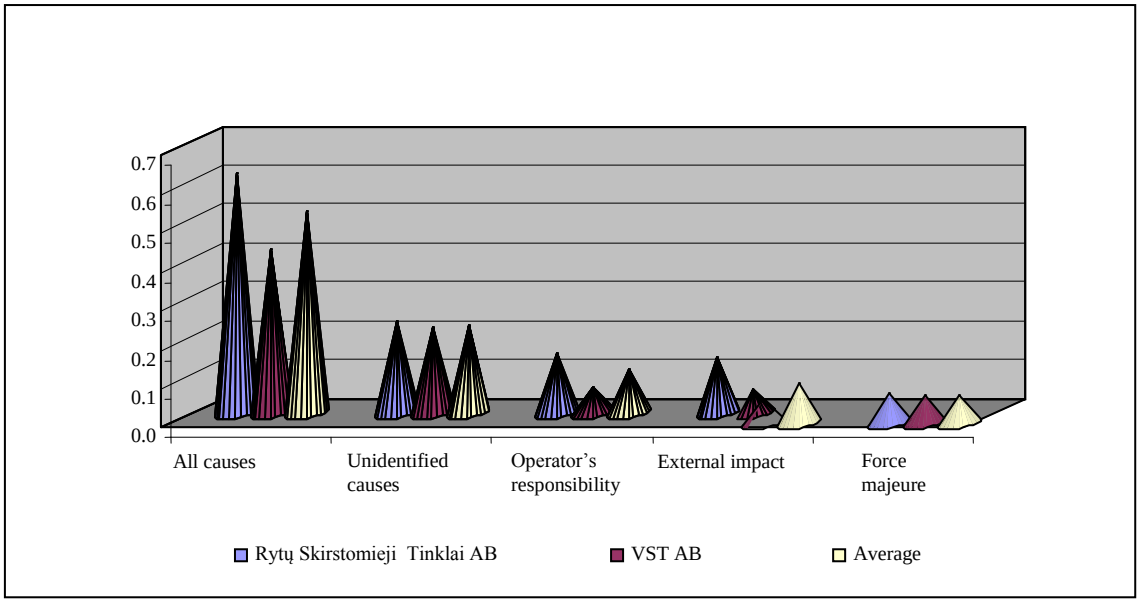
Diagram 5. System Average Interruption Frequency Index (SAIFI) by Interruption Causes in 2006



The system average interruption frequency index of Rytų Skirstomieji Tinklai AB was 1.3, and that of VST AB totalled 2, of which 0.5 (Rytų Skirstomieji Tinklai AB) and 0.8 (VST AB) were attributed to the operator's responsibility.

With the increasing use of electrical appliances by households and their susceptibility to voltage fluctuations, momentary interruptions pose an acute problem for customers. The momentary average interruption frequency index was respectively 0.6 (Rytų Skirstomieji Tinklai AB) and 0.4 (VST AB).

Diagram 6. Momentary Average Interruption Frequency Index (MAIFI) by Interruption Causes in 2006



The analysis of the system average interruption duration index by urban and non-urban territories shows that the system average interruption duration index in non-urban areas was 4.6 times (Rytų Skirstomieji Tinklai AB) and 2.9 times (VST AB) longer than in urban areas. Furthermore, the system average interruption frequency index in non-urban territories was 2.66 times (Rytų Skirstomieji Tinklai AB) and 1.4 times (VST AB) higher than in urban territories (Diagrams 7-8).

Diagram 7. System Average Interruption Duration Index (SAIDI) by Territory Type in 2006

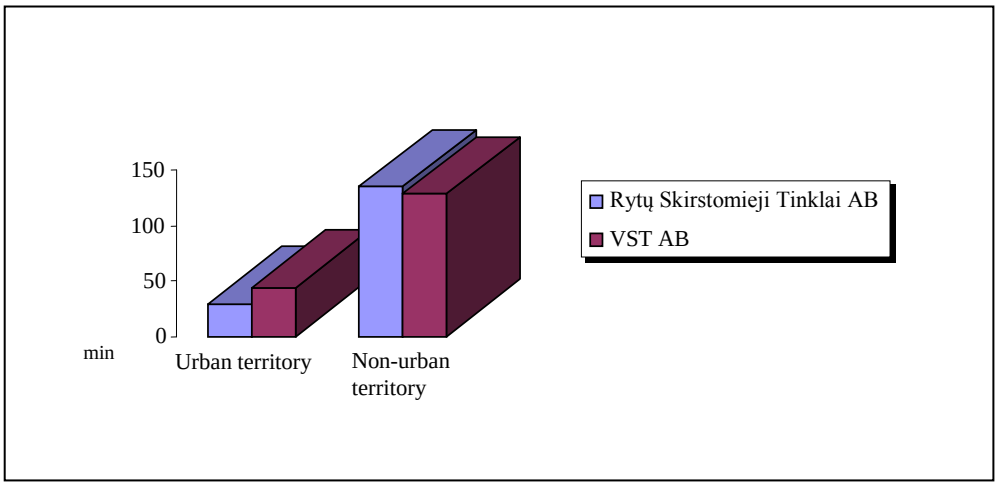
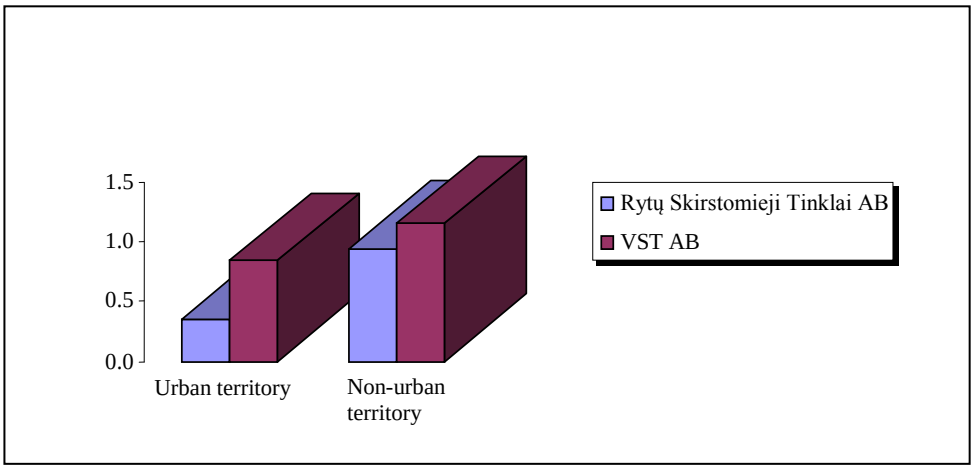


Diagram 8. System Average Interruption Frequency Index (SAIFI) by Territory Type in 2006



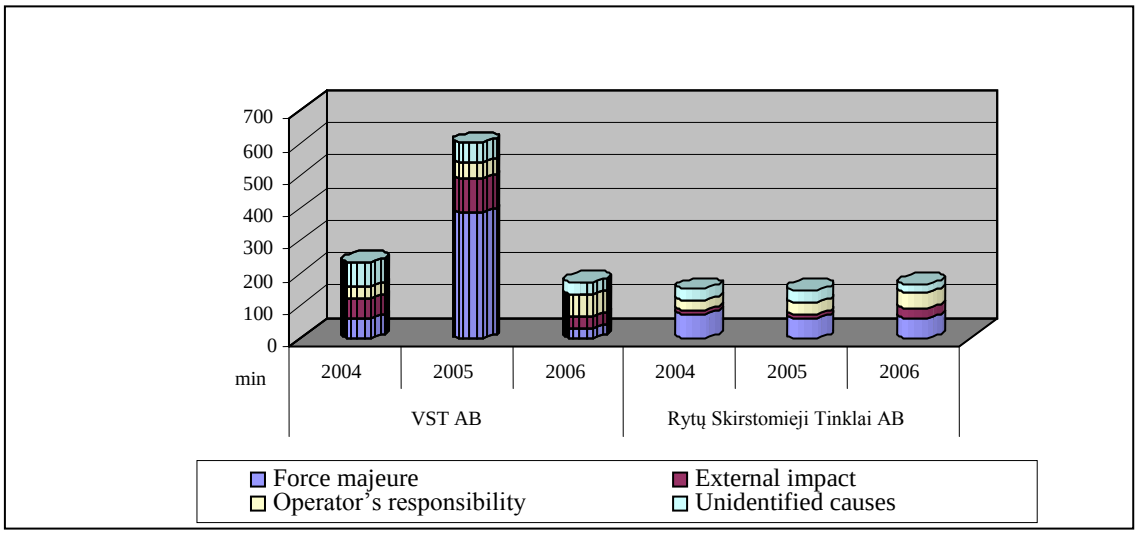
Due to scheduled grid works, the average duration of interruptions per customer in the territory served by Rytų Skirstomieji Tinklai AB was 126 minutes, i.e. 1.8 times longer than in the territory served by VST AB, where it was 71 minutes.

The comparison of continuity of electricity supply indices for 2004-2006 (Table 10 and Diagrams 9-10) shows that in 2006 the average duration of interruptions per customer occurring in the territory served by Rytų Skirstomieji Tinklai increased by 15 minutes (from 150 min up to 165 min), whereas it was reduced by 58 minutes (from 231 min down to 173 min) in the territory served by VST AB. It should be noted that in 2005 this index reached 600 minutes in the territory served by VST AB due to the impact of the hurricane Ervin which hit Lithuania in January.

Table 10. System Average Interruption Duration Index (SAIDI) by Interruption Causes, min

Interruption causes	Rytų Skirstomieji Tinklai AB			VST AB		
	2006	2005	2004	2006	2005	2004
Force majeure	59	61	71	28	385	58
External impact	32	11	15	40	105	64
Operator's responsibility	48	34	28	64	52	36
Unidentified causes	26	40	36	41	58	73
All causes	**165**	**147**	**150**	**173**	**600**	**231**

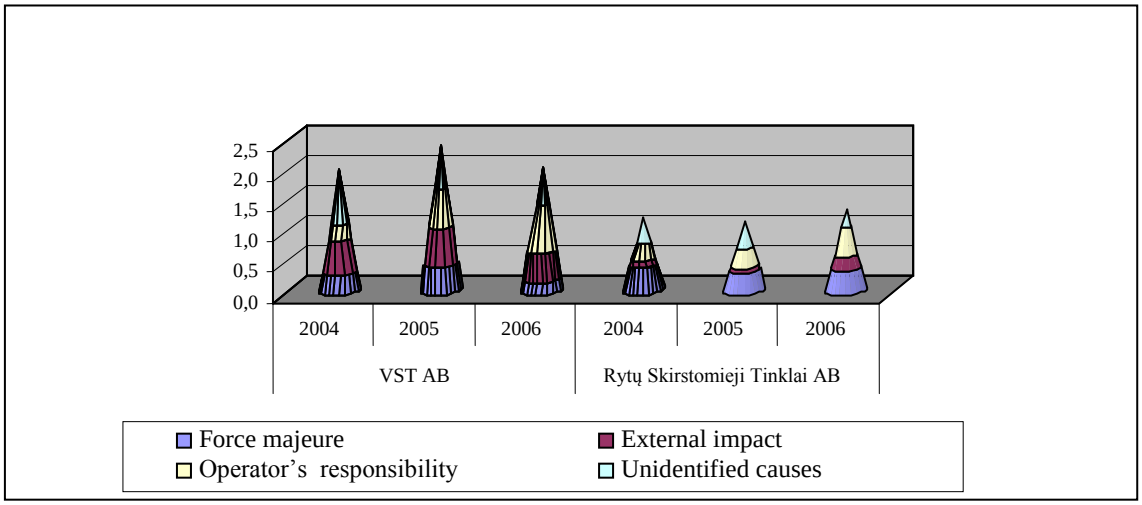
Diagram 9. System Average Interruption Duration Index (SAIDI) in 2004-2006



The share of interruptions due to causes attributed to the operator's responsibility is gradually increasing in both the distribution companies. The average duration of interruptions due to these causes increased by 20 minutes in Rytų Skirstomieji Tinklai AB and by 28 minutes in VST AB. Compared to 2004, the share of interruptions due to unidentified causes has markedly decreased. It may be concluded that both the companies intensified their efforts to investigate the causes behind such interruptions. In Rytų Skirstomieji Tinklai AB, the average duration of interruptions due to unidentified causes per customer was reduced by 10 minutes and in 2006 accounted for the smallest share of all interruptions differentiated by causes (15.8%). In VST AB, the average duration of interruptions due to unidentified causes decreased by 32 minutes and in 2006 accounted for 23.7% of all interruptions.

Diagram 10 illustrates the system average interruption frequency index in 2004-2006. This index in both the companies changed very little and reached 1.2 times in Rytų Skirstomieji Tinklai AB and 2.1 times in VST AB, on the average.

Diagram 10. System Average Interruption Frequency Index (SAIFI) in 2004-2006



The transmission reliability of the electricity transmission operator Lietuvos Energija AB is measured by two indicators – END (energy not delivered, which shows the amount of electricity not delivered through the transmission network due to interruptions during a reporting period) and AIT (average interruption time, which shows the average duration of interruptions during a reporting period). In 2006, the amount of electricity not delivered through the transmission network (END) reached 167.47 MWh, while the average interruption time (AIT) was 5.44 minutes. Most interruptions occurred due to external impact, i.e. causes beyond the company's responsibility.

The quality of services is another equally important aspect of the performance assessment of companies for customers, including such issues as the connection of customer equipment to the company's grid, the investigation of customer complaints, customer notification of unscheduled interruptions, etc. Information and data on such services are collected by companies, but their systematisation and indicator calculations are usually made more difficult by manual data processing in companies. Taking into account the importance of service quality for customers, the NCCPE plans to pay more attention to the analysis and monitoring of such data and indicators in the future.

In 2006, the time needed to connect the equipment of a new customer from the date of payment of the connection fee (when only a branch line with a metering cabinet or panel has to be installed to connect the customer's equipment, and no project is required for these works) was similar in both the electricity distribution companies – about 11 working days.

Following the payment of debts, the average time for reconnecting the household customer after disconnection due to outstanding debts was 2 working days (Rytų Skirstomieji Tinklai AB) and 1 working day (VST AB), on the average. Other customers were reconnected within 1 and 0.4 working day respectively.

The average duration of complaint investigation at Rytų Skirstomieji Tinklai AB was 13 calendar days for household customers and 15.5 days for other customers. The average duration of complaint investigation at VST AB was 10.5 and 9 calendar days respectively.

Quality requirements are currently approved only for companies operating in the electricity sector. It should be further noted that it is necessary to hold licensed companies responsible for incompliance with the requirements for the approved quality requirements to be effective. Any company having violated the set requirements should pay compensation to customers.

The Electricity Supply and Consumption Rules provide that when electricity supply to a customer is interrupted or limited or when electricity quality parameters at the point of the provision of electricity transmission or distribution services do not comply with those specified in the purchase and sales contract, the operator or supplier must compensate the customer for direct damages.

The operator or supplier is not obliged to compensate for any damages incurred by a customer where electricity supply is interrupted or limited or where electricity quality parameters do not comply with the contractual ones due to: natural disasters and fires, war, terrorist acts, force majeure, activities of a third person (theft of or damage to electrical equipment, strange objects thrown on overhead electricity lines, etc.), system pre-emergency automation actions (in cases of faults or accidents in other energy systems), actions of the State or conditions of the state of necessity, as well as where the one-time duration of a customer's disconnection does not exceed the maximum allowable duration of disconnection for the relevant category of electricity supply reliability, or where the respective automation or security systems interrupt electricity transmission and supply to the customer due to the customer's acts or omissions (when the customer concerned fails to comply with the requirements set out in contracts or legal acts or to introduce technical measures for loss reduction as provided for in legal acts or contracts), inappropriate maintenance of the customer's equipment or violations of the requirements set out in legal acts, as well as in other cases specified by legal acts or contracts.

A claim for damages must be filed within 10 calendar days after the damages are incurred. Such claim must, not later than within 30 calendar days from its receipt, be heard by a joint commission comprised of representatives of the operator or supplier and the customer. This commission must investigate the reasons for electricity supply interruption or limitation and estimate the amount of the damages.

Where the parties concerned fail to agree, the amount of damages is established by the court. Damages incurred due to electricity supply interruption or limitation must be compensated within 30 calendar days from the establishment of their amount.

When changes are made to electricity prices and tariffs of the regulated network operators and public suppliers as well as the procedure for their application, a new procedure is published in the supplement *Informaciniai pranešimai* to the official gazette *Valstybės žinios*. The applicable electricity

prices, tariffs and procedure for their application are placed on the websites of respective companies. Customers may also find information about planned changes to electricity prices, tariffs and procedure for their application, as well as make customer inquiries to companies. Furthermore, companies operating in the electricity sector are obliged by the Law on Electricity to notify household customers of the increase of prices and tariffs in writing or by other means at least one month prior to such increase.

The fees for connection to the existing electricity grids are set by the NCCPE. The rates of the fees are published when the NCCPE takes a decision on their approval. The rates of the applicable fees are also made available on the website of the respective company or by phoning the numbers given on the website of the company.

Companies must make public to market participants the following information:

- electricity tariffs for customers, their changes, new plans, etc.;
- commercial losses and technological costs;
- terms and procedures for the connection of new customers applied by the company based on existing legal acts (required documents, applications, etc.);
- terms and conditions of payment for electricity, rates of charges, etc.;
- various campaigns and discounts.

Customers may obtain relevant information not only in official and media publications and on websites, but also in all customer service departments, over information and general phone lines, as well as in information leaflets.

Prices for the electricity transportation service vary depending on the voltage of the grids supplying electricity to customers. Major industrial customers consuming about 24 GWh electricity per year with the maximum allowed capacity of 4,000 kW receive electricity from medium and high voltage electricity distribution grids, whereas households with the annual consumption of about 3,500 kWh and business customers with the annual consumption reaching 50 MWh and with the maximum allowed capacity of about 50 kW are usually supplied with electricity from low voltage electricity distribution grids. Respective average prices for electricity transportation are presented in Table 11.

Table 11. Average Prices for Electricity Transportation Services in 2006

Name	Ig	Ib	Dc
Average prices for electricity transportation services in the country, EUR/MWh	25.05	53.58	53.58

Municipal charges, costs of public service obligations or similar costs are not included in prices for electricity transportation services.

Table 12 shows electricity tariffs by regions served by two main distribution networks.

Table 12. Prices for Electricity Distribution Services Provided by Companies in Separate Regions

Indicators/Company	VST AB	Rytų Skirstomieji Tinklai AB
Price for electricity distribution through medium voltage electricity grids, EUR/MWh	15.23	14.22
Price for electricity distribution through low voltage electricity grids, EUR/MWh	29.70	27.46

Balancing

The start of electricity auctions from the second quarter of 2002, and thus hourly trade between producers, opened up possibilities to meter hourly deviations of the actually purchased electricity amounts from the contractual ones. The market operator (a division of the transmission system operator) is responsible for making public the purchasing/selling price of balancing energy valid at the end of the trading period in accordance with the Rules for Trade in Electricity and/or the Rules for Trade in Electricity at Auction approved by the Minister of Economy, as well as for organising the settlement procedure for electricity traded in by the market operator.

Acting pursuant to the Law of the Republic of Lithuania on Electricity, the NCCPE approved, by its Resolution No 135 of 23 December 2002, the procedure for the regulation of the balancing energy price. The amount of electricity set in electricity supply contracts (supply and consumption schedules) may be different from the actual consumption. Based on the information received from the transmission system operator about the results of the sales/purchase of regulating electricity at auction and in accordance with the aforementioned procedure, the market operator calculates the prices of balancing energy for suppliers (eligible customers holding supply licences) and producers.

The balancing energy market mechanism may be defined by the indicators described in Table 13.

Table 13. Characteristics of the Balancing Energy Market

No	Characteristic	Description
1.	Balancing interval	60 minutes
2.	Balancing region	Each separate generation or consumption site
3.	Regional interaction	All market participants or persons purchasing and/or selling electricity under contracts or in other manner prescribed by the Rules for Trade in Electricity must become auction participants and adhere to the auction contract upon signature. Such adherence does not impose any obligation to trade at auction, although it commits such market participants to provide information specified in the Rules to the market operator. A bid has a simple format: limited/unlimited price/amount bids, minimum amount – 5 MW, information about the dynamic characteristics of power plants not required. Foreign transmission system operators having regulatory agreements with the Lithuanian transmission system operator may also participate in balancing electricity trade auctions. Foreign transmission system operators participate in auctions under the same conditions and with the same rights as other participants of balancing electricity trade auctions.
4.	Closing of session	A regulating electricity auction session is closed not later than 2 hours prior to the beginning of regulation realisation or regulating bids may be corrected or recalled 2 hours prior to possible realisation of the bid.
5.	Day trade options	Market participants trading at hourly auctions are ensured conditions to purchase deficient electricity quantities and/or sell electricity surplus, i.e. including balancing energy, to other market participants under transparent competitive conditions.
6.	Standard balancing prices	The balancing price is calculated in accordance with the “pay as bid” principle. It is equal to the average weighted price of each uninterrupted trading hour corrected by coefficients 1.2 and 0.8 respectively in purchasing or selling electricity to the transmission system operator. Prices of up/down regulation bids should not be higher/lower than the price of balancing energy purchased/sold to the transmission system operator, as set at the end of the uninterrupted trading session.
7.	Settlement process and schedule	Until hourly trade for suppliers is introduced, the transmission system operator conducts trade in balancing energy with producers, accounting by the hour, and with suppliers, accounting by the calendar month. Settlement procedures and conditions for regulating and balancing electricity are set in respective agreements with the transmission system operator.

Minor market participants and new participants entering the market are subject to the same conditions in the electricity market as other market participants.

When hourly trade in electricity is started with suppliers, the Rules for Trade in Electricity at Auction will enter into force ensuring the participation of both the sellers and purchasers in the

momentary electricity market. This will more accurately reflect the laws of the market in the balancing energy market, at the same time fully implementing the requirements of the Electricity Directive.

After each transaction made during an *uninterrupted trading* session, the market operator calculates the average weighted price of each trading hour of that trading session as well as balancing electricity prices, and announces them through the auction information system. The transmission system operator notifies all participants of all realised regulating bids not later than within two hours after the trading hour at the *regulating auction* through the auction information system. The results of the closed regulating electricity trade auction are registered in the auction information system which can be accessed by all participants in the regulating electricity trade auction. Each market participant with successful bids additionally receives information from the auction information system on the seller/purchaser from/to which electricity has been purchased/sold at the price set in the transaction.

3.1.4. UNBUNDLING OF ACTIVITIES

The NCCPE ensures effective competition, non-discrimination of customers and suppliers and provision of services of the established quality to all customers on the electricity market. The NCCPE controls the effective unbundling of accounts with a view to avoiding cross-subsidies between generation, transmission, distribution and supply activities.

The Law on Electricity provides that a distribution network company which, in addition to distribution activities, is also engaged in the activities of the public supplier must unbundle these activities. Distribution and supply activities shall be considered as unbundled also in the case when the activities of the public supplier are carried out by the sales (electricity supply) division of a distribution network company, provided that the unbundling of economic transactions is ensured. Electricity companies shall record, group and aggregate their transactions related to transmission, distribution, supply or other non-electricity activities in separate accounts and ledgers.

Public suppliers supplying electricity not only to customers that are not eligible to choose a supplier but also to eligible customers shall register, group and aggregate information relating to customers not eligible to choose a supplier and eligible customers in separate accounts and ledgers.

The transmission system operator, distribution network operator and public suppliers fulfilling public service obligations shall keep separate accounts and ledgers specifying the revenue and costs related to these obligations.

The Rules for Licensing Activities in the Electricity Sector establish that a separate licence is issued to engage in each type of licensed activities in the electricity sector. A company must keep separate accounts for every licensed activity. The costs of the licensed activities of electricity companies must be audited and the auditor’s report must be submitted to the NCCPE within four months after the end of the previous year.

The regulator checks the breakdown of costs by separate activities when setting price caps for their services. On-site visits are also undertaken to companies to check how these companies fulfil the requirements set in their licences.

Lithuania has one transmission system operator, Lietuvos Energija AB, and two main distribution network operators, Rytų Skirstomieji Tinklai AB and VST AB.

Pursuant to the Rules for Licensing Activities in the Electricity Sector, from 1 July 2007 at the latest, the distribution network operator, being part of a vertically integrated distribution undertaking serving at least 100,000 customers, must be independent in terms of its legal form, organisation and decision making from other activities not relating to distribution. In 2006, there were five licensed distribution network operators serving less than 100,000 customers.

The ownership of one transmission system and two (or seven including local distribution networks) distribution network operators shown in Table 14 is legally unbundled and all these companies manage the assets related to respective electricity activities.

Lithuania does not have any transmission system or distribution network operators that would not manage assets related to their activities.

Table 14. Headcount in Electricity Network Companies in 2006

Company	Average number of employees
Lietuvos Energija AB	1,133
Rytų Skirstomieji Tinklai AB	2,141
VST AB	1,968

The principal shareholder in Lietuvos Energija AB is the State of Lithuania holding 96.59% of shares in the company. The main manager of the state-owned shares is the Ministry of Economy. The remaining 3.41% of shares in the company are owned by small shareholders.

The principal shareholder in Rytų Skirstomieji Tinklai AB is the State holding 71.35% of shares, E.ON Energie AG holds 20.28% of shares, and small shareholders hold 8.37% of shares. The main manager of state-owned shares is the Ministry of Economy.

The public company VST AB was privatised on 23 December 2003. The major shareholder in this company is a Lithuanian capital company, NDX Energija UAB. It owns 97.1% of shares in VST, and small shareholders own 2.9% of shares.

Visagino Energija VĮ is a state enterprise. The state-owned shares are managed by the Ministry of Economy. The other companies are private.

After the reorganisation of the vertically integrated company Lietuvos Energija SPAB by founding four new legal entities, i.e. two distribution network companies and two power plants

(Lithuanian Power Plant and Mažeikiai Power Plant), it has retained two hydro-power plants: Kaunas HPP and Kruonis PSP used for ensuring the national balance. Units of Kruonis PSP are also used as synchronic compensators. This is a tool in regulating voltage levels in the 330 kV voltage electricity network.

The transmission system operator is not engaged in supply activities, but there is a market operator functioning as a division in the company, which is responsible for the organisation of electricity trade, including auction. Two generation companies operate as subsidiaries, i.e. Kruonis Pumped Storage Plant and Kaunas Hydro-Power Plant. These plants ensure the balance of the electricity system, as well as electricity supply reliability. Separate accounts are kept for the costs of distribution services and public supply services.

The administrative premises of the transmission system operator and distribution network operators are located in the territories geographically separate from those of electricity producers. Rytų Skirstomieji Tinklai AB and VST AB are also public suppliers or suppliers of "last resort"; therefore, branches of the companies performing these functions are situated nearby the branches of the companies engaged in the activities of the distribution network operator.

Since 2002, the transmission system operator (TSO) and distribution network operators (DNO) have been functioning as completely separate legal entities. These companies have different names, trademarks, administrative buildings and websites:

- Lietuvos Energija AB (TSO) – www.le.lt;
- Rytų Skirstomieji Tinklai AB (DNO) – www.rst.lt;
- VST AB (DNO) – www.vst.lt.

Access to information about the activities of these companies, the energy sector, the electricity market, etc. is provided by the following means: website, leaflets, brochures, annual reports, multimedia presentations, documentaries/information films, events (organised or supported), press releases, informative articles, etc.

Companies place their annual reports, financial statements, economic and technical indicators on their websites.

The shares of Lietuvos Energija AB, Rytų Skirstomieji Tinklai AB and VST AB are traded on the National Stock Exchange of Lithuania; quarterly reports of these companies are made public in compliance with the stock exchange requirements.

In accordance with the procedure for profit and loss accounts for separate activities established by Lietuvos Energija AB, economic transactions related to the activities of the transmission system operator are recorded, grouped and aggregated in separate accounts and ledgers. After the end of each financial year, audits of consolidated financial statements as well as revenue and costs broken down by licensed activities are conducted by independent auditors in regulated electricity network companies. Financial statements and auditor's reports are submitted to the NCCPE. A report according to separate

activities is publicly released together with the company's annual report. Companies must publish their audited financial statements approved by independent audit companies.

Pursuant to the methodologies for setting price caps and the licensing rules in the electricity sector, the NCCPE establishes forms of reports the electricity transmission and distribution operators are obliged to follow in submitting quarterly reports to the NCCPE on their costs, indicators of electricity supply quality and reliability, electricity balances, prices and other actual and target indicators. The costs of the electricity distribution service and the public supply service are unbundled in accordance with the cost unbundling methodology approved by the NCCPE. Since transmission and distribution activities are legally unbundled, the NCCPE checks the principles of the unbundling of costs of distribution and public supply services approved by distribution network companies and serving as the basis for calculating respective prices.

Pursuant to Article 34 of the Law on Electricity, generation, transmission, distribution and supply companies are subject to mandatory independent audit. These companies, whose activities are regulated in accordance with the procedure established by this Law, submit their financial statements and auditor's report to the NCCPE. As regards the compliance of audits with the regulator's requirements, a meeting with representatives of audit companies was held to discuss the incorporation of such provisions in the relevant law.

The role of the joint operator in the unbundling process is not provided for in the national legal framework.

The NCCPE sets detailed requirements for preparing accounts and imposes responsibility for any breach of such requirements.

The NCCPE investigates cases of administrative offences provided for in the Code of Administrative Offences and imposes administrative sanctions.

Any violation of the procedure of the transmission, distribution, storage and supply of energy resources or energy, violation of the procedure of balancing the energy resource and energy supply system and connecting thereto, violation of regulated tariffs and/or prices, failure to renew compulsory insurance in due time, non-compliance with the energy activity transparency requirements set out by laws and other legal acts, default on obligations to provide mandatory services, engagement in energy activities without a licence for such activity or non-compliance with the requirements set in the licence, and refusal to grant the right of access to the energy resource or energy transmission or distribution system (networks) carry a warning or penalty on officials in the amount from EUR 145 to EUR 290.

Any unjustified interruption of the supply of energy resources or energy, violation of the supply security and/or energy quality requirements or the equipment installation, operation, safety and use procedures, engagement in energy activities without an authorisation for such activity or non-compliance with the requirements set in the authorisation, breach of energy metering, and submission of inaccurate energy meter readings carry a warning or penalty on individuals in the amount from EUR 29 to EUR 145, and a warning or penalty on officials in the amount from EUR 145 to EUR 290.

Failure to submit data to the NCCPE about the economic and financial activities of a company by suppliers of energy resources and energy in accordance with the established procedure carries a penalty on officials in the amount from EUR 145 to EUR 290.

Submission of knowingly inaccurate data by suppliers of energy resources and energy to the NCCPE carries a penalty on officials in the amount from EUR 290 to EUR 434.

Failure to submit data about their economic and financial activities by companies engaged in energy activities in accordance with the established procedure or submission of knowingly inaccurate data to state institutions carry a penalty on officials in the amount from EUR 145 to EUR 434.

Any violation of or non-compliance with resolutions of the NCCPE, as well as default on legitimate orders of the NCCPE relating to pricing in the energy sector carry a penalty on officials in the amount from EUR 58 to EUR 116.

The same actions committed by a person who has been penalised already for the abovementioned violations carry a penalty in the amount from EUR 145 to EUR 290.

3.2. COMPETITION ISSUES

3.2.1. WHOLESALE MARKET

Upon the reorganisation of the electricity sector, generation and supply activities are not regulated, except in the cases of a 25% share in the electricity sales market. The generation structure and wholesale market model given in previous reports did not see any changes.

In 2006, electricity consumption amounted to 8.9 TWh and the peak load was 2.1 GW. The available capacity of the existing Lithuanian power plants was 4.6 GW.

In 2006, Lithuania had 3 power plants with the capacity of at least 5% of the installed capacity: state enterprise Ignalina Nuclear Power Plant, power plant Lietuvos Elektrinė AB and Vilniaus Energija UAB. The share of the three largest power plants in 2006 accounted for 84% of the installed capacity.

With the view of satisfying the national electricity needs, the basic electricity system load is ensured by Ignalina NPP. With the medium system load, electricity is supplied by Ignalina NPP and thermal power plants. During electricity consumption peaks, the system is supported, apart from Ignalina NPP and thermal power plants, by Kruonis PSP to ensure operational reserve.

In 2006, HHI (Herfindahl-Hirschman Index reflecting market concentration (maximum value – 10 000)) was 4,305 in terms of quantity and 3,275 in terms of capacity.

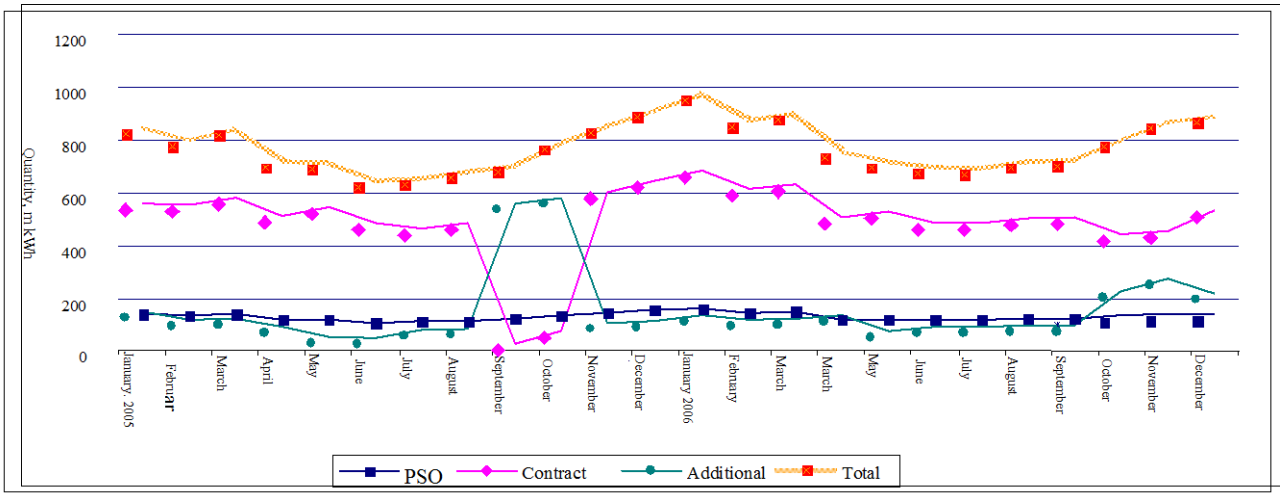
The reserve market is based on bilateral contracts between producers and the transmission system operator. Quantities of producers in providing reserves and HHI by individual types of reserves are shown in Table 15.

Table 15. Concentration of Companies Providing Capacity Reserve

Reserve by power plants	Quantities, MW/h
HHI of concentration of companies providing cold reserve	*7,706.71*
Cold reserve – in total	854.95
Lithuanian Power Plant	854
Mažeikiai Power Plant	0.50
Vilnius Power Plant	0.44
Kaunas Power Plant	0.01
From abroad	0
HHI of concentration of companies providing hot reserve	*2,414.43*
Hot reserve – in total	60.4
Lithuanian Power Plant	56.8
Mažeikiai Power Plant	0.8
Vilnius Power Plant	2.2
Kaunas Power Plant	0.6
From abroad	0
HHI of concentration of companies providing operational reserve	*10,000*
Operational reserve – in total	600
Kruonis Pumped Storage Plant	600

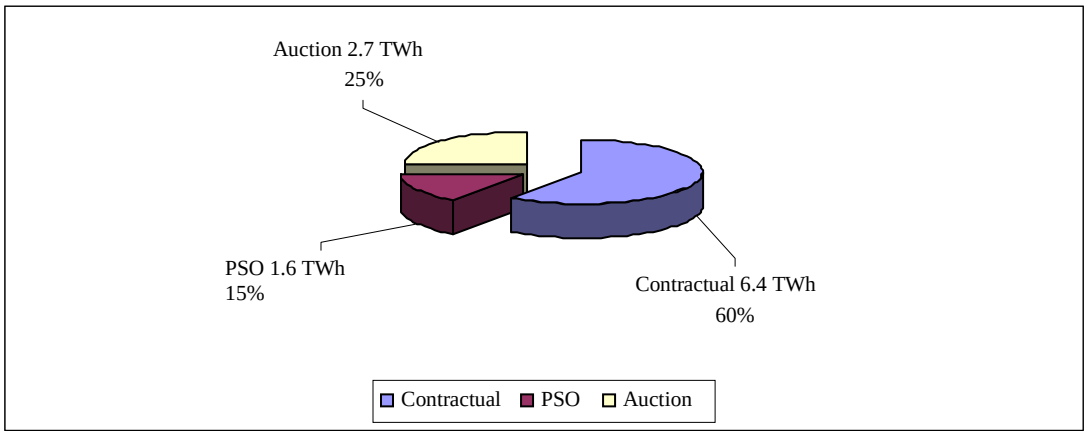
Three types of electricity are sold on the market, namely, contractual electricity, electricity under public service obligations (PSO) and additional electricity sold at auction. There are no long-term contracts between producers and suppliers. Diagram 11 shows the dynamics of electricity purchased by market participants by type.

Diagram 11. Dynamics of Electricity Purchased by Market Participants by Type in 2005-2006



Electricity sales to domestic electricity customers are shown in Diagram 12.

Diagram 12. Structure of Electricity Sold in 2006



The participation of suppliers or purchasers in the wholesale market and the volumes of their purchases are indicated in Table 16.

Table 16. Volumes of Contractual Electricity Trade between Suppliers and Producers in 2006, MWh

Supplier	Producer					**TOTAL**
	Ignalina NPP	Vilniaus Energija UAB	Kauno Termofika-cinė Elektrinė UAB	Mažeikiai Elektrinė AB	Other	
Rytų Skirstomieji Tinklai AB	2,843,042	20,000	29,400	0	205	**2,892,647**
VST AB	2,545,273	0	156,084	0	237	**2,701,594**
Ekranas AB	39,367	0	0	0	0	**39,367**
Mažeikiai Elektrinė AB	260,414	0	0	176,826	0	**437,240**
Achema AB	140,360	0	0	0	0	**140,360**
Korelita UAB	5,477	0	27,305	0	0	**32,782**
State enterprise Visagino Energija	43,512	0	0	0	0	**43,512**
Akmenės Cementas UAB	87,970	0	0	0	0	**87,970**
	5,965,415	**20,000**	**212,789**	**176,826**	**442**	**6,375,472**

The Lithuanian transmission network is fairly well integrated with Belarus, Latvia and Kaliningrad Region, which allows electricity exports. There is no current connection with the neighbouring energy system of Poland. Hourly trade related to exports/imports was started in November 2003.

In 2006, foreign electricity sales by Lietuvos Energija AB amounted to 2.14 TWh. Compared with the previous year, electricity exports fell by 48%. In 2006, imports totalled 1.71 TWh, i.e. 62% more than in 2005. Electricity trade volumes between countries are presented in Table 17.

Table 17. Electricity Exports/Imports in 2006, million kWh

2006	Exports to					Imports from			
	Latvia	Belarus	Russia	Estonia	Total:	Russia	Latvia	Estonia	Total
Total:	**871.3**	**631.4**	**534.5**	**99**	**2,136.3**	**1,426.8**	**105**	**176.2**	**1,708**

Prices are contractual, and contracts are mainly concluded between transmission system operators.

In 2006, there were no mergers carried out between companies operating in the electricity sector in Lithuania; no energy companies were privatised either, with the exception of Mažeikių Elektrinė AB, the sixth power plant in Lithuania in terms of its size, whose assets were taken over by Mažeikių Nafta AB at the end of the year.

The correlation of hourly prices of daily basic load in 2006 is shown in Annex 3.2.1b.

3.2.2. RETAIL MARKET

In 2006, in the electricity supply sector, 7 companies held licences of public suppliers, 20 companies were licensed as independent suppliers, whereas 5 companies were actually engaged in the activities of the independent supplier. The main public suppliers supplying energy upon request to all customers within their territory are Rytų Skirstomieji Tinklai AB and VST AB. Independent suppliers supplying energy to eligible customers are as follows: Ignalina Nuclear Power Plant, Mažeikių Elektrinė AB, Ekranas AB, Achema AB and Akmenės Cementas AB. In 2006, only 6 eligible customers chose independent suppliers. Ekranas AB, Achema AB and Akmenės Cementas AB, having the status of eligible customer, were granted licences of the independent supplier and traded on the market as suppliers.

Public suppliers Rytų Skirstomieji Tinklai AB and VST AB have the major supply market share. In 2006, it accounted for 86% of electricity sold to domestic customers. 26% of electricity was sold to residents, 34% – to industrial enterprises, 2% – to farms and 38% – to other customers in the country.

In 2006, an active independent supplier with the market share amounting up to 5% was Mažeikių Elektrinė AB. The share of three independent suppliers that purchased the largest amount of electricity accounted for nearly 10%.

Only Lithuanian suppliers operate on the electricity supply market without any foreign capital undertakings being engaged in such activities.

One of the largest electricity producers in Lithuania, Ignalina Nuclear Power Plant, also holds an independent supplier's licence. Another four producers also had licences of independent suppliers, among which the major one was Mažeikių Elektrinė AB.

Since the very opening of the electricity market in 2002, there was an annual increase from 13 to 20 in the number of independent suppliers having no connection with the transmission system operator and distribution network operator. However, only 5 companies were active on the electricity market.

As soon as the electricity market was opened, 6 major industrial customers receiving electricity from electricity transmission grids changed their supplier and this number remained the same in 2006.

Eligible customers may choose and change their electricity supplier without any charge. Distribution network operators also perform the public supplier's functions and must supply electricity upon request to all customers who have not chosen an independent electricity supplier at the pre-set and announced public electricity price. The actions and duties of customers and suppliers when customers change their electricity supplier are defined in Article 28 of the Law on Electricity, *Independent Supply of Electricity*. Before concluding or withdrawing from the electricity supply contract with the independent supplier, an eligible customer located in the territory specified in the public supplier's licence must communicate a written notification thereof to the public supplier 30 calendar days in advance. The same applies to the independent supplier; before concluding or terminating the electricity supply contract with an eligible customer located in the territory specified in the public supplier's licence, the independent supplier must communicate a written notification thereof to the public supplier 30 calendar days in advance. When purchasing electricity from an independent supplier, eligible customers whose equipment is connected to the distribution network must pay the distribution network operator for electricity transportation through the transmission and distribution networks, for system services and for public service obligations. Eligible customers whose equipment is connected to the transmission network must pay the transmission system operator for electricity transportation through the transmission network and for public service obligations in the electricity sector when purchasing electricity from an independent supplier.

The data presented in the table below does not take into account the prices agreed under direct contracts with independent suppliers on the market.

Table 18. Electricity Prices by Components in 2006, EUR/MWh

Item/Customer group		Ig	Ib	Dc
Prices of transportation services (excluding fees)		25.05	53.58	53.58
including:	price for transmission service	6.55	6.55	6.55
	price for ancillary services	3.68	3.68	3.68
Fees included in the price of transportation services		-	-	-
Prices of electricity and supply service		25.14	25.14	19.26
Taxes (VAT – 18%)		9.04	14.16	13.15
Total (including all taxes)		59.23	92.88	85.99

3.2.3. MEASURES TO AVOID ABUSES OF DOMINANCE

Generation

The Law on Electricity provides that prices of electricity and reserve capacity sold by producers and independent suppliers are not regulated, except in the cases where a producer or independent supplier has a share of over 25% in the market. The mechanism for regulating prices of electricity and reserve capacity sold by producers and independent suppliers having a market share of over 25%, as well as the mechanism for regulating the price of balancing electricity are determined by the NCCPE.

Transparency

Pursuant to the Rules for Trade in Electricity, the market operator must submit information about the amount of electricity consumed and/or supplied by each market participant by the hour during a trading day, as well as about imports, exports and regulating instructions given by the dispatch office of the transmission network operator during a trading day; establish the results of trade in balancing and regulating electricity and grant access for every market participant to relevant information; establish the results of every day of a month and issue respective references to all market participants necessary for invoices for balancing and regulating electricity.

The documents regulating transparent activities in the electricity generation sector were indicated in the previous reports to the European Commission.

Bidding

Auction procedures are defined in the Rules for Trade in Electricity at Auction.

Market Supervision

The regulator controls and publishes information relating to the situation on the electricity market in the Monitoring Report on Supply Security in the Lithuanian Electricity Market before 31 July of each year. Dominating producers and independent suppliers or such companies having a market share of over 25% are subject to regulation.

Pursuant to the Rules for Licensing Activities in the Electricity Sector, the market operator must conduct annual analyses of electricity transmission, the operation of the electricity distribution system, electricity supply to customers (electricity market) and provide the Ministry of Economy and the NCCPE with information about development prospects for the electricity transmission and distribution systems and the electricity market.

Distribution

Transparency

Distribution network companies must, on a quarterly basis, submit electricity balances specifying amounts of contractual electricity purchased, amounts of electricity under public service obligations, amounts of additional electricity, amounts of electricity purchased from small hydro power plants, etc. Companies also submit other reports on amounts of electricity sold and tariffs, which are necessary not only for the Ministry of Economy, but also for the Department of Statistics.

The documents regulating transparent activities in the electricity generation sector were indicated in the previous reports to the European Commission.

Rules Governing the Structure of Contracts

Relations between energy companies, as well as relations with customers of energy resources or energy are based on contracts. Energy supply, transmission and distribution contracts are public. Electricity is supplied, transmitted and distributed to regulated customers and natural persons under contracts concluded in accordance with the mandatory standard conditions. When carrying out State management of the energy sector, the Government or the institutions authorised by it shall approve the mandatory standard conditions of contracts for electricity transmission, distribution and supply to regulated customers and natural persons. Standard conditions of electricity purchase-sale contracts with household customers shall be approved by an institution authorised by the Government on the proposal of suppliers, upon agreement with the State Consumer Rights Protection Authority under the Ministry of Justice.

Contracts with household customers are concluded for an indefinite period, unless these contracts provide otherwise. Contracts also set out quality parameters, responsibility for their implementation and other conditions.

Lithuania does not encounter any problems relating to long-term contracts. No restrictions or penalties in that regard have been set.

Provision of Information

Pursuant to the Law on Electricity, the NCCPE has the right to request from generation, transmission, distribution and supply companies whose activities are regulated under the Law, as well as from the market operator the information necessary for proper supervision of the electricity market. Generation, transmission, distribution and supply companies as well as the market operator must provide the said information in accordance with the procedure established by legal acts.

With the current structure of the electricity sector, where one producer has a 70% share of the electricity supply market, the promotion of competition in the country so far is hardly possible. As already mentioned, with the view of developing the regional Baltic electricity market, meetings were held with the neighbouring countries on development and pricing issues.

4. PERFORMANCE AND REGULATION OF THE NATURAL GAS MARKET
4.1. REGULATORY ISSUES
4.1.1. MARKET LIBERALISATION

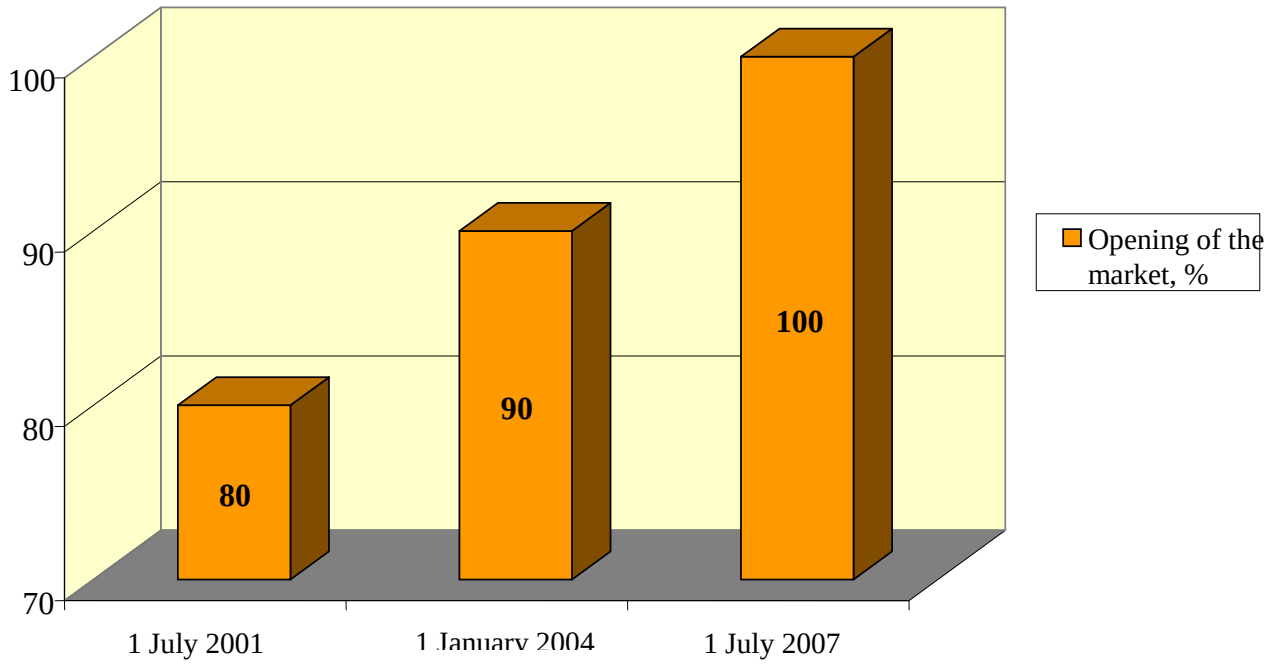
The share of the liberalised natural gas supply market did not change in 2006 and totalled to 90%. This means that 90% of natural gas sold on the national gas supply market could be purchased at contractual prices. As from 1 January 2004, all customers with the annual natural gas consumption exceeding 1 million m^3, power plants, as well as customers with gas systems directly connected to transmission system and distribution companies have been entitled to purchase natural gas at contractual prices. However, like in the previous year, 28 customers consuming 80% of natural gas sold on the national supply market exercised this right (Table 19). Such situation was determined by higher prices of gas sold to eligible customers. The difference in gas prices on the regulated and unregulated markets is the result of the monopolistic structure of the Lithuanian gas supply market since natural gas is supplied to Lithuania by a single external gas supplier, Gazprom AAB, which sets gas supply quotas for gas supply undertakings, and Lithuania has no technical possibilities to receive gas from other sources. All this enables gas suppliers to abuse their significant power on the market.

Table 19. Participants of the Lithuanian Natural Gas Supply Market

Market participants	Number of customers having the right to gain the status of eligible customer and number of gas supply companies operating under gas supply licences			Number of eligible customers and gas supply companies actually engaged in these activities		
	2004	2005	2006	2004	2005	2006
Eligible customers	109	113	104	26	28	28
Gas supply undertakings	14	14	14	3	3	3

As from 1 July 2007, the Lithuanian natural gas market is fully liberalised and all natural gas consumers have gained the status of eligible customers. Diagram 13 below shows the legal opening of the Lithuanian natural gas market since the year 2001.

Diagram 13. Legal Opening of the Natural Gas Market



4.1.2. MANAGEMENT AND ALLOCATION OF INTERCONNECTION CAPACITY AND MECHANISMS TO DEAL WITH CONGESTION

The Lithuanian natural gas system is interconnected with the gas systems of Belarus, Latvia and the Russian Federation. In 2005, the transmission system operator Lietuvos Dujos AB increased the capacities of the transmission system at the Lithuanian-Latvian border, and in 2006 it almost tripled the capacities of the transmission system at the border between Lithuania and the Russian Federation. The capacities at the Lithuanian-Belarusian border ensure all the capacities needed for Lithuanian consumers as well as those required in the direction of transit to the Russian Federation (Kaliningrad Region) and Latvia. Table 20 shows gas import capacities through the interconnections with the neighbouring countries.

Table 20. Gas Import Capacities at Cross-Border Points

Interconnection	Capacities, thousand m^3/day
Lithuania – Latvia	5,200
Latvia – Lithuania	5,200
Belarus – Lithuania	32,329
Lithuania – Russian Federation (Kaliningrad Region)	6,720

Interconnections with the Russian Federation, the Republic of Belarus and the Republic of Latvia are regulated under contracts. The capacities of these interconnections are limited by setting marginal monthly congestions totalling to +/- 5% of the average daily consumption for the respective month. Lithuanian technical capacities of natural gas imports in 2006 amounted to 11.8 billion m^3 per year. The annual demand for natural gas by Lithuanian customers was 3.1 billion m^3.

The website of Lietuvos Dujos AB (www.dujos.lt/galios_deklaravimas) provides information on the relevant points of the transmission system, indicating the technical capacities, contracted capacities, interruptible capacities, and available capacities. Data for customers on the relevant points is given in Table 21.

Table 21. Interconnection capacity of the Transmission System on Relevant Points

Relevant point of the transmission system	Maximum capacities, thousand m^3/day	Pressure, kg/cm^2	Contracted and interruptible capacities, thousand m^3/day	Available capacities, thousand m^3/day
Jauniūnai (Belarus)	27200	55	19,985.3	7,214.7
Bridžiai (Russian Federation)	6720	25	2,354.8	4,365.2
Kiemėnai (Latvia) (to Lithuania)	5200	40	0	5,200
Kiemėnai (Latvia) (from Lithuania)	5200	55	0	0

The data given in Table 21 indicates that the available technical capacities of the transmission system operator in 2006 were not used in full; therefore, no trade in capacities was carried out on the secondary market. The unused (free) capacity is offered on the market providing system users with the possibility of concluding contracts on interruptible capacities.

Natural gas transit is carried out in accordance with a long-term agreement between the Russian company Gazprom AAB and the Lithuanian company Lietuvos Dujos AB. The agreement was signed in 1999 and is valid until the year 2015. The transmission terms laid down in the agreement are different from the ones provided for in the existing standard gas transmission contracts. The pricing principle set in the agreement differs from the internal market pricing principle: the natural gas transmission price in Lithuania is calculated on the basis of the "postage stamp", meanwhile the assessment of transit is based on the principle applied on the international gas market, i.e. the price is calculated for the transportation of one thousand m^3 over a distance of 100 km.

The transit capacities reserved for 2007-2015 amount to 1,050-1,270 million m^3 annually.

The general principles of the organisation of the natural gas sector and natural gas-related activities as well as relations with customers and system users in the country are regulated by the Law on Energy and the Law on Natural Gas. Paragraph 4 of Article 19 of the Law on Energy sets forth the

requirement for a transmission system operator to provide information to customers within the territory of its operation on the activities carried out, the prices of services and the services provided to gas consumers. The Law on Natural Gas provides that gas undertakings shall inform customers about efficient gas consumption, the services provided by the gas undertaking, the conditions of the provision of services, the prices of gas and services, the prices and terms for connection to the systems as well as the intended modifications to contractual conditions. Gas undertakings shall notify customers directly (in writing or by other means) at least one month prior to any intended modifications to contractual conditions and prices. The information of gas undertakings regarding the costs of regulated activities, system operation, modernisation and development, investments into system development, the structure of prices and tariffs, as well as conditions of the provision of services is public. Article 13 of the said Law contains a provision prohibiting a transmission system operator from discrimination between system users and customers falling within different categories in favour of other customers or undertakings related to the transmission system operator.

The provision of information and transparency requirements are laid down in Article 6 of the Regulation and Part 3 of the Guidelines in the Annex to the Regulation, which provides for rules of publishing the technical information necessary for network users to gain effective access to the system.

Pursuant to the provisions of the Regulation, the gas transmission system operator must publish the following information:

a) the maximum technical of the system, thousand m^3/day;
b) the maximum (minimum) pressure, kg/cm^2;
c) the contracted and interruptible capacities, thousand m^3/day;
d) the available capacities, thousand m^3/day;
e) eligible customers must be notified of maintenance works related to limitation (interruption) of gas supply three months in advance, and regulated customers – one month in advance, also providing additional notification thereof not later than 48 hours prior to the start of maintenance works.

Customers are notified and warned of limitations or interruptions of gas supply due to scheduled maintenance works as follows:

- eligible customers are notified in writing three months prior to any scheduled limitation or interruption, and the limitation shall be agreed upon within 10 days;
- regulated customers are notified of any scheduled limitation or interruption of gas supply due to indispensable maintenance works of the system through the mass media (press) one month in advance;
- additional notification in writing must be given to regulated non-household customers, and notices to household customers must be put up in hallways at least 48 hours in advance.

Customers must be notified of any changes in natural gas prices one month in advance.

4.1.3. REGULATION OF TRANSMISSION AND DISTRIBUTION COMPANIES

Pursuant to the new version of the Law of the Republic of Lithuania on Natural Gas, which entered into force in April 2007, natural gas transmission, distribution, storage, liquefaction and supply are considered to be licensed activities. Licensing rules are approved by the Government of the Republic of Lithuania. Licences are issued, suspended and revoked and licensed activities are controlled by the NCCPE. A new version of the Licensing Rules for Natural Gas Transmission, Distribution, Storage, Liquefaction and Supply in conformity with the requirements of the aforementioned Law is currently being drafted.

Pursuant to the Licensing Rules, the Ministry of Economy lays down quality requirements for the licensed activities in coordination with the NCCPE, and the NCCPE controls the observance of these requirements by licensed undertakings. Quality requirements for licensed activities have not been approved yet.

In 2006, Lithuania had one main natural gas transmission and distribution system operator and five local distribution system operators. Natural gas transmission and distribution system operators are listed in Table 22.

Table 22. Transmission and Distribution System Operators

No	Undertaking	Type of licence	Local or national network	Main shareholders
1.	Lietuvos Dujos AB	Natural gas transmission and natural gas distribution	National	E.ON Ruhrgas International AG, Russian company Gazprom AAB, State
2.	Achema AB	Natural gas distribution	Local	Private company
3.	Druskininkų Dujos AB	Natural gas distribution	Local	Private company
4.	Intergas UAB	Natural gas distribution	Local	Private company
5.	Joniškio Energija UAB	Natural gas distribution	Local	Private company
6.	Agrofirma Josvainiai AB	Natural gas distribution	Local	Private company

Only a licence holder has the right to install or develop the transmission and distribution systems within the territory specified in the operator's licence. Pursuant to the Law Amending the Law on Natural Gas, the right to install new transmission or distribution systems in the new territory where natural gas systems are being installed shall be vested in legal persons that have acquired this right by way of competition. System operators to whose systems new gas distribution systems are being connected must connect these systems. A decision to grant permission to install new systems is taken by

the NCCPE. A decision of the NCCPE to grant permission to install new transmission or distribution systems is a pre-condition for the issue of a permit to build these objects in accordance with the procedure established by the Law on Construction. The Government or an institution authorised by it shall approve the rules for installing new systems in the new territory where natural gas systems are being installed.

As from June 2002, a licence to supply natural gas (NGS) has been mandatory to all gas supply undertakings. The number of licensed natural gas supply undertakings is given in Table 23.

Table 23. Number of Natural Gas Suppliers

Number of granted supply licences	Performed licensed activities in 2006	Performed licensed activities in 2005
13	**7**	**7**

The new Law on Natural Gas provides that the NCCPE has the right to commit a gas undertaking which holds a gas supply licence to carry out committed supply (supplier of last resort) in accordance with the procedure established by the Government. Committed supply may be carried out for household customers and customers to objects whose energy generating capacity is below 5 MW and which contain no reserve fuel stocks. An eligible customer may choose a supply undertaking other than the one carrying out committed supply.

Network Charges

Pursuant to the Law on Natural Gas and the Methodology for Calculating Natural Gas Price Caps, the transmission and distribution price caps and the price caps of gas companies for regulated customers were adjusted in 2006. Following the Methodology for Calculating Natural Gas Price Caps approved by the NCCPE, the natural gas transmission and distribution price caps set by the NCCPE shall be fixed for a three-year period and adjusted once a year, depending on inflation, operational efficiency coefficients, changes in gas consumption volumes, as well as other factors which do not depend on the undertaking's operation. The natural gas price cap for regulated customers is adjusted every six months, subject to changes in gas purchasing prices. Upon entry into force of the new Law on Natural Gas, price caps shall be set for a five-year period and adjusted not more frequently than once a year.

Gas transmission and distribution prices are applicable in accordance with the "postage stamp" principle irrespective of the transmission and distribution distance. When setting transportation price caps, gas transportation amounts and costs are calculated taking into consideration the actual transportation amounts and the actual costs of the gas undertaking during the last three years, as well as forecasts for the forthcoming three years. Once a quarter, gas undertakings submit monitoring data on their licensed activities required for setting and adjusting price caps, as well as controlling prices of gas

undertakings. Such monitoring data includes: financial accounts on licensed activities, costs account, investment implementation statement, report on accounts of connected customers, gas supply and transportation reports, report on changes in the undertaking's long-term assets, and report on the service quality indicators.

Following good business practice, the NCCPE sets economically sound annual basic costs for a three-year (five-year) period, taking into account the actual and operational costs as well as forecasts of the gas undertaking. The costs of gas undertakings are the lowest costs necessary for gas transportation to the delivery point to customers and ensuring reliable and secure gas supply.

The principles of the differentiation of specific transportation prices for gas undertakings are given in the methodology for calculating price caps. The methodology provides that gas undertakings may differentiate prices by customer categories or groups, gas consumption amounts, gas pressure, consumption purpose, reliability of gas supply, as well as on the basis of other objective criteria chosen by the gas undertakings that allow pursuing higher operational efficiency and are in line with legal acts. Natural gas price differentiation methodologies developed by gas undertakings are submitted to the NCCPE. Should the NCCPE establish that the price differentiation principles set by gas undertakings discriminate customers, it points out such faults to the undertakings and the latter must correct them. Should undertakings fail to follow orders of the NCCPE, the NCCPE may unilaterally set gas prices.

In 2006, the NCCPE set new price caps for a three-year period for the following undertakings: Energijos Sistemų Servisas UAB, Druskininkų Dujos UAB and Intergas AB (within the territory of Druskininkai municipality).

In 2006, the NCCPE recalculated gas transportation price caps for the largest gas transportation undertaking Lietuvos Dujos AB effective from 1 July 2006. Upon approval by the NCCPE, these prices have not changed from 1 July 2007 either. The natural gas transportation prices are given in Table 24.

Table 24. Network Charges Effective from 1 July 2007

Item	D3	I1	I4-1
Natural gas transportation price, EUR/MWh (excluding VAT)	6.56	6.56	3.83

Indicators of Supply Reliability

Pursuant to the Licensing Rules for Natural Gas Transmission, Distribution, Storage and Supply approved by the Government of the Republic of Lithuania, the Ministry of Economy is committed to approve quality requirements for licensed activities, and the NCCPE – to exercise control over compliance with the aforementioned requirements by licensed undertakings. Quality requirements for licensed activities have not been approved yet.

Every year the largest natural gas undertaking Lietuvos Dujos AB submits data to the NCCPE on gas supply interruptions. The average frequency of scheduled natural gas supply interruptions per customer in 2006 was 0.22563 (in 2005 - 0.2335), and the average duration of such scheduled interruptions was 2.20612 minutes (in 2005 – 2.0658 minutes).

Data on unscheduled natural gas supply interruptions is presented in Table 25. The average frequency of unscheduled gas supply interruptions per customer in 2006 was 0.00536, and the average duration of such unscheduled interruptions was 0.33620 minutes per customer.

Table 25. Data on Unscheduled Interruptions in Natural Gas Supply by Lietuvos Dujos AB in 2005-2006

Data on unscheduled interruptions in natural gas supply by Lietuvos Dujos AB					
Year	**Frequency of unscheduled gas supply interruptions**	**Number of disconnected users**	**Duration of unscheduled gas supply interruptions (min)**	**Average frequency of unscheduled gas supply interruptions per customer**	**Average duration of unscheduled gas supply interruptions per customer (min)**
2005	537	2,742	74,780	0.00512	0.1395
2006	1,284	2,900	181,756	0.00536	0.33620

The most frequent causes of unscheduled interruptions in natural gas supply include natural calamities and third party impact, such as irresponsible earthworks.

Balancing

The key requirements for the natural gas transmission system balancing are set forth in the Law on Natural Gas and the Rules for Natural Gas Transmission, Distribution, Storage and Supply approved by Order No 43 of the Minister of Economy of 5 February 2002.

The Law on Natural Gas provides that transmission or distribution system operators, upon agreement with the Commission, shall set system balancing rules. The system balancing conditions laid down in the balancing rules must be objective, transparent and non-discriminatory. The requirements of the system balancing rules are mandatory for customers and system users, except for household customers. The system balancing rules are published in the supplement *Informaciniai pranešimai* to the official gazette *Valstybės žinios*.

The Law on Natural Gas provides for new functions of the NCCPE. The NCCPE has been granted the right to establish rules for system balancing and access to the system if the rules drafted by system operators fail to conform to the requirements of the said Law and other legal acts. In addition, the NCC must draw up and approve a methodology for calculating system balancing prices, and set prices for system balancing services.

Responsibility for the balanced operation of the gas transmission systems located and connected in the territory of Lithuania lies with the transmission system operator, Lietuvos Dujos AB. The

company's orders on the balancing of gas flows are binding on all gas distribution, storage and supply undertakings, undertakings transporting gas by transit, as well as system users (customers). The gas undertaking in charge of balancing prepares gas flow balances on the basis of the contracts concluded and the gas amounts supplied to the gas system. System users are entitled to make certain corrections of the contractual gas transmission amounts at the point of acceptance or delivery. These amounts, however, may never exceed the maximum hourly amounts specified in respective gas transmission, distribution or storage contracts.

Lithuania applies a daily (24-hour) transmission system balancing interval. Daily balancing is acceptable to all participants of the gas market. The existing transmission technologies do not allow conducting full-scale balancing of the system on an hourly basis. The introduction of the hourly balancing of the transmission system is expected in the future, when the transmission system operator introduces a new IT system.

The transmission system operator balances the following transmission system:

- the total length of the gas transmission pipelines is 1,817.44 km;
- the diameter of the pipes of the gas transmission system is 100-1,200 mm;
- the permitted working gas pressure is 55 bar and 47 bar (84 km);
- 63 gas distribution stations (GDS) with the total throughput capacity of 2,517,700 m^3/h;
- 4 gas metering stations (GMS) with the total throughput capacity of 1,645,000 m^3/h.

When balancing the system, the transmission system operator must forecast the number of new customers and their planned consumption. Such forecasts are prepared on the basis of:

- available actual plans to connect new customers;
- statistical data on the connection of new customers for a few previous years;
- assessment of the national economical situation and planned increase/decrease in the number of newly connected customers in comparison with statistical data for the previous years.

Small customers use gas without any restriction; no individual capacity fee is applied to these customers. Small customers with the annual consumption of up to 20,000 m^3 (accounting for 6.6% of the market) do not participate in the system balancing. 13.8% of customers participate passively, i.e. gas consumption limitations are specified in their contracts, but no specific balancing charges have been set. Other system users (79.6% of the market) actively participate in the system balancing process and therefore must pay charges for exceeding the established capacity.

Before the adoption of the new Law on Natural Gas, prices of the system balancing services were set calculating the transmission tariff. There is no separate balance or balance maintenance charge. The transmission system operator has set the following charges for system users, which are applied if the established capacity is exceeded:

- charge for exceeding unapproved capacity;
- charge for exceeding approved capacity;
- charge for unused capacity.

The charge for exceeding unapproved capacity is paid when a system user exceeds daily gas consumption without agreement in advance with the system operator in accordance with the established procedure. This charge is 6.4 times higher than the average tariff set in the transmission system. The charge does not depend on the season of the year.

The charge for exceeding the approved capacity is paid when a system user exceeds daily gas consumption upon agreement in advance with the system operator in accordance with the established procedure. This charge amounts to:

- 2.1 of the average tariff set in the transmission system, i.e. EUR 1.78/MWh, during the cold season of the year;
- 1.1 of the average tariff set in the transmission system, i.e. EUR 0.89/MWh, during the moderate-temperature season of the year (spring, autumn);
- 0.4 of the average tariff set in the transmission system, i.e. EUR 0.29/MWh, during the warm season of the year.

The charge is fixed taking into account the price of the production of additional capacities (transportation and storage of additional gas amounts).

The charge for unused capacity is 0.1 of the average tariff set in the transmission system. Charges are applied only for an exceeded and unused gas amount.

The transmission system operator has established balancing tolerance margins. All contracts specify a continuous monthly gas supply level (the daily amount is equal to the monthly amount divided by the number of days in a month) and permitted daily deviation +/-5%. The system operator requires not exceeding the limit of 5% only in the cases of increased gas consumption (when temperature drops, etc.), whereas in other cases daily gas consumption below or above the one specified in the contract is tolerated.

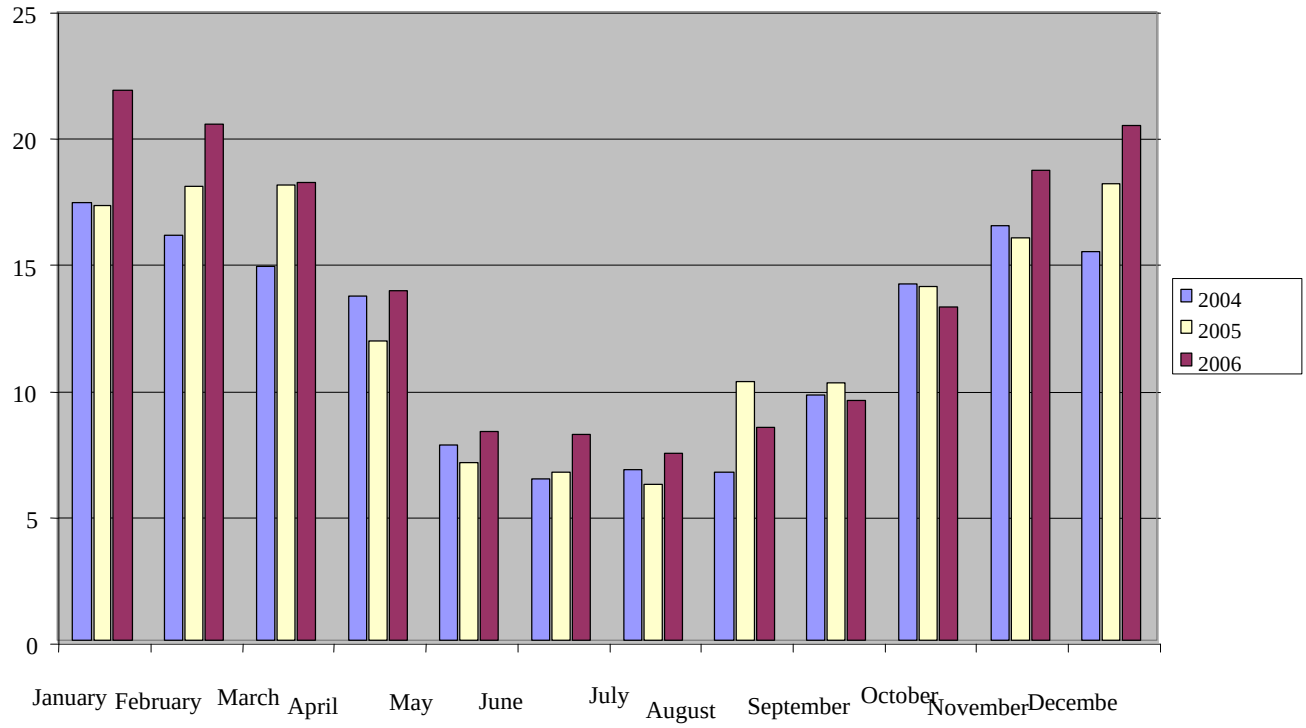
The transmission/distribution system operator determines the amounts required for system balancing on the basis of the expected demand and capacities ordered by eligible customers, which are specified in the gas supply contract, as well as available supplies in the pipeline or gas storage. A gas undertaking may interrupt gas supply to system users with interruptible gas supply at any time. The price of gas used for own needs is the price of gas purchased from the Russian company Gazprom AAB.

System users are offered balancing incentives: system users with interruptible gas supply (to which gas supply may be interrupted by the system operator at any time) may enjoy a benefit in changing the contracted capacity (daily gas consumption).

A gas undertaking must have a 24-hour telephone line or any other means of communication that would enable immediate reception of information on gas supply interruptions, limitations, variations from the usage mode or emergency situations from gas transmission and distribution undertakings and its communication to customers. In the recent years, eligible customers have been regularly using the maximum contracted capacity during the cold season of the year (peak time). Diagram 14 below shows the maximum daily natural gas consumption during a particular month.

Although the gas system does contain free capacities, there were tendencies towards increasing maximum system capacity observed in 2006, as compared to 2005 and 2004. The maximum daily system capacity was 21.896 million m^3 in January 2006, or 26% higher than in 2005.

Diagram 14. Maximum Daily Gas Consumption per Month in 2004-2006



The line-pack service is not provided to customers because the transmission system is not suitable for compressing and storing gas in the pipeline.

4.1.4. UNBUNDLING OF ACTIVITIES

In 2006, pursuant to the Law on Natural Gas in force at that time, vertically integrated gas undertakings had to keep separate accounts for each of the following activities: gas transmission, distribution, storage and supply. The accounts of all activities had to be kept as if these activities were carried out by separate undertakings.

The new Law of the Republic of Lithuania on Natural Gas sets forth that transmission, liquefaction, storage, distribution and supply activities must be unbundled by establishing a subsidiary or a separate undertaking. Transmission, liquefaction, storage and distribution may be carried out by one gas undertaking. Other non-gas activities of such undertakings must be unbundled by establishing a subsidiary or a separate undertaking. Other non-gas activities of supply undertakings may be conducted by one gas undertaking.

Article 12 of the Law on Natural Gas (2007) also provides that an integrated gas undertaking supplying gas to less than 100,000 customers is not obliged to unbundle its activities and establish a subsidiary or a separate undertaking.

In 2006, four natural gas distribution undertakings engaged in gas distribution and supply activities and serving less than 100,000 customers operated in the gas sector. The gas transmission, distribution and supply company Lietuvos Dujos AB was the only one to have more than 100,000 customers.

In 2006, supply and distribution undertakings operating in Lithuania were engaged in a single type of activities. Haupas UAB supplied gas to customers of Druskininkai region, and Intergas UAB distributed gas in this region. Dujotekana UAB was engaged in the supply activity (Table 26).

Table 26. Unbundling of Natural Gas Companies in 2006

Activity	Number of gas companies	Legally unbundled	Legally not unbundled	Gas companies which may be covered by the rule of 100,000 customers
Transmission	1	0	1	0
Distribution	6	0	5	5
Supply	7	2	5	5

The largest Lithuanian natural gas transmission, distribution and supply company Lietuvos Dujos AB has not yet implemented legal unbundling. The system operator has not been separated from supply branches since the Law on Natural Gas (2007) regulating legal unbundling entered into force only on 19 April 2007. The accounts of the supply activity and transmission and distribution activities are unbundled, and separate balance sheets are drawn up. Separate contracts on gas transmission (distribution) and on gas purchase and sales are signed with system users (eligible customers).

Transmission and distribution system operators do not have separate names, logotypes or websites and are presented to customers as one integrated company Lietuvos Dujos AB (www.dujos.lt). The shares of Lietuvos Dujos AB are traded on the National Stock Exchange of Lithuania; quarterly reports of the company are published in accordance with the stock exchange requirements. The major shareholders of Lietuvos Dujos AB are: E. ON Ruhrgas International AG with 38.9% of the shares, Gazprom AAB with 37.1% of the shares, and the State Property Fund with 17.7% of the shares in the company. 6.3% shares in the company are owned by various natural and legal persons.

The Law Amending the Law on Natural Gas passed on 20 March 2007 provides that financial statements on transmission and distribution activities of undertakings must be made public.

Financial statements of the company Lietuvos Dujos AB are audited. Pursuant to the Licensing Rules for Natural Gas Transmission, Distribution, Storage and Supply, audits of costs broken down by

the company's licensed activities are conducted. The new Law on Natural Gas contains the requirement that financial statements of undertakings must be reviewed by an independent auditor.

Although the company's activities are not legally unbundled, the company keeps separate accounts for five activities (transmission, distribution, supply to regulated customers, supply to eligible customers, and secondary activity), drawing up five balance sheets and profit and loss statements. All costs of the company are divided among individual activities on the basis of pre-determined principles, and the costs of the network operator are not attributed to other activities.

The average number of employees in Lietuvos Dujos AB in 2006 totalled 1,797, of which 357 employees worked in the transmission sector, 1219 – in the distribution sector, 186 were engaged in supply to regulated customers, 11 – in supply to eligible customers, and 24 employees – in ancillary activities (Table 27).

Table 27. Average Number of Employees in Lietuvos Dujos AB in 2006

		Transmission	Distribution	Supply	Other activities	In total
Headcount	Persons	357	1219	197	24	1,797
	%	19.9	67.8	10.9	1.3	100
	%	98.7			1.3	

Liability for Violations of Requirements for Licensed Activities

The NCCPE may impose penalties, suspend or revoke licences for violations relating to the licensed activities. When suspending a licence, the NCCPE must set a time period during which the undertaking concerned must eliminate its violations of the requirements for licensed activities. If violations are not eliminated by the established deadline, the licence may be revoked.

Upon committing violations, persons responsible for the performance of licensed activities are held liable to administrative proceedings in accordance with the procedure laid down in the Code of Administrative Offences. The Code of Administrative Offences provides for liability for any breach of the procedure for the transmission, distribution, storage, supply or use of energy resources or energy, for failure to provide data on economic and financial activities and/or provision of knowingly inaccurate data by suppliers of energy resources or energy, as well as for any violation of or non-compliance with resolutions of the NCCPE or failure to comply with orders of the NCCPE, etc.

Having discovered a violation relating to the licensed activity, the NCCPE drew up one report on the administrative offence in 2006. It should be noted that legal entities are not held liable to administrative proceedings. Instead, responsible officials and natural persons are held liable for respective violations. Two main types of penalties are provided for in the Code of Administrative

Offences, namely, a warning and a pecuniary penalty the amount of which depends on the nature of the violation.

4.2. COMPETITION ISSUES

4.2.1. DESCRIPTION OF THE WHOLESALE GAS MARKET

A wholesale natural gas market practically does not exist in Lithuania. The share of trade in natural gas between gas undertakings represents 0.27% of the total gas consumption. Small volumes of gas are purchased by local gas distribution undertakings and sold to customers. Agrofirma Josvainiai AB purchases gas from Dujotekana UAB, Fortum Joniškio Energija UAB – from Lietuvos Dujos AB, and Druskininkų Dujos UAB – from Haupas UAB. Natural gas suppliers traded in gas only under long-term contracts. No other types of contracts have been concluded by supply undertakings. Pursuant to the Law on Natural Gas, the NCCPE has the right of access to contracts concluded between gas undertakings and customers. Gas undertakings submit the main conditions of their gas purchase and sales contracts and annual activity reports to the NCCPE.

The annual natural gas consumption in Lithuania in 2006 totalled to 3.051 billion m^3. The average calorific value of imported natural gas was 33.52 MJ/ m^3. Gas is not produced in Lithuania; the entire volume of gas is imported from Russia. Two gas supply undertakings having over 5% of the gas supply market, namely, Lietuvos Dujos AB and Dujotekana UAB, supplied gas to Lithuanian customers. Gas quotas to the latter undertakings are allocated by a single external supplier Gazprom AAB.

Furthermore, the Lithuanian gas transmission network is not interconnected with the Western European natural gas system. The transmission system has a single connection with Latvia. However, natural gas from Latvia may be transported only in the event of interrupted gas supply through the Republic of Belarus.

To sum up, there is no competition on the gas supply market, either on an international or national level.

4.2.2. DESCRIPTION OF THE RETAIL GAS MARKET

In 2006, natural gas was supplied to customers by six supply undertakings: Lietuvos Dujos AB, Dujotekana UAB, Haupas UAB, Fortum Joniškio Energija UAB, Druskininkų Dujos UAB and Agrofirma Josvainiai AB.

In 2006, the total sales of natural gas on the national gas supply market amounted to 1.889 billion m^3. Eligible customers purchasing natural gas at contractual prices consumed 1.273 billion m^3,

which was 7% less than in 2005 (1.348 billion m^3). The natural gas consumption by regulated customers in 2006 increased by 4% – to 615 million m^3.

The total volume of natural gas sold by **Lietuvos Dujos AB** in 2006 amounted to 1.361 billion m^3, of which 1.8 million m^3 was sold to Fortum Joniškio Energija AB, 743.8 million m^3 – to eligible customers, and 615 million m^3 – to regulated customers. Lietuvos Dujos AB transmitted 3.014 billion m^3 of natural gas within the country, distributed 1.119 billion m^3 and transported 1.204 billion m^3 to Kaliningrad Region by transit, which was 67% more than in 2005 (721 million m^3).

The amount supplied to Lithuania through the gas system managed and operated by the said company accounts for more than 99% of the total demand of Lithuanian customers for natural gas. In 2006, Lietuvos Dujos AB invested approximately LTL 100 million in the construction of new gas systems:

- construction of a branch of the gas main Panevėžys-Klaipėda from Šiauliai in the direction of Kuršėnai and a branch of the gas main up to a gas metering station (GMS) built for Mažeikiai (completed);

- completion of the first stage of the installation of gas systems in Švenčionėliai and Švenčionys: construction of a branch of the gas main, gas distribution station and distributive gas supply pipeline in Švenčionėliai; installation of gas systems in Švenčionys is planned during the second stage;

- construction of a distributive pipeline to Kazlų Rūda (completed).

In 2006, **Dujotekana UAB** supplied 532.2 million m^3 of natural gas, of which 21.1 million m^3 to Lietuvos Dujos AB, 4.2 million m^3 to Agrofirma Josvainiai AB, and 506.9 million m^3 to eligible customers.

In 2006, **Haupas UAB** supplied 17.2 million m^3 of natural gas to customers, of which 16.55 million m^3 to eligible customers and the remaining 0.6 million m^3 to regulated customers.

Agrofirma Josvainiai AB purchased 4.16 million m^3 of natural gas from Dujotekana UAB and supplied it to regulated customers.

Fortum Joniškio Energija UAB purchased 5.15 million m^3 of natural gas from Lietuvos Dujos AB, of which 3.35 million m^3 were used for its own needs (heat generation) and 1.8 million m^3 were sold to other customers.

At the end of 2006, the number of customers (subscribers) totalled 540,700, including:

- gas power plants (28 customers), having a 49.6% share of the market;

- residents and the small commercial sector (540,329 customers), having a 6.6% share of the market;

- medium-sized industrial and commercial sector with the annual gas consumption of up to 1 million m^3 (317 customers), having a 4.8% share of the market;

- large and very large industrial customers with the annual gas consumption over 1 million m^3 (73 customers), having a 39% share of the market.

Two suppliers occupying over 5% of the gas supply market are dominant on both the retail and wholesale gas supply markets. These are Lietuvos Dujos AB and Dujotekana UAB. The remaining gas supply undertakings represent only 1.16% of the total gas sales (see Table 28).

Table 28. Gas Amounts Sold by Gas Companies on the Retail Market and their Market Share in 2006

Gas Company	Amount, billion m^3	Amount, GWh*	Market share, %
Lietuvos Dujos AB	1.359	12,663.2	71.94
Dujotekana AB	0.507	4,724.3	26.84
Other companies	0.022	205.0	1.16

* 1 m^3 = 8011.6 Kcal

As from 1 July 2007, all natural gas consumers are eligible customers, i.e. consumers may choose their supplier. To purchase gas, customers must file an application with a gas supply undertaking two months prior to the beginning of a calendar year. A customer must file a prior written request, no later than 14 calendar days before the commencement of gas supply, to a supply undertaking to conclude a gas supply (sales and purchase) contract. Upon the evaluation of whether the requested gas quantity can be supplied, the supply undertaking shall, within 14 calendar days from the receipt of the request, notify the applicant of full or partial approval of the requested quantity or refusal to meet the request. Refusal to meet the customer's request must be objective, non-discriminatory and well-grounded. The NCCPE must also be informed of such refusal to meet the customer's request.

Lithuanian customers may change their gas supplier without any charges. Eligible customers may choose between two gas supply undertakings – Lietuvos Dujos AB and Dujotekana UAB. The prices of gas sold by these undertakings differ a lot: although they purchase gas at similar prices, Dujotekana UAB applies a higher profit margin when selling gas to customers. Most eligible customers would like to change their gas supply undertaking and purchase cheaper gas from Lietuvos Dujos AB, but their options are limited by the tight gas quotas set by the only gas seller Gazprom AAB for each gas supply undertaking. This situation partially predetermined the fact that none of existing eligible customers completely changed their gas supply undertaking in 2006. 8 out of 28 customers eligible to freely purchase natural gas bought it from these two gas suppliers. Table 29 shows the structure of natural gas prices for customers.

Table 29. Natural Gas Prices by Component from 1 July 2007, EUR/MWh

Item/Customer group	D3*	I1*	I4-1
Network Charges	6.56	6.56	3.83
Levies	-	-	-
Energy price	13.41	13.41	17.69**-18.04**
Price of the gas supply service	1.52	0.30	0.0003
Taxes (VAT – 18%)	3.87	3.65	3.87-3.94
Total	25.36	23.92	25.39-25.81

* - for household customers

** - estimation of the gas price when the price of heavy fuel oil with the sulphur amount of 1% during 6 months was USD 270.24/t, LTL/USD exchange rate=LTL 2.5642/USD, calorific value 8011.6 Kcal/m^3

5. SECURITY OF SUPPLY

5.1. ELECTRICITY SECTOR

Electricity Generating Capacities, Demand, Generation and Promotion of Generation

In 2006, the total installed electricity generating capacity (nuclear and non-nuclear) amounted to almost 5,000 MW (Table 30) and more than twice exceeded the domestic needs of Lithuania (Table 31).

The main source of electricity in the country is Ignalina Nuclear Power Plant, which generates cheaper electricity than thermal power plants using fossil fuel.

Table 30. Installed/Available Capacity of Lithuanian Power Plants in 2006, MW

Power plants	Installed/available capacity
Ignalina Nuclear Power Plant	**1300 / 1183**
Lithuanian Power Plant	1800 / 1732
Mažeikiai Power Plant	160 / 148
Vilnius Power Plant	384 / 367
Kaunas Power Plant	170 / 160
Kauno Energija	9 / 8
Klaipėdos Energija	11 / 10
Thermal power plants, in total:	**2534 / 2425**
Kaunas HPP	101 / 90
Kruonis PSP	900 / 760
Small hydro power plants	27
Hydro power plants, in total:	**1028 /877**
Power plants of industrial enterprises and other power plants, including:	**102 / 70**
biomass	3.0
wind	1.0
Total:	**4968 /4555**

Table 31. Maximum Capacity Demand (Gross) in 2006, MW

Month	Maximum demand
January	2087
February	1943
March	1828
April	1632
May	1465
June	1464
July	1433
August	1403
September	1477
October	1660
November	1811
December	1844
Per year	**2087**

The Law of the Republic of Lithuania on Electricity stipulates that generation of electricity, expansion of electricity generating capacities, electricity export and import, as well as construction of direct lines are subject to authorisations. Authorisations for electricity undertakings and eligible customers to engage in non-licensed activities in the electricity sector are issued and revoked in accordance with the Rules for Issuing Authorisations for Activities in the Electricity Sector approved by Order No 380 of the Minister of Economy of the Republic of Lithuania of 18 December 2001 (as amended by Order No 4-145 of the Minister of Economy of the Republic of Lithuania of 18 April 2005).

Authorisation to generate electricity is mandatory for every undertaking which was engaged in electricity generation according to its registered Articles of Association or other equivalent documents adopted before the entry into force of the Law of the Republic of Lithuania on Electricity and wishes to continue this activity using its available technological facilities upon the entry into force of the new Law; or wishes to restart suspended electricity generation using its available technological facilities if the previous authorisation was revoked; or has built new technological electricity generating facilities in accordance with the authorisation to expand electricity generating capacities.

Authorisation to expand electricity generating capacities is mandatory for every undertaking wishing to construct a power plant in a new location and/or to increase its existing generating capacities by reconstructing (replacing) its current or constructing additional technological electricity generating facilities.

Only electricity suppliers and producers may apply for authorisations to export electricity, whereas authorisations to import electricity may be issued only to electricity suppliers and eligible customers.

Authorisations issued in 2006 were as follows: 19 authorisations for the expansion of electricity generating capacities (Table 32), 20 authorisations for electricity generation (Table 33), 1 authorisation for electricity import, and 1 authorisation for electricity export.

Table 32. Authorisations for the Expansion of Electricity Generating Capacities Issued in 2006

Year	Authorisations granted for the expansion of electricity generating capacities		Electricity generating capacities, MW			
	No of authorisations	Capacity, MW	Using conventional energy resources, MW	Using renewable energy sources, MW		
				Wind, MW	Hydro, MW	Other, MW
2006	19	150.837	42.648	90.25	0.489	17.45

Table 33. Authorisations for Electricity Generation Issued in 2006

Year	Authorisations granted for electricity generation		Electricity generating capacities, MW			
	No of authorisations	Capacity, MW	Using conventional energy resources, MW	Using renewable energy sources, MW		
				Wind, MW	Hydro, MW	Other, MW
2006	20	258.26	234.8	20.45	1.51	1.5

General criteria, conditions and requirements for the promotion of the generation and purchase of electricity generated from renewable energy sources in the Republic of Lithuania are laid down in the Procedure for Promoting the Generation and Purchase of Electricity Generated from Renewable Energy Sources approved by Resolution No 1474 of the Government of the Republic of Lithuania of 5 December 2001 (as amended by Resolution No 897 of the Government of the Republic of Lithuania of 18 September 2006). This Procedure is mandatory for natural and legal persons generating or planning to generate electricity in a power plant using renewable energy sources, as well as for persons connecting electricity facilities of producers to the electricity system and/or purchasing electricity generated by producers into distribution and transmission networks. The provisions of this Procedure promote electricity generation by wind, biomass and solar power plants, as well as small hydro power plants with the maximum capacity up to 10 MW. Since the costs of electricity generation from renewable energy sources are higher than using conventional energy resources, such electricity is purchased at higher tariffs approved by the NCCPE. Electricity generated from biofuel and hydro-power is purchased at the price of LTC 20/kWH, and from wind power – LTC 22/kWh. Purchasing prices are guaranteed until 31 December 2020. Power plants are connected to the existing systems of energy undertakings in accordance with the procedure established by law at a 40% connection fee discount applied to producers.

According to preliminary data, the share of electricity generated from renewable energy sources in 2006 accounted for 3.6% in the total electricity consumption in the country.

Electricity Forecasts

After the decommissioning of the second unit of Ignalina Nuclear Power Plant at the end of 2009, the current generating capacities, including small capacity co-generation plants that are planned to be constructed, will be sufficient to meet the national demand until 2013 in all cases of the growth in national economic needs and supply with systemic services necessary for the functioning of the system. Nevertheless, there is an urgent need to modernise the Lithuanian Power Plant and the existing co-generation plants with the lowest electricity generation cost during the heating season. Furthermore, with the increasing capacity demand and subject to economic feasibility, new co-generation plants able to generate electricity at a price that would be competitive on the open electricity market should be constructed in Lithuanian cities with well-developed district heating systems.

Lithuania will implement its commitments to the EU on the use of renewable energy sources for electricity generation by constructing wind power plants, small hydro-power plants and co-generation plants using biofuel. Pursuant to the Procedure for Promoting the Generation and Purchase of Electricity Generated from Renewable Energy Sources, the share of electricity generated from renewable energy sources in the total electricity consumption in the country should amount to 6.9% at the beginning of 2008, and to 7.7% at the beginning of 2009. At the beginning of 2008, the planned output of electricity from renewable energy sources should reach 862.6 GWh (of which 259.6 GWh – by wind power plants, 448 GWh – by hydro-power plants, and 153.5 GWh – by biomass power plants), and at the beginning of 2009 the output should amount to 995.2 GWh (of which 320.4 GWh – by wind power plants, 452 GWh – by hydro-power plants, and 219.5 GWh – by biomass power plants).

Forecasts for changes in the installed/available capacities of Lithuanian power plants for 2007–2009 are given in Table 34.

Table 34. Forecasts for Changes in the Installed/Available Capacities of Lithuanian Power Plants, MW

	2007	2008	2009
Ignalina Nuclear Power Plant	**1300/1183**	**1300/1183**	**1300/1183**
Lithuanian Power Plant	1800/1732	1800/1732	1800/1732
Mažeikiai Power Plant	160/148	160/148	160/148
Vilnius Power Plant	372/352	372/352	372/352
Kaunas Power Plant	170/161	170/161	170/161
Kauno Energija	9/8	8/7	8/7
Klaipėdos Energija	11/10	-/-	-/-
Panevėžio Energija	35/32	35/32	35/32
Thermal power plants, in total:	**2557/2443**	**2545/2432**	**2545/2432**
Kaunas HPP	101/90	101/90	101/90
Kruonis PSP	900/760	900/760	900/760
Small private hydro-power plants	28	28	29
Hydro-power plants, in total:	**1029/878**	**1029/878**	**1030/879**
Power plants of industrial enterprises and other power plants, including::	**162/75**	**180/77**	**212/79**
biomass	15	17	19
wind	45	61	91
Total:	**5048/4579**	**5054/4570**	**5087/4573**

Capacity balances of the Lithuanian energy system at peak demand times in 2007-2009 are presented in Table 35.

Table 35. Capacity Balances of the Lithuanian Energy System at Peak Demand Times in 2007-2009, MW

Indicator/Year	2006	2007	2008	2009
Installed/available capacity of power plants (excluding half of the available capacities of Kruonis PSP, wind, biomass and small hydro-power plants)	4178	4605	4640	4640
Maximum system-demanded capacity under the maximum growth of demand	1940	2070	2140	2220
Export	~400	~350	~300	~280
Mandatory long-term reserve	1300	1300	1300	1300
Capacity balance (surplus)	**533**	**885**	**900**	**840**

The maximum capacity demand in 2006–2010 is given in Table 36.

Table 36. Forecasted Maximum Capacity Demand in 2006–2010, MW

Year	Maximum demand (net)
2006	1940
2007	2070
2008	2140
2009	2220
2010	2310

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Planned Development and Renovation of the Transmission System

The power plants and electricity networks belonging to the Lithuanian energy system are not new. The major part of electricity networks was built over 25-30 years ago and their designed operational lifetime is about to expire, which causes concerns about the reliability of electricity networks and the operation of power plants. Therefore, Lietuvos Energija AB pursues a technically and economically sound investment policy by enhancing the reliability and efficiency of the energy system.

For the purpose of ensuring an adequate level of reliability of the transmission system, Lietuvos Energija AB allocates a substantial part of investments to reconstruct old or construct new transformer substations and overhead lines. These reconstructions include choosing optimal schemes for transformer substations, introducing accounting systems in order to reduce commercial losses at substations, and developing the optical connection network in the transmission system.

At present, Klaipėda zone has no direct connection with the Lithuanian energy system via the 330 kV grid and is connected with the Lithuanian 330 kV grid via neighbouring energy systems. The construction of 330 kV overhead lines Klaipėda–Telšiai and Panevėžys–Mūša is planned to ensure the reliability of supply and to strengthen the transmission grid in the western part of the country. These lines play a very important role in planning a new system interconnection between Lithuania and Sweden, which will help reduce energy dependence on Russia after the decommissioning of Ignalina Nuclear Power Plant, enhancing the reliability of electricity supply and expanding the electricity market. A feasibility study on *Electricity Bridge to Sweden* is currently in progress. The findings of the study should be presented in September 2007.

For the purpose of integrating into the European electricity market, the connection of the Lithuanian and Polish energy systems is planned via a direct current section of 1,000 MW Alytus–Ełk. The connection will require constructing a 154 km length 400 kV line Alytus–Ełk (of which 48 km will stretch from Alytus to the border) as well as an approximately 53 km length double-circuit 330 kV line from Kruonis Pumped Storage Plant to Alytus. The interconnection with the Polish electricity grid is indispensable in order to ensure reliable supply of electricity after the closure of the second unit of Ignalina Nuclear Power Plant. Upon the connection of the Lithuanian and Polish electricity grids, the Baltic electricity networks would be interconnected with the European Union's electricity networks,

thereby expanding the currently small Baltic electricity market, creating favourable conditions ensuring competition in the electricity generation sector and efficient functioning of the market.

Power transfer from/to Alytus node requires the expansion of the Lithuanian transmission grid – construction of a new double-circuit 330 kV line between Kruonis Pumped Storage Plant and Alytus. Polish internal networks must also be reinforced by constructing a new line Narew–Ełk and reconstructing 4 lines, namely Ostrołęka–Ełk, Ostrołęka–Miłosna, Ostrołęka–Olsztyn and Olsztyn–Mątki, by adjusting them for higher 400 kV voltage.

If the installed capacities of the new nuclear power plant are 3000 MW or higher, the transmission capacity of the existing lines for transferring power to the Lithuanian energy system will not be sufficient. To this end, Lietuvos Energija AB also plans to construct a new double-circuit 330 kV overhead line between Ignalina Nuclear Power Plant and Kruonis Pumped Storage Plant.

New 110 kV lines are planned in the largest cities of Lithuania in order to ensure supply reliability: an overhead line Neris-Baltupis in Vilnius, a cable line Kaunas-Eiguliai in Kaunas, and lines Klaipėda–Marios and Kretinga–Palanga in Klaipėda.

One of the most important quality indicators of an energy system is ensuring permissible voltage levels in the transmission network. At present, due to changes in electricity consumption in individual parts of the Lithuanian energy system (consumption increased in larger cities and significantly went down in other locations), numerous problems occur in ensuring permissible voltage levels in electricity networks. The introduction of reactive power compensation mechanisms is planned for reactive power management.

5.2. NATURAL GAS SECTOR

Gazprom AAB and Lithuanian gas supply undertakings have signed long-term gas sales and purchase agreements. The first long-term agreement for a six-year period was signed between Gazprom AAB and Lietuvos Dujos AB in 1999, and was later extended until 2015. According to this agreement, Lietuvos Dujos AB undertook obligations to transport, by transit, natural gas supplied by Gazprom AAB to Kaliningrad Region (Russian Federation). Dujotekana UAB, which started its activities in 2002, has also concluded a gas sales and purchase agreement with Gazprom AAB valid until 2013.

In 2006, technical import capacities amounted to 11.8 billion m^3 per year, of which import capacities reserved for transit were 1.24 billion m^3 per year, capacities reserved for Lithuanian customers under long-term agreements were 4.8 billion m^3 per year, and unreserved (available) import capacities were 5.76 billion m^3 per year.

The available capacities of the Lithuanian natural gas system at cross-border points are sufficient and should not cause any problems relating to pipeline congestion during the forthcoming three years. Therefore, the transmission system operator intends to allocate its investments during the

coming three years for enhancing the reliability of the gas systems and installing gas systems in new territories (developing new territories).

The following measures are planned to enhance the reliability of transmission and distribution systems:

- constructing a new compression station;
- constructing a new gas transmission pipeline (already started), upon completion of which the gas transmission system of western Lithuania will be connected into a ring, thereby increasing the reliability of gas supply to customers in that part of the country;
- introducing measures which will allow inspecting the condition and reliability of the major national gas transmission pipelines with diagnostic probes without interrupting gas supply;
- carrying out repairs of gas mains which cannot be prepared for inspection with diagnostic probes, and conducting hydraulic tests on them;
- maintaining reduced working pressure in one section of the gas transmission pipelines which cannot be repeatedly tested and examined with diagnostic probes, by constructing a pressure reduction node for this purpose;
- providing for measures aimed at improving the physical security of the company's gas pipelines and enhancing the reliability of information systems;
- implementing the programme for the reconstruction of transmission and distribution systems (already drafted);
- constructing gas pipelines connecting separate branch systems into a ring in order to increase the reliability of the distribution system.

According to the data provided by Lietuvos Dujos AB, the company stored 40 million m^3 of natural gas in the underground gas storage facility in Incukalns (Republic of Latvia). Other undertakings, such as Achema AB, Haupas UAB, Agrofirma Josvainiai UAB, Intergas UAB and Fortum Joniškio Energija UAB, have provided information that they do not stock any gas in storage facilities.

Article 24 of the Law on Natural Gas provides that the Government or an institution authorised by it has the right to set the requirement or conditions for gas undertakings and non-household customers to make use of natural gas storage facilities. Gas stocks must be supplied from natural gas storage facilities located in the territories of EU Members States.

As compared to 2005, there was a slight increase in natural gas consumption in Lithuania in 2006. Transmission and distribution system operators forecast that similar tendencies will persist in future (Table 37).

Table 37. Planned Volumes of Gas Transmission/Sales in 2006-2008, Including Transit to Kaliningrad Region, million m^3

Undertaking	2006	2007	2008
Agrofirma Josvainiai AB – volume of gas sales, million m^3	4.166	4.430	4.450
Haupas UAB – volume of gas sales, million m^3	17.200	16.500-20.000	16.500-20.000
Achema AB – volume of gas sales, million m^3	0.004	0.008	0.008
Fortum Joniškio Energija UAB, million m^3	1.788	1.828	1.936
Lietuvos Dujos AB			
Volume of gas transmission, million m^3	4,217.7	4,689.3	4,711.1
Volume of gas sales, million m^3	1,360.6	1,340.1	1,146.9
Intergas UAB			
Volume of gas transmission, million m^3	17.21	26.28	31
Volume of gas sales, million m^3	-	9.5	14

Lietuvos Dujos AB, as the Lithuanian transmission system operator, takes measures to address the problems related to gas shortage through the fault of external suppliers. In the event of natural gas shortage due to the fault of suppliers or other technical problems, gas is supplied from the underground gas storage facility in Incukalns or the system of gas mains of the Latvian company Latvijas Gaze AB.

Achema AB tackles all issues related to the amount and supply of natural gas directly with the supplier Gazprom AAB.

Role of the Regulator and other Institutions with respect to:

- Requirements for the supplier of last resort:

The supervision of security of supply is implemented by monitoring activities of undertakings, following supply and demand, as well as exercising supervision, by the NCCPE, of how undertakings comply with the requirements for the licensed activities. When supplying gas to customers, gas supply undertakings must follow the Rules for Natural Gas Transmission, Distribution, Storage and Supply regulating in detail the disconnection of natural gas supply, payment and other issues.

Pursuant to Article 16 of the Law on Natural Gas, assigned supply may be carried out for household customers and customers to those objects the energy generating capacity whereof is below 5 MW and which contain no reserve fuel stocks. The eligible customer may choose a supply undertaking other than the one carrying out assigned supply. The assigned supply undertaking must conclude

contracts with system operators regarding gas transportation and bears responsibility for gas supply up to the systems of customers.

Pursuant to Article 5 of the Law on Energy, when carrying out State management of the energy sector, the Government or an institution authorised by it shall have the right to impose public service obligations on undertakings engaged in energy activities in the cases prescribed by law.

- *Incentives to increase gas import capacities:*

The current gas import capacities of the Lithuanian transmission system are sufficient and do not require any expansion in the short run. Consequently, no special incentives to increase import capacities are offered yet.

- *Requirements for access to natural gas storage facilities in order to ensure public services:*

Lithuania has no natural gas storage facilities.

Progress in Major International Infrastructure Projects

With the view of examining possibilities to ensure the reliability of natural gas supply in the Baltic region, a study *Amber Project, Lithuanian-Polish Gas Interconnection* was prepared in 2002 with the participation of Danish, Lithuanian and Polish gas undertakings. This study covered the gas pipeline from the Lithuanian gas system to the Danish gas system. The symbolic title *Amber Project* has been maintained in the discussions on the possibility of connecting just the Lithuanian and Polish gas networks.

The revised National Energy Strategy provides for the preparation of a feasibility study, in cooperation with Poland, on the interconnection of the Polish and Lithuanian gas networks by 2011.

The communiqué signed on 2 March 2007 by the Prime Ministers of Lithuania and Poland on cooperation in the energy sector proposes, *inter alia*, to initiate a feasibility study on the interconnection of the Lithuanian and Polish natural gas systems.

A possibility to construct an underground natural gas storage facility has been under discussion for a few years already. The location of Vaškai was studied as a potential site, however geological research on the soil structure of Vaškai in 2004 revealed that this location was not suitable for the construction of a storage facility.

In 2004, the consortium consisting of the German company ESK, Dujotekana UAB and Geonafta UAB prepared a feasibility study on the construction of underground natural gas storage facilities in western Lithuania, where Syderiai, a location close to the gas main Šiauliai-Klaipėda, was found to be the most suitable soil structure exhibiting the highest porosity. The study was presented to the Ministry of Economy.

Additional geophysical-geological research, i.e. a three-dimensional seismic survey, is required to ascertain whether this structure is impermeable.

6. PUBLIC SERVICE ISSUES

6.1. ELECTRICITY SECTOR

The Law on Electricity defines public interests in the electricity sector as any act or omission in the electricity sector, directly or indirectly related to public security and environmental protection, as well as to electricity generation from renewable energy sources at combined heat and power generation plants.

The list of public service obligations in the electricity sector, their suppliers and supply procedure are established by the Government or an institution authorised by it. Market participants include the costs of the provision of the said services into their operating costs.

The transmission system operator, distribution network operator and public suppliers fulfilling public service obligations shall keep separate accounts and ledgers specifying the revenue and costs related to these obligations.

The expansion of the existing electricity generating capacities or installation of new generating capacities in a new location shall be subject to authorisation for the expansion of electricity generating capacities. Authorisations are issued to all applicants guaranteeing that their activities will satisfy certain conditions, one of them being the requirement to comply with public interests.

The Ministry of Economy has approved the list of public service obligations in the electricity sector. Pursuant to the order of the Minister of Economy, the following services are considered public service obligations in the electricity sector:

1. electricity generation:

1.1. from renewable energy sources;

1.2. in the co-generation mode at combined heat and power generation plants, where these plants supply heat to urban district heating systems;

1.3. at specified power plants where electricity generation is necessary for ensuring reserves of the energy system;

2. ensuring nuclear operational security, waste storage and disposal;

3. connection of electricity generating facilities using wind, biomass, solar or hydro-power to transmission or distribution electricity networks.

The fulfilment of public service obligations specified in this list is regulated by the Rules for Imposing Public Service Obligations approved by the Ministry of Economy. At the end of 2006, they were revised by applying a more flexible taxation mechanism that would facilitate trading on the electricity market. The Rules will enter into force in 2008.

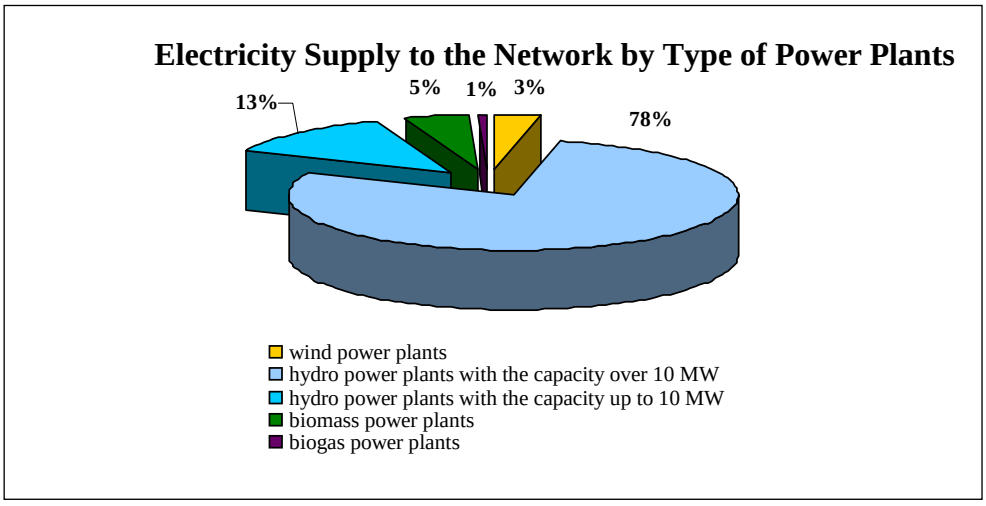
Labelling of Primary Energy Sources

For the purpose of implementing Order No 4-346 of the Minister of Economy of the Republic of Lithuania of 7 October 2005 on the approval of the Rules for Issuing Guarantees of Origin of Electricity Generated from Renewable Energy Sources (*Valstybės žinios* No 122-4375, 2005), Lietuvos Energija AB, as the transmission system operator, is responsible for the issue of guarantees of origin of electricity generated from renewable energy sources and for the administration of the database.

A guarantee of origin database was created before 31 December 2005. The following information is recorded, collected and stored on the website of Lietuvos Energija AB http://www.lpc.lt/lt/main/klm: the list of persons who were issued guarantees of origin; data on the facilities owned by the participant; the total volume of electricity generated from renewable energy sources broken down by energy sources from which the electricity was generated. Information is updated at least on a monthly basis. Participants, i.e. producers and/or suppliers registered in the guarantee of origin database and given a code, have the right to view their data.

In January 2006, 83 producers were registered in the guarantee of origin database, of which: 1 hydro-power plant with the capacity over 10 MW, i.e. Kaunas Hydro Power Plant which is a branch of Lietuvos Energija AB, 75 hydro-power plants with the capacity up to 10 MW, 3 biogas power plants and 4 wind power plants. At the end of the same year, there were already 95 producers operating on the market: 9 wind power plants, 2 biomass (wood waste) power plants, 4 biogas power plants and 80 hydro power plants. During that year, 7 suppliers were active on the market.

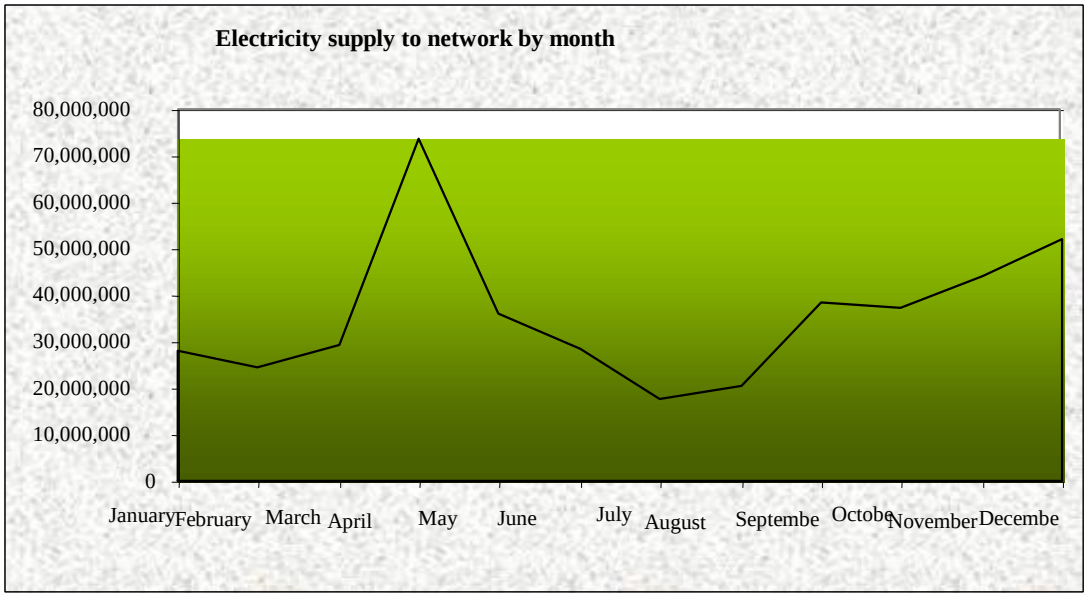
Diagram 15. Electricity Supply to the Network by Type of Power Plants



Hydro power plants supply to the network 91% of all electricity generated from renewable energy sources. The major share, i.e. 78%, is produced and supplied by Kaunas Hydro Power Plant. Biomass fuel was not used for electricity generation until April. Later on, the market share of this type

of electricity was very modest, until Vilniaus Energija UAB started supplying electricity generated from wood waste in August (2 turbines put into operation with the aggregate 12 MW capacity). The annual supply to the network also includes 5% of green electricity generated from biomass. An increasing share of electricity is wind-generated: 110.5 MWh was supplied to the network in January, and as much as 8796.1 MWh was supplied in December. The market was also entered by Vėjų Spektras UAB with the installed capacity of its power plants amounting to 30 MW.

Diagram 16. Electricity Supply to the Network by Month



The total output of electricity from renewable energy sources is mostly affected by hydro-power plants. Their production gets particularly intensive in April when tidal waters are used. In summer, due to very low water levels in rivers and water ponds, production volumes are considerably reduced in compliance with the environmental requirements and in some cases production is fully stopped. This seasonality factor is particularly relevant for hydro-power plants with the capacity up to 10 MW. In September, the total output significantly increased as a result of new capacities of wind and biomass power plants connected to the distribution networks.

Diagram 17. Electricity Supplied to the Network by Wind Power Plants

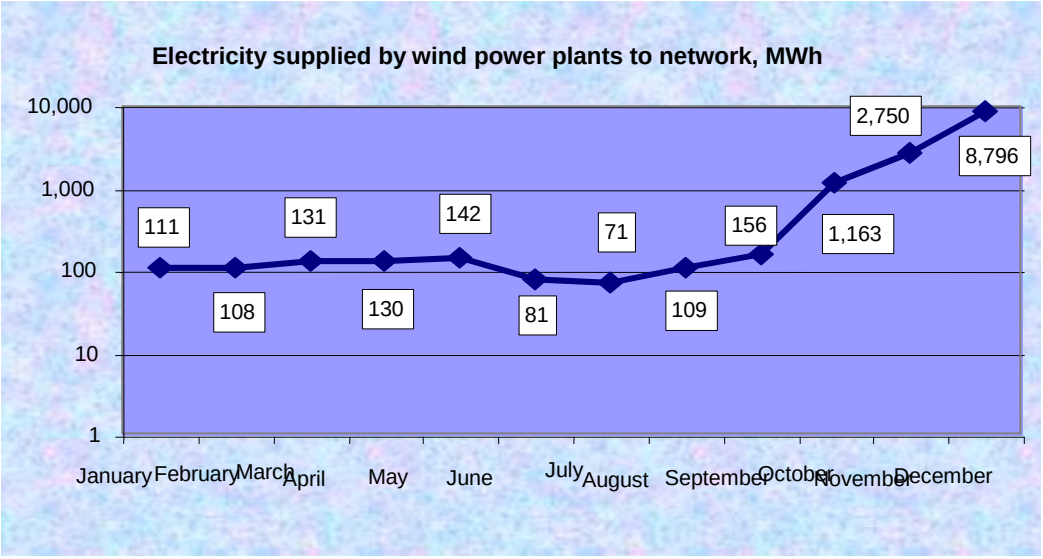
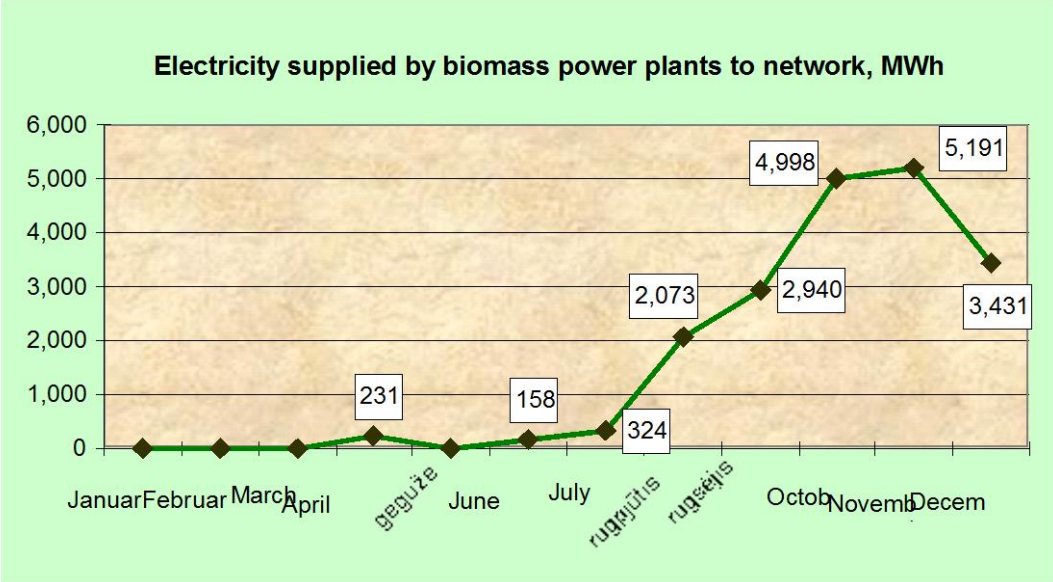


Diagram 18. Electricity Supplied to the Network by Biomass Power Plants



The volume of electricity generated from renewable energy sources is the total output of electricity produced by power plants using only renewable energy sources, as well as the proportion of electricity generated from renewable energy sources in hybrid power plants also using non-renewable energy sources. The proportion of electricity generated from renewable energy sources in these power plants is determined by subtracting the amount of electricity produced from non-renewable energy sources from the gross electricity output. The amount of electricity produced from non-renewable energy sources is determined on the basis of the consumed fuel balance and the normative consumption of conventional fuel for the generation of 1 kWh of electricity established by the Minister of Economy of the Republic of Lithuania.

The producer must, not later than within seven days after the end of each month, provide the following information to the institution issuing guarantees of origin (producers whose facilities are connected to the distribution network – to the distribution network operator of their relevant region) in respect of every facility registered in the database:

1) the amount of electricity generated from renewable energy sources during the previous month (in kWh), where this amount is measured by electricity metering devices complying with the requirements set by the Law of the Republic of Lithuania on Metrology and other legal acts, specifying the renewable energy source;

2) the amount of electricity generated from renewable energy sources and supplied to the network during the previous month (in kWh), specifying the renewable energy source;

3) the amount of electricity sold with guarantees of origin that were not used (in kWh), and the purchaser.

The distribution network operator must, not later than within seven days after the end of each month, submit the following information to Lietuvos Energija AB (the institution issuing guarantees of origin) in respect of each producer separately:

1) amounts of electricity supplied to the network during the previous month from producers generating electricity from renewable energy sources (in kWh);

2) amounts of electricity purchased from producers during the previous month under public service obligations (in kWh), and the amount paid (in LTL).

Participants shall be responsible for the accuracy and reliability of the data provided.

Electricity distribution companies publicly inform their customers about the purchased amounts of electricity by energy sources and environmental impact by electricity producers. The latter information is available on the following Internet address: http://vaai.am.lt. The amounts of electricity purchased in Lithuania in 2006 by sources are given in Table 38.

Table 38. Amounts of Electricity Purchased by Energy Sources in 2006

No	Energy source	Share of electricity purchased, %
1.	Nuclear fuel	60
2.	Fossil fuel	25
3.	Imported electricity	14
4.	Kruonis Pumped Storage Plant	2
5.	Renewable energy sources	1

Implementation of the Criteria Set out in Annex A to the Directive

While carrying on their activities, companies operating in the electricity sector must inform customers about efficient electricity consumption, the services provided by the company, conditions of the provision of services, prices and tariffs of services and electricity, fees and terms for the connection of customer equipment to the grid and expected modifications to contractual conditions. Companies of the electricity sector must notify household customers of an increase in prices and tariffs in writing or by other means at least one month prior to such increase. Public suppliers are prohibited from discrimination between customers or categories of customers. Any customer receiving electricity from a public supplier is obliged to settle all payments with the public supplier for electricity and its transportation in a timely manner. A customer has the right to unilaterally withdraw from the contract with the public supplier without paying any charges, giving written notice 30 calendar days in advance and settling all payments for the supplied electricity and its transportation service by the day of withdrawal from the contract.

Household customers have the right to:

1) freely and without any charges choose a supplier;

2) receive information from suppliers concerning the supplier's name, registered address, company code and legal form, the services provided and conditions of their provision, prices and tariffs of services and electricity, the means of notifying about prices, the duration of the contracts, the conditions for conclusion and termination of the contracts, dispute settlement procedures;

3) unilaterally withdraw from the contracts without paying any charges, if contractual conditions are modified and they are not acceptable to household customers;

4) be offered a choice of payment methods by companies operating in the electricity sector and choose a payment method.

Pursuant to the approved Electricity Supply and Consumption Rules, supply may be interrupted or limited through the customer's fault. The operator or supplier has the right, subject to a prior warning at least 15 calendar days in advance in the case of household customers or 10 days in advance in the case of other customers, interrupt or limit electricity supply to them on the date specified in the warning or any later date, when within the set period of time the customer concerned fails to pay or pays in part for the electricity consumed.

Throughout 2006, VST AB temporarily interrupted electricity supply to 400 commercial customers and 5,700 household customers for non-payment for the services provided. This accounts for some 0.9% of the total number of customers, or 33% less than in 2005.

In the same period, Rytų Skirstomieji Tinklai AB temporarily discontinued electricity supply to 300 commercial customers and 9,000 household customers for non-payment for the services provided. This accounts for about 1.3% of the total number of customers.

Where electricity transmission and/or supply to a customer are interrupted or limited or where electricity quality parameters at the point of the provision of the electricity transmission service or the purchase and sales of electricity do not comply with the set requirements, the operator or public supplier must compensate the customer upon the customer's request for direct damages incurred through the fault of the operator or public supplier. Indirect damages are not subject to compensation. The customer must file a claim for compensation for direct damages within 10 calendar days after the damages have been incurred. The operator or public supplier must hear the customer's claim within 30 calendar days. Damages incurred due to electricity transmission and/or supply interruption or limitation must be compensated within 30 calendar days from the establishment of their amount and the validity of the customer's claim, unless otherwise agreed by the customer and the public supplier or operator.

Since an independent supplier was chosen by a very small percentage of eligible customers in Lithuania (all non-household customers being eligible customers from 1 July 2004), the majority of electricity customers purchase electricity from two main public suppliers according to the regulated public tariffs. The regulated public tariffs are applicable to all categories of customers, i.e. residents, small, medium and large businesses.

A public supplier is obliged to conclude contracts and supply electricity upon request to all customers within the territory specified in the supplier's licence, who have not chosen an independent supplier.

A customer has the right to unilaterally withdraw from the contract with the public supplier without paying any charges. The customer must notify the public supplier in writing 30 calendar days in advance and settle all payments for the supplied electricity and its transportation service by the day of withdrawal from the contract.

Before concluding or terminating the electricity supply contract with an eligible customer located in the territory specified in the public supplier's licence, the independent supplier must communicate a written notification thereof to the public supplier 30 calendar days in advance.

Before concluding or withdrawing from the electricity supply contract with the independent supplier, an eligible customer located in the territory specified in the public supplier's licence must communicate a written notification thereof to the public supplier 30 calendar days in advance.

Customers may change their electricity supplier without paying any charges.

Price caps of public tariffs (Table 39) are set annually for each specific public supplier. The revenue level for transmission services through high voltage networks and distribution services, as well as for public supply services is set for a three-year period, with annual adjustment by the following coefficients: indexation, impact of electricity volume, unpredicted changes and correlation; price caps for distribution and supply services are calculated in respect of the amount of electricity planned to be transmitted, distributed or sold during that year. Price caps of public tariffs consist of the price caps of the generation cost, the price of transmission services, as well as the price of distribution services through medium and low voltage networks and supply services. The level of public tariffs depends on

fluctuations of the generation cost. As the price of the main Lithuanian producer, which has a share of over 70% of the market, is regulated, and other producers sell the major share of their electricity as public service obligations, the NCCPE estimates the generation cost which is included in the calculation of price caps of public tariffs.

Table 39. Cap Levels of Public Tariffs of Rytų Skirstomieji Tinklai AB and VST AB, EUR/MWh

Rytų Skirstomieji Tinklai AB	**2004**	**2005**	**2006**	**2007**
High voltage (330-110 kV)	35.45	36.00	35.88	39.91
Medium voltage (35-6 kV)	48.51	54.65	54.30	58.16
Low voltage (0.4 kV)	74.49	85.15	83.79	87.29
VST AB				
High voltage (330-110 kV)	35.51	35.97	35.83	39.85
Medium voltage (35-6 kV)	48.86	58.04	57.55	61.20
Low voltage (0.4 kV)	72.06	85.32	84.29	87.75

The breakdown of all customers covered by public tariffs in 2006 is presented in Table 40.

Table 40. Share of Customers Paying According to Public Tariffs, %

Household	Industry	Other
96.5	0.1	3.4

Electricity is supplied to customers as a good. Electricity consumption is allowed only subject to a contract between a customer (including eligible customer) and a public electricity supplier, transmission or distribution network operator. The grounds for executing contracts are established in the Civil Code. Disputes are settled by mutual agreement or in court. Compliance with the mandatory requirements is stipulated in licences issued to energy companies.

The State Consumer Rights Protection Authority holds preliminary extra-judicial hearings of complaints lodged by natural persons concerning the application of unfair conditions in energy purchase-sale or service contracts.

The State Energy Inspectorate under the Ministry of Economy holds preliminary extra-judicial hearings of complaints concerning the malfunctioning and breakdowns of energy facilities, equipment and metering devices, breaches of requirements for maintenance, energy quality, accounting of energy and payment for the consumed energy, accidents, the interruption, suspension or restriction of energy supply.

The NCCPE holds preliminary extra-judicial hearings of complaints concerning acts or omissions of energy enterprises in supplying, distributing, transmitting, storing energy, refusal to grant them the right of access to networks and systems, connection, balancing of energy supply flows, as well as application of prices and tariffs.

6.2. NATURAL GAS SECTOR

Article 3(6) of Directive 2003/55/EC of the European Parliament and of the Council of 26 June 2003 concerning common rules for the internal market in natural gas (CELEX No 32003L0055) sets out the requirement to inform the Commission of the European Community of all measures adopted to fulfil public service obligations. By Letter No (30.7-63)-3-1655 of 13 March 2007 addressed to His Excellency Commissioner Andris Piebalgs, the Ministry of Economy of the Republic of Lithuania notified the Commission of the following measures adopted to fulfil public service obligations:

a) The regulation of natural gas prices for regulated customers has been established. This obligation is set pursuant to subparagraph 4 of paragraph 1 and paragraphs 3 and 5 of Article 14 of Law of the Republic of Lithuania on Natural Gas No VIII-1973 (*Valstybės žinios* No 89-2743, 2000) (hereinafter referred to as "the Law"). Subparagraph 4 of paragraph 1 of Article 14 of the Law provides that "the following prices shall be regulated in the gas sector: <…> gas prices for regulated customers". Paragraph 3 of Article 14 of the Law provides that "the NCCPE shall set natural gas price caps for regulated customers for a three-year period", and paragraph 5 of Article 14 of the Law sets out that "gas prices for regulated customers not exceeding the price caps shall be fixed every six months by the gas undertaking."

Gas undertakings supplying gas to regulated customers (household customers and other small customers) shall not exceed the gas price caps set by the NCCPE for these customers. In 2006, 20.3% of the domestic gas supply market was regulated.

The main reasons underlying the application of this measure are as follows: the internal market in natural gas has not been fully created, there is no competition in the gas supply sector in the country as gas is supplied to Lithuania from a single external source. Furthermore, Lithuania does not have a developed gas transportation infrastructure that would allow receiving gas from other sources. Moreover, gas supply undertakings purchase gas according to the quotas fixed by Gazprom AAB, thereby having market power which is lasting. In other words, two supply undertakings operate under the conditions of a natural monopoly or oligopoly with a small number of participants.

It should be emphasised that in the period from 1992 to 2001 Lithuania had more than one gas supplier. However, gas was supplied from a single source – Gazprom AAB from the Russian Federation. It should be mentioned that for some time the Baltic States were supplied with gas by two undertakings: Gazprom AAB and the Russian company Itera (the latter one supplied gas from 1999 to 2002). But later on, gas supply to Lithuania by Itera was discontinued. Back then, when two external natural gas suppliers were still in operation, Lithuania expected the gas sector to face good liberalisation and competition prospects, which later failed. The Russian Federation has tightened control over gas exports; there are no legal possibilities of access to the gas system in the Russian Federation for third countries, thus, without interconnections with other gas supply sources, the diversification of gas supply and the development of the gas market are hardly possible.

The price regulation principle is clearly defined in paragraph 3 of Article 14 of the Law on Natural Gas (effective in 2006), namely, "the NCCPE shall set natural gas price caps for regulated customers for a three-year period. The Methodology for Calculating Natural Gas Price Caps was approved by Resolution No O3-15 of the NCCPE of 12 April 2005. This methodology is made public and available to customers. This methodology provides for relevant procedures, e.g. recalculation of natural gas price caps for regulated customers every six months depending on changes in prices of gas purchased from foreign countries, and once a year – also due to corrections of transmission and distribution price caps, as well as other procedures. Thus, this obligation is clearly defined, transparent, non-discriminatory and verifiable.

b) The requirement has been set that natural gas is supplied to regulated customers by distribution undertakings. This obligation is set pursuant to paragraph 8 of Article 12 of the Law of the Republic of Lithuania on Natural Gas No VIII-1973 establishing that "a distribution undertaking shall supply gas to regulated customers."

The purpose of these public service obligations is to create conditions for the protection household customers and other small customers ensuring secure and reliable gas supply to them. This obligation is also related to the supply of services of general economic interest. With reference to *Note of DG Energy & Transport on Directives 2003/54/EC and 2003/55/EC on the Internal Market in Electricity and Natural Gas – Public Service Obligations* published by the European Commission, the obligation implemented in Lithuania complies with the provision of section 2.1.3 that this service is entrusted to private operators rather than all undertakings in the sector. Pursuant to these recommendations and Article 3 of Directive 2003/55/EC, Member States may appoint a supplier of last resort for customers connected to the gas network. It should be underlined that this public service obligation is imposed in a way that prevents any adverse effect to the development of trade or to the interests of the Community.

In 2006, there were seven undertakings holding licences granted by the NCCPE to engage in gas distribution activities in the respective territory, five of which carried out the activities of distribution to regulated customers.

Obligations to supply gas to the abovementioned distribution undertakings are permanent (as long as such undertaking is engaged in the activity specified in the licence); gas undertakings do not incur any losses as a result of the performance of obligations because all the losses related to this activity are included in the costs and regulated prices. Prices also include the undertaking's profit from this activity. Without obligation to supply gas to small customers and given gas supply quotas, customers would not be guaranteed a possibility to purchase gas.

Having regard to the mentioned arguments and taking into account the fact that the Lithuanian gas system is isolated from other EU gas systems and has no alternative gas supply sources, also that Gazprom AAB directly sells gas only to Lietuvos Dujos AB and Dujotekana UAB and sets gas supply quotas and conditions for them, while customers do not have real possibilities to choose their gas

supplier, the Ministry of Economy of the Republic of Lithuania is of the opinion that such imposition of public service obligations has no effect on domestic or international competition. It also believes that these measures are implemented in compliance with the provisions of Directive 2003/55/EC.

Apart from residents and the small-scale commercial sector with the annual gas consumption below 1 million m^3, the regulated gas supply tariffs could also be applied to certain medium-scale commercial and industrial customers with the annual consumption of over 1 million m^3 until the full opening of the gas supply market. These are the customers who have failed to use their right to become eligible customers. The number of such customers in 2006 was 76. They consumed 43.5% of the total gas amount sold to regulated customers. According to the number of customers, residents make up the majority of regulated customers, i.e. 99.1% (Table 41).

Table 41. Number of Regulated Natural Gas Customers and Consumption Levels

Regulated customers	Number of customers in 2006	Natural gas consumption in 2006, thousand m^3
Household customers	535,754	175.1
Commercial customers	4,593	111.1
Industrial customers	378	328.8

While carrying on their activities, gas undertakings must inform customers about efficient gas consumption, the services provided by the gas undertaking, conditions of the provision of services, prices of gas and services, fees and terms for connection to the systems and expected modifications to contractual conditions. Gas undertakings must notify household customers directly (in writing or by other means) at least one month prior to any intended modifications to contractual conditions or prices. Gas undertakings are prohibited from discrimination between customers or categories of customers. Any customer receiving gas is obliged to settle all payments with natural gas undertakings for natural gas and its transportation in a timely manner. In 2006, natural gas supply was interrupted to 433 customers for non-payment of bills.

7. REPORT ON THE PRICING STRUCTURE AND G VALUES

The electricity transmission service price has been applicable since 2002, following the division of the vertically integrated electricity company and the start of the functioning of the electricity market. Lithuania has one company holding the transmission system operator's licence, namely, Lietuvos Energija AB, the main company in the Lithuanian electricity sector, functioning as the owner of the electricity transmission grid (110-330 kV), system operator and market operator. It:

- maintains and develops the electricity transmission system;
- ensures a balance between electricity generation and consumption, as well as electricity transmission from Lithuanian power plants to distribution companies;
- co-ordinates the operation of the Lithuanian energy sector to ensure reliable electricity supply to consumers. Together with the neighbouring energy systems, it is engaged in electricity exports, imports and transit;
- organises trade in electricity.

The structure of the transmission system is shown in Diagram 19.

Diagram 19. Lithuanian Electricity Transmission System

The company owns 222 transformer substations and switchyards, over 6,000 km of 330 and 110 kV electric lines, Kaunas Hydro-Power Plant and Kruonis Pumped Storage Plant, the dispatch centre and the ITT centre. Kaunas HPP and Kruonis PSP ensure capacity balances and the regulation of modes.

The transmission system managed by Lietuvos Energija AB is interconnected by four 330 kV electric lines with Latvia, five lines with Belarus and three lines with Russia (Kaliningrad). One of the primary objectives of Lietuvos Energija AB is the integration of the Lithuanian energy system into the Western European electricity market as well as the development of regional co-operation. The expansion of the transmission grid is planned in the near future by interconnecting it with the Polish electricity networks. The Lithuanian-Polish interconnection project is vitally important in developing a common EU electricity market and enhancing the reliability of energy supply. The exploitation of joint capabilities of the electricity systems of the Baltic States is aimed at creating a common Baltic electricity market ensuring successful integration of the Baltic States into Western European and Scandinavian electricity markets.

The general pricing principles applicable to electricity transmission services are defined in the Law on Electricity, i.e. prices for transmission services are regulated by setting the price cap. The specific procedure for calculating price caps for these services is established in the Methodology for Setting Prices for Electricity Transmission and Distribution Services and their Price Caps. It is described in the Section on Network Tariffs in this Report. The prices for electricity transmission services are calculated according to several voltage levels: 330-110 kV (high) and 35-6 kV (medium). The prices for lower voltage transmission services are close to those charged for the services provided by the twice higher voltage grid. However, the transmission system has only several medium voltage electric lines, which do not have particular importance to the system.

The transmission service price consists of the following components:

1. price for the transmission system operator's service;
2. price for additional (capacity reserve) services;
3. price for public service obligations (currently not applicable and equal to zero).

The average transmission service price is differentiated into capacity and energy components according to voltage levels. The average price for additional services is differentiated only on the basis of capacity component.

Transmission service prices (excluding VAT) effective from 2007 by types of services provided to distribution networks and customers receiving electricity from the transmission grid are given in Table 42.

Table 42. Components of Transmission Service Prices

No	Tariff (1 EUR = 3.4528 LTL)	Tariff, excluding VAT	
		when the ownership boundary is between 330-110 kV voltage equipment	when the ownership boundary is between 35-6 kV voltage equipment
1.	Differentiated two-component prices charged by the transmission system operator:		
1.1.	capacity component	LTL 6.06/kW per month	LTL 11.04/kW per month
1.2.	energy component	LTC 1.25/kWh	LTC 1.27/kWh
2.	Differentiated price for the capacity reserve service – capacity component	LTL 6.40/kW per month	LTL 6.40/kW per month

When paying for transmission services, distribution network operators and customers whose equipment is connected to the transmission grid make the following payments:

- A differentiated price of the transmission system operator's service in LTC/kWh for the actual amount of electricity transmitted to them from the transmission grid and in LTL/kW per month for the maximum actual hourly demanded capacity per month (including electricity generated with own resources and received from producers, except for those using renewable and waste energy sources);
- A differentiated price of the capacity reserve service in LTL/kW per month for the maximum actual hourly demanded capacity per month (including electricity generated with own resources and received from producers, except for those using renewable and waste energy sources);
- A set price of public service obligations in LTC/kWh for the actual amount of electricity transmitted to them.

Public suppliers selling electricity to customers whose equipment is connected to the transmission grid apply public tariffs less the prices charged for electricity transmission and capacity reserve services.

It is evident that producers are not charged the transmission service price or a part thereof, i.e. G component is equal to zero. Furthermore, no charges are applied on the basis of the location of producers or customers.

The equipment of new customers and producers is connected to the grid in accordance with the Rules for the Connection of Energy Facilities (Networks, Equipment, Systems) of Electricity Customers and Producers to the Existing Facilities (Networks, Equipment, Systems) of Energy Companies approved by the order of the Minister of Economy.

Pursuant to the Law on Energy and the Law on Electricity, the NCCPE approves connection fees (see Table 43).

Table 43. Effective Fees for the Connection of Customer Equipment to the Grid, Excluding VAT

Tariffs	Measurement unit	One-phase branch line	Three-phase branch line
1.1. Monomial tariff for allowed capacity	LTL/kW	108.0	142.8
1.2. Binomial tariff for: - allowed capacity - taxable distance	 LTL/kW LTL/m	 108.0 14.8	 142.8 19.2

These fees are set at the rates so as to cover 40% of the operators' costs needed to provide the services specified in the aforementioned Rules, except where:

1) a customer wishes to enhance the reliability of electricity supply;

2) the price for the service provided by the operator as calculated in accordance with the approved fees for the connection of customer equipment to the grid is more than 2.5 times lower than the estimated amount for this service;

3) a customer wishes to replace the one-phase branch line with the three-phase one, without changing the allowed capacity;

4) a customer, as a result of the transfer of part of its immovable property to another person (new customer), waives its allowed capacity or a part thereof, while the new customer's electrical equipment, the allowed capacity whereof equals to the waived one, is connected at the same grid address as the equipment of the customer that has waived its allowed capacity;

5) the allowed capacity of the customer's electrical equipment that is newly connected is above 1000 kW;

6) the customer's electrical equipment is connected to the 35 kV voltage grid and the ownership boundary is at the side of 35 kV voltage;

7) the connection of electrical equipment to the grid is requested for one-off events, construction period or other short-term purposes, except for the cases when the electricity grids constructed and installed for construction needs will be used for continuous electricity supply, as well as the connection of electrical equipment in temporary constructions is requested;

8) a customer, producer or other persons wish to move or reconstruct the energy facilities (electricity networks and equipment) owned by the operator, when these facilities impede the construction of buildings or for other reasons;

9) customer equipment is connected to the transmission grid in the cases prescribed by the Law of the Republic of Lithuania on Electricity;

10) the price for the connection of electrical facilities of producers to the grid is equal to the estimated project amount. Producers using renewable and waste energy sources for electricity

generation pay for the connection of their equipment in accordance with the Procedure for Promoting the Generation and Purchase of Electricity Generated from Renewable and Waste Energy Sources;

11) this service is free of charge in the event of a customer reducing the allowed capacity of its electrical equipment.

The following procedure for applying fees for the connection of customer equipment to the grid has been established by the resolution of the NCCPE:

1) monomial tariff (for allowed capacity) is charged, where $L \leq Lv$ or $k \leq x\ L$.

2) binomial tariff (for allowed capacity and distance) is charged, where $L > Lv$ and $k > x\ L$.

where:

$k = L / P$;

P – newly connected (additional) allowed capacity of the customer (kW);

Lv and xL – electricity network development estimation values;

L – shortest geometrical distance from the customer's metering cabinet (boundary of the ownership of the electricity network) to the calculated connection point (m).

The following network development estimation values have been set:

Lv = 38 m, x L = 4.49 m/kW.

Based on the allowed capacity, the connection point is determined in accordance with the conditions specified in Table 44.

Table 44. Determination of the Connection Point

Customer's additional allowed capacity P, kW	Connection point for the requested branch line (L) is determined as follows:
$P \leq 10$	a) the nearest point in the 0.22 – 10 kV voltage electricity grid; b) when installing a new three-phase branch line, the nearest point in the 0.38 – 10 kV three-phase voltage electricity grid.
$10 < P \leq 500$	the nearest point in the 10 kV voltage electricity grid. In cases where the allowed capacity may be connected to the 0.38 kV voltage electricity grid without any reconstruction, the nearest point in the 0.38 kV voltage electricity grid.
$500 < P < 1000$	the nearest 110 kV transformer substations or 10 kV buses of the 10 kV distribution point.
$P \geq 1000$	in accordance with technical conditions.

Connection fees are calculated according to the following formulas:

- monomial when a one-phase branch line is installed M = 108,0 x P (Lt);
- monomial when a three-phase branch line is installed M = 142,8 x P (Lt);
- binomial when a one-phase branch line is installed M = 108,0 x P +14,8 (L – 4,49xP) (Lt);
- binomial when a three-phase branch line is installed M = 142,8 x P + 19,2 (L – 4,49xP) (Lt).

Fees for the connection of customer equipment to the grid and the procedure for their application are applied to customers of all electricity network operators, who conclude contracts for the connection of their equipment to the grid after 1 January 2003.

Connection does not entail any additional charges. However, privileges are granted to producers using renewable energy sources pursuant to the Procedure for Promoting the Generation and Purchase of Electricity Generated from Renewable Energy Sources. When paying for the services of the transmission system operator, such producers are not charged the capacity component of the transmission service and the price for the capacity reserve service.

ANNEX 3.2.1b

Correlation of Hourly Prices of Daily Basic Load in 2006

	AUT	CZE	DNK	ESP	FIN	FRA	GER	ITA	LITHU	NL	NOR	POL	ROM	SWE
AUT	1.00	0.68	0.52	0.50	0.21	0.91	0.87	0.74	**-0.14**	0.83	0.07	0.35	0.23	0.15
CZE	0.68	1.00	0.40	0.23	0.23	0.57	0.60	0.53	**0.05**	0.57	0.20	0.42	0.27	0.23
DNK	0.52	0.40	1.00	0.29	0.71	0.37	0.44	0.49	**0.29**	0.40	0.64	0.45	0.14	0.73
ESP	0.50	0.23	0.29	1.00	0.12	0.53	0.42	0.30	**-0.19**	0.39	-0.07	0.16	-0.18	0.01
FIN	0.21	0.23	0.71	0.12	1.00	0.08	0.17	0.25	**0.58**	0.11	0.89	0.30	0.09	0.95
FRA	0.91	0.57	0.37	0.53	0.08	1.00	0.80	0.66	**-0.27**	0.81	-0.09	0.25	0.15	0.00
GER	0.87	0.60	0.44	0.42	0.17	0.80	1.00	0.60	**-0.14**	0.74	0.06	0.30	0.19	0.13
ITA	0.74	0.53	0.49	0.30	0.25	0.66	0.60	1.00	**0.02**	0.59	0.13	0.41	0.43	0.22
LITHU	**-0.14**	**0.05**	**0.29**	**-0.19**	**0.58**	**-0.27**	**-0.14**	**0.02**	**1.00**	**-0.24**	**0.71**	**-0.02**	**0.25**	**0.67**
NL	0.83	0.57	0.40	0.39	0.11	0.81	0.74	0.59	**-0.24**	1.00	-0.01	0.29	0.10	0.06
NOR	0.07	0.20	0.64	-0.07	0.89	-0.09	0.06	0.13	**0.71**	-0.01	1.00	0.27	0.12	0.97
POL	0.35	0.42	0.45	0.16	0.30	0.25	0.30	0.41	**-0.02**	0.29	0.27	1.00	0.14	0.30
ROM	0.23	0.27	0.14	-0.18	0.09	0.15	0.19	0.43	**0.25**	0.10	0.12	0.14	1.00	0.12
SWE	0.15	0.23	0.73	0.01	0.95	0.00	0.13	0.22	**0.67**	0.06	0.97	0.30	0.12	1.00

Comments:

- Denmark: average according to eastern and western regions.
- Norway: average according to three regions.