

2007 Annual Report of the Public Utilities Commission of the Republic of Latvia on the National Energy Sector, Prepared for the European Commission

1. Foreword

Reviewing publicly discussed topics of year 2007 we may conclude that the Public Utilities Commission (hereafter – Commission) has been at the very centre of almost every issue – from complications in the operations of Latvijas Pasts (Latvian Post) to the recurrent rise in prices on energy resources. This once again shows the important role of the Commission in the socio-economic processes of the country.

Due to the situation in the world market of energy resources the Commission considered a new proposal for natural gas tariffs that was followed by a review of several cogeneration tariffs. The full electricity market opening in Latvia was achieved in July 2007 – the first users have already changed their supplier. The Commission was actively involved in defining the documents and procedures to set up preconditions for the market.

The Commission also participated in drafting of the concept for unified universal service model in public utilities sectors.

At the end of the year the Commission agreed to take over from year 2008 regulation of such municipally regulated sectors as Riga water supply and sewage services.

Valentīna Andrējeva
Chairwoman, Public Utilities Commission

2. Summary: Major developments over the last year

2.1. The basic organisational structure and competences of the regulatory agency

According to the Law “On Regulators of Public Utilities” the Public Utilities Commission regulates energy (electricity, gas, and heat if it is produced in a combined heat and power plant), electronic communications, postal services and the railway sector at the national level. Local government regulators oversee waste management (except for waste recycling), water supplies, sewerage services, delivery of heat, and production of heat in boiler houses. From January 2008 Riga municipality delegated the Commission to take over the regulation of the heat and waste sectors in the Riga City.

The Commission and the local government regulators, according to the law, are independent in their decision making, and they are not subject to the decisions of the national government, local governments or other state institutions. The regulators’ decisions may be declared unlawful and repealed only by the courts. The Commission does not supervise local government regulators, and it does not have the right to influence their work.

Development and harmonisation of amendments to the Law “On Regulators of Public Utilities” was taking place during 2007.

In accordance with the law “On Regulators of Public Utilities”, the goal of regulation is to make it possible for people to receive continuous, safe and high-quality public services with tariffs (prices) which correspond to economically

reasonable costs. -The regulatory system is also meant to promote development, along with economically justified competition in the regulated sectors.

The Commission performs the following functions:

- It protects consumer interests and promotes the development of public service providers;
- It promotes competition;
- It issues licenses, registers authorisations, and supervises adherence to their requirements;
- It supervises the compliance of services to various requirements related to quality, environmental protection, technical regulations and standards;
- It defines tariff calculation methodologies;
- It approves service tariffs;
- It offers public information about its activities and the operations of public service providers;
- It performs extra-judicial dispute settlement.

The decision-making institution of the Commission is its board, which consists of five commissioners. The board takes decisions on behalf of the Commission and approves administrative acts which are binding for specific public service providers and users. The executive institution operates under the oversight of the Commission's chairperson, and it serves both as a secretariat and as the provider of expert services. The executive institution prepares issues and documents for board meetings, enacts approved decisions, and oversees the implementation of those decisions.

Parliament appoints the chairperson of the Commission on the basis of a recommendation from the Cabinet of Ministers. The chairperson of the Commission is also the chair of its board. Similarly, Parliament approves four board members, each with a term in office of five years.

The executive institution has a separate department for each regulated sector. It also has a Legal Department, an Economic Analysis Department and several independent divisions.

2.2. Main developments in the gas and electricity markets

Since 1 July 2004 all electricity users, except households, have the opportunity to choose alternative suppliers of electricity. From 1 July 2007 all users including households can choose alternative suppliers of electricity.

In 2007 the first independent trader started its operations and therefore some of the consumers switched from the previous supplier JSC "Latvenergo" to new supplier. The Commission's report on the fulfilling the requirements of the independence of electricity transmission system operator (hereafter – TSO) JSC "Augstsprieguma tīkls" were approved, thus confirming that TSO ensures an equal access to the electricity system network and there isn't a feedback from the TSO's side for the effective operation of competitive electricity market.

The JSC „Augstsprieguma tīkls” as TSO concluded an agreement on participation in the association's of European Transmission System Operators (ETSO) electricity transit flow compensation mechanism for the years 2008 – 2009 thereby going closer to the integration into the European electricity market.

On 21 February 2007 the Commission issued a licence for a distribution system operator JSC "Sadales tīkls" which started operation on 1 July 2007 by taking over all the functions of DSO from JSC "Latvenergo".

2.3. Major issues dealt with by the regulator

Licensing and license supervision

According to Regulation No. 297 of the Cabinet of Ministers, the Commission regulates the generation of electricity and heat by combined heat and power plants with a maximum capacity above one MW, as well as the generation of electricity at power plants with a capacity above one MW (including hydropower plants, wind power stations and combustion power stations). The Commission regulates the transmission of electricity if the voltage is at least at a level of 110 kV, the distribution of electricity if the voltage is between 1 and 110 kV, and the sale of electricity to consumers if the annual volume of sold electricity exceeds 4,000 MWh.

As of 31 December 2007 a total of 69 licenses had been issued and are valid in the electricity supply sector. Of those, 21 were for electricity and heat generation in CHP plants, 16 were for wind power generators, 2 were for hydropower plants, 2 for generation of electricity by biogas and steam turbine, 1 was for electricity transmission, 10 were for electricity distribution, and 17 were for electricity sales. This shows that licenses are issued in all electricity sub-sectors, and this indicates that the market is opening up for new competitive opportunities.

The Commission also regulates the storage, transmission, distribution and sale of natural gas and liquefied gas (propane/butane mix), excluding gaseous hydrocarbons which are used as a fuel.

In the natural gas supply sector, the joint stock company “Latvijas Gāze” has licenses for the storage, transmission, distribution and sale of natural gas.

As of 31 December 2007 11 licenses had been issued and are valid in the liquefied gas distribution sector.

Also in 2007 23 objects which belong to energy supply companies were inspected to investigate their operations and their compliance with license requirements. The companies were inspected on schedule, as were companies which had filed applications for the alteration of license requirements, for the issuance of a license, or for approval of tariffs. Inspections were also conducted at facilities about which complaints had been received.

Tariff regulation

Electricity

The Commission approves tariffs for companies which generate electricity in co-generation plants, tariffs for the transmission and distribution of electricity, as well as tariffs for the sale of electricity to captive users. Tariffs for the transmission and distribution of electricity are specified so that when a free market participant concludes a bilateral agreement on the delivery of electricity and pays for transmission and distribution system services, the rules for accessing the transmission and distribution system are clearly understood.

On 10 April 2008 the amendments to the Electricity market law stated that all the households and commercial electricity consumers with less than 50 employees and yearly turnover less than 7 million LVL have the rights to use the universal service of electricity – the Commission’s accepted electricity tariff for captive consumers. The other consumers are obliged to buy electricity from traders at an agreed price.

The captive user tariffs are defined for those who have not taken advantage of the opportunity that is guaranteed by law — the right to choose the supplier of electricity freely. These users pay for electricity in accordance with tariffs that are

defined by the Commission and tariffs differ from one user group to another, depending on the voltage level, the demanded amount of electricity, and time zones. The captive user tariffs cover the cost of generating and importing electricity, including generation from renewable energy resources. The tariffs also cover the cost of electricity transmission, distribution, and retail.

The cost of imported electricity is based on agreements between Latvenergo and suppliers of electricity from Russia, Lithuania and Estonia. The Commission defines the tariff for generating electricity at co-generation stations with a capacity of more than 4 MW. For co-generation stations with capacity of less than 4 MW and for power plants which use renewable energy resources, the purchase price for electricity is specified by law.

In the year 2007 the Commission accepted new electricity tariff calculation methodologies for transmission system services, distribution system services and sales for captive consumers.

From 1 August 2007 new transmission system service tariffs are in force, at the end of the year Commission approved tariffs for distribution system services for JSC "Sadales tīkls".

In 2007 new electricity generation tariffs were approved also for several CHP plants as well as for small network distribution services and sales.

According to Eurostat data, Latvia together with Estonia, Lithuania and Bulgaria had one of the lowest electricity tariffs in 2007 among all European Union member states for households and commercial users.

Natural gas

Sales tariffs of natural gas for end-users are made up of the purchase price of natural gas on the border of the country and of tariffs related to services which are associated with the delivery of natural gas to users – transmission, storage, differentiated distribution and sales tariffs.

On January 9, 2007 the JSC "Latvijas Gāze" submitted to the Commission the natural gas tariff proposal for 2007 which was evaluated and approved by the Commission in March 2007 and came into force from 1 May 2007. During the second half of 2007 existing tariff calculation methodologies were improved, introducing separated tariffs for storage services and trade tariffs.

Regulation of all consumer tariffs continues to be justified because of the lack of competition and alternative supplier in the natural gas supply sector. This process ensures greater tariff stability, as well as the balancing out of the interests of the supplier and users. According to Eurostat data in 2007, Latvia had the third lowest natural gas tariffs both for households and commercial users among the EU member states. This proves that it is possible to regulate a monopoly successfully on the basis of an effective cost-based tariff setting methodology. Ensuring cost-reflective network service tariffs and final tariffs has led to the situation where two thirds of the final price corresponds to the price of gas on the border and one third of the final price reflects the cost of network services. The low tariffs, however, have not prevented the natural gas supplier from developing successfully over the years of operation. It has increased operational efficiency; turnover, expanded its networks, multiplied volume of investments, and achieved ever-increasing profits.

Protection of consumer interests

In 2007 the Commission assessed 57 complaints and applications from public service users in the energy sector. The number of complaints has decreased,

particularly in the electricity and heat sectors. In the gas supply sector, the number of complaints remained at the same level in comparison to the previous year. Individuals submitted 84% of all complaints.

Complaints which were received by the Commission referred to many different subjects. In the electricity supply sector most had to do with electricity supplies (37%), metering and payments (28%), and the quality of the supplied electricity (12%). In the gas supply sector, complaints usually concern maintenance of the natural gas supply system (20%), natural gas metering and payments (30%), and issues related to liquefied gas (40%).

3. Regulation and performance in the electricity market

3.1. Regulatory issues (Article 23(1), except sub-section “h”)

3.1.1. General

The state-owned company Latvenergo dominates the field of electricity supplies in Latvia, controlling more than 90% of installed capacity for the generation of electricity in Latvia. The company offers services related to the import/export, distribution and delivery of electricity to consumers. From 1 September 2005 the electricity transmission is carried out by JSC “Augstsprieguma tīkls”, the independent transmission system operator. From 1 July 2007 the electricity distribution is carried out by JSC “Sadales tīkls”, the independent distribution system operator.

There are some 150 small hydropower plants with total installed capacity 25 MW (1% of the total). Furthermore, 14 wind power stations with the total capacity of 25.2 MW (1% of the total) and 40 combined heat and power (CHP) plants with a total capacity of 140 MW are present in the market.

Latvia imports electricity for most of the year, but during flooding in the spring, it also exports it. The total amount of imports amounts to some 30% - 40% of all consumption, and it depends each year on the amount of water in the river Daugava.

In addition to Latvenergo, there are 17 licensed companies which offer electricity distribution and sales.

Since 1 July 2004 all electricity users except households have been allowed to choose alternative electricity suppliers. Several companies which do not own distribution networks have been licensed to sell electricity, but there have been no actual sales so far. The electricity market became 100% open by 1 July 2007 when all customers became eligible to choose alternative supplier of electricity.

In 2007, the interconnection ESTLINK between Estonian and Finnish transmission systems operated and export/import operations took place – Nord Pool Spot gives reference price signals.

3.1.2. Management and allocation of interconnection capacity and mechanisms to deal with congestion

At this time there is no real evidence to show that there is congestion in and between the Baltic States, as cross-border interconnection capacities are large. Latvia has cross-border lines with Estonia (two 330 kV and two 110 kV lines) and Lithuania (four 330 kV and three 110 kV lines). Latvia also has cross-border connections with countries that are not in the EU – Russia (one 330 kV line) and Belarus (one 110 kV line).

3.1.3. Regulating the tasks of transmission and distribution companies

Latvia has one transmission system operator, JSC “Augstsprieguma tīkls”. The operator rents the fixed assets of the transmission system from JSC “Latvenergo” and is a part of a holding company. Latvenergo also owns the biggest distribution system operator, JSC “Sadales tīkls”. There are, in addition, eight local distribution companies.

On 16 January 2008 the Commission accepted the Grid Code that includes procedures for the system management and utilisation, the activities of market participants, except end users. In accordance with the Grid Code, the system operators shall perform calculations of balancing openly and without discrimination with respect to all recipients of a balancing service. The users and producers, who are market participants and distribution system operators, have the duty to pay for the balancing service the scope of which is determined on the basis of the data of the transmission and distribution operators. The transmission system operator shall ensure the compliance with the procedures specified in the Grid Code. The Commission may assign the transmission system operator to elaborate amendments to the Grid Code and determine a time period for the elaboration and submission thereof to the Commission.

Network tariffs

Methodologies for the calculation of transmission and distribution system service tariffs have been developed in accordance with the Electricity market law, the law on the regulators of public utilities, regulations related to the supply and trade of electricity, as well as other legal acts which are in force in Latvia. These are applied when tariffs are set. The main principles behind these methodologies are the following:

- The regulated enterprise must clearly and unambiguously reflect the cost of each regulated service, including only those assets and activities which are related to the regulated services. The regulated enterprise must apply the cost allocation model after its basic principles and specifications have been approved by the regulator. The cost allocation model must be comprehensive.
- The regulatory asset base and the rate of return on capital must be used in determining capital costs. The rate of return on capital is the weighted average return rate from the rate of return that applies to equity and long-term interest rates on borrowed capital, as defined by the regulator. The rate of return on capital is calculated in terms of the specific relationship between equity and borrowed capital. The rate is set so as not to affect the enterprise’s choice between the use of equity and borrowed capital. At the request of an enterprise, the regulator can set the rate of return on capital before tariff proposals are submitted.
- In accordance with the law on the regulators of public utilities, tariffs must correspond to economically justified costs. When setting the tariff, the regulator must perform analysis and assessment of costs and profits.

According to existing procedure, companies submit reasonably justified tariff proposals. The Commission must approve or reject the proposal within 120 days. The Commission’s decisions can only be challenged in court.

Estimated national network charges for the typical consumer (average)

Type	Consumption	Average network charges EUR/kWh
Dc	3500 kWh	0.046
Ib	50MWh	0.023 – 0.0157
Ig	24GWh	0.0026 – 0.0040

1. Dc: Household, 3500kWh a year, connected to 0.4 kV lines:

$3500 \times 0.03278 = 114.73\text{LVL} = 163 \text{ EUR}$ or 0.046 EUR/kWh

2. Ib: Commercial customer, 50 MWh a year, permitted load 50 kW

a) connection to 6-20 kV lines

$50\,000 \times 0.01351 = 675 \text{ LVL} = 960 \text{ EUR}$

Fee for permitted load = $50 \times 3.00 = 150 \text{ LVL} = 213 \text{ EUR}$

Total price = 1173 EUR or 0.023 EUR/kWh

b) connection to 6-20 kV busbars

$50\,000 \times 0.00862 = 431 \text{ LVL} = 613 \text{ EUR}$

Fee for permitted load $50 \times 2.40 = 120 \text{ LVL} = 171 \text{ EUR}$

Total price = 784 EUR or 0.01568 EUR/kWh

The difference between 6-20kV busbars and lines: $0.023 - 0.01568 = 0.0073 \text{ EUR/kWh}$

3. Ig: Industrial customer, 24 GWh a year, permitted load 4000 kW

a) connection point 110 kV lines

$24\,000\,000 \times 0.00144 = 34\,560 \text{ LVL} = 49\,175 \text{ EUR}$

Fee for maintenance and development of transmission system:

$4000 \times 4.087 = 16\,348 \text{ LVL} = 23\,261 \text{ EUR}$

Total price = 63 347 EUR or 0.0026 EUR/kWh

b) connection point low voltage side of 110/6-20 kV transformer

$24\,000\,000 \times 0.00190 = 45\,600 \text{ LVL} = 64\,883 \text{ EUR}$

Fee for maintenance and development of transmission system $4000 \times 5.362 = 21\,448 \text{ LVL} = 30\,518 \text{ EUR}$

Total price = 95 401 EUR or 0.0040 EUR/kWh

The difference between 110/6-20kV transformer low voltage side and 110kV lines: $0.0040 - 0.0026 = 0.0014 \text{ EUR/kWh}$

All calculations are done without VAT 18%

The quality of services

Regulation of Cabinet of Ministers has been accepted in July 2007 on the sales and use of electricity. These regulations envisage the right of the regulator to define quality requirements. for system operators and set the most important indicators for the quality of supply. The Commission accepted the regulations on distribution service quality requirements. These regulations oblige DSO to apply decreased tariffs for customers facing low voltage quality. Distribution system operators also have to collect the number of quality indicators and to inform Commission about their performance.

During the course of 2007, the quality of electricity was improved for the substantial amount of end users, and the average amount of time needed to repair

problems in the distribution network for the end users was 4,2 h. There were 56924 interruptions in the distribution network for the end users. There were 24 interruptions in the transmission network with an average duration of 2.25 hours.

Balancing

Latvian law on the electricity market proposes that the TSO is responsible for power balance in the system, as well as for the provision of balancing services on the transmission level. TSO has developed balancing and settlement procedures and put them down in the Grid Code. The Electricity Market Act sets out guidelines in terms of how the balancing arrangements among consumers, producers and system operators should be provided. Customers and producers that are market participants, along with distribution networks, will have to conclude balancing services agreements with the system operators to the network of which they are connected.

The TSO is responsible for the operational reliability of the power system. TSO should ensure that demand equals supply in the system on a second-by-second basis. For this purpose, the TSO has an open supply agreement and maintains operating reserves. Furthermore, those few customers, larger electricity producers and distribution networks which are directly connected to the transmission grid obtain balancing services directly from the TSO after concluding the relevant agreement. The concept of a balancing group has also been introduced. The idea is that customers have the right to delegate a supplier in terms of settling imbalances with the system operator. In that case, the supplier concludes a balancing service agreement with the system operator, and it may carry out the netting of imbalances among customers and producers.

The balancing model at the distribution level does not differ from one at the transmission level. Customers and producers directly connected to the distribution grid must buy the balancing service from the respective DSO, or they may delegate this task to their supplier. The tariffs for the captive customers include the balance energy costs.

According to the Electricity Market Act, administration of imbalance settlements is the responsibility of system operators. Balance settlement is based on hourly energies that are obtained from hourly energy measurements (no load-profile-based metering system has been planned at this time).

TSO published balance energy purchase and selling prices, prices differ every hour round-the-clock. For wind power plants (independently from installed capacity) and other power plants with installed capacity 15MW and higher the balancing energy prices are calculated in accordance with formula.

3.1.4. Effective unbundling

There are nine DSOs in Latvia – eight comparatively small operators with fewer than 100,000 customers. The dominant DSO company is JSC “Sadales tīkls”, wholly owned by Latvenergo which launched operations as a separate entity on July 1, 2007. There is a single TSO – “Augstsprieguma tīkls”, which is wholly owned by Latvenergo and launched operations as a separate entity on September 1, 2005. The TSO and DSOs are located apart from production and supply affiliates. The TSO and DSO rents the network assets from Latvenergo.

Latvian law on the electricity market obliges TSOs and DSOs to publish separate balance sheets. When it comes to the setting of rules on the compilation of unbundled accounts, the regulator has approved cost allocation methodologies and has

implemented its right to commission a compliance audit, one that is conducted by an independent auditor.

At the end of 2007, Latvenergo had 1250 employees, 60 – by the trading unit, and 602 – by work units related to the generation of electricity, 224 – transport and communications services, 364 – supporting functions. The independent TSO had 592 employees, independent DSO - 3280. The percentage of shared services in the TSO's cost structure in 2007 was 7%.

In 2005, the Commission approved regulations on the minimum requirements of ensuring the independence of an electricity system operator. These regulations define the maximum requirements that can be presented in national law so as to ensure the greatest possible independence for system operators, along with successful market functioning.

The legislator has envisaged sanctions which the Commission can apply to companies which fail to comply with management, account unbundling or other requirements. The Latvian Administrative Code allows the Public Utilities Commission to punish service providers in the sector when the following administrative offences are committed:

- Failure to deliver information to the regulator or the delivery of false information;
- Failure to comply with the legal decisions taken by the regulator;
- Providing services without a license or breaching its provisions.

3.2. Competition issues [Article 23(8) and 23(1)(h)]

3.2.1. Description of the wholesale market

Since July 1, 2004, all electricity users except for households have had the option to choose alternative electricity suppliers. Several companies were given licenses only for the sale of electricity and two of them operate as intermediaries in the delivery of electricity to consumers. In a year 2007 first three consumers changed their supplier – from JCS “Latvenergo” to independent trader.

The low activity of eligible users can be explained by concentrated generation and the difficulty of finding a better energy price abroad than Latvenergo can find. Electricity generation in Latvia is almost entirely related to Latvenergo (producing approximately 60% of total consumption), and independent electricity generators tend, individually, to be much too small to offer major volumes of energy for large potential users. When it comes to the import of alternative energy, potential intermediaries and eligible users face energy export restrictions that are defined in some countries. There are also specific balancing conditions, and foreign operators are often unwilling to become involved in low-volume deals.

In 2007, the total annual consumption, including losses, was 7,740 GWh and the amount of installed available generation capacity was 2,692 MW. Latvia produced 4,532 MWh of electricity, imported 4,963 MWh from the neighbouring countries Lithuania, Estonia, Russia, and Belarus. Peak load in 2007 was 1,365 MW.

Only one company has more than 5% share of installed available capacity – the largest producer, Latvenergo, produces about 90% of the total generation volume.

The share of the three biggest generators covers approximately 94% of electricity production in Latvia.

Mainly electricity was sold at regulated prices and in line with approved tariffs, several consumers agreed on prices with an independent trader.

Latvia has connection lines to two neighbouring member states – Estonia and Lithuania. A submarine cable between Tallinn and Helsinki is in operation.

Latvenergo cooperates with energy companies in Lithuania, Estonia and Finland in pursuit of this interconnection.

There were no acquisitions or mergers in the electricity industry in Latvia in 2007.

3.2.2. Description of the retail market

In 2007, electricity supply companies supplied the required volume of energy, selling 6606 GWh of electricity to consumers – 6,4% more than in 2006. One-quarter of this electricity was used by local residents for household needs, and the remainder went to commercial consumers. The number of consumers has not changed significantly. Most consume a comparatively small volume of electricity. In 2007, only 108 consumers used more than five million kWh of electricity each. Of the total number of customers, 585 used more than one million kWh.

There were 995 thousand household and 92 thousand commercial consumers. The distribution of consumers among groups in 2007 was as follows:

- Industry – 1.7 TWh, or 26%;
- Transport – 0.14 TWh, or 2.2%;
- Households – 1.8 TWh, or 27%;
- Agriculture – 0.14 TWh or 2%;
- Building&construction – 0.1 TWh or 1.7%
- Other – 2.7 TWh, or 41%.

According to Eurostat Latvia had one of the lowest electricity tariffs for households and commercial users among all European Union member states in 2007. It must be stressed that the existing level of end tariffs is not an obstacle against further development in the energy supply sector. The energy companies are financially stable, they operate at a profit, and they have been making extensive investments in networks and generation capacities.

Type	Consumption	Energy price and supply margin EUR/kWh	Network charges EUR/kWh	Mandatory purchase component EUR/kWh	VAT 18%	Final price EUR/kWh
Dc	3,500 kWh	0.0212	0.04	0.0078	0.013	0.082
Ib	50MWh	0.0312	0.02	0.0078	0.011	0.07
Ig	24GWh	0.0272	0.003	0.0078	0.006	0.044

4. Regulation and performance in the natural gas market

4.1. Regulatory issues [Article 25(1)]

4.1.1. General

Natural gas supply to Latvia is highly dependent on external suppliers – Gazprom and Itera-Latvija. These supply gas along networks which belong to the former of those two companies. Alternative gas supplies would become possible if the Russian gas market were to be liberalised, if connections to other EU countries and Norway were to be ensured, or the LNG storage and regasification plant were to be built. All of this would require significant, not to say enormous investments, and these would not be cost-effective at the present level of total annual consumption of

natural gas. So, real competition in the natural gas market can not be expected anytime soon.

Because there is a lack of competition in the natural gas supply sector, regulation of all consumer tariffs will continue to be justified for the foreseeable future. The regulatory process ensures greater tariff stability, balancing out the interests of the supplier and those of users. According to Eurostat, Latvia had the third lowest household and commercial users' natural gas tariffs among all EU member states in 2007. This has not been a problem for the natural gas supplier, however, in terms of successful developments over recent years. Operational efficiency has been enhanced, turnover has been on the rise, networks have been expanded, investment volumes have been increased, and ever-increasing profits have been achieved.

4.1.2. Management and allocation of interconnection capacity, mechanisms to deal with congestion

Latvia's natural gas transmission system was developed some 40 years ago, and the following principles were the cornerstone for the process:

1) Natural gas is supplied to Latvia along a Latvian-Russian pipeline only during the warm period of the year (April-September), and it is accumulated in an underground gas storage facility;

2) During the colder part of the year, gas from the underground facility is delivered to Latvian consumers, as well as transmitted to Estonia and back to Russia;

3) There is also a connection to Lithuania, but it is only used as an emergency backup system for the supply of a limited Lithuanian region;

4) The transmission system was designed for annual consumption of up to 4 billion cubic metres in Latvia – more than two times more than current consumption.

The natural gas transmission system is operated by the vertically integrated company Latvijas Gāze. It transmits natural gas on the basis of orders from the owners of natural gas (Gazprom and Itera-Latvija). During the winter, about 1 bcm of natural gas is transmitted to Russia and Estonia.

4.1.3. Regulating the tasks of transmission and distribution companies

These are the general regulations and basic principles in support of tariff calculation methodologies:

- The methodologies have been developed in conformity with the law on energy, the law on the regulators of public utilities, regulations related to the supply and use of gas, as well as other legal acts which are in force in the Republic of Latvia. The methodologies are applied when determining transmission and distribution service tariffs.

- The regulated enterprise must clearly and unambiguously reflect the cost of each regulated service, including only those assets and activities which are related to the regulated services. The regulated enterprise must apply the cost allocation model after its basic principles and specifications have been approved by the regulator. The cost allocation model must be comprehensive.
- The regulatory asset base and the rate of return on capital must be used in determining capital costs. The rate of return on capital is the weighted average return rate from the rate of return that applies to equity and long-term interest rates on borrowed capital, as defined by the regulator. The rate of return on capital is calculated in terms of the specific relationship between equity and borrowed capital. The rate is set so as not to affect the enterprise's choice between the use of equity and borrowed capital. At the request of an

enterprise, the regulator can set the rate of return on capital before tariff proposals are submitted.

- In accordance with the law on the regulators of public utilities, tariffs must correspond to economically justified costs. When setting the base tariff, the regulator must perform analysis and assessment of costs and profits.
- When transmission tariffs are determined, the relationship between the total transmitted volume and the volume transmitted for supply of Latvian consumers is taken into account.

The distribution tariff is differentiated on the basis of the customer's annual consumption.

Tariffs for typical customers (2007 average)

		EUR/GJ	EUR/GJ
Type	Consumption	Transm	Distr
I4-1*	418.6 TJ	0.46	1.61
I1	418.6 GJ	0.46	2.46
D3	83.7 GJ	0.46	2.46

* Load factor is not implemented because the transmission and distribution systems are underused.

Balancing

The TSO currently conducts balancing on the basis of the consumption rate. Industrial consumers are required to observe tolerance thresholds for over- and under-consumption (+/-10% on a daily basis), taking into account rules that are set out in gas supply contracts.

4.1.4. Effective unbundling

The current regulatory requirement is that all regulated activities must involve unbundled accounts. The Commission has implemented these requirements in regulations related to the independence of system operators. The regulator approves the cost allocation methodology that is proposed by the company, and it has the right to request an independent compliance audit. All system operators share only administrative costs. The offices of the TSO and the DSO are located separately.

4.2. Competition issues [Article 25(1)(h)]

4.2.1. Description of the wholesale market

Latvian consumers consume approximately 1,67 billion cubic metres of natural gas a year, and 100% of that gas is imported by Latvijas Gāze from Russia – that is a forced situation. All import operations are handled by Latvijas Gāze on the basis of a supply agreement among it, Gazprom and Itera-Latvija. There is no wholesale market for natural gas in Latvia.

Since Latvia joined the EU, it was given the right to postpone implementation of EU Directive 2003/55 until 2010 because the exclusive rights of the gas supplier, Latvijas Gāze, and its owners, Gazprom and Itera-Latvia, are compulsory.

4.2.2. Description of the retail market

The final gas consumption in 2007 was 652 million cubic metres and 1020 million cubic metres of gas is used for production of heat and electricity.

The Latvian retail market structure is as follows:

- Households – 137 Mcm or 22%
- Industry – 341 Mcm or 52%
- Transport - 2 Mcm or 0,3%
- Utilities and commercial enterprises – 172 Mcm or 26%

All of the consumers received gas from the vertically integrated joint stock company Latvijas Gāze.

Because of the lack of alternative suppliers, there will be no switching of suppliers in the foreseeable future.

All prices at the retail level are set by the regulator, and they are differentiated in accordance with the annual consumption level of customers.

The final price of natural gas consists of the price of services, the price of imported natural gas, and VAT.

Type	Consumption	Storage EUR/GJ	Transmission EUR/GJ	Distribution EUR/GJ	VAT 18%	Final price EUR/GJ
I4-1*	418.6 TJ	0.30	0.46	1.61	0.43	2.80
I1	418.6 GJ	0.30	0.46	2.46	0.58	3.80
D3	83.7 GJ	0.30	0.46	2.46	0.58	3.80

Consumers also pay a fixed monthly fee for metering, ranging between EUR 1.04 and EUR 1.09. This depends on ownership of the meter.

5. Security of supply

5.1. Electricity [Article 4]

Total electricity consumption including losses in 2007 amounted to 7740 GWh, which was 5% more than in 2006. The tendency of increasing electricity consumption by 5-7% per year in recent years has stopped recently and it is expected that over the next years the consumption will increase at a lower rate than in last years.

Peak load in 2007 was 1.38 MW. Forecasts for the years between 2008 and 2010 are as follows:

- 2008 – 1.4 MW
- 2009 – 1.42 MW
- 2010 – 1.44 MW

Available generation capacity at this time is at a level of 2,684 MW.

There are nine distribution system operators, and their license conditions state that they must supply all customers with electricity and connect new customers in their zones of operations. Latvenergo in 2007 was the biggest DSO in Latvia and covered 99% of demand.

The total capacity of the transmission network is currently at a level of 6942.8 MVA, which is five times more than the peak load in 2007. This ensures the continuous supply of electricity. After a major windstorm in 2005, the safety zones of transmission lines in forested regions were widened so as to lessen damage caused by falling trees.

Guidelines approved by the Cabinet of Ministers say that the security of supply should also be supported through the construction of a major thermoelectric generation plant, which uses fuel other than natural gas.

5.2. Gas [Article 5]

Latvian consumers consume around 1.67 bcm of gas each year, with annual growth of approximately 1%. The technical import capacity which is available at this time is 3.5-4 bcm.

The aforementioned growth is based on the increasing use of gas to produce heat. Major changes in the structure of gas consumption, however, should not be expected, because of the lack of major industrial consumers. At the same time, the rising price of natural gas could lead to a halt or decrease in gas consumption if some industrial consumers prove unable to bear the increased fuel costs or large scale energy and heat conservation activities are performed.

The joint stock company Latvijas Gāze is the only trader of natural gas in Latvia, and its exclusive license obliges it to supply natural gas within the covered zone. At this time this refers to all of Latvia, and the obligation exists as long as deliveries are technologically possible and economically feasible.

6. Public service issues [Article 3(9) for electricity, 3(6) for gas]

Public Service Obligations (PSOs) are imposed on service providers by law. These are specifically defined in secondary legislation and in license terms. Given that, most provisions are imposed by the legislature.

PSO requirements are defined in several laws, particularly the law on energy, the law on the electricity market, and the law on the regulators of public utilities. Additionally on 16 February 2006 the Regulator determined the minimum requirements for ensuring the independence of the system operator. On 22 March 2006 the Regulator determined what information and to what extent a public service provider shall include in the bills and informative materials to be issued to an end user. On 20 December 2006 the Regulator determined the quality requirements for distribution system operator.

The laws have defined several tasks to public service providers, and these are also entrusted by the Regulator issuing licenses:

- Starting from July 2007 legally separated electricity distribution system operator JSC “Sadales tīkls” has started its activity.
- The operation is continued as well by independent transmission system operator JSC “Augstsprieguma tīkls” and public trader JSC “Latvenergo”.
- According to the law, all licensed system operators must, in accordance with their licensing terms, ensure the safe, continuous and stable delivery of electricity, heating energy, gas or other types of energy and fuel to existing and potential users, doing so at an economically justified level of quantity and quality and in conformity with environmental protection requirements.
- The system operator has a permanent obligation to provide access for system users and applicants to energy transmission or distribution systems or natural gas storage sites if such access is permanently compatible with appropriate technical regulations and safety requirements.

A DSO has the obligation of connecting every customer in the licensed area. According to regulations that have been approved by the Commission, the connection charge (the cost of project design and construction) must be shared by the customer (60%) and the DSO (40%).

The obligation to purchase electricity produced within the country in CHPPs or from renewable resources

One of the most important obligations imposed on the public supplier of electricity is the obligation to purchase electricity that is produced within the country in CHPPs or from renewable resources. Article 28 of the law on the electricity market says that producers can receive the right to sell electricity to the public supplier (Latvenergo), and the public supplier has the obligation to buy it, as long as the producer satisfies requirements that have been defined in Regulations of Cabinet of Ministers regarding Electricity Production from Renewable Energy Resources, accepted on 24 July 2007.

In November 2006 the government approved regulations on electricity generation in combined heat and power plants, covering particular criteria and requirements which regulate obligatory purchase. These regulations contain provisions on the operating regime, the security of the supply, efficiency, and the formula for determining the price of electricity.

Article 28 of the law on the electricity market also says that the public supplier must report the costs of the obligatory purchase. These are included in the end user tariff, and all users connected to the public supplier must cover them in proportion to the amount of electricity which they consume.

In general, the same provisions also apply to producers of electricity that comes from renewable resources (Article 29 of the law on the electricity market). However, there are a few specific features. For one thing, Article 29 of the law says that a specific segment of total electricity consumption must be based on the production of electricity from renewable resources. By 2010, this segment must reach 49.3% of the total amount of electricity consumption.

The obligation to purchase electricity produced in cogeneration regime and from renewable resources is also defined in the public supplier's license.

On the 14 November 2007 the Commission accepted the methodology on calculation of the components for the obligatory purchase and in accordance with the methodology from 1 March 2008 obligatory purchase component for the electricity produced from the renewable energy resources is 0.9 LVL/MWh (1.28 EUR/MWh) and for electricity produced in co-generation regime: 5.2 LVL/MWh (74 EUR/MWh). For the captive users the components are included in the end user tariffs but others are obliged to pay together with payments for transmission of electricity.

There are no corresponding obligations in the supply of natural gas.

Protection of vulnerable customers

According to Article 33 of the law on the electricity market, the public supplier of electricity faces several obligations which have to do with the supply of electricity to captive customers. On 28 September 2005, the regulator modified Latvenergo trading license so as to impose the obligations of a public supplier on it.

There are plans at this time to draft a unified strategy for the supply of gas and electricity to vulnerable customers. At the moment, each municipality deals with this issue separately in terms of providing a minimum set of public services to each individual.

Labelling the primary energy source

Article 29 of the law on the electricity market says that producers which conform to criteria may receive a proof of origin in terms of the produced electricity,

this occurring in accordance with government-specified procedures. An institution authorised by the government issues the proof of origin.

Annex A – Customer protection issues

According to the law on the regulators of public utilities, the Commission is obliged to deal with customer complaints. In simpler cases, the regulator offers oral or written consultations or opinions. In more complicated cases, however, there are dispute resolution procedures when it comes to customer complaints.

In 2007, there were seven dispute resolution cases, mostly concerned with energy supply conditions and with justification of disconnection. All of the disputes were resolved at meetings of the regulator's board.

In 2007, six administrative court procedures, which were initiated in previous years, continued. Four of them were completed by reaching final court decision and one new litigation process was initiated. As a result, three litigation processes will continue in 2008. By replying to complainants, the regulator makes sure that service providers provide transparent information to consumers about applicable prices and tariffs, as well as apply equal terms and conditions, when it comes to the accessibility and use of electricity and gas services.

It can be concluded that the regulator ensures transparent, simple and free-of-charge procedures for dealing with customer complaints. Such procedures make it possible to settle disputes fairly and promptly, providing, where warranted, for a system of reimbursement or compensation.

Regulation of end user prices

In accordance with the prevailing legal framework, the Commission sets tariffs for the captive consumers and for all consumers in the gas supply sector in accordance with the methodologies accepted by the regulator.

In the electricity sector the Commission has the rights to allow the supply company to set the tariffs for the captive consumers without regulatory accept. On 12 December 2007 Commission gave to JSC "Latvenergo" a permit of setting tariffs from 1 January 2009. The methodology for the tariff setting for the captive consumers envisages that the tariffs for the end users are based on the costs of transmission, distribution and sales services plus the costs of energy. The energy costs are the sum of the purchase costs of different suppliers that includes necessary energy import costs and costs of the energy purchased from the suppliers inside the country. In the case of electricity market fluctuations that could not be compensated in the specified period when the tariffs are in force, the company could ask for the increase/decrease of the tariffs.

The designated supplier is fully compensated for the obligation to supply electricity and gas under regulated tariffs, because existing network service tariffs are economically justified and give the companies enough incentive for development.

Activities of the regulator in ensuring transparency of terms and conditions of supply contracts

A very important duty for the government is to ensure transparency of terms and conditions when it comes to supply contracts. The government is allowed to issue regulations in which general rules are set out on trade in electricity (Regulation No. 452, approved by the Cabinet of Ministers on 26 June 2007). These regulations indicate the provisions and conditions which must be included in electricity supply contracts.

Electricity market law says that a public supplier must draft, submit for regulatory approval, and then, in accordance with procedures specified by the regulator, publish an approved standard contract for electricity supply, along with the rules of operation and the procedures for the procurement of electricity that is necessary to supply electricity to captive customers.

The government also issued regulations No. 29 of 23 February 2008 in which general rules are defined for supply and use in the area of natural gas.