

2008 Annual Report of the Public Utilities Commission of the Republic of Latvia on the National Energy Sector, Prepared for the European Commission

1. Foreword

Reflecting on the events of 2008, I must stress drastic changes in trends of development which were observed in different sectors of the national economy, affecting also the regulated sectors. After rapid economic growth, which still continued in the first half of 2008, considerable decline of economic activity was clearly visible at the end of the year.

In the middle of 2008, prices of energy resources in the world reached an unexpectedly high level, causing a tense situation in the sectors of gas, electricity and heat power supply. Taking into account the actual conditions of the supply of energy resources, prices of energy resources for customers in Latvia increased at a slower rate and to a lesser extent. End-tariffs of several services have decreased slightly since November 2008.

Because of changes in legal acts in the middle of the year, the electricity market became more active, large customers switched to contract prices and some customers chose to change the supplier. Latvia is the first Baltic State to relinquish regulation of end-tariffs for a customer group and actually open electricity market for competition.

Over the course of the year, the Public Utilities Commission (hereinafter – Commission) carefully followed the rapid changes of the situation to make sure that regulated tariffs do not exceed costs of service provision, safe and uninterrupted services are available and necessary investments are made for secure access to services in the future.

The scope of the Commission's responsibilities expanded from the beginning of 2008 – taking into account the government's plans on the formation of a unified public utilities regulator in Latvia, the Commission has already made the first step in this direction by starting regulation of public utilities in municipally regulated sectors in the capital Riga.

The Commission regards the improvement of legal acts to set a flexible procedure for tariff application in 2008 as significant – when costs of supplied energy resources change, automatic reduction of natural gas, cogeneration and heat energy end-tariffs will be possible.

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 Law on Regulators of Public Utilities the 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 the beginning of 2008 municipality of Riga city delegated the Commission to take over the regulation of the heat, waste and water sectors in the Riga district.

The Commission and the local government regulators are, according to the law, 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.

In accordance with Law on Regulators of Public Utilities the goal of regulation is provide customers with continuous, safe and high-quality public services for tariffs (prices) that correspond to economically justified costs, while promoting development and competition in the regulated sectors.

The Commission performs the following functions:

- protects customer interests and promotes the development of public service providers;
- promotes competition;
- issues licenses, registers permits, and supervises the compliance with their requirements;
- supervises the compliance of services to various requirements related to quality, environmental protection, technical regulations and standards;
- defines tariff calculation methodologies;
- approves tariffs as specified in Laws and Regulations of Cabinet of Ministers;
- provides public information about its activities and operations of public service providers;
- performs preliminary out-of-court 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.

The Commission is institutionally and financially independent. The Parliament appoints the board members, each with a term in office of five years. The decisions of the Commission can be repealed only by the court. The operations of the Commission are financed from a state duty on public service regulation.

The executive institution has structural units 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 July 1, 2004 all electricity customers, except households, have the opportunity to choose alternative suppliers of electricity. From July 1, 2007 all customers including households can choose alternative suppliers of electricity. In 2008, according to amendments to Electricity Market Law regulated tariffs were removed for some part of customers, the criteria for receiving rights to have regulated tariffs for final customers are set out in Regulations of Cabinet of Ministers on trade

and usage of electricity. These changes in legislation lead to the process where customers were switching the supplier.

In 2008, the independent traders became more active and therefore at the end of year 2008 3% of electricity consumed is delivered by independent traders, some of the customers switched from the previous supplier JSC Latvenergo to a new supplier.

The Commission approved reports on fulfilling the requirements of the independence of electricity transmission system operator (hereinafter – TSO) JSC “Augstsprieguma tīkls” and electricity distribution system (hereinafter – DSO) JSC “Sadales tīkls” thus confirming that TSO and DSO ensure an equal access to the electricity system network.

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

Latvia has derogation from the market opening till the January 1, 2010. The gas market will be open only after the interconnection with EU gas transmission system will be build, except interconnections with Estonia, Lithuania and Finland gas transmission systems.

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 issued licenses for 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 customers if the annual volume of sold electricity exceeds 4000 MWh.

As of December 31, 2008 a total of 84 licenses had been issued and are valid in the electricity supply sector. Of those, 33 were for electricity and heat generation in CHP plants, 21 were for wind power generators, 2 were for hydropower plants, 1 for generation of electricity by biogas and steam turbine, 1 was for electricity transmission, 10 were for electricity distribution, and 16 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 licensed the storage, transmission, distribution and sale of natural gas.

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 December 31, 2008 8 licenses had been issued and are valid for distribution of liquefied petroleum gas from underground reservoirs via pipeline networks.

Also in 2008 23 objects which belong to energy supply companies were inspected to investigate their operations and their compliance with license requirements. The company’s objects 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 customers. 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 April 10, 2008 the amendments to Electricity Market Law were adopted and they stated that all households and non-households customers with less than 50 employees and yearly turnover less than 7 million LVL have the right to use the Commission's accepted electricity tariffs for those customers. The other customers are obliged to buy electricity from traders they choose for agreement price.

Captive customer's tariffs are defined for those customers of electricity in Latvia who have not taken advantage of the opportunity that is guaranteed by law — the right to choose the supplier of electricity freely. These clients pay for electricity in accordance with tariffs that are defined by the Commission. Captive customer tariffs differ from one user group to another, depending on the voltage level, the demanded amount of electricity, and time zones. Captive customer tariffs cover the cost of generating and importing electricity, including electricity generated from renewable energy resources. The tariffs also cover the cost of transmission and distribution systems, as well as the cost of retailing the electricity.

The cost of imported electricity is based on agreements between Latvenergo and suppliers of electricity in 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 Cabinet of Ministers.

In the year 2008, the Commission adopted amendments to electricity tariff calculation methodologies for transmission system services and distribution system services.

From April 1, 2008 new tariffs for captive customers are in force.

In 2008, new electricity tariffs were also approved for several CHP plants as well as electricity distribution system service tariffs and electricity trading differentiated tariffs for captive customers for smaller distribution networks.

According to Eurostat data, Latvia together with Estonia, Lithuania and Bulgaria had one of the lowest electricity tariffs in 2008 among all European Union member states for households and non-household customers.

Natural gas

End sales tariffs for natural gas are based on the purchase price of natural gas on the border of the country and tariffs related to services which are associated with the delivery of natural gas to customers – transmission, storage, distribution and sales.

On April 16, 2008 the JSC Latvijas Gāze submitted to the Commission the natural gas tariff proposal that was evaluated and approved by the Commission and came into force on October 1, 2008.

Regulation of all customer tariffs continues to be justified specifically because of the lack of alternative supply sources and competition in the natural gas supply sector. This process ensures greater tariff stability, as well as the balancing out the interests of the supplier and customers. The monopoly gas company is regulated successfully on the basis of an effective cost-based tariff setting methodology.

According to Eurostat data, Latvia had the seventh lowest gas tariffs for households in 2008 among all European Union member states.

Protection of customer interests

In 2008, 74 complaints and applications were received from public service customers 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 85% 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 delivery of electricity (24%), metering and payments (16%), and installation of new connection and connection fee (36%). In the gas supply sector, complaints usually concern natural gas tariffs (42%), natural gas metering and payments (25%), and issues related to natural gas delivery (25%).

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 supply 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 customers. The functions of the electricity transmission system operator are carried out by JSC “Augstsprieguma tīkls”, the independent transmission system operator. The functions of the electricity distribution system operator are carried out by JSC “Sadales tīkls”, the independent distribution system operator.

There are some 150 small hydropower plants with total installed capacity 25.2 MW (1% of the total). There are also 15 wind power stations with a total capacity of 27.2 MW (1% of the total) and 43 combined heat and power (CHP) plants with a total capacity of 130 MW.

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 depends each year on the amount of water in the river Daugava.

In addition to Latvenergo, there are 9 licensed distribution companies and 16 licensed electricity traders.

Since July 1, 2004 all electricity customers except households have been allowed to choose alternative electricity suppliers. The electricity market became 100% open on July 1, 2007 when all customers became eligible to choose an alternative supplier of electricity.

In 2008, 10% from the electricity customers that are in the free electricity market switched their electricity supplier. In 2008, the interconnection ESTLINK between Estonian and Finnish transmission systems operated and electricity was exported/imported from Latvia – Nord Pool Spot gives reference price signals.

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

At present there is no congestion in and between the Baltic States, as cross-border interconnection capacities are enough 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).

The Commission states that electricity transmission system interconnections with neighbouring countries have excess of capacities and it is enough for all the electricity import and export operations. In specified regimes the electricity supply for Latvia could be limited outside the Baltic region in the Smolensk - Belorussia and Lithuania - Belorussia cross-sections due to congestion there. The difference between Latvian interconnections net capacity and yearly maximum capacity flow is 1335 MW.

The total amount of interconnection capacity is 2850 MW for export and 2780 MW for import. In 2008, the total amount of incoming energy was 4.64 TWh and maximum capacity was 1046 MW, outgoing energy was 2.12 TWh with maximum capacity 884 MW, amount of transit was 1.9 TWh and 628 MW. Taking into account the data above, the market operations for electricity traders are not limited. Therefore the electricity traders can freely deliver the electricity to Latvian customers despite the fact that the Latvian cross border electricity flows can reach 40% from inland consumption while the average level in the EU countries is 8-10%.

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 the holding company. Latvenergo also owns the biggest distribution system operator, JSC “Sadales tīkls”. There are, in addition, 10 local distribution companies.

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 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 according to basic principles and specifications that 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 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 customer (average)

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

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

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

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

a) connection to 6-20 kV lines

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

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

$$\text{Total price} = 1173 \text{ EUR or } 0.023 \text{ EUR/kWh}$$

b) connection to 6-20 kV buses

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

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

$$\text{Total price} = 784 \text{ EUR or } 0.01568 \text{ EUR/kWh}$$

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

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:

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

$$\text{Total price} = 63\,347 \text{ EUR or } 0.0026 \text{ EUR/kWh}$$

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 $4000 \times 5.362 = 21\,448$ LVL = 30 518 EUR
Total price = 95 401 EUR or 0.0040 EUR/kWh
The difference between 110/6-20kV transformer low voltage side and 110kV lines: $0.0040 - 0.0026 = 0.0014$ EUR/kWh
All calculations are done without VAT

The quality of services

Cabinet of Ministers Regulations on the sales and use of electricity have been accepted in July, 2007. They state that the regulator has the right to define quality requirements. The Commission has accepted Regulations on distribution service quality requirements where quality indicators are defined in areas such as continuity of supply, quality of voltage, commercial quality, etc.

On January 16, 2008 the Commission accepted Grid Code that includes procedures for the system management and utilisation, the activities of market participants, except final customers. 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 customers 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 Regulator.

During the course of 2008, the quality of electricity was improved for a substantial number of final customers, and the average amount of time needed to repair problems in the distribution network for the final customers was 7.8 hours. There were 52640 interruptions in the distribution network for the final customers. There were 24 interruptions in the transmission network with an average duration of 3.1 hours.

Balancing

The Latvian Electricity Market Law states that the TSO is responsible for power balance in the system, as well as for providing of balancing services at the transmission network level. TSO has developed balancing and settlement procedures and put them down in the Grid Code. The Electricity Market Law sets out guidelines in terms of how the balancing arrangements among customers, 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 of the network that they are connected to.

The TSO is responsible for the operational reliability of the power system. This includes making sure 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 the 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 Law, administration of imbalance settlements is the responsibility of system operators. Balance settlement is provided on hourly basis.

TSO published balance energy purchase and selling prices, prices differ every hour. For power plants with installed capacity of 15 MW and higher the balancing energy prices are calculated in accordance with a formula.

3.1.4. Effective unbundling

There are 10 DSOs in Latvia – 9 comparatively small operators with fewer than 100,000 customers. The dominant DSO company is JSC “Sadales tīkls”. It launched its operations as a separate entity on July 1, 2007. There is a single TSO – “Augstsprieguma tīkls”, operating as a separate entity since September 1, 2005. The TSO and DSOs are located separately from production and supply affiliates. The TSO and DSO rents the network assets from Latvenergo.

Latvian Electricity Market Law 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 2008, Latvenergo had 1,500 employees, 60 – employed by the trading unit, 602 – by work units related to the generation of electricity, 224 – transport and communications services, 364 – supporting functions. The independent TSO had 606 employees, independent DSO - 3,098 employees. The percentage of shared services in the TSO’s cost structure in 2008 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 Violations Code allows the Public Utilities Commission to punish service providers in the sector when the following administrative offences are committed:

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

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 customers except households have had the option to choose alternative electricity suppliers. 10 companies were given licenses only for the sale of electricity and 3 of them are active to operate as intermediaries in the delivery of electricity to customers. In 2008, 109 customers changed their supplier – from historical supplier JCS Latvenergo to an independent trader.

The low activity of eligible customers can be explained by concentrated generation and the difficulty of finding a better energy price than Latvenergo can offer. Electricity generation in Latvia is almost entirely related to Latvenergo (producing approximately 60% of total consumption), and independent electricity generators are, individually, too small to offer major volumes of energy for large potential customers.

In 2008, total annual consumption, including losses and self consumption, was 7794 GWh and the amount of installed available generation capacity was 2692 MW. Latvia produced 5213 GWh of electricity, and imported 4643 GWh from the neighbouring countries Lithuania, Estonia, Russia and Belorussia. Peak load in 2008 was 1419 MW.

The largest producer Latvenergo produces about 90% of the total generation volume and is the only one company in Latvia that have more than 5% share of installed available capacity.

The share of the three biggest generators was 94%.

At the end of year 2008 82% of electricity was sold at regulated prices (approved tariffs), while 18% was sold at agreement prices out of which 3% was sold by independent trader.

Latvia has strong interconnection lines without congestion to two neighbouring member states – Estonia and Lithuania. A submarine cable between Tallinn and Helsinki is in operation as a merchant line. Latvenergo is a shareholder in company which operates this interconnection.

There were no acquisitions or mergers in the electricity industry in Latvia in 2008.

3.2.2. Description of the retail market

In 2008, electricity supply companies supplied the required volume of energy, selling 6628 GWh of electricity to final customers – 0.3% more than in 2007. One quarter of this electricity was used by local residents for household needs, and the remainder went to non-household customers. The number of customers has not changed significantly. Most of them consume a comparatively small volume of electricity. In 2008, only 108 customers 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 non-household customers. The distribution of customers among groups in 2008 was as follows:

- Industry – 1.7 TWh, or 25.7%;
- Transport – 0.14 TWh, or 2.1%;
- Households – 2 TWh, or 30.6%;
- Agriculture&forestry&fishery – 0.13 TWh or 2%;

- Other – 2.6 TWh, or 39.6%.

According to Eurostat Latvia had one of the lowest electricity tariffs for households and non-household customers among all European Union member states in 2008.

| Type | Consumption | Energy price and supply margin EUR/kWh | Network charges EUR/kWh | Mandatory purchase component EUR/kWh | VAT for household 5% and for industrial customer 18% | Final price EUR/kWh |
|------|-------------|--|-------------------------|--------------------------------------|--|---------------------|
| Dc | 3,500 kWh | 0.042 | 0.046 | 0.008 | 0.0048 | 0.1008 |
| Ib | 50MWh | 0.042 | 0.02 | 0.0083 | 0.012 | 0.0823 |
| Ig | 24GWh | 0.0356 | 0.0032 | 0.0092 | 0.008 | 0.056 |

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. 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/or 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 customer 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 customers. This has not been an obstacle for the natural gas supplier 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.

Latvia has derogation for the opening of gas market till January 1, 2010. The gas market will be open only after the interconnections with EU states gas transmission systems will be build, except those interconnections with Estonia, Lithuania and Finland gas transmission systems.

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 customers, 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 region in Lithuania;

4) The transmission system was designed for annual consumption of up to 4 bcm 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 Energy law, the Law on 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 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.

The distribution tariffs are differentiated on the basis of the customer's annual consumption.

Tariffs for typical customers (2008 average, without VAT and levies)

| | | EUR/GJ | EUR/GJ |
|-------|-------------|--------|--------|
| Type | Consumption | Transm | Distr |
| I4-1* | 418.6 TJ | 0.42 | 1.18 |
| I1 | 418.6 GJ | 0.42 | 2.49 |
| D3 | 83.7 GJ | 0.42 | 2.49 |

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

Balancing

The TSO currently conducts balancing on the basis of the consumption rate. Non-household customers 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

Total Latvian gas market consumption is 1.66 bcm of natural gas in a year 2008 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 January 1, 2010.

4.2.2. Description of the retail market

The final gas consumption in 2008 was 626 mcm and 1005 mcm of gas is used for production of heat and electricity.

The Latvian retail market structure is as follows:

- Households – 140 mcm or 22,3%
- Industry – 331 mcm or 53%
- Transport - 0.6 mcm or 0.1%
- Utilities and commercial enterprises – 154 mcm or 24,6%

All of the customers 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* | Final price EUR/GJ |
|------|-------------|-------------------|------------------------|------------------------|------|-----------------------|
| I4-1 | 418.6 TJ | 0.28 | 0.42 | 1.18 | 0.99 | 6.51 |
| I1 | 418.6 GJ | 0.28 | 0.42 | 2.49 | 1.40 | 9.20 |
| D3 | 83.7 GJ | 0.28 | 0.42 | 2.49 | 0.40 | 8.20 |

*VAT for I1, I4 -18%, D3-5%

5. Security of supply

5.1. Electricity [Article 4]

Total electricity consumption including losses in 2008 amounted to 7740 GWh, which was 5% more than in 2007. The tendency of increasing electricity consumption by 5-7% per year in recent years today has stopped and it is expected that next year the consumption will have descending tendency.

Peak load in 2008 was 1.42 GW. Forecasts for the years between 2009 and 2011 are as follows:

- 2009 – 1.39 GW
- 2010 – 1.4 GW
- 2011 – 1.41 GW

Available generation capacity at this time is at a level of 2684 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 2008 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 2008. This ensures continuous supply of electricity.

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

5.2. Gas [Article 5]

Latvian total gas consumption is 1.66 bcm in a year 2008, which is 2% less than previous year. The technical import capacity which is available at this time is 3.5-4 bcm.

The aforementioned shrinking of consumption is based on the falling energy demand induced by the global economic crisis and dramatic commodity price increase during 2008. Major changes in the structure of gas consumption, however, should not be expected, because of the lack of major industrial customers.

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 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.

Public Service Obligations requirements are defined in several laws, particularly the Energy law, the Electricity market law, and the Law on regulators of public utilities. Additionally on February 16, 2006 the Commission determined the minimum requirements for ensuring the independence of the transmission and distribution system operators. On March 22, 2006 the Commission determined what information and to what extent a public service provider shall include in the bills and informative

materials to be issued to an final customer. On December 20, 2006 the Commission 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 Commission issuing licenses:

- On July 1, 2007 a legally separated electricity distribution system operator JSC “Sadales tīkls” started its activity.
- The independent transmission system operator JSC “Augstsprieguma tīkls” and public trader JSC Latvenergo continue their operation as well.
- According to the law, all licensed system operators must, in accordance with their licensing terms, ensure safe, continuous and stable delivery of electricity, heating energy, gas or other types of energy and fuel to existing and potential customers, 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 customers 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) for the 0,4kV voltage connections must be shared by the customer and the DSO:

- the customer pays 60% and the DSO 40% if the current intensity of input protection appliance is till 40 ampere;
- the customer pays 80% and the DSO 20% if the current intensity of input protection appliance is more than 40 ampere;

The other customers and generators are obliged to cover 100% of the connection costs.

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 Electricity market law 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 July 24, 2007.

In November 2006 the Cabinet of Ministers adopted 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.

The public supplier must report the costs of the obligatory purchase. These are included in the final customer tariffs for captive customers and other customers (market participants) 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. One part 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, including all hydropower plants. In order to achieve the set aim, as well as to clarify support mechanisms for electricity produced from renewable energy resources, in July 2007 the government adopted regulations on production of electricity from renewable energy resources, excluding big hydropower plants, and setting prices thereof.

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

On November 14, 2007 the Commission accepted the methodology on calculation of the components for the obligatory purchase and in accordance with the methodology stated that from the October 1, 2008 obligatory purchase component for the electricity produced from the renewable energy resources is 2 EUR/MWh and for electricity produced in co-generation regime 9.2 EUR/MWh.

Protection of vulnerable customers

The public supplier of electricity is bound by several obligations concerning supply of electricity to captive customers. These obligations are set out in the licence of the public supplier.

There are plans at this time to draft a unified strategy for the supply of 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. The Commission elaborated the concept for unified universal service model in regulated public utilities sectors and in 2008 presented the document to the Cabinet of Ministers.

Labelling the primary energy source

Producers which conform to criteria may receive a proof of origin in terms of the produced electricity, according 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 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 the dispute resolution procedure is applicable when it comes to customer complaints.

In 2008, there were six cases of dispute resolution, mostly concerned with energy supply conditions and connection to the grid. All of the disputes were resolved at meetings of the Commission's board.

In 2008, three administrative court procedures, which were initiated in previous years, continued. One of them was completed by reaching final court decision and four new litigation processes were initiated. As a result, seven litigation processes will continue in 2009. By replying to complainants, the Commission makes sure that service providers provide transparent information to customers 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 Commission 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 final customer prices

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

In the electricity sector, the Commission can grant rights to the supply company to set the tariffs for the captive customers by the company itself. In such case the Commission within 21 days reviews draft tariffs and their conformity with tariffs calculation methodology, and if the Commission does not reject draft tariffs, they enter into force on the date indicated but the company. Whereas, if the Commission concludes that draft tariffs are not calculated in accordance with the methodology, draft tariffs do not enter in the force in the term set by the company. In December 2007 the Commission granted such rights to Latvenergo. Therefore Latvenergo from January 1, 2009 can set the tariffs for captive customers by the company itself, however by following the procedure above. For the eligible customers the prices are set by bilateral agreements.

The methodology for the tariff setting for the captive customers envisages that the tariffs for the final customers 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 and supply of electricity (Regulation No. 452, adopted by the Cabinet of Ministers on June 26, 2007). These regulations set out provisions and conditions of electricity supply contracts.

Electricity market law prescribes that a public supplier must draft, submit for the regulatory approval, and then, in accordance with procedures specified by the regulator, publish an approved standard contract for electricity supply, together with the rules of operation and the procedures for the procurement of electricity that is necessary to supply electricity to captive customers. On December 12, 2007 the Commission approved the above mentioned standard contract for electricity supply for natural and legal persons who have the right to receive electricity for regulated price.

By adopting Regulations No.1048 of December 16, 2008 on supply and use of natural gas, the government set out general rules and conditions of supply contracts.