# 2009 Annual Report of the Public Utilities Commission of the Republic of Latvia on the National Energy Sector, Prepared for the European Commission

### 1. Foreword

Evaluating the events of 2009, I must highlight the fact that significant progress was made regarding the reform of the unified regulator. The Parliament (Saeima) passed the required amendments in legislation in June and by November 1, 2009 the Public Utilities Commission (hereinafter – PUC) took over the implementation of regulatory functions from municipal regulators. From November 2009, in addition to electricity, gas supply, electronic communications, post and railway sectors, the PUC regulates public services in sectors of heat supply, water supply, sewage, and waste management throughout Latvia. From July 2009, the PUC was also entrusted with the control of maintenance of energy supply facilities and supervision of compliance with safety and maintenance requirements for hydro-technical facilities of hydropower stations.

When the PUC took over the regulatory functions of municipal regulators, a foundation was laid for the adjustment of the regulatory system, eliminating differing regulatory approaches which burdened the operation of service providers and hindered the establishment of a common regulatory strategy. Although the scope of functions performed by the PUC has grown repeatedly, setting of a uniform state fee for public service regulation and reduction of state duties paid by companies in municipally regulated sectors could be done by optimising the resources involved in public utilities regulation.

It should be mentioned that in 2009 PUC together with assuming new responsibilities faces continuous attempts, mainly initiated by the Ministry of Economics of Latvia, to undermine the PUC independence status legally, functionally and financially. Therefore PUC tried hard to prevent further destabilisation of the regulatory authority and to stop amendments to the law which are inconsistent with the national legislation and the 3rd Energy package.

Following the trends in the world markets, the prices of imported energy resources decreased in Latvia in 2009. As a result, natural gas tariffs and heat energy (produced from natural gas) tariffs went down throughout the year. Natural gas tariffs for large industrial users were 45% lower in December 2009 compared to December 2008. In turn, end-tariffs of district heating, for example, in Riga were 35% lower in December 2009 compared to the end of 2008. The tariff reduction provided an opportunity for energy companies and users to adjust to the hard economic situation at the time.

Year 2009 has brought significant changes for the European level regulation in several public utilities sectors. Opening of electricity and gas markets and their regulation will be determined by new Directives or the so-called "3rd Energy Package". It specifies new requirements for unbundling of network operators, monitoring of investments, independence of regulators of the member states, as well as provides for the establishment of the European-level organisation for co-operation of energy regulators.

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 PUC regulates energy (electricity, gas, heat and heat which is produced in a combined heat and power plant), electronic communications, postal services and the railway sector. Till the end of October 2009 local government regulators (except municipality of Riga city) oversaw waste management (except for waste recycling), water supplies, sewerage services, delivery of heat, and production of heat in boiler houses. From the beginning of November 2009, the PUC took over the regulation of the heat, waste and water sectors which were previously regulated by local government regulators.

In addition, from July 1, 2009, the PUC overtook part of functions performed by the State Construction Inspection, i.e., maintenance control of energy supply merchants' facilities and other energy supply objects in compliance with regulatory enactments of the energy sector, as well as supervision of the safety of hydrotechnical structures of hydroelectric power stations. Thus new responsibilities of the PUC should be financed from the limited budget - from the fees that were paid for the regulation of other functions.

According to the law the PUC is independent in its decision making, and is not subject to the decisions of the national government, local governments or other state institutions. The PUC's decisions may be declared unlawful and repealed only by court. Due to amendments to Law on Regulators of Public Utilities in 2009, the PUC's decisions can be challenged in two court instances instead of three court instances as the case was before the aforementioned amendments.

In accordance with Law on Regulators of Public Utilities the goal of regulation is to 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 PUC 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;
- performs maintenance control of energy supply merchants' facilities and other energy supply objects in compliance with regulatory enactments of the energy sector;
- performs supervision of the safety of hydro-technical structures of hydroelectric power stations.

The decision-making institution of the PUC is its Board, which consists of five Commissioners. The Board takes decisions on behalf of the PUC and approves administrative acts which are binding for specific public service providers and users. The executive institution operates under the oversight of the PUC'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 Parliament appoints the Board members, each with a term in office of five years. The decisions of the PUC can be repealed only by the court.

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

It should be noted that from the end of 2008 the PUC faces continuous attempts, mainly initiated by the Ministry of Economics of Latvia, to undermine the PUC independence status legally, functionally and financially.

Present legal status of the PUC, i.e., as a derived public person under the supervision of the Minister of Economics, does not provide the PUC with the rights to directly submit to the Parliament draft laws related to the regulatory issues, such as amendments to the law on Regulators of Public Utilities or the PUC's budget without unnecessary delay. This right is granted to the Ministry of Economics. Currently there is an uncertainty whether the Minister of Economics will submit timely the PUC's recommendations or proposals, especially concerning the PUC's independence. Moreover, the supervision of the Minister of Economics raises serious concerns in respect of conflict of interest given that the the Minister of Economics as a state representative is a holder of capital shares in major electricity provider JSC Latvenergo.

In addition, caps on salaries of the PUC's staff introduced by legal acts cause a problem related to recruiting and keeping qualified experts within the institution. Currently salaries of the PUC's staff are not competitive with the business in the regulated sectors and cause misbalance between the functions per person at all staff levels, which have increased due to the structural reform 2009, and the salary.

Currently prompt solutions on the PUC's legal status and real independence are kept away from the agenda of the Government and the Parliament and the Ministry of Economics ignores the PUC's initiatives in this regard.

# 2.2. Main developments in the gas and electricity markets

From July 1, 2007 all customers including households can choose alternative suppliers of electricity. All households and non-household customers with less than 50 employees and annual turnover less than 7 million LVL have the right to use the universal service of electricity, i.e., regulated tariffs are applied to those customers.

In 2009, 35.6 % of total electricity was traded for a contract price in accordance with bilateral agreement. 92% of those customers purchased electricity from the dominant trader in the market JSC "Latvenergo" and other 8% from other trader. In 2009, 90 customers switched the supplier, four of them switched back on January 1, 2010.

The PUC approved reports on fulfilling the requirements of the independence of electricity transmission system operator (hereinafter – TSO) JSC "Augstsprieguma tīkls" and electricity distribution system operator (hereinafter – DSO) JSC "Sadales

tīkls", thus confirming that TSO and DSO ensure equal access to the electricity system network.

JSC "Augstsprieguma tīkls" as TSO concluded an agreement on participation in the European Transmission System Operators (ETSO) association's electricity transit flow compensation mechanism 2008 - 2009, thereby taking a step closer to the integration in the European electricity market.

In the gas sector Directive 2009/73/EC of the European parliament and of the Council of 13 July 2009 concerning common rules for the internal market in natural gas and repealing Directive 2003/55/EC (hereinafter – gas Directive) granted to Latvia the right to derogate from specific articles of gas Directive and Regulation (EC) No 715/2009 of the European parliament and of the Council of 13 July 2009 on conditions for access to the natural gas transmission networks and repealing Regulation (EC) No 1775/2005 in whole while derogation criteria are met.

# 2.3. Major issues dealt with by the regulator

#### Licensing and license supervision

According to Regulations of the Cabinet of Ministers, the PUC 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 plants and combustion power stations). The PUC issued licenses for the transmission of electricity if the voltage is at least 110 kV, for the distribution of electricity if the voltage is between 1 and 110 kV, and for the trade of electricity to customers if the annual volume of sold electricity exceeds 4,000 MWh.

At the end of the reporting year, the PUC had licensed 106 companies in the electricity supply sector. The PUC issued 118 licenses - 50 for co-generation plants that generate electricity and heat, 32 for wind power plants, two for hydroelectric power plants, and one for electricity generation from biogas of waste landfill sites. One licence was issued for the transmission of electricity, 11 for the distribution of electricity, and 21 for the trade of electricity.

In 2009, the PUC issued 43 new licenses of which seven were issued for electricity trading. 30 licenses were issued for electricity generation, 19 of these are for generation of electricity and heat power in combined heat and power (hereinafter – CHP) plants, and 11 are for electricity generation in wind power plants. Two licences for electricity generation in CHP plants were cancelled in 2009.

The PUC also regulates the storage, transmission, distribution and trade of natural gas, except for trade of natural gas in gas filling stations for auto vehicles.

The JSC"Latvijas Gāze" has licenses for the storage, transmission, distribution and trade of natural gas. One licence for the distribution of liquefied gas was cancelled in 2009.

In accordance with Regulations of the of the Cabinet of Ministers on types of regulated public utilities, in 2009 seven licenses were issued for the distribution of liquefied petroleum gas from underground and above-ground reservoirs through pipelines to a connection point in a residential building.

The operations of public service providers are regularly inspected on the basis of the PUC's decision. In 2009 14 objects of energy supply companies were inspected

in order to examine their operations and compliance with license requirements. The companies' objects were inspected following the schedule, as were the companies which had filed applications for amendments to license requirements, 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 PUC approves tariffs for companies which generate electricity in cogeneration plants, tariffs for the transmission and distribution of electricity, as well as tariffs for the sale of electricity to captive customers. In accordance with Electricity Market Law all households and non-household customers with less than 50 employees and annual turnover less than 7 million LVL have the right to receive electricity by paying regulated electricity tariffs. The other customers are obliged to buy electricity from traders they choose for a contract price.

Captive customers pay for electricity in accordance with the tariffs that are accepted by the PUC. Tariffs for captive customers differ from one user group to another, depending on the voltage level, the demanded amount of electricity, and time zones. Tariffs for captive customers cover the cost of generating and importing electricity, including electricity generated from renewable energy resources and also the cost of transmission and distribution system services as well as the cost of retailing the electricity.

The PUC authorized JSC "Latvenergo" to set the tariffs for captive customers from January 1, 2009. In the procedure above the PUC within 21 days assesses conformity of tariffs with the tariff calculation methodology. If the PUC does not reject a tariff proposal, it enters into force on the date indicated by JSC "Latvenergo". If the PUC rejects a tariff proposal based on a justified reason, tariffs do not enter in force. So far JSC "Latvenergo" has not exercised the above mentioned right. Tariffs for captive customers set by the PUC are in force from April 1, 2008.

The price of imported electricity is based on agreements between JSC "Latvenergo" and suppliers of electricity from Russia, Lithuania and Estonia and trade transactions of JSC "Latvenergo" in the Nordic electricity market (Nord Pool). The PUC approves tariffs for electricity generated at CHP plants with a capacity of more than 4 MW (including JSC "Latvenergo" CHP plants TEC-1 and TEC-2). For CHP plants with capacity of less than 4 MW and for power plants that use renewable energy resources, the purchase price for electricity is specified by law and it falls outside the competence of the PUC.

In 2009, the PUC approved electricity distribution system service tariffs and differentiated tariffs of electricity trade for captive customers for a small distribution company LLC "RTO Elektrotīkli".

New electricity and heat power tariffs were approved for several CHP plants – joint stock company (hereinafter – JSC) "Valmieras enerģija", JSC "Latvenergo" CHP plants TEC-1 and TEC-2, Riga's district heating JSC "Rīgas siltums" CHP plant Imanta, limited liability corporation (hereinafter – LLC) "Cēsu siltumtīkli", LLC "Fortum Jelgava", and municipal JSC"Daugavpils siltumtīkli". Tariff application procedures were also set for CHP plants of JSC "Latvenergo" TEC-2, LLC "Cēsu siltumtīkli" and LLC "Juglas jauda".

In 2009, the PUC rejected five submitted tariff proposals: twice a tariff proposal for heat energy and electricity generated in JSC "Latvenergo" plant TEC-2, LLC "Cēsu siltumtīkli" tariff proposal for heat energy generated in CHP plants, JSC "Sadales tīkls" tariff proposal for electricity distribution system services, JSC "Augstsprieguma tīkls" tariff proposal for electricity transmission system services.

According to Eurostat data, Latvia together with Estonia, Lithuania and Bulgaria had one of the lowest electricity tariffs in 2009 among all European Union member states for households and non-household customers.

#### Natural gas

End tariffs for trade of 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 trade.

Regulation of all customer tariffs continues to be justified 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.

#### **Protection of customer interests**

National legal acts and legal acts of the European Union related to the energy sector provide legal basis for the PUC's competence to oversee the process of market development, ensuring transparent market information and equal rules for all market participants.

In 2009, 71 complaints of public service users were received and reviewed in the energy sector. 56 questions related to public service provision were sent by electronic means. 90% of complaints were received from individuals.

Answers related to electricity supply mostly had to do with the delivery of electricity (21%), connection to the grid and connection fee (23%) and the registration of the amount of electricity used and the resultant bills (30%). In the area of gas supply, most complains had to do with natural gas tariffs (34%), registration of natural gas use and resultant bills (22%), and natural gas delivery issues (34%).

#### 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 JSC "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, 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 also 138 small hydroelectric power plants that generate electricity. They have a total capacity of 25 megawatts (MW). Latvia has 20 wind power plants with a total capacity of 29 MW, and 54 CHPplants with a total installed capacity of 140 MW. In addition to dominant DSO JSC "Sadales tīkls", there are 10 other

licensed companies that distribute electricity. JSC "Latvenergo" sells electricity to both captive customers and market participants. The licensed trader LLC "Enefit" also sells electricity to market participants in Latvia.

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

The electricity market became 100% open on July 1, 2007 when all customers became eligible to choose an alternative supplier of electricity. In 2009, 6.3% of the electricity customers that are in the free electricity market switched their electricity supplier.

The interconnection between Estonian and Finnish transmission systems operates and electricity was exported/imported from/to Latvia from/to Nordic countries and therefore Nord Pool Spot gives reference price signals.

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

In 2009 there was no congestion in Latvia and between the Baltic States, as cross-border interconnection capacities were large enough, existing interconnection lines with Estonia (two 330 kV and two 110 kV lines) and Lithuania (four 330 kV and three 110 kV lines), with non-EU countries Russia (one 330 kV line) and Belarus (one 110 kV line).

The electricity transmission system interconnections with neighbouring countries have excess capacities and are enough for all the electricity import and export operations. In specific occasions the electricity supply to Latvia could be limited outside the Baltic region in the Smolensk - Belorussia and Lithuania - Belorussia cross-sections. The total amount of Latvia's interconnection capacity is 2500 MW for export and 2780 MW for import. In 2009, the total amount of incoming energy was 2.84 TWh and maximum capacity was 1024 MW, outgoing energy was 1.18 TWh with maximum capacity 955 MW, amount of transit was 2.1 TWh and 700 MW.

Taking into account the data above, the market operations for electricity traders in 2009 were not limited and electricity traders could freely deliver the electricity to Latvian customers.

PUC by fulfilling its obligations set out in Regulation (EC) No 1228/2003 of the European Parliament and of the Council of 26 June 2003 on conditions for access to the network for cross-border exchanges in electricity (hereafter - Regulation), on February 22, 2010 approved a new version of Grid Code where safety, operational and planning standards, including a general scheme for the calculation of the total transfer capacity and the transmission reliability margin based on the electrical and physical features of the network, are included (as set out in Article 5 section 2 of the Regulation). All the information required by the Regulation is also published on the TSO's web page: <u>http://www.ast.latvenergo.lv</u>.

However, due to the closure of Ignalina nuclear power plant in Lithuania and the fact that Latvian-Estonian interconnection is the weakest in terms of interconnection capacity the Baltic electricity regional initiative organized a working group to start implementation of capacity allocation auctions for the Latvian -Estonian interconnection.

# 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 elaborated based on the Electricity Market Law, the Law on Regulators of Public Utilities, and by taking into consideration regulations related to the supply and trade of electricity, as well as other legal acts which are in force in Latvia. The main principles set out in 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 and is approved by the PUC.
- 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 a tariff proposal is 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 the existing procedure, companies submit substantiated tariff proposals. The PUC must approve or reject the proposal within 120 days. The PUC's decisions can only be challenged in court.

### The quality of services

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

On January 2009, the PUC accepted a new version of 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 PUC 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 PUC. During the course of 2009, the quality of electricity supply was improved for a substantial number of end-users, and the average amount of time needed to repair problems in the distribution network for the end-users was 6.7 hours. There were 32817 interruptions in the distribution network for the end-users. There were 9 interruptions in the transmission network with an average duration of 0.37 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 they are set out in the Grid Code. In 2009, in order to harmonize balance energy calculation and publication, the principle that balance energy prices are published till the 5th day of the next month, instead of publication beforehand, was set out 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. For this purpose, the TSO has an open supply agreement and maintains operating reserves. Furthermore, those customers, large 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 set out in law. The idea is that customers have the right to delegate a supplier to settle imbalances with the system operator. In such a 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 an hourly basis.

TSO publishes balance energy purchase and selling prices on hourly basis and customer costs for balancing energy are calculated in accordance with balance energy calculating methodology published on TSO's home page.

#### **3.1.3.** Effective unbundling

There are 11 DSOs in Latvia – 10 of these are 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 rent the network assets from JSC "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 PUC has approved cost allocation methodologies and has implemented its right to PUC a compliance audit, one that is conducted by an independent auditor.

At the end of 2009, JSC "Latvenergo" had 1,374 employees. The independent TSO had 533 employees, independent DSO - 2656 employees. The percentage of shared services in the TSO's cost structure in 2009 was 7%.

In 2006, the PUC approved regulations on the minimum requirements for ensuring the independence of an electricity system operator. These regulations define the m requirements to ensure the greatest possible independence for system operators, along with successful market functioning. In 2009, the PUC approved reports on fulfilling the requirements of the independence of system operators, submitted by electricity transmission system operator JSC "Augstsprieguma tīkls" and electricity distribution system operator JSC "Sadales tīkls". Thus, the PUC confirmed that TSO and DSO ensure an equal access to the electricity system network is independent from generation and distribution activities, is independent from other activities not relating to the transmission system. The legislator has envisaged sanctions which the PUC can impose against companies which fail to comply with management, account unbundling or other requirements. The Latvian Administrative Violations Code allows the PUC to punish service providers in the sector when the following administrative violations 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

18 companies were given licenses for the trade of electricity and 3 of them actively operate as intermediaries in the delivery of electricity to customers. In 2009, 109 customers changed their supplier – from historical supplier JSC "Latvenergo" to another trader.

Electricity generation in Latvia is almost entirely related to Latvenergo producing approximately 60% of total consumption. The independent electricity generators are too small to offer significant volumes of energy for potential customers.

In 2009, the total annual consumption, including losses and self consumption, was 7223 GWh and the amount of installed available generation capacity was 2530 MW. Latvia produced 5569 GWh of electricity, and imported 4259 GWh from the neighbouring countries Lithuania, Estonia, Russia and Belorussia, exported 2605 GWh. Peak load in 2009 was 1340 MW.

The JSC "Latvenergo" produces about 90% of the total generation volume in the country and is the only company in Latvia that has more than 5% share of installed available capacity.

The share of three biggest generators was 94%.

At the end of 2009, 64.4% of electricity was sold at regulated prices (approved tariffs), while 35.6% was sold at contract prices out of which 16% was sold by an independent trader.

In 2009 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 the company which owns and operates this interconnection.

There were no acquisitions or mergers in the electricity industry in Latvia in 2009.

# **3.2.2.** Description of the retail market

In 2009, electricity supply companies supplied the required volume of energy, selling 6103 GWh of electricity to end-users -7,9% less than in 2008. One quarter of this electricity was used by local residents for household needs, and the remainder part went to non-household customers. The number of customers has not changed significantly. Most of them consume a comparatively small volume of electricity. There were 1004 thousand household and 97 thousand non-household customers. The distribution of customers among user groups in 2009 was as follows:

- Industry 1,5 TWh, or 24,7 %;
- Transport 0,12 TWh, or 2 %;
- Households 2 TWh, or 32,8 %;
- Agriculture&forestry&fishery 0,14 TWh or 2,2 %;
- Other 2,3 TWh, or 38.4 %.

Accordingly to Eurostat data, Latvia had one of the lowest electricity tariffs for households and non-household customers among all European Union member states in 2009.

#### 4. Regulation and performance in the natural gas market

# 4.1. Regulatory issues [Article 25(1)]

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 investments, and these would not be cost-effective at the present level of total annual consumption of natural gas. Thus, real competition in the natural gas market cannot be expected in middle term.

Due to 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 to ensure successful development over recent years. Under current tariff setting regime the company was able to make investments in security of supply by improving transmission and distribution networks and storage facilities as well as to extract reasonable profit for its shareholders.

Regarding article 49.1 of the Gas Directive Latvia has derogation for the opening of gas market till the interconnections with gas transmission systems of the EU member states will be built, except interconnections with gas transmission systems of Estonia, Lithuania and Finland.

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

Latvia's natural gas transmission system was developed 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, Lithuania and back to Russia;

3) The transmission system was designed for annual consumption of up to 4 bcm in Latvia – about three times more than total consumption in 2009.

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, Itera-Latvija, Lietuvos Dujos). During the winter, about 1 bcm of natural gas is transmitted to Russia, Estonia and Lithuania.

### **4.1.2.** The regulation of transmission and distribution companies

These are the general regulations and basic principles for 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 a tariff proposal is 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.

#### 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.

# 4.1.3. Effective unbundling

The current regulatory requirement is that all regulated activities must involve unbundled accounts. The PUC 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 in 2009 was 1,49 bcm and 100% of that gas was imported by JSC "Latvijas Gāze" from Russia. All import operations are handled by JSC "Latvijas Gāze" on the basis of a long term supply agreement among it, Gazprom and Itera-Latvija. There is no wholesale market for natural gas in Latvia.

Gas Directive gives Latvia the right to derogate from specific articles of the gas Directive and Regulation 715/2009 in whole while derogation criteria are met.

### 4.2.2. Description of the retail market

The gas consumption by end-users was 560 Mcm in 2009. 932 Mcm of gas was used for production of heat and electricity.

The Latvian retail market structure is as follows:

- Households 128 Mcm or 22,9%
- Industry 258 Mcm or 46%
- Transport 1,1 Mcm or 0,2%
- Utilities and commercial enterprises 173 Mcm or 30,8%

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.

During 2009 regulator received 9 consumer complaints and inquiries related to gas issues, 5 from which were unsubstantiated, 2 - unrelated to the regulator's work and 2 - information requests.

# 5. Security of supply

# 5.1. Electricity [Article 4]

Total electricity consumption including losses and self consumption in 2009 amounted to 7223 GWh, which was 6,7% less than in 2008. Peak load in 2009 was 1.34 GW. Forecasts for the years 2010 - 2011 are as follows:

- 2010 1.35 GW
- 2011 1.4 GW
- 2012 1.41 GW

Available generation capacity at this time is 2530 MW.

There are 11 distribution system operators, and their license conditions state that they must supply all customers with electricity and connect new customers in their licensed zones of operations. JSC "Sadales tīkls" in 2009 was the biggest DSO in Latvia and covered 99% of demand.

The total capacity of the transmission network is currently at a level of 7897,8 MVA, which is five times more than the peak load in 2009. This ensures continuous supply of electricity.

The Regulation of the Cabinet of Ministers on competition on introducing of electricity generation capacity payment foresees that the security of supply should also be supported through the construction of a new base load thermoelectric generation plant.

# 5.2. Gas [Article 5]

The total consumption of gas in Latvia was 1.49 bcm in 2009, which was 10% less than in the previous year. The technical import capacity which is available at this time is 3.5-4 bcm.

The aforementioned reduction in consumption is based on the falling energy demand induced by the global economic crisis. Major changes in the structure of gas consumption, however, should not be expected, because of the lack of major industrial customers and continuing economic slow down in Latvia and the EU.

The JSC "Latvijas Gāze" is the only trader of natural gas in Latvia, and its exclusive license obliges it to supply natural gas within the licensed area. At this time this refers to all territory of Latvia, and the public service 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 legislation.

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 8, 2006 the PUC determined the minimum requirements for ensuring the independence of the transmission and distribution system operators. On March 22, 2006, the PUC 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 December 20, 2006, the PUC 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 PUC issuing licenses:

- 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.

DSO has the obligation to connect every customer in the licensed area while complying with the regulations on connection to the grid, set by the PUC. According to the above mentioned regulations, 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 less than 40 amperes;
- the customer pays 80% and the DSO 20% if the current intensity of input protection appliance is more than 40 amperes;

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 CHP plants or from renewable resources. Article 28 of the Electricity Market Law specifies 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 and Price calculation, accepted on February 24, 2009.

On March 10, 2009, 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 end-user 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 from renewable energy resources. One part of total electricity consumption must be based on the production of electricity from renewable resources. By 2010, this segment must have reached 49.3% of the total amount of electricity consumption, including all hydropower plants. The obligation to purchase electricity produced in cogeneration regime and from renewable resources is also defined in the public supplier's license.

On August 18, 2009, the PUC accepted the Methodology on calculation of the components for the obligatory purchase and in accordance with the above mentioned methodology the obligatory purchase component for the electricity produced from the renewable energy resources in 2009 was 2 EUR/MWh and for electricity produced in co-generation regime - 9.2 EUR/MWh.

#### Protection of vulnerable customers

The obligation for the public supplier to supply electricity to captive customers is set out in the Electricity Market Law, as well as indicated in the licence of the public supplier.

In 2009, JSC "Latvenergo" implemented the social support program for vulnerable customers. The support took place in a form of 500 kWh electricity account card that was issued to 100 thousand households.

#### 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.

# Customer protection issues

According to the Law on Regulators of Public Utilities, the PUC is obliged to deal with customer complaints. In simpler cases where the agreement between the parties involved in the dispute is achievable, the regulator provides oral or written consultations or delivers an opinion. In more complicated cases the dispute resolution procedure is applicable.

In 2009, there were two cases resolved by applying dispute resolution procedure, one of the cases was concerning the quality of electricity supply, while the other was concerning contractual conditions of gas supply. All of the disputes were resolved at meetings of the PUC's Board.

In 2009, one administrative court procedure was completed by reaching a final court decision and three new litigation processes were initiated. As a result, eight litigation processes will continue in 2010. By replying to complainants, the PUC makes sure that service providers provide thorough and 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 PUC 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 necessary, for a system of reimbursement or compensation.

#### **Regulation of end-user prices**

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

In the electricity sector, the PUC can grant rights to the supply company to set the tariffs for the captive customers by the company itself. In such a case, the PUC within 21 days reviews draft tariffs and if the PUC does not reject draft tariffs, they enter into force on the date indicated by the company. Whereas, if the PUC concludes that draft tariffs are not economically justified tariffs do not enter in the force in the term set by the company. In December 2007, the PUC granted such rights to Latvenergo. Therefore from January 1, 2009, Latvenergo can set the tariffs for captive customers by following the procedure above. For the market customers the prices are set by bilateral agreements.

The methodology for the tariff setting for the captive customers envisages that the tariffs for the end-users are based on the costs of transmission, distribution and trade 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, if market fluctuations could not be compensated in the specified period when the tariffs were in force, the company has rights to 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 has issued regulations in which general rules on trade and supply of electricity are set out. (Regulation No. 793, adopted by the Cabinet of Ministers on June 21, 2009). These regulations set out also main 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 PUC approved the above mentioned standard contract for electricity supply for natural and legal persons who have the right to receive electricity for regulated prices.

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.