

2010 Annual Report of the Public Utilities Commission of the Republic of Latvia on the National Energy Sector, Prepared for the European Commission

1. Foreword

This report provides an insight into the electricity and gas sector regulation in 2010, as well as outlines future trends. One of the trends is the rise of energy prices globally. Higher oil prices in global commodity markets resulted in higher gas and electricity prices in the second half of 2010, and this trend continues in 2011. The Regulator's task is to make sure that changes in costs which are included in tariffs are substantiated and whether all calculations are conform to concluded agreements and operating conditions of regulated companies.

During the reporting year, the Regulator's experts spent a lot of time and effort evaluating the operation of electricity distribution networks. After a delay of several years, the fixed assets of electricity networks were revaluated; thus, adequate amortisation deductions will be provided for network maintenance. At the end of the reporting year, some users experienced interruptions of electricity distribution services because of insufficient resources for proper maintenance of electricity networks. The Regulator will closely monitor companies to reduce such risks in the future.

In the energy sector, further opening of the market to competition has continued. In 2010, the switching of suppliers was more active in the electricity market as customers had more understanding of the process. Also, electricity markets were opened up to competition in Lithuania and Estonia. Hopefully, the competition will reduce energy prices or at least slow their growth in the near future.

In 2010, a preparation for the implementation of the European energy directives or the so called „Third package” continued in Latvia, and the Regulator actively participated in this work.

Valdis Lokenbahs,
Chair
Latvia Public Utilities Commission

2. Summary: Major developments over the last year

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

According to the Law on Regulators of Public Utilities the PUC regulates energy (electricity, gas, heat and heat which is produced in a combined heat and power plant), electronic communications, postal services, railway sector and heat, waste and water sectors previously regulated by local government regulators.

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. According to Law on Regulators of Public Utilities the PUC's decisions can be challenged in two court instances.

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 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.

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 2010, 20,1% 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 traders. In 2010, 31 customer or 2,3% from market participants switched to another supplier.

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.

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 4000 MWh.

At the end of the reporting year, the PUC had licensed 155 companies in the electricity supply sector and issued 167 licenses - 75 for co-generation plants that generate electricity and heat, 43 for wind power plants, 2 for hydroelectric power plants, 2 for solar power plants and 1 for electricity generation from biogas of waste landfill sites. The PUC has issued one licence for the transmission of electricity, 11 for the distribution of electricity, and 32 for the trade of electricity.

In 2010, the PUC issued 53 new licenses of which 14 were issued for electricity trading. 39 licenses were issued for electricity generation, 26 of these are for generation of electricity and heat power in combined heat and power (hereinafter – CHP) plants, 11 are for electricity generation in wind power plants and 2 are for electricity generation in solar power plants. One licence for electricity trade was cancelled in 2010.

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.

In accordance with Regulations of the Cabinet of Ministers on types of regulated public utilities, at the end of 2010 in total 7 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 2010 59 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 co-generation 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.

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. Following the procedure the PUC assesses conformity of tariffs with the tariff calculation methodology within 21 days. 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.. In 2010 tariffs for captive customers were not changed and tariffs set by the PUC which were in force from April 1, 2008 continued to be applicable.

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) Estonian price zone. 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 2010, the PUC approved transmission system service tariffs for a JSC “Augstsprieguma tīkls”. New electricity and heat energy tariffs were approved for CHP plants of the JSC “Latvenergo” (TEC-1 and TEC-2) and LLC “Windau”. The tariff approval for JSC’s “Latvenergo” TEC-1 and TEC-2 plants was related to the application of an excise tax for natural gas used as fuel for production of heat energy. Excise tax amounting to 15,60 LVL/thousand m³ was applied to natural gas used for generation of heat energy. Tariffs were approved in tabular form and are applicable depending on the natural gas trade end tariff set by the JSC “Latvijas gāze” for a specific month.

In 2010, the Commission rejected the JSC “Sadales tīkls” tariff proposal for electricity distribution system services.

According to the *Eurostat* data for 2010, electricity tariffs in Latvia were about the same level as tariffs in the Eastern EU countries.

Natural gas

End user tariffs for trade of natural gas are based on the purchase price of natural gas on the border of the country and tariffs of gas supply services – 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 2010, 116 complaints of public service users were received and reviewed in the energy sector. 88% of complaints were received from individuals. Answers related to electricity supplies mostly had to do with the delivery of electricity (16%), installation of a new connection and the connection fee (19%) and the registration of the amount of electricity used and the resultant bills (40%). In the gas supply sector, most complaints concerned issues of natural gas supply (88%).

3. Regulation and performance in the electricity market

3.1. Regulatory issues

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 and 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 140 small hydroelectric power plants that generate electricity. They have a total capacity of 25 megawatts (MW). Latvia has 30 wind power stations

with a total capacity of 31 MW, and 52 co-generation stations with a total installed capacity of 140 MW. In addition to JSC “Sadales tīkls”, there are 10 other licensed companies that distribute electricity. JSC “Latvenergo” sells electricity to both captive users and market participants. 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 2010, 2,3% 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 2010 the existing capacities of interconnection lines were: with Estonia (two 330 kV and two 110 kV lines), Lithuania (four 330 kV and three 110 kV lines), with non-EU countries Russia (one 330 kV line) and Belarus (one 110 kV line).

On April 27, 2010 the Memorandum of Understanding on the Capacity Allocation Mechanism between the Baltic States No. PV-FIN-1011-15 (Memorandum) was signed by the Baltic States transmission system operators (TSOs). The Memorandum specifies:

1. From April 1, 2010 till January 1, 2011 if there is congestion on Estonian (EE) – Latvian (LV) interconnection weekly explicit auction will be used for 20% of available transmission capacity (ATC) for bilateral trades, including Russian transit to Lithuania and Latvia;
2. From April 1, 2010 till January 1, 2011 if there is congestion on EE-LV interconnection the capacity optimization method will be used for 80% of ATC for traded capacity in the price zone of Nord Pool Spot (NPS) Estlink;
3. Till January 1, 2011 during congestion on the Latvian-Lithuanian interconnection implicit auction on ATC shall be used for trade which take place in BaltPool (Lithuanian electricity power exchange);
4. Introduction of implicit auction by January 1, 2011 on EE-LV interconnection;
5. The Baltic TSOs working group to follow-up on a common position towards non-EU countries, also regarding impact coefficients for energy flows, etc.

In the summer of 2010, the Baltic countries experienced congestion at the Estonian and Latvian border. The capacity determination used by the Baltic States differs from its determination in European synchronous systems, because of synchronous operation of the Baltic Power System with Russian UPS and different security and technical standards. Therefore, the implemented method on EE-LV border does not work properly in practice due to the physical power flow distribution in BRELL loop as Russian transit to Kaliningrad does not take part in the capacity allocation. All sides agreed to work on a common methodology on determination of cross-border transfer capacities. The “flow based” capacity allocation method is considered as relevant for application in the Baltic States in the future. The implementation of the method needs a detailed assessment of the technical solution. The solution of the problem should be reached by agreement between TSOs.

According to the ENTSO-E ten-year network development plan 2010-2020 the Baltic TSOs should provide the common short time (1 year) and long time investment plans with specified goal and benefit to be achieved through those investments, also the congestion revenue allocation plan has to be presented in order to solve the regular overload of the Estonian - Latvian interconnection.

The total amount of Latvia's interconnection capacity is 2500 MW for export and 2780 MW for import. In 2010, the total amount of incoming energy was 2 TWh and maximum capacity was 1112 MW, outgoing energy was 1,136 TWh with maximum capacity 1316 MW, amount of transit was 2,476 TWh and maximum capacity 786 MW.

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

Regulation of the Cabinet of Ministers on the sales and use of electricity states that the PUC has the right to define quality requirements. The PUC has accepted

Regulation on distribution service quality requirements where quality indicators are defined in areas such as continuity of supply, voltage quality, commercial quality, etc.

In 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 end users. In accordance with the Grid Code, the system operators shall perform calculations of balancing openly and without discrimination with respect to all recipients of a balancing service. The 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.

In 2010 the average amount of time needed to repair problems in the distribution network for the end-users was 10,1 hour. There were 42524 interruptions in the distribution network for the end-users. There were 21 interruptions in the transmission network with an average duration of 0,52 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.

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

Latvian Electricity Market Law obliges TSO and DSOs to publish separate balance sheets. With regard to the setting of rules on the compilation of unbundled accounts, the PUC approves cost allocation methodologies and implements its right to ensure a compliance audit that is conducted by an independent auditor.

At the end of 2010, JSC “Latvenergo” had 1324 employees. The independent TSO had 495 employees, independent DSO – 2552 employees. In 2010, the percentage of shared services was 7% in the TSO’s cost structure.

In 2006, the PUC approved regulations on the minimum requirements for ensuring the independence of an electricity system operator. These regulations define the minimal requirements ensuring the largest possible independence of system operators, along with successful market functioning. In 2010, 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, and it is independent from generation and distribution activities, as well as from other activities not related 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 Code of Administrative Offences allows the PUC to impose penalties to respective service providers 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

3.2.1. Description of the wholesale market

32 companies received licenses for the trade of electricity and 3 of them actively operate as intermediaries in the delivery of electricity to customers. In 2010, 31 customers changed their supplier.

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

In 2010, the total annual consumption, including losses and self consumption, was 7500 GWh and the amount of installed available generation capacity was 2530 MW. Latvia has produced 5569 GWh of electricity, and imported 3973 GWh from the neighbouring countries Lithuania, Estonia, Russia and Belorussia, and has exported 3100 GWh. Peak load in 2010 was 1323 MW.

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

The share of three biggest generators was 94%.

At the end of 2010, 67,2% of electricity was sold at regulated prices (approved tariffs), while 33,8% was sold at contract prices out of which 13% was sold by independent traders.

There were no acquisitions or mergers in the electricity industry in Latvia in 2010.

3.2.2. Description of the retail market

In 2010, electricity supply companies supplied the required volume of energy, selling 6215 GWh of electricity to end-users – 2% more than in 2009. One quarter of this electricity was used by local residents for household needs, and the remaining part went to non-household customers. The number of customers has not changed significantly. Most of them consume a comparatively small volume of electricity. The distribution of customers among user groups in 2010 was as follows:

- Industry – 1590 GWh or 25,6%;
- Transport – 126 GWh or 2%;
- Households – 1938 GWh or 31,2%;
- Agriculture&forestry&fishery – 139 GWh or 2,2%;
- Others – 2422 GWh or 31,2%.

According to the *Eurostat* data for 2010, electricity tariffs in Latvia were about the same level as tariffs in the Eastern EU countries.

4. Regulation and performance in the natural gas market

4.1. Regulatory issues

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 will be liberalised, and connections to other EU countries and Norway will be ensured, or the LNG storage and/or regasification plant will be built. All of this would require significant investments, and they would not be cost-effective at the current level of total annual consumption of natural gas. Thus, real competition in the natural gas market cannot be expected in the medium-term.

Due to lack of competition in the natural gas supply sector, the regulation of tariffs for all customers will continue to be justified for a foreseeable future. The regulatory process ensures stronger tariff stability and a balance between the interests of supplier and customers. This has not been an obstacle for the natural gas supplier to ensure a 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 make a reasonable profit for its shareholders.

In conformity to the Article 49.1 of the gas Directive, Latvia has derogation for the opening of gas market until it “is directly connected to the interconnected system of any Member State other than 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 of this 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 supplied 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 supplies natural gas on the basis of orders from the owners of natural gas (Gazprom, Itera-Latvija, and Lietuvos Dujos. During the winter, about 1 bcm of natural gas is supplied 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. These 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

4.2.1. Description of the wholesale market

Total Latvian gas market consumption in 2010 was 1,82 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 JSC “Latvijas Gāze”, 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 until derogation criteria are met.

4.2.2. Description of the retail market

The gas consumption by end-users was 620 Mcm in 2010. 1167 Mcm of gas were used for production of heat and electricity.

The Latvian retail market structure is as follows:

- Households – 155 Mcm or 25,0%;
- Industry – 302 Mcm or 48,7%;
- Agriculture&forestry – 19 Mcm or 3,1%;
- Others – 144 Mcm or 23,2%.

All customers have 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 2010 regulator has received 25 consumer complaints and inquiries related to gas issues, 24 from which were unsubstantiated, 1 – unrelated to the regulator’s competences.

5. Security of supply

5.1. Electricity

Total electricity consumption including losses and self consumption in 2010 amounted to 7500 GWh, which was 6,7% less than in 2008. Peak load in 2010 was 1,32 GW. Forecasts for the years 2010-2011 are as follows:

- 2011 – 1.35 GW;
- 2012 – 1.4 GW;
- 2013 – 1.42 GW.

Currently available generation capacity 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" was the biggest DSO in Latvia in 2010, 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 2010. This ensures a continuous supply of electricity.

5.2. Gas

The total consumption of gas in Latvia was 1.82 bcm in 2010, which was 22 % more than in the previous year. Currently available technical import capacity is 3,5-4 bcm.

The aforementioned increase in consumption is based on the climate issues - long and cold winter season. Major changes in the structure of gas consumption, however, should not be expected, because of the lack of major industrial customers and continuing economic slowdown 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 present this refers to the whole territory of Latvia, and the public service obligation exists as long as deliveries are technologically possible and economically feasible.

6. Public service issues

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 some of them are also entrusted to 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 an access to system to customers and applicants to energy transmission or distribution systems or natural gas storage sites if such an access is 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, where:

- 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.

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. The Electricity Market Law specifies that producers can obtain the right to sell electricity to the public supplier (JSC “Latvenergo”), and the public supplier has the obligation to buy it, as long as the producer satisfies requirements that have been defined in Regulation of Cabinet of Ministers regarding Electricity Production from Renewable Energy Resources and Price calculation, accepted on March 16, 2010.

On March 10, 2009, the Cabinet of Ministers has adopted the Regulation on electricity generation in combined heat and power plants, covering particular criteria and requirements which regulate obligatory purchase. That regulation contains provisions on the operating regime, the security of the supply, the efficiency, and the formula for determining the price of electricity.

The public supplier must report the costs of the obligatory purchase. They are included in the end-user tariffs for captive customers and other customers (market participants) in order to cover proportionally the amount of electricity 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. In 2010 this segment reached 58,49 % 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 has 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 2010 was 2,9 EUR/MWh and for electricity produced in co-generation regime - 13,4 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.

Labelling the primary energy source

Producers which conform to criteria may receive a proof of origin in terms of the produced electricity, in accordance 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 2010, there were three cases resolved by applying dispute resolution procedure, one of the cases concerned the connection to the grid, while the other two were related to contractual conditions of gas supply. All of the disputes were resolved at meetings of the PUC's Board.

In 2010, six administrative court procedures were completed by reaching a final court decision, two litigation processes were continued from previous years and four new litigation processes were initiated. As a result, six litigation processes will continue in 2011. 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 approved 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 reviews draft tariffs within 21 days 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 into force in the term set by the company. In December 2007, the PUC has granted such rights to JSC "Latvenergo". Therefore from January 1, 2009, JSC "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 cannot 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 supplier 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 regulation in which general rules on trade and supply of electricity are set out. The regulation sets 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 provisions on supply and use of natural gas, the government set out general rules and conditions of supply contracts.