

## **2011 Annual Report of the Public Utilities Commission of the Republic of Latvia on the National Energy Sector, Prepared for the European Commission**

### **1. Foreword**

The Annual Report shows the situation regarding the provision and regulation of energy sector in 2011. The Public Utilities Commission (PUC) celebrated its 10<sup>th</sup> anniversary in 2011; this is a reference point to assess if we have succeeded in becoming an active mediator among service providers, customers and the state administration. This is also the time for setting future goals and defining future activities.

Each year, companies regulated by the PUC provide for 8-9% of the aggregate value added in Latvia, their services are used by every Latvian household, company and institution. It clearly shows the significance of our work. The PUC's activities to achieve general availability of high-quality services have several aspects.

In order to improve access to services, the PUC has consistently promoted and supported healthy competition in all sectors where this is possible and as much as possible, has taken care of the consumers' rights to choose a supplier and change it quickly.

The PUC has supervised firmly, but fairly, natural monopoly companies and monopoly services. It is confirmed by the PUC's statistics on litigation over the past ten years – out of more than 50 disputed decisions made by the PUC, the court decision may be regarded as unfavourable for the PUC only in one case, and the reason was a differing interpretation of contentious legal norms.

The achieved competence level of the PUC has laid a foundation for successful cooperation with not only the strongest Latvian companies, but also with their transnational shareholders whose annual turnovers exceed the gross domestic product of Latvia. In order to further advance and optimise the quality of regulatory processes, we plan to formalise and model processes, establish a unified know-how base not only for our own needs, but also to form a more operational link with the regulated companies.

The PUC has become a full member of the European regulatory bodies, and is particularly active in performing its tasks at the regional level within the framework of the European regional groups.

The PUC's ten year experience is significant, especially taking into account its achievements as multi-sector regulator. However, to maintain the position achieved, we will continue the successfully started work in the next decade.

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**

PUC is established and operates according to the Law on Regulators of Public Utilities. The goal of this law is to ensure the possibility of receiving continuous, safe and qualitative public utilities whose tariffs (prices) conform to economically substantiated costs, as well as to promote development and economically substantiated competition in regulated sectors.

PUC regulates the provision of public utilities as a commercial activity in the following sectors: energy (electricity, natural gas and thermal energy), electronic communications, postal services, railway transport, municipal waste management and water management.

According to the Law on Regulators of Public Utilities PUC is institutionally and functionally independent. PUC independently performs the functions delegated to it by the Law on Regulators of Public Utilities and, within the scope of its competence, take decisions independently and issue administrative instruments binding upon specific providers and users of public utilities. PUC's decisions may be declared unlawful and repealed only by court.

The main functions of PUC are:

- protect the interests of customers and promote the development of providers of public utilities;
- determine the method for calculation of tariffs;
- determine the tariffs;
- license and register the provision of public utilities;
- examine disputes;
- promote competition in the regulated sectors;
- supervise compliance of the public utilities with the Law on Regulators of Public Utilities, special regulatory enactments of the regulated sectors, conditions of the licence or conditions of general authorisations, as well as various requirements related to quality, environmental protection, technical regulations and standards;
- provide public information about its activities and operations of public service providers.

PUC consists of a Council composed of a Chairperson and four members appointed by the parliament for five years and an executive body subordinated to the Council. The Council takes decisions on behalf of PUC and approves administrative acts which are binding for specific public service providers and customers. The executive body operates under the oversight of PUC's Chairperson, and it serves both as a secretariat and as the provider of expert services. The executive body prepares issues and documents for examination at the Council meetings, enacts approved decisions, and oversees the implementation of those decisions.

The executive body has structural units for each regulated sector. There is a Legal Department, an Economic Analysis Department and Energy Department, as well as several other departments and divisions.

## **2.2. Main developments in the gas and electricity markets**

From July 1, 2007 all customers including households can choose alternative supplier of electricity. In 2011 all households and merchants with less than 50 employees and annual turnover less than 7 million LVL had the right to use the universal service of electricity, i.e., regulated tariffs are applied to those customers.

In 2011, 44% of total electricity was traded for a contract price in accordance with bilateral agreement. 85% of those customers purchased electricity from the dominant trader in the market JSC “Latvenergo” and other 15% from other traders. In 2011 81 customer or 6% from market participants switched to another supplier.

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 July 13, 2009 concerning common rules for the internal market in natural gas and repealing Directive 2003/55/EC (hereinafter – Gas Directive) grants 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 July 13, 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 on types of regulated public utilities in the energy sector (electricity and gas) PUC regulates:

- the generation of electricity in generating installations, the installed electric capacity of which is more than one megawatt;
- the generation of electricity and thermal energy in cogeneration where the total installed electric capacity of cogeneration equipment is more than one megawatt;
- electricity transmission if the voltage is 110 kilovolts and higher;
- electricity distribution if the voltage is higher than one kilovolt and does not exceed 110 kilovolts;
- the trade of electricity to any energy user if the total marketing capacity exceeds 4000 megawatt hours per year;
- the transmission of natural gas through pipelines;
- the storage of natural gas intended for sale in containers or storage sites;
- the distribution of natural gas;
- the trade of natural gas to any energy users, except the trade of natural gas in gas filling compression stations for vehicles.

Until January 1, 2012 all providers of the above mentioned types of public utilities had to obtain a licence issued by PUC. After the above mentioned date the registration procedure (instead of licensing procedure) was introduced for generation and trade of electricity (except public trader) and thermal energy. Prior to the provision of these public utilities the provider must be registered by PUC.

At the end of the reporting year, PUC had licensed 191 companies in the electricity supply sector and issued 203 licenses - 97 for co-generation plants that generate electricity and thermal energy, 53 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. PUC has issued one licence for the transmission of electricity, 11 for the distribution of electricity, and 36 for the trade of electricity.

In 2011, PUC issued 41 new licenses of which 6 were issued for electricity trading, 35 licenses were issued for electricity generation, 25 of these are for generation of electricity and heat power in combined heat and power (hereinafter – CHP) plants, 10 are for electricity generation in wind power plant.

JSC “Latvijas Gāze” has licenses for the storage, transmission, distribution and trade of natural gas.

In accordance with amendments to the Regulations of the Cabinet of Ministers on types of regulated public utilities the distribution of liquefied petroleum gas from surface and underground tanks through pipelines to the inlet in an apartment building does not need to be regulated by PUC since January 1, 2012.

The operations of public service providers are regularly inspected on the basis of PUC’s decision. In 2011 87 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***

PUC approves tariffs for the generation of electricity in co-generation plants, as well as tariffs for the transmission and distribution of electricity.

In accordance with Electricity Market Law and Regulations of the Cabinet of Ministers regarding the Trade and Use of Electricity in 2011 all household customers, as well as merchants with annual turnover less than 7 million LVL and less than 50 employees (hereinafter – captive customer) had the right to receive electricity by paying regulated electricity tariffs. The other customers bought 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 costs of generated and imported electricity, including electricity generated from renewable energy resources, and costs of transmission and distribution system services, as well as the cost of electricity trading service.

According to the Electricity Market Law PUC has authorized JSC “Latvenergo” to set the tariffs for captive customers from January 1, 2009. Following the procedure PUC assesses conformity of tariffs with the tariff calculation methodology within 21 days. If 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 into force. For the first time the tariffs for captive customers set by JSC “Latvenergo” entered into force on April 1, 2011.

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. 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 PUC.

In 2011, PUC approved new electricity and thermal energy tariffs for CHP plants of the JSC “Latvenergo” (TEC-1 and TEC-2) and LTD “Windau”. The tariff approval for JSC “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 thermal energy. Excise tax amounting to 15,60 LVL/thousand m<sup>3</sup> was applied to natural gas used for generation of thermal 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 2011, PUC approved the JSC “Sadales tīkls” distribution system services tariffs for electricity.

According to the Eurostat data for 2011, electricity tariffs in Latvia were about at the same level as tariffs in the Eastern EU countries.

### ***Natural gas***

Final customer 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 2011, 131 complaints of public service users were received and reviewed in the energy sector. 90% of complaints were received from individuals. Answers related to electricity supplies mostly had to do with the supply of electricity (16%), quality of energy supply (20%), installation of a new connection and the connection fee (9,5%), electricity tariffs (9,5%) and the registration of the amount of electricity used and the resultant bills (39%). 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 requirements of the European Parliament and Council Directive 2009/72/EC concerning common rules for the internal market in electricity and repealing Directive 2003/54/EC (hereinafter – Electricity Directive), including on the TSO certification, have been transposed into the Electricity Market Law by amendments adopted on July 8, 2011. Accordingly on November 23, 2011 PUC issued Regulations regarding the electricity transmission system development plan and Regulations regarding the TSO certification.

The Cabinet of Ministers on January 12, 2011 issued an order No.12 supporting the establishment of JSC “Augstsprieguma tīkls” as an independent system operator.

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 trade of electricity to customers. The functions of the electricity TSO are carried out by JSC “Augstsprieguma tīkls”.

On February 10, 2011 JSC “Latvenergo” established JSC “Latvijas elektriskie tīkli” and invested in equity all transmission network assets. The main responsibility of JSC “Latvijas elektriskie tīkli” as an Electricity System Owner is to finance investments in the transmission system.

The functions of the electricity DSO are carried out by JSC “Sadales tīkls”, the independent DSO.

There are 141 small hydroelectric power plants that generate electricity. They have a total capacity of 25 megawatts (MW). Latvia has 31 wind power stations with a total capacity of 36 MW, and 63 co-generation stations with a total installed capacity of 942,1 MW. In addition to JSC “Sadales tīkls”, there are 10 other licensed companies that distribute electricity. JSC “Latvenergo” sells electricity to both - captive customers and market participants. LTD “Enefit”, LTD “Enerģijas avots”, LTD “BCG Rīga” 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 2011, 6% 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 2011 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 TSOs. The Memorandum specifies:

1. From April 1, 2010 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 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. 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. 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 2011, 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. 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 2011, the total amount of incoming energy was 4,01 TWh and maximum capacity was 1500 MW, outgoing energy was 2,764 TWh with maximum capacity 1300 MW, amount of transit was 2,023 TWh and maximum capacity 819 MW.

#### ***Regulating the tasks of transmission and distribution companies***

Latvia has one TSO - JSC “Augstsprieguma tīkls”. Until January 2, 2012 JSC “Augstsprieguma tīkls” was a part of vertically integrated electricity undertaking JSC “Latvenergo”. Till April 1, 2011 the operator rented the fixed assets of the transmission system from JSC “Latvenergo”. From April 1, 2011 operator rented

fixed assets of the transmission system from JSC “Latvijas elektriskie tīkli”. JSC “Latvenergo” also owns the biggest DSO 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, 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, providers of public utilities submit substantiated tariff proposals. PUC must approve or reject the proposal within 120 days. 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. In 2011 there were into force the PUC’s Regulations on distribution service quality requirements where quality indicators were defined in areas such as continuity of supply, voltage quality, commercial quality, etc.

On February 24, 2010 PUC accepted the 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 DSOs, 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 TSO shall ensure the compliance with the procedures specified in the Grid Code. The PUC may assign the TSO to elaborate amendments to the Grid Code and determine a time period for the elaboration and submission thereof to the PUC.



In 2011 the average amount of time needed to repair problems in the distribution network for the end-users was 7,98 hour. There were 519514 interruptions in the distribution network for the end-users. There were 24 interruptions in the transmission network with an average duration of 0,56 hours.

### ***Balancing***

The 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. A market participant has the right to become a balancing service provider by entering into a balancing contract with a TSO.

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 within JSC “Latvenergo” on July 1, 2007. JSC “Sadales tīkls” is located separately from the vertically integrated undertaking's production and supply affiliates. On October 1, 2011 JSC “Latvenergo” invested all distribution network assets previously owned by JSC “Latvenergo” in JSC “Sadales tīkls” stock capital.

There is only one TSO – JSC “Augstsprieguma tīkls”, operating as a independent transmission system operator from January 2, 2012. From April 1, 2011

JSC “Augstsprieguma tīkls” rents the network assets from JSC “Latvijas elektriskie tīkli” – the daughter company of JSC “Latvenergo” which was established as the transmission system owner in accordance with the latest amendments to the Electricity Market Law.

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, 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 2011 JSC “Latvenergo” had 1323 employees. The independent TSO had 56 employees, independent DSO – 2553 employees. In 2011, the percentage of shared services was 24% 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 2011, the PUC approved reports on fulfilling the requirements of the independence of system operators, submitted by electricity TSO JSC “Augstsprieguma tīkls” and electricity DSO 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 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 authorisation or breaching provisions of licence or general authorisation;
- 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**

36 companies received licenses for the trade of electricity and 5 of them actively operate as intermediaries in the delivery of electricity to customers. In 2011 more than 81 customers changed their supplier.

Electricity generation in Latvia is almost entirely related to JSC “Latvenergo” producing approximately 70% of total electricity consumption. The independent electricity generators are too small to offer significant volumes of energy for potential customers.

In 2011, the total annual consumption, including losses and self consumption was 7338 GWh and the amount of installed available generation capacity was 2584 MW. Latvia has produced 6093 GWh of electricity, and imported 4009 GWh from the neighbouring countries Lithuania, Estonia, Russia and Belorussia, and has exported 2764 GWh. Peak load in 2011 was 1227 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 2011, 59% of electricity was sold at regulated prices (approved tariffs), while 41% was sold at contract prices out of which 20% was sold by independent traders.

There were no acquisitions or mergers in the electricity industry in Latvia in 2011.

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

In 2011, electricity supply companies supplied the required volume of energy, selling 6191 GWh of electricity to end-users – 0,4% more than in 2010. 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 2011 was as follows:

- Industry – 1670 GWh or 27%;
- Transport – 124 GWh or 2%;
- Households – 1772 GWh or 28,6%;
- Agriculture&forestry&fishery – 135 GWh or 2,2%;
- Others – 2490 GWh or 40,2%.

According to the Eurostat data for 2011, electricity tariffs for household customer 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 LTD “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, LTD "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 2011 was 1,561bcm 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 LTD “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 2011. 1167 Mcm of gas were used for production of heat and electricity.

The Latvian retail market structure is as follows:

- Households – 133 Mcm or 22,4%;
- Industry – 251 Mcm or 42,3%;
- Agriculture&forestry – 23 Mcm or 3,8%;
- Others – 187 Mcm or 31,5%.

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 2011 regulator has received 39 consumer complaints and inquiries related to gas issues, 37 from which were unsubstantiated, 2 – unrelated to the regulator’s competences.

## **5. Security of supply**

### **5.1. Electricity**

Total electricity consumption including losses and self consumption in 2011 amounted to 7338 GWh, which was 2% less than in 2010. Peak load in 2011 was 1,227 GW. Forecasts for the years 2012-2013 are as follows:

- 2012 – 1.4 GW;

- 2013 – 1.42 GW.

Currently available generation capacity is 2584 MW.

There are 11 DSOs, 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 2011, and covered 99% of demand.

The total capacity of the transmission network is currently at a level of 8028,8 MVA, which is five times more than the peak load in 2011. This ensures a continuous supply of electricity.

## **5.2. Gas**

The total consumption of gas in Latvia was 1.561 bcm in 2011, which was 14 % 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 PUC determined the minimum of requirements for ensuring the independence of TSO and DSOs. On February 08, 2012, PUC determined what kind of information a public service provider shall include in the bills and informative materials to be issued to a final customer. In 2012 Cabinet of Ministers approved quality standards for public networks.

The laws have defined several tasks to public service providers, and some of them are also entrusted to 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 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 (combined heat and power plants) or from renewable resources***

One of the most important obligations imposed on the public trader of electricity is the obligation to purchase electricity that is produced within the country in CHP combined heat and power plants or from renewable resources. The Electricity Market Law specifies that producers can obtain the right to sell electricity to the public trader (JSC “Latvenergo”), and the public trader 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 trader must report the costs of the obligatory purchase. They are included in the final customer tariffs for captive customers and other customers (market participants) pay them separately in order to cover the costs of the obligatory purchase 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 2011 this segment reached 41,93 % 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 trader’s license.

On August 18, 2009, 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 2011 was 3,3 EUR/MWh and for electricity produced in co-generation regime - 13,4 EUR/MWh.

***Protection of vulnerable customers***

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

***Labelling the primary energy source***

Producers which conform to criteria may receive a guarantee s of origin in terms of the produced electricity, in accordance with government - specified

procedures. An institution authorised by the government issues the guarantee of origin. On November 22, 2011, the Cabinet of Ministers approved the rules for obtaining guarantees of origin for electricity produced from renewable energy sources.

### ***Customer protection issues***

According to the Law on Regulators of Public Utilities, 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 2011, there were no cases in electricity and gas sector resolved by applying official dispute resolution procedure. In 2011, 17 administrative court procedures were completed by reaching a final court decision, 52 litigation processes were initiated and 56 litigation processes will continue in 2012.

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 final customer prices***

In accordance with the prevailing legal framework, the PUC sets tariffs 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”. For the first time the tariffs for captive customers set by JSC “Latvenergo” entered into force in April 1, 2011.

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 final customers 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.



*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 Cabinet of Ministers 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. On November 29, 2011, the Cabinet of Ministers has adopted Electricity trade and use rules in new edition.

Electricity Market Law prescribes that a public trader must draft, submit for the regulatory approval, and then, in accordance with procedures specified by the regulator, PUC publishes 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, On December 12, 2007, 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, which were still used in 2011.

By adopting main provisions on supply and use of natural gas, the Cabinet of Ministers set out general rules and conditions of supply contracts. On December 16, 2008, the Cabinet of Ministers issued Regulations for the supply and use of natural Gas.