2013 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 report shows the situation regarding the provision and regulation of public services in energy sector in 2013. Public Utilities Commission (hereinafter – PUC) acted as an active balanced mediator among the service providers, customers and the state administration.

Year 2013 was the second year for PUC as an independent institution. It provided new opportunities for independent work and fulfilment of the new duties, especially in the energy sector. This status simultaneously meant a much larger administrative load for the economic policy making and implementation – Regulator actively contributed to the development of the legal and regulatory environment. In 2013 in the processes of market opening Regulator performed a number of specific actions which significantly improved market functioning.

Liberalization of the electricity market fundamentally changed PUC's functions in the energy sector. In 2013 Nord Pool Spot (hereinafter – NPS) by the opening of the "Elspot" Latvian trading areas has successfully launched the electricity exchange in Latvia. Opening of the Latvian trading area has led to the long term goal achievement - to create a transparent and open Baltic electricity market, which is connected with the electricity market in the Nordic region.

Projects of common interest, whose task is to provide a unified European energy infrastructure in order to expand the market and to create independence from one resource supplier play an important role in EU energy market.

Year 2013 was also significant for the fact that PUC of Latvia as the first among the Baltic countries successfully completed a new process of public services – JSC "Augstsprieguma tīkls" was certified as an independent electricity transmission system operator.

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

Regulator 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.

Regulator 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 Regulator 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, takes decisions independently and issues administrative instruments binding upon specific providers and users of public utilities. Regulator's decisions maybe declared unlawful and repealed only by court.

The main functions of Regulator 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.

Regulator 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 Regulator and approves administrative acts which are binding for specific public service providers and customers. The executive body operates under the oversight of Regulator'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 are 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 could choose alternative supplier of electricity. From April 1, 2012 all households and other customers who used the connection till 400 volt had the right to use the universal service of electricity (regulated tariffs), as from November 1, 2012 only households has regulated tariffs.

On June 3, 2013 Latvia joined organized market place – power exchange NPS to trade electricity and NPS day-ahead (Elspot) biding area in Latvia was successfully launched. While on December 10, 2013 NPS intraday market (Elbas) was launched in Latvia and Lithuania.

In 2013 76% of total electricity was traded for a contract price in accordance with bilateral agreement and 73% of that electricity was traded by the dominant trader in the market JSC "Latvenergo" and the rest 27% - by other traders.

Regulator approved report on fulfilling the requirements of the independence of electricity distribution system operator (hereinafter - DSO) JSC "Sadales tīkls", thus confirming that DSO ensures equal access to the electricity system network.

On January 30, 2013 Regulator issued the decision on the certification of JSC "Augstsprieguma tīkls" and designated an independent system operator thus fulfilling the certification process in accordance with the Article 13 of the Directive 2009/72/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in electricity and repealing Directive 2003/54/EC (hereinafter – Electricity Directive) and Article 3 of the Regulation (EC) No 714/2009 of the European Parliament and of the Council of July 13, 2009 on conditions for access to the network for cross-border exchanges in electricity and repealing Regulation (EC) No 1228/2003. In the process of the certification regulator also checked the necessary steps taken forensuring the independence of the owner of transmission system – JSC "Latvijas elektriskie tīkli". On September 11, 2013 PUC approved the second ten-year transmission system development plan.

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) guarantees 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 natural gas) Regulator 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 Regulator. After the above mentioned date the registration procedure (instead of licensing procedure) was introduced for generation and trade of electricity. Prior to the provision of these public utilities the provider must be registered by Regulator.

In 2013 Regulator registered 5 new electricity producers, among them 2 are for generation of electricity and heat power in combined heat and power plants (hereinafter – CHPP) and 3 are for electricity generation in wind power plants.

At the end of the reporting year there were registered 245 companies in the electricity producing sector -180 for co-generation plants, 61 for wind power plants, 2 for hydroelectric power plants and 2 for solar power plants. In 2013 Regulator registered 17 new electricity traders. At the end of the reporting year in the sector of the electricity trading there were registered 55 companies and there were in force 11 licences for the distribution of electricity and 1 licence for transmission of electricity. JSC "Latvijas Gāze" has licenses for the storage, transmission, distribution and trade of natural gas.

The operations of public service providers are regularly inspected on the basis of Regulator's decision. In 2013 82 objects of energy supply companies were inspected in order to examine their operations and compliance with license requirements or general authorisation conditions, among them 39 electricity supply, 34 heat supply, 2 natural gas supply and 9 hydroelectric power stations. The objects of the companies were inspected following the schedule and taking into regard the necessity to ascertain on the operation of the companies in accordance with legislation. In addition Regulator organised electricity supply quality measurements in 53 objects according to European Standard EN 50160 requirements. Some of inspections were also conducted at facilities about which complaints have been received.

Tariff regulation

Electricity

Regulator approves tariffs for the generation of electricity and thermal energy in CHPP from fossil resources. Regulator approves tariffs for companies that generate electricity in CHPP with a capacity above 4 MW, electricity transmission and distribution tariffs, as well as - if the trader is not authorized to set tariffs – tariffs for electricity trade to captive customers.

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 costs of electricity trading service.

According to the Electricity Market Law Regulator has authorized JSC "Latvenergo" to set the tariffs for captive customers from January 1, 2009. Tariffs for captive customers in 2013 were set by JSC "Latvenergo" and are in force from April 1, 2011.

For CHPP 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 Regulator.

According to the Eurostat data for 2013 electricity tariffs in Latvia were about at the same level as tariffs in the Eastern EU countries.

Natural gas

Customer's end tariffs for trade of natural gas are based on the purchase price of natural gas on the border of the country and tariffs of natural 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 Regulator's competence to oversee the process of market development, ensuring transparent market information and equal rules for all market participants.

In 2013 78 complaints of public service users were received and reviewed in the energy sector. Answers related to electricity supplies mostly had to deal with the registration of the amount of electricity used and the resultant bills (41%), quality of energy supply (16%), supply of electricity (11%), electricity tariffs (5%) and installation

of a new connection and the connection fee (5%). In the gas supply sector, most complaints concerned issues of natural gas supply (64%), the registration of the amount of natural gas used and resultant bills (27%), installation of a new connection (9%).

3. Regulation and performance in the electricity market

3.1. Regulatory issues

3.1.1. General

The requirements of the Electricity Directive have been transposed into the Electricity Market Law by amendments adopted on July 8, 2011. Accordingly on November 23, 2011 Regulator issued Regulations on the electricity transmission system development plan and on the transmission system operator (hereinafter - TSO) certification.

The functions of the electricity TSO are carried out by the independent system operator JSC "Augstsprieguma tīkls". On October 8, 2012 Regulator sent a letter to the European Commission to get an opinion of evaluation the compliance of the JSC "Augstsprieguma tīkls" accordingly to the requirements of certification of the JSC "Augstsprieguma tīkls" as an independent system operator.

On December 3, 2012 the European Commission expressed an opinion on the adequacy of the JSC "Augstsprieguma tīkls" as an independent TSO in accordance with the Electricity directive. On January 30, 2013 the Regulator certified JSC "Augstsprieguma tīkls" as an independent transmission system operator under a condition that no later than till January 31, 2015 JSC "Augstsprieguma tīkls" itself shall perform the maintenance of fixed assets of the transmission system or shall conclude an agreement for performance of specific works with such a company which is neither directly nor indirectly associated with activities of electricity generation, trade and distribution.

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, also provides functions of public trader. JSC "Latvenergo" sells electricity to both - captive customers and market participants. JSC "Latvijas elektriskie tīkli" (a part of vertically integrated electricity undertaking JSC "Latvenergo") is a transmission network asset owner and is responsible for financial investments in the transmission system and transmission network maintenance.

The functions of the electricity DSO are carried out by JSC "Sadales tīkls (a part of vertically integrated electricity undertaking JSC "Latvenergo"), as well as 10 other licensed companies that distribute electricity. There are 146 small hydroelectric power plants that generate electricity. They have a total capacity of 27 megawatts (MW). There are 4 regulated hydroelectric power plants, with capacity bigger than 1 MW. They have a total capacity of 1537 MW. Latvia has 61 registered wind power stations among those 18 are currently operating stations with a total capacity of 63.5 MW, and 188 registered cogeneration stations, among them 56 are currently working with a total installed capacity of 1204 MW (including biomass and biogas power plants). Latvia imports electricity for

most of the year and mostly exports during flooding in the spring. The total amount of imports amounts to 15% - 20% 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. There are several more companies in Latvia, which sells electricity to market participants: LTD "Enefit", LTD "Baltic Energy Services", LTD "BCG Riga", LTD "Inter Rao Latvia".

The interconnection between Estonian and Finnish transmission systems operates and the electricity is exported/imported from/to Latvia from/to Nordic countries and therefore NPS gives reference price signals.

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

On 15th May 2013 in Vilnius, the Baltic TSOs signed an agreement on the principles of calculation and allocation of the cross-border capacity within Baltic countries and with 3rd countries (hereinafter – Agreement), which apply to the interconnections of the Baltic countries, as well as to foreign cross-border networks for the trade with non-member states of the European Economic Area (3rd countries). The agreement was crucial to continue successfully the integration of the Baltic electricity market. NPS ensured allocation of the capacity for the members of the market on the basis of information provided by the Baltic TSOs according to the unified methodology (principles) of calculation and allocation of the cross-border capacity. The aforementioned methodology was fully applied as the NPS Latvian bidding area was opened on 3rd June 2013. Starting from this date NPS ensured implicit auctions between the Baltic countries however the capacity optimization method is applied for the 3rd countries. As stipulated in Article 37^3 of the Latvian Electricity Market Law, the transactions of market participants, which exceed borders of one bidding area and include the physical transmission of electricity, shall only be performed in the power exchange.

The Baltic TSOs calculated cross-border trading capacity in accordance with the Agreement, including:

- 1. Baltic internal cross-border trading capacity calculation rules;
- 2. Cross-border capacity calculation rules with 3rd countries;
- 3. Cross-border trading capacity allocation rules within Baltic states and with 3rd countries.

In the 2013 the Baltic countries experienced congestion problems at the Estonian and Latvian interconnection. The "flow based" capacity allocation method is considered as more relevant for the application in the Baltic States in the nearest future. The implementation of the method still needs a detailed assessment of the technical solution and Baltic TSOs are continuing to develop and improve methods for cross-border trading capacity calculation rules.

According to the ENTSO-E ten-year network development plan 2012 and also accepted by the PUC the ten-year transmission system development plan of the JSC

"Augstsprieguma tīkls" the Estonia-Latvia 3^{rd} interconnection should be realized in a year 2020. As a result an increased cross-border transmission capacity will make it possible for the producers to get an access to the larger market area and compete in a European common electricity market.

The total amount of Latvia's interconnection capacity in 2013 was 2040 MW for export and 1450 MW for import. In 2013 the total amount of incoming energy was 4,9 TWh and maximum capacity was 1077 MW, outgoing energy was 3,6 TWh with maximum capacity 1429 MW, amount of transit was 3,1 TWh and maximum capacity 910 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 the owner of the fixed assets of the transmission system is JSC "Latvijas elektriskie tīkli". From January 30, 2013 Regulator designated JSC "Augstsprieguma tīkls" as an independent system operator and completed the certification.

JSC "Latvenergo" owns the biggest DSO JSC "Sadales tīkls". There are 10 local distribution companies in addition.

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 Regulator.
- 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.
- 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. Regulator must approve or reject the proposal within 120 days. Regulator's decisions can only be challenged in court.

The quality of services

On October 4, 2011 Cabinet of Ministers approved Rules on public power supply network voltage requirements that define quality requirements. The rules entered in force on January 1, 2012.

Regulator accepts 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 Regulator may assign the TSO to elaborate amendments to the Grid Code and determine a time period for the elaboration and submission thereof to the Regulator.

In 2013 the average amount of time needed to repair problems in the distribution network for the final customers was 10,35 hours per one user. There were 15 interruptions in the transmission network with an average duration of 0,44 hours. Planned system average interruptions duration (SAIDI) in distribution network for 2013 was 280 minutes, unplanned – 341 minutes and planned system average interruptions frequency index (SAIFI) per customer for 2013 was 0.96, unplanned – 3.52.

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 TSOs. 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 in Latvia - JSC "Augstsprieguma tīkls". From January 30, 2013 JSC "Augstsprieguma tīkls" operates as an independent system operator. 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 amendments to the Electricity Market Law and Regulator states that JSC "Latvijas elektriskie tīkli" has an adequate level of necessary independence from the JSC "Latvenergo".

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, Regulator approves cost allocation methodologies and implements its right to ensure a compliance audit that is conducted by an independent auditor.

At the end of 2013 JSC "Latvenergo" had 1428 employees. JSC"Augstsprieguma tīkls" had 64 employees and JSC "Sadales tīkls" – 2505 employees.

Regulator confirmed annually that the biggest DSO JSC "Sadales tīkls" had fulfilled the necessary conditions to ensure the independence requirements for the DSO in accordance with the regulations on the requirements for ensuring the independence of DSO. The legislator has envisaged sanctions which Regulator can impose against companies which fail to comply with management, account unbundling or other requirements. The Latvian Code of Administrative Offences allows Regulator 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

55 companies are registered for the trade of electricity and 12 of them actively operate as intermediaries in the delivery of electricity to customers. Electricity generation in Latvia is almost entirely related to JSC "Latvenergo" producing approximately 80% of total electricity consumption. The other electricity producers are too small to offer significant volumes of energy for potential customers.

In Latvia 5 traders during 2013 were trading electricity in NPS power exchange and in average 30--50% of the total electricity consumed in Latvia was traded through NPS power exchange. In accordance to EU Regulation No.1227/2011 on wholesale energy market integrity and transparency (hereinafter – REMIT) Regulator has investigated one case about high price peaks in June 25, 2013.

In 2013 the total annual consumption, including losses and self-consumption was 6843 GWh and the amount of installed available generation capacity was 2653 MW. Latvia has produced 5491 GWh of electricity, and imported 5004 GWh from the neighbouring countries Lithuania, Estonia, Russia and Belarus, and has exported 3652 GWh. Peak load in 2013 was 1368 MW.

The JSC "Latvenergo" produces about 82 % 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 2013, 24% of electricity was sold at regulated prices (approved tariffs), while other part was sold at contract prices out of which 73% was sold by JSC "Latvenergo" and 27% - by other traders.

There were no acquisitions or mergers in the electricity industry in Latvia in 2013.

3.2.2. Description of the retail market

In 2013 electricity supply companies supplied the required volume of energy, selling 6364 GWh of electricity to final customers -1,3% less than in 2012. 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.

According to the Eurostat data for 2013, 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 falling 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 is 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 more than 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 2013.

The natural gas transmission system is operated by the vertically integrated company JSC "Latvijas Gāze". It supplies natural gas on the basis of orders from the owners of natural gas (Gazprom, LTD "Itera-Latvija", Eesti Gaas and Lietuvos Dujos). During the winter about 1 bcm of natural gas is supplied to Russia, Estonia and Lithuania.

Latvia's natural gas supply system pipeline networks have three international connections (natural gas tracking stations), with capacity on existing pipeline situation is as follows:

- cross-border connection with Russia up to 17 million m3/day
- cross-border connection with Estonia up to 6 million m3/day
- cross-border connection with Lithuania up to 5 million m3/day

Transnational connections with Russia und Lithuania provides the ability to supply natural gas in both directions – to Latvia's natural gas supply system and from it, thereby ensuring security of supply of natural gas in Latvia.

In 2013 there were not overload capacities in Latvia, thus the system operator did not need to use any actions or methods that focus on power congestion management.

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 the natural gas, as well as other legal acts which are in force in Latvia. These methodologies are applied when determining natural gas supply 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 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 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.

Balancing

The TSO currently conducts balancing on the basis of the consumption rate. Nonhousehold customers are required to observe tolerance thresholds for over- and underconsumption (+/-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 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.

4.2. Competition issues

4.2.1. Description of the wholesale market

Total Latvian natural gas market consumption in 2013 was 1,452 bcm (decreased by 0.3% accordingly to 2012) and 100 % of that gas was imported by JSC "Latvijas Gāze" from Russia. All import operations were handled by JSC "Latvijas Gāze" on the basis of a long term supply agreement among JSC "Latvijas Gāze", Gazprom and LTD "Itera-Latvija". 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. Accordingly to the Energy Law it is scheduled on April 3, 2017.

4.2.2. Description of the retail market

Natural gas consumption by final customers was 578 Mcm in 2013. 874 Mcm of natural gas were used for production of thermal energy and electricity.

The Latvian retail market structure is as follows:

- households -127 Mcm or 22,%,
- industry 222 Mcm or 38,4%,
- agriculture&forestry 26 Mcm or 4,5%,
- others 203 Mcm or 35,1%.

All customers have received natural gas from the vertically integrated JSC "Latvijas Gāze".

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

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

During 2013 Regulator received 22 consumer complaints and inquiries related to gas issues, 20 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 2013 amounted to 6843 GWh, which was 8,8% less than in 2012. Peak load in 2013 was 1,368 GW. Forecasts for the years 2014-2015 are as follows:

• 2014 – 1.42 GW;

• 2015 – 1.45 GW.

Currently available generation capacity is 2762 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" is the biggest DSO in Latvia in 2013 covering around 99% of the whole territory of Latvia.

The total capacity of the transmission network is currently at a level of 8542,8 MVA, which is five times more than the peak load in 2013. This ensures a continuous supply of electricity.

5.2. Natural gas

In 2013 the total consumption of gas in Latvia was 1.452 bcm in 2013, which was 0.3 % less than in the previous year. Currently available technical import capacity is 3,5-4 bcm.

The aforementioned decrease in consumption is based on the growing use of renewable resources in central heating and power generation. Major changes in the structure of natural gas consumption, however, should not be expected, because of the lack of major industrial customers.

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 22, 2012 Regulator determined the requirements for ensuring the independence of DSOs. On February 08, 2012, Regulator determined what kind of information a public supplier shall include in the bills and informative materials to be issued to a final customer.

Laws have defined several tasks to public traders, and some of them are also entrusted to Regulator 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, thermal energy, natural 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.

In electricity sector DSO has the obligation to connect every customer in the licensed area while complying with the regulations on connection to the grid, set by Regulator. According to the above mentioned regulations, the connection charge (the cost of project design and construction) for the 0,4 kV 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 CHPP or from renewable resources. The Electricity Market Law specifies that producers can obtain the right to sell electricity to the public trader 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 CHPP, 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.

PUC accepts the renewable energy fee and co-generation fee that should be paid by all the electricity customers. In 2013 the amount of the electricity produced from renewable energy resources reached 56, % of the total amount of electricity consumption, including hydropower plants with installed capacity more than 5 MW.

On August 28, 2013, Regulator 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 2013 was 8 EUR/MWh and for electricity produced in co-generation regime - 18,9 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 guarantees of origin in terms of the produced electricity, in accordance with government - specified procedures prescribed by the Cabinet of Ministers. 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, Regulator is obliged to deal with customer complaints. In simpler cases where the agreement between the parties involved in the dispute is achievable, Regulator provides oral or written consultations or delivers an opinion. In more complicated cases the dispute resolution procedure is applicable.

In 2013, official dispute resolution procedure was applied in one case in natural gas sector, 2 administrative court procedures were completed by reaching a final court decision, 4 litigation processes were initiated and 52 litigation processes will continue in 2014.

By replying to complainants, Regulator 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 natural gas services.

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

Regulation of final customer prices

In accordance with the prevailing legal framework Regulator sets tariffs for all customers in the natural gas supply sector in accordance with the methodologies approved by Regulator.

In the electricity sector Regulator can grant rights to the supply company to set the tariffs for the captive customers by the company itself. In such a case, Regulator reviews draft tariffs within 21 days and if Regulator does not reject draft tariffs, they enter into force on the date indicated by the company. Whereas, if Regulator concludes that draft tariffs are not economically justified, tariffs do not enter into force in the term set by the company. In December 2007, Regulator has granted such rights to JSC "Latvenergo". For

the first time the tariffs for captive customers set by JSC "Latvenergo" entered into force on 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 natural 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, including main provisions and conditions of electricity supply contracts, are set out.

On November 29, 2011, the Cabinet of Ministers has adopted Regulations on electricity trade and use and on January 21, 2014 the Cabinet of Ministers adopted new rules on Regulations on electricity trade and use.

Electricity Market Law prescribes that a public trader must draft for the regulatory approval, and then, in accordance with procedures specified by Regulator, it publishes 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, Regulator approved the above mentioned standard contract for electricity supply for natural and legal persons who had the right to receive electricity for regulated prices, which were still used in 2013. On June 6, 2012 Regulator approved JSC "Latvenergo" standard contract for electricity supply and for DSO. 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.