

## 1. Foreword

The report shows the situation regarding the provision and regulation of public utilities in energy sector in 2014. Public Utilities Commission (hereinafter – Regulator) acted as an active balanced mediator among the service providers, customers and state administration.

Assessing the development of the energy sector in the reporting period, I would like to note the significant and extensive work done to provide for the full opening of the electricity market to competition from January 1, 2015, henceforth relinquishing regulation of electricity tariffs for households. The Regulator participated in the development of necessary legal acts and was actively involved in the information campaign for households on the opening of the electricity market.

I would also like to point out that 2014 was the first full year of operation for the power exchange “Nord Pool Spot” in the Latvian bidding area and it determined a new agenda in the Regulator’s work – the Regulator carried out full monitoring of the wholesale energy market with the goal to promote its integrity and transparency. Two significant events must be noted within the context of the development of the wholesale electricity market. The largest electricity producer and trader in Latvia – JSC “Latvenergo” started full-scale electricity trading in the power exchange “Nord Pool Spot”, namely, the sale of all generated electricity and buying the necessary electricity in the power exchange (gross bidding). This event considerably improved the market liquidity in the region and transparency of the wholesale market. In turn, the agreement of the Latvian and Estonian transmission system operators, reached at the end of the year, to expand and increase the volumes of auctioned cross-border capacities (PTR-limited) provides an opportunity for wholesale electricity market participants to fix the price difference on a larger scale and mitigates the related risks.

Within the context of the development of the energy sector, the movement towards the liberalisation of the natural gas market must certainly be mentioned. Pursuant to the amendments to the Energy Law, requirements for the third-party access to natural gas infrastructure were stipulated and the Regulator was obliged to approve the third-party access rules, developed by the natural gas system operator and whose evaluation process was started in the reporting period.

With regard to Latvia’s integration into the common European Union energy market, the Regulator’s work which was completed in the reporting period by assessing the projects of common interest on cross-border electricity and natural gas infrastructure and coordinating cost allocation thereof with regulators of other Member States must be noted. As a result, the Regulator adopted decisions on cost allocation for the projects of common interest that are significant for the development of the sectors and it enabled the project promoters to submit applications for the European Union co-funding in a timely manner.

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## **2. Summary: Major developments over the last year**

### **2.1. The basic organizational 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. The Regulator 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 acts binding upon specific providers and users of public utilities. Regulator's decisions may be 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, technical regulations and standards;
- provide public information about its activities and operations of public service providers.

Regulator consists of a Board composed of a Chairperson and four members appointed by the parliament for five years and an executive body subordinated to the Board. The Board 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 Board 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 up to 400 volt had the right to use the universal service of electricity (regulated end-user tariffs). As from November 1, 2012 until December 31, 2014 only households had regulated end-user tariffs.

From July 1, 2014 JSC "Latvenergo", the largest electricity producer and trader in Latvia, sells all produced electricity and buys all electricity needed through an organized market place - power exchange "Nord Pool Spot" (NPS).

In 2014, 76% of total electricity was traded for a contract price in accordance with bilateral agreements and 70% of that electricity was traded by the dominant trader in the market, JSC "Latvenergo", and the remaining 30% - by other traders.

On April 16, 2014 Regulator approved that JSC "Sadales tīkls" fulfills the requirements of the independence of electricity distribution system operator (hereinafter – DSO) - is a separate company and is separated from the activities of production, transmission and trade of electricity, thus confirming that board members of the DSO are not engaged in the structures of a vertically integrated electricity undertaking JSC "Latvenergo" and have the right to take decisions regarding the assets required for the exploitation, maintenance or development of the distribution system without reference to the JSC "Latvenergo", and that the DSO ensures equal access to the electricity distribution system.

Each year the electricity system owner JSC "Latvijas elektriskie tīkli" must submit a report regarding the ability of the electricity system owner to co-operate with the transmission system operator, to provide it with information necessary for the performance of the obligations of a transmission system operator and do not disclose restricted access information to JSC "Latvenergo" and its structures, to finance investments in the transmission system, which must be decided upon by the transmission system operator and which must be approved by the Regulator. The assets financed by these investments become a part of the transmission system and are the property of the electricity system owner.

On July 9, 2014 Regulator took an annual decision on independence of JSC "Latvijas elektriskie tīkli". The electricity transmission system owner is separated from the activities of production, transmission and trade of electricity, the board members of the transmission system owner are not engaged in the structures of a vertically integrated electricity undertaking JSC "Latvenergo", the transmission system owner utilizes only such services, provided by a vertically integrated electricity undertaking, which ensure the confidentiality of commercial information, and the electricity transmission system owner has the right to take decisions independently, without interference by JSC "Latvenergo". The electricity transmission system owner elaborated a compliance program and published a report on the performed measures to ensure its independence.

Each year JSC "Augstsprieguma tīkls" must submit a report regarding the compliance of the transmission system operator with the certification requirements.

After the receipt of these reports, the Regulator took a decision on July 9, 2014 stating that JSC "Augstsprieguma tīkls" complies with the certification requirements and the electricity transmission system owner JSC "Latvijas elektriskie tīkli" is able to fulfill its obligations. The Regulator also examined how the conditions set out in the Regulator's decision of January 30, 2013 on certification and designation of the JSC "Augstsprieguma tīkls" as an independent system operator (hereinafter - certification decision) are fulfilled, by evaluating the reports that JSC "Augstsprieguma tīkls" presented to the Regulator every two months. The Regulator gained the confidence that the conditions set out in the certification decision will be fulfilled in an accurate and timely manner. The fulfillment of the conditions set out in the certification decision will be evaluated in details in the next evaluation period.

On August 13, 2014 Regulator approved ten-year transmission system development plan (TYNDP) for 2015 - 2024. In its decision PUC also stated that the national TYNDP complies with the EU wide TYNDP.

In the natural 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. However, according to the amendments to Energy Law, adopted on March 13, 2014, the Latvian parliament decided to set a deadline for the derogation – April 3, 2017 – unless one of the following conditions has been met earlier:

- Latvian natural gas system is directly connected to the interconnected system of any Member State other than Estonia, Lithuania and Finland;
- Market share of the dominant supplier is less than 75% of the total natural gas consumption.

According to amendments to Electricity Market Law and Energy Law, in 2014 the effective, proportionate and dissuasive financial sanctions were introduced in the electricity and natural gas sector. The Regulator has the right to apply financial sanctions up to 10% of the annual turnover of the regulated service provider and the owner of the electricity transmission system in case of failure to comply with their obligations under the relevant national and European Union legal acts. Regulations of the Cabinet of Ministers set out a detailed procedure on how the Regulator must calculate the amount of fines.

Pursuant to Regulation (EU) No 347/2013 of the European Parliament and of the Council of April 17, 2013 on guidelines for trans-European energy infrastructure and repealing Decision No 1364/2006/EC and amending Regulations (EC) No 713/2009, (EC) No 714/2009 and (EC) No 715/2009 (hereinafter – Regulation 347/2013), the Projects of Common Interest No.4.4.1 "Internal Line between Ventspils, Tume and Imanta (LV)" (hereinafter – Project 4.4.1) and No.4.2.1 "Interconnection between Kilingi–Nõmme (EE) and Riga TEC 2 substation (LV)" (hereinafter – Project 4.2.1), and the Project 4.2.2 "Internal Line between Harku and Sindi (EE)" (hereinafter – Project

4.2.2) (hereinafter altogether referred to as Projects 4.2), are part of the priority electricity corridor of the Baltic Energy Market Interconnection Plan in electricity, specified in Annex I.4 of Regulation 347/2013: interconnections between Member States in the Baltic region and reinforcing internal grid infrastructures accordingly, to end isolation of the Baltic States and to foster market integration inter alia by working towards the integration of renewable energy in the region. The Projects of Common Interest No.8.2.3 „Capacity enhancement of Klaipeda-Kiemenui pipeline in Lithuania” (hereafter – Project 8.2.3) and 8.2.4 „Modernization and expansion of Incukalna Underground Gas Storage” (hereafter – Project 8.2.4) are part of the priority gas corridor of the Baltic Energy Market Interconnection Plan in gas, specified in Annex I.8 of Regulation 347/2013: gas infrastructure to end the isolation of the three Baltic States and Finland and their dependency on a single supplier, to reinforce internal grid infrastructures accordingly, and to increase diversification and security of supplies in the Baltic Sea region.

Pursuant to Article 3(4) of Regulation 347/2013, the European Commission adopted the Commission delegated Regulation (EU) No 1391/2013 of October 14, 2013 amending Regulation (EU) No 347/2013 of the European Parliament and of the Council on guidelines for trans-European energy infrastructure as regards the Union list of projects of common interest (hereinafter – EC Regulation 1391/2013). The European Commission approved the list of Projects of Common Interest (hereinafter – PCI) including the Project 4.4.1 and Projects 4.2. The inclusion of the Project 4.4.1 and Projects 4.2 in the PCI list demonstrates their compliance with the PCI criteria set out in Article 4 of Regulation 347/2013.

Pursuant to Article 16 of Regulation (EC) No 714/2009, accrued revenues resulting from congestion management will be invested to increase the capacity of the Latvian – Estonian interconnection, namely, to implement the Project 4.2.1.

On October 31, 2013, Regulator received the Latvian transmission system operator’s JSC “Augstsprieguma tīkls”, the Latvian electricity system owner’s JSC “Latvijas elektriskie tīkli” investment request for the Project 4.4.1 and JSC “Augstsprieguma tīkls”, JSC “Latvijas elektriskie tīkli”, the Estonian transmission system operator’s Elering AS investment request for the Projects 4.2. On April 9, 2014, Regulator took its Decision No.77 regarding the allocation of investment costs for Project 4.4.1 and on April 23, 2014, Regulator took its Decision No.90 regarding the allocation of investment costs for Projects 4.2.

On October 29, 2013 Regulator received the Latvian natural gas transmission system operator’s JSC “Latvijas Gāze” investment request for the Project 8.2.4 and on November 1, 2013 Regulator received AB “Amber Grid” investment request for the Project 8.2.3. On April 30, 2014, Regulator took its Decision No.96 regarding the allocation of investment costs for Project 8.2.4 and Decision No.97 for Project 8.2.3.

Under the 2014 Connecting Europe Facility (CEF) call, Project 4.2.1, Project 4.4.1 and Project 8.2.3 were selected for receiving financial assistance under CEF-Energy as of November 21, 2014. Maximum EU financial assistance for Project 4.4.1 is EUR 55,089,000, for Project 4.2.1 EUR 112,301,701 and for Project 8.2.3 EUR 27,592,500. Project 8.2.4 was not included in the list of actions selected for receiving financial assistance under CEF-Energy on November 21, 2014.

### **2.3. Major issues dealt with by the regulator**

Regulator carries out licensing and registration, and supervision of conditions of the licence or conditions of general authorisations.

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;
- liquefying of natural gas or receiving, unloading, storage and regasification for further delivery to the natural gas transmission system.

Until January 1, 2012 generators and traders of electricity had to obtain a license issued by Regulator. After the above mentioned date a simplified 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 2014 no new electricity producers were registered in the producers' register.

At the end of the reporting year there were 216 companies registered in the electricity producers' register – 159 for co-generation plants, 56 for wind power plants, 2 for hydroelectric power plants and 2 for solar power plants. In 2014 Regulator registered 16 new electricity traders. At the end of the reporting year 63 companies were registered in the electricity traders' register and there were 11 licences in force 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 2014 59 objects of energy supply companies were inspected in order to examine their operations and compliance with license requirements or general authorization conditions, among them 52 were objects in electricity supply sector, 46 - heat supply sector, 3 - natural gas supply sector and 1 hydroelectric power station. The objects of the companies were inspected according to the schedule and taking into regard the necessity to ascertain the operation of the companies in accordance with

legislation. In addition Regulator carried out electricity supply quality measurements in 52 objects according to European Standard EN 50160 requirements. Some inspections were also conducted at facilities following the complaints that 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. The latter obligation was in force till December 31, 2014, as there is no end-user tariffs regulation starting from January 1, 2015.

Tariffs for captive customers covered 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 former incumbent JSC "Latvenergo" to set the tariffs for captive customers from January 1, 2009. In 2014 the tariffs set by JSC "Latvenergo" and which were in force from April 1, 2011 were applicable to captive customers till December 31, 2014.

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 2014 electricity tariffs in Latvia were approximately at the same level as tariffs in the Eastern EU countries.

#### ***Natural gas***

End-user tariffs for trade of natural gas are based on the purchase price of natural gas on the border of the country and tariffs of natural gas supply services - transmission, storage, distribution and trade.

Regulation of all customer tariffs continues to be justified due to the fact that Latvia's natural gas market is in the process of opening, but is not opened yet. This situation still ensures greater tariff stability, as well as 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 2014 57 complaints of public utility users were received and reviewed in the energy sector. Complaints on electricity supply mostly were related to the registration of the amount of electricity consumed and the resultant bills (33%), quality of energy supply (10%), supply of electricity (18%), electricity tariffs (8%), installation of a new connection and the connection fee (18%) and other issues (13%). In the gas supply sector, most complaints concerned issues of natural gas supply (61%), the registration of the amount of natural gas consumed and resultant bills (31%), installation of a new connection (8%).

### **3. Regulation and performance in the electricity market**

#### **3.1. Regulatory issues**

##### **3.1.1. General**

The functions of the electricity TSO are carried out by the independent system operator JSC "Augstsprieguma tīkls". 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" must perform the maintenance of fixed assets of the transmission system itself or must 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. In 2014 Regulator gained the confidence that the certification decision will be fulfilled in an accurate and timely manner.

The state-owned company JSC "Latvenergo" dominates in 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 and till April 1, 2014 was also providing functions of the public trader. In 2014 JSC "Latvenergo" was selling electricity to both captive customers and market participants. In February 2014 JSC "Latvenergo" established a daughter company JSC "Enerģijas publiskais tirgotājs" and from April 1, 2014 the new daughter company provides functions of the public trader. In accordance with the amendments to Electricity Market Law the public trader has the obligation to buy electricity from cogeneration power plants, renewable power plants and pay a guaranteed fee for the installed capacity to plants that have obtained the right to sell the produced electricity within the mandatory procurement.

JSC "Latvijas elektriskie tīkli" (a part of vertically integrated electricity undertaking JSC "Latvenergo") is a transmission network asset owner and is responsible for financing investments in the transmission system. 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 28 megawatts (MW). There are 4 regulated hydroelectric power plants, with capacity bigger than 1 MW. They have a total capacity of 1560 MW. Latvia has 55 registered wind power plants among those 18 are currently operating stations with a total capacity



of 58 MW, and 165 registered co-generation stations, among them 57 are currently working with a total installed capacity of 1232 MW (including biomass and biogas power plants). Latvia imports electricity for most of the year and mostly exports during flood season in 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 was opened on July 1, 2007 when all customers became eligible to choose a supplier of electricity. There are several companies in Latvia which sell electricity to market participants: LTD "Enefit", LTD "Baltic Energy Services", LTD "BCG Riga", LTD "Inter Rao Latvia", LTD "Deco Energy".

On January 21, 2014 the Cabinet of Ministers adopted new rules on Regulations on electricity trade and use, setting out basic rules for household customers, conditions for universal service. Starting from January 1, 2015 all household customers will buy electricity from a chosen electricity trader at a market price.

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 congestion management mechanisms**

On January 22, 2014 Latvian and Estonian TSOs signed an agreement on the principles of calculation and allocation of the cross-border capacity within Latvia, Estonia and with 3rd countries (hereinafter – Agreement with Estonia). On February 10, 2014, the Latvian and Lithuanian TSOs signed an agreement on the principles of calculation and allocation of the cross-border capacity within Latvia, Lithuania and with 3rd countries (hereinafter – Agreement with Lithuania), both agreements 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 the integration of the Baltic electricity market successfully. NPS ensured allocation of the capacity for the market participants on the basis of information provided by the Baltic TSOs and 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 June 3, 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.<sup>3</sup> of Electricity Market Law, the transactions of market participants, which exceed borders of one bidding area and include the physical transmission of electricity, must only be performed in the power exchange.

In the 2014 the Baltic countries had congestion problems at the Estonian and Latvian interconnection.

From January 1, 2014 on the Estonia-Latvia border in direction from Estonia to Latvia the Limited Physical Transmission Rights (hereinafter- PTR limited) auctions were introduced by Latvian and

Estonian TSO. Part of the Net Transfer Capacity (NTC) on the Estonian-Latvian border that is calculated by TSOs in accordance to the transmission capacity allocation methodology is offered to the PTR limited auction as yearly and monthly capacities.

NTC between the Estonian and Latvian systems will continue to be distributed by Nord Pool Spot for allocation. At the same time, PTR limited (50 MW on annual and 50-150 MW on a monthly basis) will be sold at an auction with the obligation to sell them back to the transmission system operators (TSOs). For the repurchased capacity, the TSOs will pay to the holders of PTR limited a fee equivalent to the price difference of the NPS Estonian and Latvian price area in the corresponding period. The PTR limited auctions are organized by respective TSOs and operated by Estonian TSO – Elering AS.

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.

According to the ENTSO-E TYNDP 2014 and national TYNDP, approved by Regulator, the Estonia-Latvia 3rd interconnection should be commissioned in year 2020. As a result the increased cross-border transmission capacity will make it possible for the market participants to access a larger market area and compete in a European common electricity market.

The total amount of Latvia's interconnection capacity in 2014 was 2080 MW for export and 1600 MW for import. In 2014 the total amount of incoming energy was 6.4 TWh and maximum capacity was 1077 MW, outgoing energy was 4.06 TWh with maximum capacity 1429 MW, amount of transit was 2.95 TWh and maximum capacity 910 MW.

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

Latvia has one TSO - JSC "Augstsprieguma tīkls", designated as an independent system operator. Regulator annually examines the TSO's conformity with the certification requirements and approves ten year network development plan.

JSC "Latvenergo" owns the biggest DSO JSC "Sadales tīkls". There are 10 local distribution companies in addition (serving less than 100 000 electricity customers).

### ***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 utility 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 utility 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 utility's choice between the use of equity and borrowed capital. At the request of an utility, 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. Rules prescribe the mandatory applicable standard that apply to the public power supply network voltage, which is European Standard EN50160. Standard EN50160 defines, describes and specifies the main characteristics of the voltage at a network user's supply terminals in public low voltage, medium and high voltage alternating current electricity networks under normal operating conditions.

Regulator approves Grid Code that includes procedures for the system management and utilization, 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 2014 the average amount of time needed to repair problems in the distribution network for the final customers was 7.76 hours per one user. There were 12 interruptions in the transmission network with an average duration of 0.5 hours. Planned system average interruptions duration (SAIDI) in

distribution network for 2014 was 256 minutes, unplanned – 210 minutes and planned system average interruptions frequency index (SAIFI) per customer for 2014 was 0.99, unplanned – 2.78.

### ***Balancing***

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 which 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 service agreement 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 Electricity Market Law, administration of imbalance settlements is the responsibility of TSO. 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 the holding company JSC "Latvenergo" on July 1, 2007. JSC "Sadales tīkls" is unbundled 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 and Regulator has verified 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 2014 JSC "Latvenergo" had 1439 employees. JSC "Augstsprieguma tīkls" had 71 employees and JSC "Sadales tīkls" – 2550 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. In 2014 amendments to Electricity Market Law entered into force giving Regulator the right to apply financial sanctions up to 10% of the annual turnover of the regulated utility provider and the owner of the electricity transmission system in case of failure to comply with their obligations under the relevant national and European Union legal acts.

## **3.2. Competition issues**

### **3.2.1. Description of the wholesale market**

In 2014 61 company was registered as a trader of electricity and 13 of them actively operate as intermediaries in the supply of electricity to customers. Electricity generation in Latvia is almost entirely related to JSC "Latvenergo" producing approximately 51% of total electricity consumption. The other electricity producers are too small to offer significant volumes of energy for potential customers.

In Latvia 10 traders during 2014 were trading electricity in NPS power exchange and on average 60 to 80% 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 prohibition of insider trading on

2014. Regulator concluded that there was no breach of REMIT and has applied a verbal non-public warning to a market participant and has closed the case.

In 2014 the total annual consumption, including losses and self-consumption was 7172 GWh and the amount of installed available generation capacity was 3002 MW. Latvia has produced 4857 GWh of electricity, and imported 5338 GWh from the neighboring countries Lithuania, Estonia, Russia and Belarus, and has exported 3023 GWh. Peak load in 2014 was 1316 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 largest producers was 94%.

At the end of 2014, 24% of electricity were sold at regulated prices (approved end-user tariffs), while the other part was sold at contract prices out of which 70% were sold by JSC "Latvenergo" and 30% - by other traders.

There were no acquisitions or mergers in the electricity industry in Latvia in 2014.

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

In 2014 electricity supply companies supplied the required volume of energy, selling 6713 GWh (Regulator's data) of electricity to final customers – 5.5% more than in 2013. One quarter of this electricity was consumed by local residents for household needs, and the remaining part was consumed by 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 2014, electricity tariffs for household customers 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 was liberalized, and connections to other EU countries and Norway were ensured, or the LNG storage and/or regasification plant was built in Latvia. All of this would require significant investments, and they would not be cost-effective at the current declining annual consumption of natural gas.

At the end of 2014 the Lithuanian National floating LNG regasification terminal with a capacity of 2-3 billion m<sup>3</sup> / year in Klaipeda started to operate. Klaipeda LNG terminal project was implemented by the company "Klaipedos Nafta". For Latvia there is a possibility to buy 0.5 bcm of capacity at the terminal by about EUR 50 million on favorable transit transmission conditions. After improving the transmission network it could be an alternative for Latvia's customers.

On April 30, 2014, Regulator took its Decision No.96 regarding the allocation of investment costs for the project of Common Interest "Modernization and Expansion of Incukalna Underground Gas Storage". As a Project 8.2.4 is a part of BEMIP and is included the ENTSO-G TYNDP 2012 package of projects 8.2 and it is a significant infrastructure project ensuring the reinforcement of security of energy supply in the region and fosters diversification of sources of natural gas supply, effective use of infrastructure and development of a competitive natural gas market in the Baltic States.

According to the project promoter's assumptions about securing financing (own financing and the European Union co-financing), implementation of the Project 8.2.4 will impact the existing tariffs of natural gas transmission system services and storage services. Pursuant to Article 12(1) of Regulation 347/2013, the allocated part of the efficiently incurred investment costs, which excludes maintenance costs, related to a PCI shall be borne by the relevant transmission system operators of the Member States to which the project provides a net positive impact. The allocated part of the costs of the Project 8.2.4 for the Latvian natural gas transmission operator must be included in the natural gas transmission service tariff pursuant to the Regulator's September 27, 2013 decision No.1/24 "Methodology for calculation of natural gas transmission service tariffs".

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. 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 earn a reasonable profit for its shareholders.

In the energy sector according to amendments of March 13, 2014 to Energy Law, the requirements of the 3rd Energy package were introduced, as far as they relate to Latvia as an isolated natural gas market and taking into account the derogation set out in Gas Directive. The amendments also introduced third party access in accordance with the Gas Directive, as well as financial sanctions for violations.

Latvia's natural gas transmission system was developed more than 40 years ago, the management and allocation of interconnection capacity and mechanisms to deal with congestion natural gas transmission system were developed then, 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 2014.

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), the capacity on existing pipeline is as follows:

- cross-border connection with Russia – up to 17 million m<sup>3</sup>/day;
- cross-border connection with Estonia – up to 6 million m<sup>3</sup>/day;
- cross-border connection with Lithuania – up to 5 million m<sup>3</sup>/day.

The international connections with Russia and Lithuania provide 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 2014 there were no overload capacities in Latvia, thus the system operator did not need to use any actions or methods that focus on power congestion management.

#### **4.1.1. 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 Energy Law, 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 utility 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 utility 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 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. 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.

### **4.1.2. 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**

In 2014 the total Latvian natural gas market consumption was 1.293 bcm (decreased by 10.9% accordingly to 2013) 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". The 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. Within the context of the development of the energy sector, the movement towards the liberalisation of the natural gas market must certainly be mentioned. Pursuant to the amendments to the Energy Law, requirements for the third-party access to natural gas infrastructure were stipulated and the Regulator has the obligation to approve the third party access rules, developed by the natural gas system operator and whose evaluation process was started in the reporting period.

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

Natural gas consumption by final customers was 548 Mcm in 2014. 746 Mcm of natural gas were used for production of thermal energy and electricity.

The Latvian retail market structure is as follows:

- households – 125 Mcm or 22.8%;
- industry – 202 Mcm or 36.8%;
- agriculture & forestry – 26 Mcm or 4.8%;
- others – 195 Mcm or 35.6%.

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

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

During 2014 Regulator received 13 consumer complaints and inquiries related to gas issues, 12 from which were unsubstantiated, and 1 – unrelated to the Regulator's competences.

## **5. Security of supply**

### **5.1. Electricity**

Total electricity consumption including losses and self-consumption in 2014 amounted to 7172 GWh, which was 4.8% more than in 2013. Peak load in 2014 was 1.316 GW. Forecasts for the years 2015-2016 are as follows:

- 2015 – 1.42 GW;
- 2016 – 1.45 GW.

Currently available generation capacity is 3002 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 2014 covering around 99% of the whole territory of Latvia.

The total capacity of the transmission network is currently at a level of 8899.8 MVA, which is five times more than the peak load in 2014. This ensures a continuous supply of electricity.

### **5.2. Natural gas**

In 2014 the total consumption of gas in Latvia was 1.293 bcm in 2014, which was 10.9 % 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 in Energy Law, 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 December 4, 2014 Regulator issued regulations on what kind of information a trader of electricity or natural gas must include in the bills and informative materials to be presented to a 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 customers and applicants to energy transmission or distribution systems or natural gas storage sites if such 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.

The obligation to purchase electricity that is produced within the country in CHPP or from renewable resources is imposed on the public trader of electricity. 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 adopted the Regulation on electricity generation in CHPP, covering particular criteria and requirements which regulate mandatory procurement. This regulation contains provisions on the operating regime, the security of the supply, the efficiency, and the formula for determining the price of electricity.

Regulator accepts the renewable energy fee and co-generation fee that should be paid by all the electricity customers proportionally to their consumption. In 2014 the amount of the electricity produced from renewable energy resources reached 39% 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 mandatory procurement components, and in accordance with the above mentioned methodology the mandatory procurement component for the electricity produced from the renewable energy resources in 2014 was 9.4 EUR/MWh and for electricity produced in co-generation - 17.4 EUR/MWh. On February 26, 2014 Regulator adopted new Methodology on calculation of the mandatory procurement components.

### ***Protection of vulnerable customers***

In 2014 the obligation for the previous public trader JSC "Latvenergo" to supply electricity to captive customers was maintained till December 31, 2014, according to the amendments to Electricity Market Law.

### ***Labelling the primary energy source***

Producers which conform to criteria may receive guarantees of origin in terms of the produced electricity, in accordance with specified procedures prescribed by the Cabinet of Ministers. An institution authorized 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 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 2014, dispute resolution procedure was applied in one case in natural gas sector, 2 administrative court procedures were completed by reaching a final court decision, 51 litigation processes will continue in 2015.

By replying to complainants, Regulator makes sure that utility 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 for a system of reimbursement or compensation where necessary.

### ***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.

Tariffs for natural gas infrastructure services and trade were approved by the Regulator in 2008. Natural gas trade tariffs are set out in tabular form and change accordingly to the natural gas sale's price changes, which is dependent on oil product price in the stock exchange.

For the market customers the prices are set by bilateral agreements; from January 1, 2015 for household customers the prices will be set by bilateral agreements.

The methodology for the tariff setting for the captive customers which was applicable till December 31, 2014 envisaged 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 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 January 21, 2014 the Cabinet of Ministers adopted new rules on Regulations on electricity trade and use, setting out one contract for household customers and conditions for universal service.