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REGULĒŠANAS
KOMISIJA

2016 Annual Report of the Public Utilities Commission of the Republic of Latvia on the National Energy Sector, Prepared for the European Commission

CONTENT

I Foreword

The Public Utilities Commission's (hereinafter – Regulator) report provides an overview of the regulatory developments of the electricity and natural gas sectors in Latvia in 2016. Regulatory activities covered various tasks, mainly stemming from continued implementation of the EU directives or regulations, both in electricity and natural gas sectors.

In 2016, the Regulator paid a particular attention to wholesale and retail trade, also in the supervision of the energy market Regulator under the Regulation on wholesale energy market integrity and transparency (hereinafter – REMIT) co-operated with the Agency for the Cooperation of the Energy Regulators (hereinafter – ACER) and Baltic and Nordic national regulatory authorities (hereinafter – NRAs) to monitor the electricity wholesale market in order to prevent potential market abuse and manipulation of wholesale electricity prices and natural gas market.

Proceeding Latvia's integration into the common European Union electricity market, the Regulator continued the implementation of the European Commission's network codes to establish a unified, coordinated and appropriate single day-ahead and intraday market coupling, where the important role for the Regulator is to supervise a nominated electricity market operator (hereinafter – NEMO) in Latvia and to adopt respective rules and methodologies developed by EU NEMOs and transmission system operators.

In order to ensure the opening of the natural gas market on April 3, 2017, in 2016 the Regulator started intensive work preparing legal acts that regulate the operation of the natural gas market.

Another area of activity was related to infrastructure projects within the Baltic Energy Market Interconnection Plan (BEMIP) region. Projects of Common Interest (hereinafter – PCI) particularly in the electricity sector, include new interconnections between Member States in the Baltic region, reinforcing internal grid infrastructures accordingly, to foster market integration inter alia by working towards the integration of renewable energy in the region, providing electricity transmission from the north to the south of the Baltics via Latvia and increasing the transmission capacity via the Baltic States.

In the natural gas sector, PCIs are aimed at the enhancement of interconnections and Incukalns underground gas storage to foster market integration, competition and to ensure security of natural gas supply.

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Chair
Public Utilities Commission of Latvia

II The basic organizational structure and competences of the regulatory authority

The Regulator was 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.

The 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 (until March 10, 2016), municipal waste management and water management.

According to the Law on Regulators of Public Utilities the 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. The Regulator's decisions may be declared unlawful and repealed only by the court.

The main functions of the Regulator are:

- protect the interests of customers and promote the development of providers of public utilities;
- determine the methodology for calculation of tariffs;
- determine the tariffs;
- license and register the providers 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.

According to Regulations of the Cabinet of Ministers on types of regulated public utilities in the energy sector (electricity and natural gas), the Regulator regulates:

- the generation of electricity in power plants if the installed electric capacity is more than one megawatt;
- the generation of electricity in cogeneration mode if the total installed electric capacity of cogeneration power plant 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 trading amount exceeds 4,000 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.

The 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 the Regulator and approves administrative acts which are binding for specific public service providers and customers. The executive body operates under the oversight of the Regulator's Board, 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 Electricity Market Law and the Energy Law establish effective, proportionate and dissuasive financial sanctions in the electricity and natural gas sector, namely, 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/gas 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.

As regards tariff calculation in the electricity and gas sector, methodologies for the calculation of storage, transmission and distribution system service tariffs have been elaborated based on the Electricity Market Law, Energy Law and the Law on Regulators of Public Utilities, and by taking into consideration regulations related to the supply and trade of electricity and natural gas, 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 the 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 for a specified proportion between equity and borrowed capital. The Regulator annually sets the rate of return on capital for each sector, the rate is applied if a new 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 services submit substantiated tariff proposals. The Regulator must approve or reject the proposal within 120 days. The time when public utilities prepare the requested additional information does not count towards these 120 days. The Regulator's decisions can only be challenged in court.

A service provider may submit a request to the Regulator to receive a permit to set the tariff by itself. In this case the provider shall publish the tariffs in the official Gazette of the Government of Latvia not later than within two months prior to the entry into force of the new tariffs and shall inform the Regulator. The service provider shall submit to the Regulator a substantiation for the new tariffs and information regarding the actual costs, forecasted data regarding the new tariffs, and other documents that substantiate the need for the new tariffs. The Regulator shall, within 21 days evaluate the conformity of the submitted tariffs to legal acts and the economic substantiation of tariffs, as well. If the Regulator has not taken a decision regarding the non-conformity of the submitted tariffs to legal acts or has not rejected the economic substantiation, the tariffs shall come into force on the date specified by the service provider.

The Regulator has the rights to initiate tariff review if significant changes affecting income or costs of service provision are observed or might be predicted. In this case, the Regulator requests the service provider to submit a new substantiated tariff proposal.

III Major developments over the last year in the electricity and natural gas markets

International cooperation is essential to ensure that the energy market functions and develops properly. Regional cooperation on specific cross-border issues is a foundation for successful implementation of the European Union legal norms at European level. In 2016, the Regulator constantly participated in forums, conferences and workshops at international level.

The Regulator participated in the Baltic Electricity and Gas Market Forums (takes place twice in a year) where the Regulators from the Baltic countries, Poland and the Nordic countries, three Baltic transmission system operators, the ACER, Finnish and Lithuanian gas exchange representatives, as well as traders and representatives of the ministries raised issues concerning REMIT, implementation of REMIT Regulation, coordination and assessment of cross-border investments or the projects of common interest, as well as Grid Code implementation and other topics that contribute to the development of the Baltic market and foster market integration.

The aim of the forum was to look at the achievements in 2015 through the prism of current events, as well as to summarize the most important changes in the near future, which will have a significant impact on the Latvian energy sector and the Latvian industrial consumers as a whole, affecting their competitiveness. The Regulator as a member of the Regional Gas Market Coordination Group (hereinafter – RGMCG) actively participated in the preparation of the Regional

Gas Market Development Plan. The objective of the Regional Gas Market Development Plan which was successfully developed by RGMCG and endorsed by the Baltic Council of Ministers' Committee of Senior Energy Officials is to facilitate the creation of the effectively functioning common regional gas market (single entry-exit zone, common principles of the traders' registration, proposal for the implementation of the implicit capacity allocation model) in the Baltic States and Finland.

Major developments in the natural gas sector in 2016 are described in section 2.1.1. of the Report.

As regards the electricity sector, in 2016, the Regulator approved the dominant distribution system operator's - JSC "Sadales tīkls" electricity distribution system tariffs which entered into force from August 1, 2016. For households, the tariff structure was changed significantly by introducing a fixed component – a connection provision fee – to promote network optimization. For legal entities, the proportion of the fixed and variable part changed (increase in weight of the fixed part), as they already had a two component tariff.

The new tariff structure helps to reduce inequalities in terms of monthly costs among the users – those who consume electricity will not have to pay also for those who do not consume electricity but who anyway have to be provided with an electricity connection, a continuous supply of electricity and meter maintenance by JSC "Sadales tīkls". Approximately 120,000 users' locations have the so-called "zero" connections and connections with a very low consumption. In order to ensure the efficient operation of power grids and equipment, the power lines to such "empty" connections also require timely renovation and constant maintenance in good order. Till new tariffs came into force, such costs were covered only by those users who consume electricity.

IV The electricity market

1.1. Network regulation

1.1.1. Unbundling

The state-owned company JSC "Latvenergo" dominates in the field of electricity supply in Latvia, controlling more than 88% of installed capacity for the generation of electricity in Latvia.

In February 2014, JSC "Latvenergo" established a subsidiary company JSC "Enerģijas publiskais tirgotājs" and from April 1, 2014, the subsidiary company provides functions of the public trader. In accordance with the amendments to the 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.

The functions of the electricity transmission system operator (hereafter – TSO) are carried out by the independent system operator JSC "Augstsprieguma tīkls". From January 30, 2013 JSC "Augstsprieguma tīkls" rents the network assets from JSC "Latvijas elektriskie tīkli" – the subsidiary company of JSC "Latvenergo" which was established as the transmission system owner and the Regulator has verified that JSC "Latvijas elektriskie tīkli" has an adequate level of necessary

independence from the JSC "Latvenergo". On January 30, 2013, the Regulator certified JSC "Augstsprieguma tīkls" as an independent transmission system operator under a condition that no later than January 31, 2015 JSC "Augstsprieguma tīkls" has to perform the maintenance of fixed assets of the transmission system itself or has to 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.

JSC "Augstsprieguma tīkls" has to submit a report annually regarding the compliance of the transmission system operator with the certification requirements. After the receipt of the report, the Regulator took decision on June 9, 2016, stating that JSC "Augstsprieguma tīkls" complies with the certification requirements and the electricity transmission system owner JSC "Latvijas elektriskie tīkli" is able to fulfil 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 JSC "Augstsprieguma tīkls" as an independent system operator (hereinafter – certification decision) are fulfilled. The Regulator gained the confidence that the conditions set out in the certification decision are fulfilled in an accurate and timely manner. The fulfilment of the conditions set out in the certification decision will be also evaluated in detail in the next evaluation period.

On August 18, 2016, the Regulator approved the ten-year transmission system development plan (TYNDP) for 2017 - 2026. In the decision, the Regulator also stated that the national TYNDP complies with the Community-wide TYNDP.

In 2016, the management structure of JSC "Augstsprieguma tīkls" was changed. According to the recommendation of the Organisation for Economic Co-operation and Development (OECD), the Cabinet of Ministers adopted regulation, stating that till December 31, 2016 a supervisory board of the JSC "Augstsprieguma tīkls" should be established. Based on the decision made by the extraordinary meeting of stockholders on October 18, 2016, a supervisory board of JSC "Augstsprieguma tīkls" was established. In the same extraordinary meeting of stockholders 3 members of the supervisory board were elected.

The dominant DSO JSC "Sadales tīkls" 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".

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

The Regulator has to confirm annually that the biggest DSO JSC "Sadales tīkls" has 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 the DSO.

On April 29, 2016, the Regulator approved that JSC "Sadales tīkls" fulfills the requirements of the independence of an electricity distribution system operator (hereinafter – DSO) – it is a separate company and is unbundled 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 the vertically integrated electricity undertaking JSC "Latvenergo" and have the right to take decisions independently from JSC "Latvenergo" regarding the distribution system assets. The DSO ensures equal access to the electricity distribution system.

Each year the electricity system owner JSC "Latvijas elektriskie tīkli" has to submit a report regarding the ability of the electricity system owner to co-operate with the transmission system operator JSC "Augstsprieguma tīkls". The report includes information how the electricity system owner performs its obligations set by law according to 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. On April 29, 2016, the Regulator took an annual decision on the 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.

As mentioned above, the legislator has provided for sanctions which the Regulator can impose against companies which fail to comply with management, account unbundling or other requirements.

1.1.2. Technical functioning

1.1.2.1. Balancing

The Electricity Market Law states that the TSO is responsible for power balance in the system, as well as for providing 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.

The TSO has developed balancing and settlement procedures which are set out in the Grid Code.

On June 26, 2013, the Regulator approved the Grid Code, which entered into the force from July 3, 2013. The Grid Code 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.

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 a 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 have to 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 the TSO. The balance settlement is provided on an hourly basis.

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

In view of the Network Code on Electricity Balancing project and their timely implementation, in 2015 the Baltic TSOs started a balance management harmonization study to carry out an in-depth analysis on a harmonised balance management model most suitable for the Baltic balance system. The study, titled "Baltic's balance management model study and harmonization plan towards EU energy markets model" delves into different balance model aspects, describing possible alternatives in terms such as the number of balance portfolios, the cost structure for covering balance service, and different pricing methodologies for imbalance energy etc. The study was prepared in close collaboration with all three Baltic TSOs (Elering, JSC "Augstsprieguma tīkls" and Litgrid). The Baltic TSOs' plan is to launch a common Baltic balancing market by 2018. As a prerequisite, the Baltic countries must harmonize and adopt a common set of imbalance settlement arrangements beforehand. The goal is to develop unified, transparent conditions to all market participants which should in effect level the playing field for all market participants

throughout the Baltics, foster competition and thus enhance the Baltic electricity market's efficiency. Therefore, public consultation was carried out in 2016.

1.1.2.2. Quality of service and supply

On October 4, 2011, the Cabinet of Ministers approved the Rules on Public Power Supply Network Voltage Requirements that define quality requirements. The rules entered into force on January 1, 2012. Rules prescribe the mandatory applicable standard that applies to the public power supply network voltage, which is the 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.

In 2016, the average amount of time needed for repairs in the distribution network for the final customers was 1.18 hours per one user. There were 11 interruptions in the transmission network with an average duration of 0.68 hours. Planned system average interruptions duration (SAIDI) in the distribution network for 2016 was 156 minutes, unplanned – 104 minutes and planned system average interruptions frequency index (SAIFI) per customer for 2016 was 0.677, unplanned – 2.199.

The operations of public service providers are regularly inspected on the basis of the Regulator's decision. In 2016, 49 objects of electricity supply companies were inspected in order to examine their operations and compliance with license requirements or general authorisation conditions. 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, the Regulator carried out electricity supply quality measurements in 42 objects according to the European Standard EN 50160 requirements. Some inspections were also conducted at facilities following the complaints that had been received.

1.1.3. Network tariffs for connection and access

The Regulator approves electricity transmission and distribution tariffs. There is no end-user tariff regulation starting from January 1, 2015.

According to the Eurostat data for 2016, electricity tariffs for household users in Latvia were about 30% and for industrial users about 20% higher than in the Eastern EU countries. Higher prices were related to the changes in the structure for distribution system tariffs - there was a price increase related to the changes in the structure for distribution system operator tariffs from August 1, 2016, which introduced a fixed part of the tariff – a connection provision fee. Electricity tariffs for industrial users in Latvia were about 20% higher than in other Eastern EU countries. Higher prices for industrial users are related to the changes in the structure for distribution system tariffs – as the share of the fixed part in the overall payment increased, users with ineffective use of capacity pay more than before. And as ineffective users usually consume less energy, the price calculated for one unit is much higher, which contributes to a higher unit price in overall statistics.

On May 5, 2016, the Regulator approved JSC "Sadales tīkls" electricity distribution system tariffs which entered into force from August 1, 2016. For households, the tariff structure was changed significantly by introducing a fixed component – a connection provision fee – to promote network optimization. For legal entities, the proportion of fixed and variable part changed (increase in the weight of the fixed part), as they already had a two component tariff. At the same time, the electricity supply fee was decreased, therefore for customers with effective use of capacity the overall payment decreased, while for customers with ineffective use of capacity the overall payment increased. Some electronic communications merchants appealed the Regulator's decision - they considered that the Regulator did not take into account all significant circumstances in the tariffs evaluation process, and as a result distribution tariffs approved were not fair to undertakings in the electronic communications sector. This case will be pending in 2017.

On November 24, 2016, the Regulator made amendments to the electricity transmission and distribution system services tariff calculation methodologies, by changing the existing regulation. Henceforth, the Regulator has a duty to approve an annual rate of return on capital until September 1 of the calendar year, which the electricity transmission and distribution system operator will apply in the preparation of tariff calculation for next calendar year. According to the power transmission and distribution system service tariff calculation methodologies the rate of return on capital is the weighted average cost of capital calculated from the determined rate of return on own capital and rate of return on borrowed capital. The amendments exclude revaluation reserve value attributable to regulatory asset base from the calculation of rate on return on capital.

On December 8, 2016, the Regulator approved the rate of return on capital in the electricity distribution and transmission system. For year 2017, the rate set is 4.43%, which is at a historically lowest level. The approved rate of return on capital relates to the electricity TSO - JSC "Augstsprieguma tīkls" and authorised DSOs. In evaluating TSO and DSOs tariffs, the Regulator by checking the eligibility of the costs included in the costs of tariffs may propose a review of tariffs in response to changes in tariffs' influencing factors, including profitability.

1.1.4. Cross-border issues

1.1.4.1. Management and allocation of interconnection capacity and congestion management mechanisms

On September 11, 2015, the Baltic States TSOs signed an agreement on Terms, Conditions and Methodologies on Cross-Zonal Capacity Calculation, Provision and Allocation within the Baltic States and with the 3rd Countries (hereinafter – Rules). On October 8, 2015, the Baltic States national regulatory authorities made the request to the Baltic TSOs to develop the Rules and take into account the expected new typology of transmission grid from 2016 when the new interconnections between Sweden and Lithuania and between Lithuania and Poland become operational, and requirements stemming from the Commission Regulation (EU) 2015/1222 of 24 July 2015 establishing a guideline on capacity allocation and congestion management (hereinafter - CACM). By taking into account the new typology of the transmission grid and requirements of

CACM, on October 8, 2015, the Baltic States national regulatory authorities expressed the support for the before mentioned Rules as a necessary step towards further developments of the cross-border capacity calculation and allocation within the Baltic States and with the 3rd Countries. Those Rules entered into force from 1 January 2016.

Power exchange "Nord Pool" (hereinafter – NP) ensures allocation of the capacity for the market participants on the basis of information provided by the Baltic TSOs and according to the Rules. NP ensures implicit auctions between the Baltic countries. As stipulated in Article 37.³ of the 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.

The launch of NordBalt interconnection between Sweden and Lithuania and LitPol Link interconnection between Lithuania and Poland in 2016 has changed the direction of transmission flows, increasing the load on the Latvia-Lithuania border towards Lithuania, Latvia-Estonia border towards Estonia, with a corresponding decrease on the Estonia-Latvia border towards Latvia. In 2016, the Baltic countries had congestion at the Estonian and Latvian interconnection for 29% of the total time of the year on average. The average price of electricity in Latvia has decreased by 8.6% from 48.84 EUR/MWh in 2014 to 44.65 EUR/MWh in 2016.

Starting from January 1, 2014, the Limited Physical Transmission Rights (hereinafter – PTR limited) auctions take place on the Estonia-Latvia border in the direction from Estonia to Latvia. Part of the Net Transfer Capacity (hereinafter – NTC) on the Estonian - Latvian border that is calculated by TSOs in accordance with the transmission capacity allocation methodology is offered to the PTR limited auction as yearly, quarterly and monthly capacities.

On October 21, 2016, the Regulator approved the Allocation Rules for Forward Capacity Allocation, List of Bidding Zone borders and/or their subsets to which the Allocation Rules apply including information on the type of allocated Long Term Transmission Rights and Border specific annex for the Estonia – Latvia border (entered into force from January 2017) after consultations with the Estonian Competition Authority and the Agency for the Cooperation of the Energy Regulators in the process of implementing the Forward Capacity Allocation Network Code.

NTC between the Estonian and Latvian systems will continue to be distributed by NP for allocation. At the same time, PTR limited (300 MW on annual, 50-100 MW on quarterly and 100-150 MW on a monthly basis) is sold at an auction with the obligation to sell them back to the TSOs. For the repurchased capacity, the TSOs will pay to the holders of PTR limited a fee equivalent to the price difference of the NP Estonian and Latvian price area in the corresponding period. The PTR limited auctions are organized by respective TSOs and operated by the Estonian TSO - Elering AS.

According to the ENTSO-E TYNDP 2016 and national TYNDP, approved by the Regulator, the Estonia-Latvia 3rd interconnection should be commissioned in 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 the common European electricity market.

The total amount of Latvia's interconnection capacity in 2016 was 2,080 MW for export and 1,600 MW for import. In 2016, the total amount of incoming energy was 4,828 TWh, outgoing energy was 3,795 TWh, and the amount of transit was 3,202 TWh.

1.1.4.2. Investment plans and projects of common interest

Taking into account the investment request for cross-border cost allocation for the project of common interest No 4.2.3 "Internal Line between Riga CHP2 and Riga HPP (LV)" from the project promoters JSC "Augstsprieguma tīkls" and JSC "Latvijas elektriskie tīkli", on 14 July, 2016, the Regulator took a decision regarding the allocation of the investment costs for the project of common interest "Internal Line between Riga CHP2 and Riga HPP" pursuant to the European Commission (EC) Regulation (EU) No 347/2013 of the European Parliament and of the Council of 17 April 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 No 347/2013).

On August 18, 2016, the Regulator approved the ten-year transmission system development plan (TYNDP) for 2017 - 2026. In the decision, the Regulator also stated that the national TYNDP complies with the Community-wide TYNDP.

Pursuant to Regulation No 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 CHP 2 substation (LV)" (hereinafter – Project 4.2.1), the Project 4.2.2 "Internal Line between Harku and Sindi (EE)" (hereinafter – Project 4.2.2), and the Project 4.2.3 "Internal line between Riga CHP 2 and Riga HPP (LV)" (hereinafter – Project 4.2.3) (hereinafter altogether referred to as Projects 4.2) and No. 4.8.1 "Interconnection between Tartu (EE) and Valmiera (LV)" (hereinafter – Project 4.8.1), and the Project 4.8.3 "Interconnection Tsirguliina (EE) and Valmiera (LV)" (hereinafter – Project 4.8.3), 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.

Pursuant to Article 3(4) of Regulation No 347/2013, the European Commission adopted the Commission delegated Regulation (EU) No 2016/89 of November 18, 2015 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 2016/89). The European Commission approved the second list of PCIs including the Project 4.4.1, Projects 4.2, Project 4.8.1 and Project 4.8.3. The inclusion of the Project 4.4.1, Projects 4.2, Project 4.8.1 and Project 4.8.3 in the second PCI list demonstrates their compliance with the PCI criteria set out in Article 4 of Regulation No 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.

Under the 2014 Connecting Europe Facility (hereafter – CEF) call, Project 4.2.1 and Project 4.4.1 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. Maximum EU financial assistance for Project 4.4.1 is EUR 55,089,000, for Project 4.2.1 EUR 112,301,701.

Under the second 2016 Connecting Europe Facility (hereafter – CEF) call, Project 4.2.3 was selected for receiving financial assistance under CEF-Energy as of February 17, 2017. Maximum EU financial assistance for Project 4.2.3 is EUR 9,990,000.

1.2. Promoting Competition

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. The biggest ones are JSC "Latvenergo", "Enefit" Ltd, "Inter RAO Latvia" Ltd, "Baltic Energy Service" Ltd, and "Geton Energy" Ltd.

JSC "Latvenergo" owns the biggest DSO - JSC "Sadales tīkls". In addition, there are 10 local distribution companies, serving less than 100,000 electricity customers.

1.2.1. Description of the wholesale market

In 2016, 80 companies were registered as traders of electricity and 27 of them actively operate as intermediaries in the supply of electricity customers. Electricity generation in Latvia is almost entirely carried out by JSC "Latvenergo" producing approximately 63% of the total consumed electricity. The other electricity producers are too small to offer significant volumes of energy for potential customers.

In Latvia, 13 traders were trading electricity in NP during 2016 and 100% of the total electricity consumed in Latvia was traded through NP.

In 2016, the total annual consumption, including losses and self-consumption was 7,363 GWh and the amount of installed available generation capacity was 2,828 MW. Latvia produced 4,904 GWh of electricity, imported 4,827 GWh from the neighbouring countries (Lithuania, Estonia, Russia and Belarus), and exported 3,794 GWh. 424 power plants are currently operating; of these, 147 are small hydroelectric power plants that generate electricity. They have a total capacity of 28 megawatts (MW). There are 4 hydroelectric power plants, with capacity more than 1 MW. They have a total capacity of 1560 MW. Latvia has 54 wind power plants with a total capacity of 70 MW, and 219 co-generation stations, with a total installed capacity of 1,281 MW (including natural gas, biomass and biogas power plants). The total amount of import is approximately 30% of total consumption, and depends on the amount of water in the river Daugava.

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 the installed available capacity.

The share of the three largest producers was 84%.

At the end of 2016, all the electricity was sold at contract prices, 61% was sold by JSC "Latvenergo" and 39% - by other traders.

There were no acquisitions or mergers in the electricity industry in Latvia in 2016.

1.2.2. Description of the retail market

In 2016, electricity supply companies supplied the required volume of energy, selling 6,710 GWh (Regulator's data) of electricity to final customers – 0.6% more than in 2015. 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 2016, electricity tariffs for household customers in Latvia were about 30% higher than in other Eastern EU countries.

In 2016, one new electricity producer was registered in the electricity producers' register.

At the end of the reporting year, there were 182 companies registered in the electricity producers' register – 143 for co-generation plants, 36 for wind power plants, 2 for hydroelectric power plants and 1 for solar power plants. In 2016, the Regulator registered 8 new electricity traders. At the end of the reporting year, 80 companies were registered in the electricity traders' register and 11 licences were issued for the distribution of electricity and 1 licence for the transmission of electricity.

In 2016, 100% of total electricity was traded in the electricity market at contract prices in accordance with bilateral agreements and 64% of that electricity was traded by the dominant trader in the market - JSC "Latvenergo", and the remaining 36% - by other traders. Serving customers and billing is traders' responsibility, therefore internal policies in setting a market offer are taken into consideration. However, regulation states, that a universal offer must be included in the product portfolio for all traders willing to supply households. A universal offer is defined as one which comes with a fixed electricity price for a period of 12 months and does not contain any restrictions on early termination of the contract (no penalty for customer). Nevertheless, products with a fixed price for a different than one-year period and products with a variable stock price are offered in the market.

1.3. Security of supply

The total electricity consumption including losses and self-consumption in 2016 amounted to 7,500 GWh, which was 1% more than in 2015. Peak load in 2016 was 1,318 MW. Forecasts for the years 2017 - 2018 are as follows:

- 2017 – 1,285 MW;
- 2018 – 1,308 MW.

Currently available generation capacity is 2,828 MW.

There are 11 DSOs, and their license conditions state that they must supply all customers with electricity and connect new customers in their licensed zones of operations. JSC "Sadales tīkls" was the biggest DSO in Latvia in 2016 covering around 99% of the whole territory of Latvia.

The total capacity of the transmission network is currently 8,950 MVA, which is five times more than the peak load in 2016. This ensures a continuous supply of electricity.

V The natural gas market

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 the Gas Directive. According to the Gas Directive, in 2016, Latvia had valid derogation from Articles that define the requirements for the unbundling of natural gas transmission systems and transmission system operators. The derogations, granted under Gas Directive 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 are not applied.

As the Latvian natural gas market was closed in 2016, JSC "Latvijas Gāze" was the only merchant in it. JSC "Latvijas Gāze" by conditions of share purchase agreement had rights on transmission, storage and distribution until year 2017 and license for sale of natural gas as well as unlimited and exclusive right to use Incukalns underground gas storage in Latvia for the period of twenty years starting from 1997. JSC "Latvijas Gāze" carried out transmission, distribution, storage and sale of natural gas in compliance with the licences issued by the Regulator.

2.1. Network regulation

2.1.1. Unbundling

Natural gas merchant JSC "Latvijas Gāze" is a vertically integrated undertaking and fulfils the requirements of the Energy Law and compiles in its internal accounting a balance sheet, profit and loss calculation and a cash flow statement separately for each type of energy supply – for transmission, storage, distribution and trade of natural gas.

Clear and harmonized rules of the regional natural gas market functioning together with the construction of the necessary gas infrastructure are the main preconditions for the market players to be able to cooperate with each other without borders, as well as to be prepared to react with a sufficient speed in emergency situations.

In order to fully implement the requirements of the Gas Directive (starting from April, 2017) on February 11, 2016, amendments to the Energy Law were adopted. Amendments stipulated that the natural gas market in Latvia would open on April 3, 2017 - all natural gas users would have the right to freely choose a natural gas trader; households would have a right to choose to become a market player or receive gas at a regulated price, unbundling of distribution system operators must be completed by 1 January 2018. The legislator considered the most effective solution was the full ownership unbundling of the single natural gas transmission and storage system operator from the energy production, distribution and trading activities; and unbundling of the single transmission system operator and storage system operator must be completed by 31 December 2017. Amendments to the Energy Law also prescribed the calculation of the system services tariffs and natural gas price to be expressed in energy units.

With these amendments Regulator was bound to set and publish the criteria according to which the natural gas storage system operator and LNG system operator determine the access regime to the storage, whether negotiated procedure or regulated procedure will be applied. Also, the above mentioned amendments require the Regulator to re-issue the methodologies for calculating the tariffs for the use of natural gas transmission, distribution and storage system services, as well as a methodology for calculating natural gas prices for captive users, to determine the requirements and procedures for registration of natural gas traders, requirements on certification of the single natural gas transmission and storage system operator or transmission system operator as well as the requirements for the independence of the natural gas distribution system operator.

In 2016, the Regulator developed and approved several crucial legal acts necessary for the natural gas market opening in Latvia from April 3, 2017 such as Methodology for Calculation of Tariffs for Natural Gas Transmission System Service, Regulations on the Criteria According to which the Operator of a Natural Gas Storage System and a Liquefied Gas System Operator shall Determine the Access Regime for Natural Gas Storage Facilities as well as Amendments to Regulations for the Registration of Energy Producers and Traders and General Authorisation Regulations in the Field of Energy determining the requirements for registration of natural gas traders and special requirements for trade in natural gas, which are binding to all natural gas traders.

Work on the development of regulations on certification of the single natural gas transmission and storage system operator or transmission system operator, as well as on the requirements for the independence of the natural gas distribution system operator was started.

2.1.2. Technical functioning

2.1.2.1. Balancing

According to the Energy Law balancing of the natural gas supply system must be ensured by the natural gas TSO. TSO performs balancing calculation in accordance with the Regulations on the use of the joint stock company "Latvijas Gāze" natural gas transmission system.

The balancing calculations are performed on the basis of the natural gas supply accounting transactions performed in a specific time period in order to specify the balancing volume of natural gas. The balancing calculations are accessible to the market participants involved in the transactions without violating the protection of commercial secrets.

The balancing period is one month during which each system user must ensure that the quantity of natural gas withdrawn from the transmission system complies with the amount of natural gas injected into the transmission system. Within a balancing period, the quantity of natural gas withdrawn from the transmission system by a system user per gas day may differ from the natural gas injected into the transmission system within one gas day by no more than 5%.

In order to ensure payments for balancing services, TSO may request from energy users guarantees in accordance with criteria and procedures set in the Regulations on the use of the joint stock company "Latvijas Gāze" natural gas transmission system.

2.1.2.2. Quality of service and supply

The operations of public service providers are regularly inspected on the basis of the Regulator's decision. In 2016, 8 objects of gas supply company JSC "Latvijas Gāze" were inspected in order to examine the company's operations and compliance with license requirements or general authorisation conditions. The objects of the JSC "Latvijas Gāze" were inspected according to the schedule and taking into regard the necessity to ascertain the operation of the companies in accordance with legislation.

2.1.3. Network tariffs for connection and access

Since in 2016 Latvia's natural gas market was not opened yet, regulation of all customers tariffs continued to be justified. This situation still ensured greater tariff stability, as well as balancing out the interests of the supplier and customers.

Under the current tariff setting regime, a natural gas merchant is able to make investments in the security of supply by improving transmission and distribution networks and storage facilities, as well as to earn a reasonable profit for its shareholders.

The Regulator is responsible for preparation and approval of natural gas transmission, storage, distribution system services and natural gas trade tariffs calculation methodologies and approval of corresponding tariffs.

There are two tariffs approved for transmission – one – for cross-border transmission system (part of the transmission system connected with Estonian, Lithuanian and Russian transmission systems) services, the second – for the services of the transmission system's part serving for the national supply only and is applied only to domestic consumers.

For underground gas storage services, the Regulator approves three tariffs – injection, storage and withdrawal services tariffs.

Natural gas trade tariffs are based on the natural gas acquisition price on the border of the country and price of natural gas stocks in the underground gas storage (hereinafter both together– sales price) and tariffs of natural gas supply services - transmission, storage, distribution and trade. The Regulator also sets the principles on how the natural gas acquisition price is included in natural gas trade tariffs. Natural gas trade tariffs are differentiated in accordance with the annual consumption level of customers. Natural gas trade tariffs are set out in tabular form at different sales prices of natural gas because the natural gas sale's price changes depend on the oil product price in the stock exchange.

On December 8, 2016, the Regulator set a rate of return on capital of the natural gas transmission system operator at 4.68%. The rate of return on capital was calculated in accordance with the natural gas transmission service tariff calculation methodology. The new fixed rate of return on capital will be applied when drafting a tariff proposal which is scheduled to be in force in 2017.

2.1.4. Cross-border issues

Pursuant to Regulation No 347/2013, the PCI No. 8.2.1 "Enhancement of Latvia — Lithuania interconnection" (hereafter – Project 8.2.1) and PCI No.8.2.4 "Modernization and Expansion of Incukalns 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 No 347/2013, the European Commission adopted the EC Regulation 2016/89. The European Commission approved the second list of PCIs including the Project 8.2.1 and Project No.8.2.4. The inclusion of the Project 8.2.1 and Project No.8.2.4 in the second PCI list demonstrates their compliance with the PCI criteria set out in Article 4 of Regulation No 347/2013.

Project 8.2.4 was not included in the list of actions selected for receiving financial assistance under CEF-Energy on November 21, 2014 and in 2015.

Under the second 2016 Connecting Europe Facility (hereafter – CEF) call, Project 8.2.4 was selected for receiving financial assistance under CEF-Energy as of February 17, 2017 for the study Incukalns Gas Storage – Study of Increased Flexibility and Use As Strategic Gas Storage. Maximum EU financial assistance for Project 8.2.4 is EUR 150,000.

In 2016 the Regulator prepared an interpretative communication on the implementation of the ACER's Decision on the implementation of GIPL project (PCI No 8.5) and coordination with the regulators of Lithuania, Estonia and Poland and participated in consultations with Estonian and Finnish regulators on the Paldiski LNG terminal project (PCI No 8.1.2.2) investment request, including CBCA.

2.2. Promoting Competition

2.2.1. Description of the wholesale market

Natural gas supply to Latvia is dependent only on two external suppliers – "Gazprom" and "Itera-Latvija" Ltd. In 2016 after improving the transmission network by implementing PCI No.8.2.3 "Capacity Enhancement of Klaipeda - Kiemenai pipeline", Klaipeda LNG terminal became an alternative source of supply for Latvia's and Estonia's consumers.

In 2016, 1132 million cubic meters (hereinafter - mcm) of natural gas were imported and 100% of that natural 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 between JSC "Latvijas Gāze" and "Gazprom".

Latvia's natural gas supply system pipeline networks have three international connections; the capacity of the existing interconnections is as follows:

- cross-border connection with Russia – up to 17 mcm/day;
- cross-border connection with Estonia – up to 7 mcm/day;
- cross-border connection with Lithuania – up to 6 mcm/day.

The cross-border 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 the security of supply of natural gas in Latvia. The cross-border connection with Estonia provides the ability to supply natural gas from Latvia.

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 Incukalns underground gas storage facility. During the colder part of the year, natural gas from the underground facility is delivered to Latvian consumers, as well as supplied to Estonia, Lithuania and back to Russia, if needed. In 2016, about 132 mcm of natural gas was supplied to other countries.

The natural gas transmission system was designed for annual consumption of up to 4000 mcm in Latvia – almost three times more than the total consumption in 2016. In 2016, there were no overload capacities in Latvia, thus TSO did not need to use any actions or methods that focus on congestion management.

Until April 3, 2017, the users of natural gas distribution system who procure natural gas for personal use outside the territorial area of the licence of JSC "Latvijas Gāze", have the right to use the natural gas distribution system for self-supply in accordance with a bilateral arrangement between the user concerned and the JSC "Latvijas Gāze", which should have provisions for a separate settlement of payments for using the distribution system services.

On March 31, 2016, JSC "Latvijas Gāze" received a request of JSC "Latvenergo" to ensure natural gas transmission and distribution system services in order to use natural gas purchased from

another natural gas trader for own final consumption in the territory of Latvia. The Energy Law stipulates cases when a natural gas system operator has a right to provide a substantiated refusal for access to the relevant system. As JSC "Latvijas Gāze" did not ensure access to the relevant system and did not provide a substantiated refusal for access, the Regulator's Board decided to initiate an administrative proceeding about possible violations by JSC "Latvijas Gāze" concerning the application received from JSC "Latvenergo". After weighing up all the circumstances, the Regulator's Board decided to issue a warning to JSC "Latvijas Gāze". The Regulator's decision has been appealed by the JSC "Latvijas Gāze" and legal proceeding will continue in 2017.

On May 2, 2016, the Regulator received an application of JSC "Latvijas Gāze" requesting a temporary derogation until April 3, 2017, for the rights of third parties to use the natural gas transmission and distribution system in order to transport the natural gas purchased from other natural gas traders for consumption in the territory of Latvia. After evaluating the existing situation in accordance with the requirements of legal acts, on August 25, 2016, the Regulator's Board decided to refuse granting a temporary derogation. The Regulator's decision has been appealed by the JSC "Latvijas Gāze" and legal proceeding will also continue in 2017.

2.2.2. Description of the retail market

In Latvia, there was only one natural gas retailer – the JSC "Latvijas Gāze" in 2016.

In 2016, the total Latvian natural gas consumption was 1375 mcm (increased by 4.3% compared to 2015); The aforementioned consumption increase was due to lower average temperatures in the first months of the year 2016.

The Latvian natural gas consumption structure in 2016 was as follows:

- energy sector – 935 mcm or 68%;
- utilities and commercial companies – 192.5 mcm or 14%;
- households – 137.5 mcm or 10%;
- industry – 110 mcm or 8%.

In 2016, there were 442.8 thousand natural gas customers. The number of customers has slightly decreased compared to 2015 when there were 443.6 customers due to the switching to other energy resources.

In 2016, the Regulator received 35 consumer complaints and inquiries related to gas issues, all of them were unsubstantiated.

2.3. Security of supply

Security of supply measures are being implemented in accordance with the requirements of the Regulation (EU) No 994/2010 of the European Parliament and of the Council of 20 October 2010 concerning measures to safeguard security of gas supply and repealing Council Directive

2004/67/EC. Competent authority with regards to the mentioned Regulation – the Ministry of Economics of the Republic of Latvia.

The infrastructure standard N-1 for Latvia is 220,67%.

In 2016 there have been no periods when the natural gas demand was not fully covered. Since the actual consumption of natural gas is approximately 1300 mcm per annum, due to the capacity of the pipeline system, which is designed for 3000 - 4000 mcm annual consumption and the availability of the Incukalns UGS, JSC "Latvijas Gāze" was capable of meeting all the users' requirements without exercising the option of supply interruption.

In Latvia, there is only one energy supply merchant active in the natural gas supply – the JSC "Latvijas Gāze". Considering the close correlation of the measures for mitigation of natural gas supply risk listed in the risk assessment and those included in the investment program of the JSC "Latvijas Gāze", the preventive measures related to infrastructure investments are based on the JSC "Latvijas Gāze" investment program.

VI Consumer protection and dispute settlement in electricity and natural gas

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

In 2016, 149 complaints of public utilities 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 (49%), electricity tariffs (13%), installation of a new connection and the connection fee (11%), quality of energy supply (7%), supply of electricity (7%), and other issues (13%). In the natural gas supply sector, most complaints concerned issues of the registration of the amount of natural gas consumed and resultant bills (69%), natural gas supply (14%), installation of a new connection (6%) and other issues (11%).

3.1. Public service issues

The 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.

The Public Service Obligations requirements are defined in several laws, particularly in the Energy Law, the Electricity Market Law and the Law on Regulators of Public Utilities. Additionally, the Regulator has also passed a number of important legislative measures (i.e. adopted amendments) to ensure promotion of best practices in regulated sectors.

In the electricity sector, a DSO has an obligation to connect every customer in the licensed area while complying with the regulations on the connection to the grid, set by the Regulator. According

to the above mentioned regulations, the connection charge (the cost of 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 DSO has less than 100,000 users;
- the customer pays 50% and the DSO 50%, if the DSO has more than 100,000 users.

Other customers and generators are obliged to cover 100% of the connection costs.

Laws have defined several tasks for a public trader as well as for the 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 ensure for system users and applicants access to energy transmission or distribution systems or natural gas storage sites if such access is compatible with appropriate technical regulations and safety requirements.

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. 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 the Regulation of the Cabinet of Ministers regarding Electricity Production from Renewable Energy Resources and Price Calculation, adopted 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.

The Regulator approves the renewable energy fee and co-generation fee that should be paid by all the electricity customers proportionally to their consumption. In 2016, the amount of the electricity produced from renewable energy resources reached 38% of the total amount of electricity consumption, including hydropower plants with installed capacity more than 5 MW.

On February 26, 2014, the Regulator adopted a new 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 2016 was 10.5 EUR/MWh and for electricity produced in co-generation – 16.3 EUR/MWh.

JSC "Latvijas Gāze" is the only natural gas merchant in Latvia, and its licences oblige it to supply and trade natural gas within the licensed area. In 2016, this refers to the whole territory of Latvia,

and the public service obligation exists as long as deliveries are technologically possible and economically feasible.

3.2. Protection of vulnerable customers

In accordance with the Electricity Market Law, electricity supply to vulnerable costumers from January 1 till December 31, 2016 was ensured by JSC "Latvenergo". The electricity price is set in the Electricity Market Law. On July 12, 2016, the Cabinet of Ministers approved detailed rules about electricity supply and distribution to vulnerable customers. These rules entered into force on August 1, 2016 and provide that vulnerable customers are poor or low-income families (persons), large families or families which care for disabled children or persons with the first disability group.

3.3. 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 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. These rules were applicable until June 8, 2016, when amendments of the Electricity Market Law entered into force. According to these amendments the Cabinet of Ministers will approve new regulation on February 14, 2017.

3.4. Customer protection issues

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

In 2016, 35 applications were submitted to the Regulator about the actions of the public service provider in the natural gas sector. One complaint was justified and two were not related to the Regulator's competence. Dispute resolution procedure was applied in four cases, one dispute will be pending in 2017, two claims were rejected and one was upheld in part. 1 administrative court procedure was initiated regarding the Regulator's dispute settlement decision (which upheld the claim in part) and litigation process will continue in 2017.

In 2016, 104 applications were submitted to the Regulator about the actions of the public service provider in the electricity sector. 9 complaints were justified and 16 was not related to the Regulator's competence. Dispute resolution procedure was applied in two cases in the electricity sector, one claim will be pending in 2017 and the other was rejected.

When replying to complainants, the 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 the 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.

3.5. Regulation of final customer prices

In accordance with the prevailing legal framework, the Regulator sets tariffs for all end-users in the natural gas supply sector in accordance with the methodologies approved by the Regulator. Tariffs for natural gas infrastructure services and trade were approved by the Regulator in 2008.

In the electricity sector, the Regulator sets only network tariffs, supply prices are set by bilateral agreements. Both electricity produced and electricity consumed in Latvia are being sold and bought in a power exchange. Supply price is a subject of agreement and the price can be fixed or variable (tied to spot price).

3.6. Activities of the Regulator in ensuring transparency of terms and conditions of supply contracts

A very important duty is to ensure the transparency of terms and conditions when it comes to supply contracts. The Cabinet of Ministers has issued a regulation in which general rules on trade and supply of electricity, including main provisions and conditions of electricity supply contracts, are set out. In this regard, national legislation in the electricity sector has not changed since January 21, 2014, when the Cabinet of Ministers adopted the before mentioned rules.

In the gas sector, the Cabinet regulation of February 9, 2016 No.85 "Regulations on natural gas supply and use" sets the main provisions and conditions of natural gas supply contracts, as well as stipulates general rules for the supply of gas.

The Regulator supervises the content of the contracts to prevent discrimination of energy users' or non-transparent requirements.