

National Report

of the President
of Energy Regulatory Office
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List of abbreviations

ACER	Agency for the Cooperation of Energy Regulators
Directive 2009/73/EC	Directive 2009/73/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in natural gas and repealing Directive 2003/55/EC (OJ L 211/94, as amended)
ENTSO-E	The European Network of Transmission System Operators for electricity
ENTSO-G	The European Network of Transmission System Operators for gas
GK PGNiG	Polskie Górnictwo Naftowe i Gazownictwo S.A. group
DNC	Distribution Network Code
TNC	Transmission Network Code
NES	National Electricity System
OGP Gaz-System S.A.	Operator Gazociągów Przesyłowych Gaz-System S.A.
DSO	Distribution System Operator
SSO	Storage System Operator
TSO	Transmission System Operator
RES	Renewable Energy Sources
PGNiG S.A.	Polskie Górnictwo Naftowe i Gazownictwo S.A.
President of ERO	President of Energy Regulatory Office
President of UOKiK	President of Office of Competition and Consumer Protection
PSE S.A.	Polskie Sieci Elektroenergetyczne S.A.
PSG Sp. z o.o.	Polska Spółka Gazownictwa Sp. z o.o.
Regulation No 714/2009	Regulation (EU) No 714/2009 of the European Parliament and of the Council of 13 July 2009 on conditions for access to the network for cross-border exchanges in electricity and repealing Regulation (EC) No 1228/2003 (EU OJ L 211/15, as amended) – <i>repealed on 31 December 2019</i>
Regulation No 715/2009	Regulation (EU) No 715/2009 of the European Parliament and of the Council of 13 July 2009 on conditions for access to the natural gas transmission networks and repealing Regulation (EC) No 1775/2005 (EU OJ L 211/36, as amended)
CACM GL	Commission Regulation (EU) 2015/1222 of 24 July 2015 establishing a guideline on capacity allocation and congestion management (EU OJ L 197/24, as amended)
NC RfG	Commission Regulation (EU) 2016/631 of 14 April 2016 establishing a network code on requirements for grid connection of generators (EU OJ L 112/1, as amended)
NC DC	Commission Regulation (EU) 2016/1388 of 17 August 2016 establishing a Network Code on Demand Connection (EU OJ L 223/10)

NC HVDC	Commission Regulation (EU) 2016/1447 of 26 August 2016 establishing a network code on requirements for grid connection of high voltage direct current systems and direct current-connected power park modules (EU OJ L 241/1)
NC FCA	Commission Regulation (EU) 2016/1719 of 26 September 2016 establishing a guideline on forward capacity allocation (EU OJ L 259/42)
SO GL	Commission Regulation (EU) 2017/1485 of 2 August 2017 establishing a guideline on electricity transmission system operation (EU OJ L 220/1)
EB GL	Commission Regulation (EU) 2017/2195 of 23 November 2017 establishing a guideline on electricity balancing (EU OJ L 312/6)
NC ER	Commission Regulation (EU) 2017/2196 of 24 November 2017 establishing a network code on electricity emergency and restoration (EU OJ L 312/54, as amended)
Regulation 2019/943	Regulation (EU) 2019/943 of the European Parliament and of the Council of 5 June 2019 on the internal market for electricity (EU OJ L 158/54)
REMIT Regulation	Regulation (EU) No 1227/2011 of the European Parliament and of the Council of 25 October 2011 on wholesale energy market integrity and transparency (EU OJ L 326/1)
BAL NC	Commission Regulation (EU) No 312/2014 of 26 March 2014 establishing a Network Code on Gas Balancing of Transmission Networks (EU OJ L 91/15)
CAM NC	Commission Regulation (EU) 2017/459 of 16 March 2017 establishing a network code on capacity allocation mechanisms in gas transmission systems and repealing Regulation (EU) No 984/2013 (EU OJ L 72/1)
TAR NC	Commission Regulation (EU) 2017/460 of 16 March 2017 establishing a network code on harmonised transmission tariff structures for gas (EU OJ L 72/29)
SGT EuRoPol GAZ S.A.	System Gazociągów Tranzytowych EuRoPol GAZ S.A.
TGE S.A.	Towarowa Giełda Energii S.A.
TPA	Third Party Access
EU	European Union
ERO	Energy Regulatory Office
Energy Law Act	Energy Law Act of 10 April 1997 (JoL of 2020 item 833, as amended)
Capacity Market Act	Act of 8 December 2017 on capacity market (JoL of 2020 item 247)
Act on Stocks	Act of 16 February 2007 on stocks of crude oil, petroleum products and natural gas, the principles of proceeding in circumstances of a threat to the fuel security of the State and disruption on the petroleum market (JoL of 2020 item 411)
Pricing Act	Act of 28 December 2018 amending the Excise Duty Act and certain other acts (JoL of 2018 item 2538, as amended)
UOKiK	Office of Competition and Consumer Protection

1. FOREWORD

Last year is a period of great importance on the energy market. Amendments to domestic legislation coupled with new EU regulations introduced in recent years have had a significant impact on the processes ongoing on the domestic electricity and gas markets.

Due to dynamic increases of electricity prices in wholesale market in 2018, in order to stabilize financial encumbrances of final electricity customers in 2019, the so-called Pricing Act was passed at the end of 2018. The new provisions which entered into force at the beginning of 2019, obliged electricity suppliers to specify in 2019 electricity prices for final customers equal to prices applied as at 31 December 2018 (in case of a tariff approved by the President of ERO) or not higher than those applied as at 30 June 2018 (in case of prices not subject to approval by the President of ERO). Energy companies conducting business activity consisting in electricity trading were obliged to include the above mentioned prices in settlements with final customers for the period beginning on 1 January 2019 and to amend sales agreement or comprehensive agreements in this respect. "Freezing" of electricity prices introduced by the Pricing Act was applicable until the end of 2019.

In July 2019, four legal acts comprising an EU package "Clean Energy for All Europeans" which are of crucial importance for the functioning of the common energy market entered into force¹⁾. The regulations significantly influenced the scope of competence and role of regulators as part of the common market development. In mid-2019, intensive work on the implementation of specific provisions of the regulations began, in which the President of ERO participated both at the level of ACER and by fulfilling its competence with respect to the domestic market.

A detailed description of the developments on the Polish energy market and activities undertaken by the Polish Regulator in favour of development and proper operation of the market and fostering competition has been provided in detail in this National Report of the President of ERO, to be submitted to the European Commission and ACER.

¹⁾ Regulation (EU) 2019/941 of the European Parliament and of the Council of 5 June 2019 on risk-preparedness in the electricity sector and repealing Directive 2005/89/EC (OJ EU L 158/1 of 14.6.2019) – hereinafter: regulation 2019/941; Regulation (EU) 2019/942 of the European Parliament and of the Council of 5 June 2019 establishing a European Union Agency for the Cooperation of Energy Regulators (OJ EU L 158/22 of 14.6.2019) – hereinafter: regulation 2019/942; Regulation (EU) 2019/943 of the European Parliament and of the Council of 5 June 2019 on the internal market for electricity (OJ EU L 158/54 of 14.6.2019) – hereinafter: regulation 2019/943; Directive (EU) 2019/944 of the European Parliament and of the Council of 5 June 2019 on common rules for the internal market for electricity and amending Directive 2012/27/EU (OJ EU L 158/125 of 14.6.2019) – hereinafter: directive 2019/944.

2. MAIN DEVELOPMENTS IN THE ELECTRICITY AND GAS MARKETS

On 1 January 2019, the provisions of the so-called Pricing Act entered into force, which introduced a mechanism to protect final customers against electricity price increases. The Pricing Act froze electricity prices and imposed obligations on entrepreneurs selling electricity to adjust prices to the 2018 level, amend contracts with customers or re-issue invoices accordingly.

The main objective of the Pricing Act was to ensure that electricity prices did not increase in 2019 as compared to 2018. Every entrepreneur involved in the sale of electricity in 2019 was obliged to adjust contracts and prices in settlements with customers to the requirements of the Pricing Act. In relation to households (group G), trading companies applying tariffs should apply tariff prices valid as at 31 December 2018, while those applying market offers – prices not higher than those of 30 June 2018. At the same time, trading companies were granted the right to apply for appropriate compensation in connection with the sale of electricity at the statutory price.

The Pricing Act provides for sanctions for non-compliance, and the President of ERO is the competent authority to carry out verification and impose fines on entrepreneurs which have not fulfilled their statutory obligations. In 2020 the President of ERO announced a comprehensive monitoring of the market for compliance of electricity trading companies with the obligations imposed by the Pricing Act.

It should be added that the “freezing” of electricity prices introduced by the Pricing Act was only in force until the end of 2019 and is not continued in 2020.

In 2019, the Compensation Scheme Act was passed²⁾. It introduces a new system of support for entities conducting economic activities in energy-intensive sectors or subsectors – compensation for the passing on of the costs of purchasing emission allowances (within the meaning of the Emissions Trading Scheme Act) to the prices of the electricity used to manufacture their products. It should be noted that the price of electricity on the wholesale market depends to a large extent on the obligation of energy generators to purchase emission allowances. High energy prices adversely affect domestic energy-intensive industries as well as their international competitiveness. These negative phenomena are to be counteracted by the compensation scheme set out in the Act. The President of ERO is the body responsible for examining applications for compensation, granting such compensation and deciding on the obligation to return it. The Act sets out detailed rules for calculating the amount of compensation granted for a calendar year. The regulatory body is also entitled to impose penalties for non-compliance with the obligations set out in the Act, i.e. providing untrue information, refusing to provide information and failing to provide access to the accounting books. Importantly, entities applying for compensation cannot benefit from privileges dedicated to final customers under the Pricing Act. The Act on the Compensation Scheme entered into force on 29 August 2019, so it will be possible to assess the functioning of its provisions in subsequent years.

On 18 June 2019, the last provisions on last resort supply set out in the Act of 9 November 2018 amending the Energy Law Act and certain other acts entered into force. In addition to the hitherto binding regulation of Article 5ab, which specifies in detail the obligations of the supplier, DSO and TSO and the supplier of last resort to ensure gas supplies to the final customer in a situation where the consumer did not have a designated supplier of last resort in the comprehensive agreement or the gas fuel distribution agreement (in such a case, in accordance with Article 5ab item 1 of the Energy Law Act, the DSO or TSO, acting on behalf and in favour of the consumer, concludes a comprehensive agreement with the supplier of last resort), Article 5aa is in force, which comprehensively regulates the rules of reserve sales for newly concluded agreements, as well as for those concluded so far in which the name of the supplier of last resort was indicated. These provisions were long-awaited solutions to protect final customers in the event of a sudden cessation of operations by the existing trading company with which the consumer in question had a valid comprehensive agreement for the sale of gaseous fuels.

²⁾ Act on Compensation Scheme for Energy-Intensive Sectors and Subsectors (JoL of 2019, item 1532, as amended).

On 2 August 2019 the Act of 4 July 2019 amending the Energy Law Act came into force. The Act equips the President of ERO with the power to establish, by way of a decision, an agreement entrusting the performance of the duties of a gas transmission system operator between the gas transmission system operator and the owner of the gas transmission network – under the conditions specified in the Act.

Changes in the electricity and gas market

Electricity market

The volume of gross domestic electricity production in 2019 was lower than in the preceding year and amounted to 158,767 GWh (decrease by 3.9% as compared to 2018). Gross domestic electricity consumption (169,391 GWh) decreased in that year by around 0.9% as compared to 2018.

The structure of electricity generation in 2019 did not change significantly in comparison to 2018. A great majority of production is based on conventional fuels, that is hard coal and lignite, albeit their share decreased from 80% to 75%. 2019 saw an increase of share of generation from wind and other renewable energy sources and so did the share of electricity generation in gas power plants.

In 2019, installed capacity in the domestic electricity system totalled 46,799 MW, and generating capacity 46,991 MW, which is an increase by 1.9% and 2.9%, respectively, as compared to 2018³⁾.

An average annual demand for capacity was 23,082.0 MW, against maximum demand of 26,504.4 MW, which is a decrease by 1.0% and an increase by 0.2%, respectively, as compared to 2018.

The ratio of available capacity to generating capacity was 64.5% (decrease by 1.6 percentage points as compared to 2018)⁴⁾.

The number and structure of entities of the electricity sector have not changed significantly. In 2019, the highest share in the electricity generation subsector amounting to 40,6%⁵⁾, was still held by PGE Polska Grupa Energetyczna S.A. (decrease by 2.3 percentage point in comparison to the preceding year). This group, having taken over energy companies which were part of the EDF Group also became leader on the market of sales to final customers and maintained it in 2019.

Three largest producers (which were part of the groups: PGE Polska Grupa Energetyczna S.A., ENEA S.A., TAURON Polska Energia S.A.) still had in total almost 2/3 of the installed capacity and were responsible for about 67% of domestic electricity production.

In 2019, there were five big DSOs operating on the electricity market whose grids are directly connected to the transmission system. In addition, in 2019 there were 184 vertically integrated undertakings designated as DSOs, which are not subject to the unbundling obligation.

In 2019 there were five incumbents and over 136 alternative trading companies active in the electricity supply to final customers, including suppliers operating on the household market. On the electricity market there were also 184 suppliers acting within undertakings vertically integrated with the DSOs.

In 2019, there were some 17.8 million consumers, out of whom 91% (16.2 million) are the consumers in the G tariff group, with a great majority of household consumers (over 15.1 million) that purchase electricity to consume it in their households. The rest of final customers are consumers of the A, B and C tariff groups. Groups A and B comprise consumers supplied from the high and medium voltage grids, which are so-called industrial consumers, while the C group comprises consumers connected to the low voltage grid consuming electricity for the purpose of conducted business activity, the so-called commercial consumers.

Between the 4th quarter of 2018 and the 4th quarter of 2019, electricity prices increased in A and B tariff groups, and slightly decreased in the C tariff group. In the period under analysis, a considerable decrease in electricity prices was observed for the tariff G consumers – by 4.05%, out of which the prices for household customers decreased by as much as 4.75%, which was an intended consequence of introducing the Pricing Act. In 2019 distribution fees decreased for all tariff groups. The highest decrease in the distribution fee was for customers in the A tariff group – by 11% and

³⁾ As at 31 December 2018 and 31 December 2019, data of PSE S.A.

⁴⁾ Data based on average annual values from evening peak, data of PSE S.A.

⁵⁾ Share calculated taking into account the volume of electricity fed into the grid, while to calculate this ratio, the entity structure as at 31 December 2019 was taken into consideration.

the lowest for the C tariff group customers – by 2.6%. For consumers in the G tariff group, the distribution fee decreased by 7.18%, and for the household consumers by 7.95%.

Gas market

As at the end of 2019, 186 entities held licence for trade in gaseous fuels in comparison to 197 at the end of 2018. 99 undertakings actively participated in natural gas trading. Gas trading undertakings from outside GK PGNiG S.A. acquired 118.5 TWh of natural gas.

Sale and purchase of gas on the Polish wholesale market is performed mainly on the commodity exchange managed by TGE S.A. The gas exchange participants include mainly gas trading companies and big final customers which may act independently, after concluding a relevant contract with TGE S.A. and becoming gas exchange participants, or through brokerage houses or through other entities with a gas exchange participant status from their own group that may conclude transactions in favour of other entities being part of the same group.

Gas exchange trading is performed by concluding sale (transaction) contracts between exchange participants.

In 2019, as a result of performance of contracts concluded on TGE S.A., in the entire period of listing of a particular type of contract, 136,394,588 MWh of natural gas were delivered at an average price of 95.77 PLN/MWh.

On the territory of the Republic of Poland, as of 31 December 2019, there was a gas DSO subject to legal and functional unbundling requirements. This entity was PSG Sp. z o.o. of GK PGNiG. In addition, 52 energy companies performed DSO functions to the extent not subject to legal unbundling.

The sale of gas to consumers was dominated by undertakings of GK PGNiG S.A., whose share increased, as compared to the previous year by around 0.69%, to 82.77%. The observed increase in GK PGNiG's share in sales of gas to final customers, which has been sustained since 2017, resulted from a significant drop in gas purchase from abroad directly by final customers for their own needs, as a result of changes in legal regulations concerning mandatory gas reserves, as well as the acquisition of some customers by PGNiG OD Sp. z o.o. as part of the launch of last resort supply following the collapse of several trading companies in 2019. The remaining 17.23% of gas sale to final customers was performed by alternative companies selling to domestic consumers.

Implementation of the Clean Energy for All Europeans package

On 4 July 2019, Regulation 2019/943 came into force, which replaced Regulation 714/2009. However, this does not affect the validity of the network codes and guidelines adopted so far, and work on their implementation is still ongoing, both on the part of TSOs and NEMOs and on the part of regulators and ACER.

It should be noted that Regulation 2019/943 has imposed a number of new regulatory obligations on regulators and ACER. In 2019, on the basis of this regulation, the President of ERO issued, among others, a decision granting PSE S.A. a derogation from the obligation to make day-ahead cross-zonal transmission capacity available⁶⁾, conducted, at the request of the TSO, proceedings to approve the method and assumptions to be used in the process of reviewing bidding zones and considered alternative configurations.

Additionally, Article 16(8) of Regulation 2019/943 imposed an obligation on the TSO to make available to market participants cross-zonal transmission capacity at a level not lower than 70% of the capacity at a given border or critical element of the network, determined taking into account the limits of system security. As it was currently impossible for the Polish TSO to meet the above conditions, pursuant to Article 15 of the above Regulation, an action plan has been developed by the Ministry of Energy, in cooperation with the President of ERO and the Polish TSO, specifying the level of minimum transmission capacities for cross-zonal trade that will be made available to market

⁶⁾ <https://www.ure.gov.pl/pl/energia-elektryczna/europejskiree/decyzje/8636,Decyzja-dotyczaca-odstepstwa-od-obowiazku-udostepniania-miedzystrefowych-zdolnos.html>

participants by the Polish TSO from the beginning of 2020 until the end of 2025. The plan also includes a schedule for the adoption of measures to achieve the target level of minimum capacity of 70% of transmission capacity in accordance with Article 16(8) of Regulation 2019/943⁷⁾.

An important change from the regulators' perspective, introduced in turn by Regulation 2019/942, is the loss of the competence of regulators to issue decisions coordinated at EU level, which ACER has gained. The change in the procedure did not affect the involvement of the President of ERO, who participated through his representatives delegated to work in the Agency's task forces and working groups in the preparation of the decisions.

In connection with entering into force of Regulation 2019/943, which regulates inter alia issues related to capacity mechanisms, it is necessary to adapt the Polish capacity mechanism to its requirements:

a. Regulation 2019/943 introduces new requirements for the regulator regarding the capacity market. The regulator is involved in the preparation of methodologies for adequacy assessment, i.e.: methodology for calculation of the value of lost load (VoLL), methodology for calculation of cost of new entry (CoNE), methodology for calculation of reliability standards (RS).

Article 25 of Regulation 2019/943 states that Member States implementing capacity markets shall determine the necessary level of security of energy supply through a reliability standard (RS). This standard is defined by the Member State or the competent authority designated by it on the basis of a request from the regulatory authority. RS shall be calculated using at least:

- 1) value of lost load (VoLL) and
- 2) the cost of new entry (CoNE) or controlled demand.

The correlation of parameters for capacity market auctions with the indices values resulting from the VoLL/CoNE/RS calculation methodology is of key importance. Pursuant to the Capacity Market Act, the TSO submits to the President of ERO and the Minister of Energy the proposed values of parameters for the main auction and additional capacity market auctions.

The parameters of the main and additional auction in the Polish capacity mechanism include the safety standard understood as the acceptable loss of load expressed in hours per year (the so-called LoLE index) and the cost of new entry (CoNE). The current Ordinance of the Minister of Energy of 18 July 2018 on the execution of the capacity obligation, its settlement and demonstration and concluding transactions on the secondary market sets the safety standard in Article 3 at 3 hours.

The methodologies for the determination of these parameters are to be approved in 2020. Once they have been approved, regulators are required to define and publish the VoLL.

b. Regulation 2019/943 introduces restrictions on the participation in capacity market by generation units not meeting the CO₂ emission limit.

Pursuant to Article 22(4)(b) of Regulation 2019/943, generation capacity that started commercial production before 4 July 2019 and that emits more than 550 g of CO₂ of fossil fuel origin per kWh of electricity and more than 350 kg CO₂ of fossil fuel origin on average per year per installed kW shall not be committed or receive payments or commitments for future payments under a capacity mechanism.

At the same time, the regulation imposed an obligation on ACER to publish an opinion providing technical guidance related to the calculation of CO₂ emissions from generation units on the basis of the design efficiency of the generation unit and nominal capacity.

On 17 December 2019, ACER published Opinion No 22/2019⁸⁾. According to this document, each Member State should have an appropriate body responsible for verifying that the CO₂ emissions of the generation capacity participating in the capacity mechanism are compatible with the limit resulting from Regulation 2019/943.

The Capacity Market Act defines two types of auctions: the main auction, where the delivery period is a calendar year, and the additional auction, where the delivery period is a calendar year quarter. This means that generation units that do not meet the requirements of the Regulation in terms of

⁷⁾ The action plan is available on the website of the Ministry of State Assets at <https://www.gov.pl/web/aktywa-panstwowe/plan-dzialania-przyjety-przez-kse>

⁸⁾ Opinion No 22/2019 of the European Agency for the Cooperation of Energy Regulators of 17 December 2019 on the calculation of the values of CO₂ emission limits referred to in the first subparagraph of Article 22(4) of Regulation (EU) 2019/943 of 5 June 2019 on the internal market for electricity (recast) https://www.acer.europa.eu/Official_documents-/Acts_of_the_Agency/Opinions/Opinions/ACER%20Opinion%2022-2019%20on%20the%20calculation%20values%20of%20CO2%20emission%20limits.pdf

CO₂ emissions will not be allowed to participate in the main auction for 2025, but only in the quarterly auctions for the first and second quarter of 2025.

In order to meet the requirements of Article 22(4) of Regulation 2019/943, it is necessary to implement the guidelines contained in ACER Opinion No 22/2019 by indicating the competent authority responsible for verifying the level of CO₂ emissions of the generation units participating in the capacity mechanism and the type of documents that are necessary for this verification process. It is also necessary to adapt the Capacity Market Regulations by changing the rules of certification to the main auction and additional auctions so that only units meeting the CO₂ emission limit are admitted to the main auction and additional auctions from the third quarter of 2025, as well as in terms of documents confirming the level of CO₂ emissions of the generation units taking part in the certification (adaptation to ACER guidelines contained in Opinion No 22/2019). In July 2020, work began on amending the Capacity Market Regulations in this area, so that both the certification for the main auction for 2025 (planned for September 2020) and the main auction itself are carried out in accordance with the requirements of Regulation 2019/943.

In accordance with Article 10(4) of Regulation 2019/943, regulatory authorities (...) shall identify policies and measures applied within their territory that could contribute to indirectly restricting wholesale price formation, including limiting bids relating to the activation of balancing energy, capacity mechanisms, measures by the transmission system operators, measures intended to challenge market outcomes, or to prevent the abuse of dominant positions or inefficiently defined bidding zones. However, pursuant to Article 10(5) of Regulation 2019/943, where a regulatory authority (...) has identified a policy or measure which could serve to restrict wholesale price formation it shall take all appropriate actions to eliminate or, if not possible, to mitigate the impact of that policy or measure on bidding behaviour. Member States shall provide a report to the Commission by 5 January 2020 detailing the measures and actions they have taken or intend to take.

In order to fulfil the obligation imposed on the regulatory body by the above mentioned regulations, the President of ERO decided to conduct public consultations. On 22 July 2019, the Communication of the President of ERO (No 53/2019) on the invitation to participate in public consultations concerning policies and measures applied in the territory of the Republic of Poland which could indirectly contribute to restricting wholesale prices formation was published.

Market participants were asked to answer 13 questions that concerned:

- market structure,
- regulatory environment,
- transparency, access to information,
- organization of the wholesale market,
- support schemes,
- infrastructure,
- control mechanisms.

Answers to the questions asked in the consultation could be sent until 30 August 2019.

Then, the report was prepared (as at September 2019), which was submitted by the President of ERO to the government in December 2019.

3. ELECTRICITY MARKET

3.1. Network regulation and technical functioning

3.1.1. Unbundling

In the light of the current regulations of the Energy Law Act for electricity and gas system operators (hereinafter referred to as "system operators") are designated by decision of the President of ERO:

- at the request of the owner of the network or installation referred to in Article 9h item 1 of the Act,
- ex officio in cases specified in Article 9h, item 9 of the Act.

The Energy Law Act specifies the conditions of operation and tasks of system operators. The power distribution system operators (DSOs) operating in a vertically integrated undertaking serving more than 100,000 customers connected to their network are obliged to become legally and organizationally unbundled and independent in terms of their decisions (Article 9d of the Energy Law Act). There is one power transmission system operator in Poland – PSE S.A.

On 4 June 2014 the President of ERO granted PSE S.A. a certificate of complying with independence criteria determined in Article 9d item 1a of the Energy Law Act for the period until 31 December 2030.

Compliance with independence criteria and conditions of conducting licensed activity and exercising the TSO function is monitored and periodically examined. In 2019 no irregularities in the functioning of the TSO were revealed.

In 2019, as in previous years, there were five large DSOs on the electricity market, whose networks are directly connected to the transmission network (DSOp). They are legally obliged to separate the distribution activities carried out by the system operator from other activities not related to electricity distribution (unbundling). In addition, in 2019, there were 184 companies designated as DSOs (so-called DSO_n) operating within vertically integrated companies that are not subject to unbundling.

Compliance Programmes

Operator independence, which ensures equal access to the network for all market participants, is crucial for the performance of DSO functions. Operators are required to develop programmes which set out the measures taken to ensure non-discriminatory treatment of system users (Compliance Programmes).

Compliance Programmes are approved by the President of ERO for five largest DSOs which are obliged to be unbundled in terms of legal and organizational form and decision making (Article 9d of the Energy Law Act). The other DSOs are not obliged to submit Programmes for approval. Implementation of the approved Compliance Programmes is controlled by the President of ERO based on reports describing activities undertaken in the preceding year to implement the Compliance Programmes, submitted by Compliance Officers each year, before 31 March.

Compliance Officers appointed by DSOs are responsible for monitoring the Compliance Programmes implementation. As the areas of activity are extensive, in most companies the Compliance Officer is assisted by regional coordinators who report to him/her in terms of the subject matter under monitoring, but in terms of their structural function, they report to directors of branches.

All operators published the Compliance Programmes on their websites. Employees were trained with respect to the Compliance Programme and had also an opportunity to ask Compliance Officers about interpretation of particular provisions of the Programme. As a rule, new employees are trained not later than one month after they were employed.

As part of the implementation of their tasks, Compliance Officers performed, among others, the following activities:

- reviewed applied templates of documents and gave opinion on their consistency with the provisions of the Programmes,
- reviewed procedures applied to the provision of basic business services, such as: connection to the grid, distribution, supplier switching, processing of complaints, customer service,
- monitored proper use of DSO's brand in terms of differentiation from brands of other companies which are part of groups,
- reviewed contents of DSOs' websites.

Similarly to previous years, outsourcing part of services to other entities, both affiliated with the vertically integrated enterprise and external ones, was common. In the assessment of the President of ERO, when entrusting the tasks, the implementation of which is related to access to sensitive data, to third parties, it is necessary to provide Compliance Programme training to all employees involved in performing outsourcing-covered activities. A contractual obligation of a DSO contractor to comply with the provisions of the Programme is insufficient. This may lead to decreased protection of sensitive data.

In 2019 the President of ERO did not conduct any proceedings regarding a violation of the Compliance Programme.

The year 2019 was a period of intensive work related to updating the Programmes in connection with the changes and challenges that emerged during several years of operation of independent DSOs in vertically integrated groups.

On 20 February 2019 the President of ERO published the Guidelines to the content of the Compliance Programmes developed by DSOs and SSO. The scope of the Guidelines was extended to include the Compliance Programme (among others, management of network infrastructure and its development – including ICT; principles of knowledge sharing with market participants; marketing activities and sponsoring of the operator; functioning of the operator in a vertically integrated enterprise; centralization or outsourcing of services and purchases of the operator). The President of ERO indicated that by the end of May 2019 it expects DSOs to submit Compliance Programmes adapted to the Guidelines for approval. The DSOs submitted applications to the President of ERO to amend decisions approving the existing Compliance Programmes and submitted proposals for the content of their Compliance Programmes prepared in connection with the publication of the Guidelines. By the end of 2019, the administrative proceedings to approve changes in the Compliance Programs had not been completed.

3.1.2. Network extension and optimization

Monitoring investment plans of transmission system operators

The power company PSE S.A. performing business activity in the field of electricity transmission – being the only power TSO operating on the territory of Poland, designated by the President of ERO – performs investment tasks in accordance with the development plan agreed with the President of ERO with respect to meeting the current and future demand for electricity. The draft development plan of this operator – under the provision arising from Article 16 item 13 of the Energy Law Act – is subject to agreement with the President of ERO. When agreeing on the TSO development plan, the President of ERO verifies first of all the compliance of its content with the Act and its implementing regulations and with the assumptions of the state's energy policy, cooperating with the locally competent provincial boards, and additionally agrees on investment outlays in such an amount that the costs resulting from them may constitute the basis for tariff calculation, in compliance with the requirement referred to in Article 16 item 10 of the Energy Law Act, according to which the plan should ensure long-term maximization of the efficiency of outlays and costs incurred by energy companies so that outlays and costs do not cause an excessive increase in electricity prices and fee rates in particular years, while ensuring continuity, reliability and quality of supplies.

In 2019 the President of ERO agreed on the draft development plan submitted by the TSO with respect to meeting current and future electricity demand for the years 2018-2027. The agreement process was initiated as early as in 2018, when the TSO submitted the said draft for public consultation (the draft development plan was available on the company's website), and then supplemented the document with relevant comments and remarks made by the parties during the consultation. The plan assumed that the TSO would incur investment outlays of over PLN 11.3 billion in the aforementioned period 2018-2027.

As part of the implemented tasks regarding the monitoring of investment plans, analyses of the performance of the volumes planned for a given year are conducted annually, the results of which are used in the process of agreeing subsequent editions of development plans or their updates. As it follows from the report on the implementation of the development plan for 2019 (which enterprises are obliged to submit, pursuant to Article 16 item 18 of the Act), the TSO notified about the execution of planned investment outlays of PLN 1,669.9 million (that is 117.4%, with the assumed plan of PLN 1,422.5 million, data in current prices from the year of network investments implementation, i.e. 2019).

Assessment of consistency of TSOs' investment plans with the EU-wide network development plan

When agreeing on the development plan, the President of ERO shall also verify its consistency with the EU-wide ten-year network development plan ("TYNDP"), developed by ENTSO-E. The consistency of both plans shall be checked at each update of any of the above mentioned documents.

The investment projects implemented in 2019 to develop interconnections and increase technical transmission capacities in interconnection, included in the TYNDP 2018, which the TSO incorporated into the development plan for 2018-2027 agreed with the President of ERO, are specified below:

- Construction of 400 kV Ostrołęka-Stanisławów line and development of 400 kV Stanisławów substation and 400/220/110 kV Ostrołęka substation with the introduction to 400(220)/110 kV Wyszaków substation (TYNDP 123.373),
- Construction of 400 kV Mikułowa-Świebodzice line and development of 400/220/110 kV Świebodzice substation and 400/220/110 kV Mikułowa substation (TYNDP 230.355),
- Construction of 400 kV Baczyna-Krajnik line (TYNDP 230.353),
- Construction of 400/110 kV Baczyna substation with the introduction of 400 kV Krajnik-Plewiska line (TYNDP 230.1035),
- Construction of 400 kV Baczyna-Plewiska line (TYNDP 230.1232),
- Construction of 400 kV Dunowo-Żydowo Kierzkowo-Piła Krzewina line (TYNDP 170.1661, 170.1662),
- Modernization of 400 kV Krajnik-Morzyczyn line (TYNDP 170.1663),
- Modernization of 400 kV Morzyczyn-Dunowo line (TYNDP 170.1664),
- Modernization of 400 kV Dunowo-Słupsk line (TYNDP 170.1664),
- Modernization of 400 kV Słupsk-Żarnowiec line (TYNDP 170.1664),
- Modernization of 400 kV Żarnowiec-Gdańsk I/Gdańsk Przyjaźń line (TYNDP 170.1665),
- Modernization of 400 kV Gdańsk Błonia-Gdańsk I/Gdańsk Przyjaźń line (TYNDP 170.1665).

In addition, the TSO has been carrying out the construction of the cable HVDC connection Poland-Lithuania (TYNDP 170.1034, this task exceeds the scope of investments submitted by the TSO for implementation under the development plan for 2018-2027).

The analysis of the 2019 report on the implementation of the 2018-2027 development plan reveals that PSE S.A. carried out the following projects as part of the investments to build and expand the cross-border interconnections:

- Modernization and development of 400/220/110 kV Mikułowa substation,
- Modernization and development of 400/220 kV Krajnik substation.

On the basis of the assessment of the consistency of the previous versions of the TSO's investment plans with respect to compliance with the EU-wide network development plan, it can be concluded that there may be slight planning inconsistencies, resulting from, among others, the following: various deadlines for updating the documents covered by the TYNDP and the TSO development plan (subsequent updates will usually indicate the most recent data on the current status of the project or its completion date), a distant date of investment start-up (in the national plan, projects with a distant project start-up date are usually included in the group "investment preparation", where general information usually only descriptive is provided), which cannot be eliminated in advance. The identified inconsistencies are explained with the TSO on a current basis.

Smart grid development

Considering that issues related to the development and implementation of strategies for smart grid deployment were not included in the scope of statutory tasks of the President of ERO, this body only took part in consultations on draft solutions in this area. The legislative process itself is the responsibility of the minister responsible for energy issues, while the President of ERO actively participates in consultations, presenting its position on the issue. The minister responsible for energy remains obliged to develop and implement strategies aimed at smart grid deployment, including conducting appropriate legal analyses and regulatory impact assessment, and consequently the impact of the strategy implementation on the level of electricity prices and tariffs for both industry and households.

The forthcoming implementation programme under the strategy for fuel and energy sector development in Poland, specified in the document entitled "Energy Policy of Poland until 2040 – the strategy for the development of the fuel and energy sector" (which is currently the subject of inter-ministerial consultations) will cover also the directions of power grid infrastructure development, including development of the transmission and distribution infrastructure, the efficiency of emergency operations, energy storage and smart grid deployment. The development of smart grids is the strategic project of this direction.

As mentioned above, pursuant to the provisions of Article 16 of the Energy Law Act, electricity distribution system operators – similarly to the TSO – which distribute to 100 or more customers a total of at least 50 GWh per year, are obliged to draw up and agree with the President of ERO a development plan which includes, among others:

- projects for the modernization, expansion or construction of the network and planned new energy sources, including the RES installations, and
- actions in the scope of acquisition, transferring and processing of measurement data from the remote reading meter.

The activities undertaken by DSOs regarding the implementation, operation and evaluation of the effects of pilot projects for the installation of remote reading meters (reported under the development plans) have been completed and their effects are used in the work on the legislative package for mass smart metering deployment in Poland. Under the leadership of the Ministry of Climate, work is underway on the draft Act amending the Energy Law Act and certain other acts (draft no UC34 of 27 September 2019 published on the website of the Government Legislation Centre), which introduces systemic solutions for the smart metering system, consisting in the obligation to install remote reading meters in accordance with the schedule set out in this draft Act and the establishment of the Energy Market Information Operator whose role will be to create and develop a central energy market information system.

The abovementioned pilot projects for the installation of remote reading meters (balancing meters in transformer stations and meters at final customers) and the conclusions drawn from these projects as to the pace of implementation of this type of measurement confirmed the thesis that it is justified to shift the installation of remote reading meters at final customers, to install balancing meters and to upgrade the network to the level of smart grids for the period after 2021, i.e. after the implementation of the first (current) stage of quality regulation covering the years 2016-2020.

The modernization processes carried out by DSOs, in accordance with the development plans agreed with the President of ERO, led to noticeable effects in the decrease of SAIDI and SAIFI indices in 2016-2019 for distribution companies. A significant contribution to this goal was made by the quality regulation implemented in 2015, which assumed a significant decrease in these indices over a period of several years.

Due to the fact that DSOs' implemented only pilot projects, the regulator did not create tools exclusively dedicated to the evaluation of these investments (the total amount of outlays made in relation to the plan was evaluated, within a given group of energy assets). However, such projects were monitored annually through individual reports of DSOs within the execution of an investment plan.

In the light of the above, in their reports on the implementation of the development plan for 2019, the five largest DSOs notified of:

- the predominant share (in total expenditure) of investments related to the connection of new customers and electricity generators and the modernization and restoration of existing assets, related to improving the quality of services and/or increasing demand for capacity,
- the fact that a significant factor shaping the level of outlays made in 2019 was the implementation of investments in the MV/IV grid development and restoration, resulting in improved reliability and reduced grid failure rate (including the improvement of SAIDI, SAIFI indices). The activities aimed at achieving the above objectives were focused in particular on the areas of network maintenance in an appropriate technical condition while retaining the proper relation of expenditures to the achieved effects of reliability and improvement of the quality and reliability of power supply, modernization and restoration of network assets, automation of processes of power equipment control and operation, as well as processing of metering data from remote reading meters,
- continuation and at the same time intensification of activities related to the deployment in the network of devices performing switching functions and devices monitoring the state of electrical parameters of the network, in order to achieve the smart grid standard.

3.1.3. Network tariffs

In 2019 the President of ERO conducted proceedings regarding approval of electricity tariff for:

- 1) transmission system operator (TSO) – for entities using the transmission service under a transmission contract,
- 2) distribution system operators (DSOs), which on 1 July 2007 unbundled their operations – for customers connected to distribution networks at all voltage levels, i.e. for industry, medium and small business and households,
- 3) electricity suppliers – in relation to the consumers of G tariff groups, connected to the network of a given distribution system operator, for which the supplier provides a comprehensive service,
- 4) other energy companies, the so-called industrial energy companies, in the field of electricity supply (group G) and in the field of distribution of electricity to customers connected to their networks.

In the first quarter of 2019, administrative proceedings were continued for the approval of tariffs for 2019 for: PSE S.A. and five largest DSOs, i.e. PGE Dystrybucja S.A., TAURON Dystrybucja S.A., ENEA Operator Sp. z o.o., ENERGA-OPERATOR S.A. and innogy Stoen Operator Sp. z o.o., initiated in 2018. The proceedings concerning the approval of tariffs for the above mentioned companies were not completed in 2018 for reasons beyond the control of the President of ERO. During this period, advanced work was underway on an act aimed at reducing electricity charges for final customers. As a result of this work, the Pricing Act was published, which entered into force on the day of its announcement, with effect from 1 January 2019. According to the provisions of this Act at that time, the fee rates in the tariffs of electricity transmission or distribution companies were to be set at no more than the prices and gross fee rates applicable on 31 December 2018, taking into account the reduction of the transitional fee rates. Due to interpretation doubts raised by energy companies and the President of ERO concerning the wording of some of the provisions of the aforementioned Act, on 5 March 2019 the Act of 21 February 2019 amending the Excise Duty Act and certain other acts, the Environmental Protection Law Act, the Greenhouse Gas and Other Substances Emissions Management System Act, the Act amending the Act on Biocomponents and Liquid Biofuels and certain other acts and the Act on Promotion of Electricity from High Efficiency Cogeneration was published. The amendment has completely excluded from the regulation of this Act the rules of determining the fee rates in relation to transmission or distribution companies. In view of the above, it became possible to complete the administrative proceedings for the approval of the PSE S.A.'s tariff and DSOs tariffs for 2019. The decision approving the PSE S.A.'s tariff for 2019 was issued on 22 March 2019. The tariffs for the five largest DSOs, i.e. PGE Dystrybucja S.A., TAURON Dystrybucja S.A., ENEA Operator Sp. z o.o., ENERGA-OPERATOR S.A. and innogy Stoen Operator Sp. z o.o. were approved by the President of ERO on 22 March 2019 for the period until 31 December 2019. The DSO tariffs were calculated on the basis of the guidelines contained in the document updated and published in March 2019: "DSOs' tariffs for 2019 (applicable to DSOs which unbundled their operations as of 1 July 2007)".

While preparing in 2019 guidelines for the calculation of tariffs for 2020 for DSOs that unbundled their operations on 1 July 2007, the President of ERO simultaneously carried out work related to the change of the current model of quality regulation described in detail in the document "Distribution System Operator Regulation Strategy for 2016-2020 (which unbundled their operations as of 1 July 2007)", effective from 2016.

The quality regulation model was modified again. The amended document "Quality regulation in 2018-2025 for Distribution System Operators (which unbundled their operations as of 1 July 2007) – version of 29 May 2019", was produced as a result of evaluation of the quality regulation model for 2016-2020, developed in 2015. The most important changes in the model of quality regulation are:

- introduction of area indicators: instead of SAIDI, SAIFI indices, area indicators were introduced with a division into four areas: cities, towns with district rights, towns, villages,
- setting new long-term objectives (until 2025) with new starting points,
- eliminating disastrous weather events from the calculation of quality indicators,
- granting a bonus for the achievement of the final objectives of the quality regulation,
- reference of the penalty to the amount of the return on capital that forms part of the regulated revenue.

The aforementioned document contains the redefined Key Performance Indicators (KPIs), a method of setting their targets in particular years of regulation, a method of their settlement and the impact on the regulated revenue of DSOs in the part concerning return on capital.

3.1.4. Security and reliability regulation

Rules of network security and reliability

Pursuant to the Energy Law Act, energy enterprises engaged in the transmission and distribution of electricity to customers are obliged to:

- maintain the capacity of equipment, installations and networks to supply fuel or energy in a continuous and reliable manner, while meeting applicable quality requirements, and
- provide all entities, on the basis of equal treatment, with transmission services consisting in the transmission of fuel or energy from a gas, electricity or heat supplier selected by these entities, under the terms and to the extent specified in the Act.

The provision of transmission services shall not compromise the reliability of electricity supply and the quality of electricity below the level specified in separate regulations, and shall not result in an adverse change in prices and the scope of supply of fuel or energy to other entities connected to the network. The above issues regulating the standards of energy supply to customers arise from supplementary provisions to the Energy Law Act, contained in the Ordinance of the Minister of Economy of 4 May 2007 on detailed conditions for the operation of the power system (hereinafter referred to as the "Electricity System Ordinance"), which in turn have been reflected in the transmission or distribution network codes of individual network operators. Pursuant to Article 9g of the Act, the TSO and the DSO are obliged to develop a transmission network code (TNC) or a distribution network code (DNC), respectively. The aforementioned codes are approved by the President of ERO. The methods, terms and conditions, requirements and rules contained in the codes are binding for the network operators and the users connected to the network of these operators, and constitute a part of the contract for the provision of electricity transmission or distribution services.

The reliability of network operation (understood as the ability of the transmission or distribution network to deliver or receive capacity and electricity under specified conditions, place and time) is a derivative of power security, which is mainly determined by the amount of power reserve in the power system and the competences and rights of system operators. System operators, each within their own area of operation, are responsible for power security on the electricity markets:

- on the system market – TSO,
- on local markets – DSOs.

Pursuant to Article 9g item 4 of the Act, codes prepared for the power networks specify detailed conditions for the use of these networks by system users and the conditions and manner of operation, exploitation and development planning of these networks. They concern, among other things, the requirements regarding the security of operation of the power grid and the conditions that must be met for its maintenance, as well as the indicators characterizing the quality and reliability of electricity supply and the security of operation of the power grid. The quality parameters of electricity are specified in the network code.

Congestion management

Approval of rules for access to the cross-border infrastructure, including the rules for capacity allocation and congestion management

In 2019, capacity allocation methodologies approved by the President of ERO in 2015 – allocation of transmission capacity through a day-ahead market coupling – were still applied on the Poland-Sweden 4 (SwePol Link) and Poland-Lithuania (LitPol Link) interconnections. Due to the fact that the decisions of the President of ERO of 17 May 2017 issued in relation to the mentioned borders of the market areas Poland-Sweden 4 and Poland-Lithuania remained in force in 2019, no long-term transmission rights were issued.

On 19 November 2019, the Polish market area joined the Single Intra-Day Coupling (SIDC) mechanism implemented using the XBID platform. The SIDC mechanism initially covered Polish borders: CZ-PL, DE-PL, LT-PL and PL-SE4 (PL-SE4 with the first trading day of 22.01.2020).

The decisions of the President of ERO issued in agreement with the other regulators of the CCR Hansa and CCR Baltic in 2018 concerning the approval of the methodologies for capacity calculation

in day-ahead and intra-day electricity markets remained in force in 2019 and are expected to be implemented according to the schedule specified in the decisions of the President of ERO.

In 2019 ACER issued a decision on the methodologies for capacity calculation in day-ahead and intra-day markets for the CCR Core.

Notwithstanding the above, in 2019 transmission capacities on synchronous connections were allocated through tenders organized by the Joint Allocation Office S.A. This company, in accordance with the decisions of the President of ERO and other EU regulatory authorities, was established as a common allocation platform. Allocation was performed on the basis of the harmonized rules for allocation of long-term transmission rights approved by ACER's decision of 2 October 2017 and amended by ACER's decision of 29 October 2019 (along with the regional requirements for this region approved in 2017 and amended twice in 2019 by the regulatory authorities of the CCR Core under the harmonized allocation rules), and in the day-ahead timeframe. The allocation of transmission capacity in the intra-day timeframe on these connections was carried out by the Czech TSO – ČEPS, a.s., and then as continuous allocation on XBID. At the beginning of September 2019, as a result of the President of ERO's decision approving the change of the TNC, the method of determining the Transmission Security Margin was changed from a deterministic to a statistical method, which enabled PSE S.A. to make greater transmission capacities available on a synchronous profile in compliance with the NES operation security standards.

Apart from the above, on 14 May 2019 the President of ERO approved the change of conditions for the allocation of cross-zonal transmission capacities and other necessary mechanisms enabling the operation of more than one NEMO in Poland.

Revenues from transmission capacity allocation on interconnections with the EU states and the manner of their utilization in 2019

The final amount of revenues from the allocation of cross-border transmission capacity on interconnections with the EU countries in the period from 1 January to 31 December 2019 amounted to PLN 256,374,500. This sum is reduced by the amounts returned by the TSO to the participants of the cross-border exchange due to the fact that these participants returned part of the annual and monthly transmission rights they had acquired and due to the fact that these participants did not exercise their transmission rights in the daily auctions.

In the calculation of the transmission fee rates in PSE S.A.'s tariff for 2019 (approved by the decisions of the President of ERO), it was assumed that a part of the planned costs of conducting transmission activities included in quality rate calculation will be financed with revenues from the allocation of interconnection transmission capacities planned to be obtained in 2019.

In consideration thereof, the amount of revenues from the allocation of interconnection transmission capacities obtained for the period from 1 January 2019 to 31 December 2019 was reduced by revenues allocated to finance the quality rate costs. The remaining amount was credited to the Special Purpose Fund established under Rules of the Special Purpose Fund by means of a Resolution of the Management Board of PSE S.A. of 25 May 2006. The TSO allocates the resources accumulated in the Special Purpose Fund to maintain or increase interconnection capacity through investments in networks, i.e. in accordance with the objectives set forth in Regulation 714/2009. Completion of these investment projects will contribute to increasing the transmission capacity of the NES interconnections with the transmission systems of the EU Member States and will increase the operational security of the national system within the interconnected European systems, in particular by increasing the possibilities of inter-TSO cooperation (e.g. the possibility of using inter-TSO remedies).

The investment projects related to maintenance and increase of transmission capacity on interconnectors of the NES with transmission systems of the EU member states have been specified in the Development Plan agreed by the President of ERO.

In the period from 1 January to 31 December 2019 the TSO spent the amount of PLN 150,414,400 from the Special Purpose Fund.

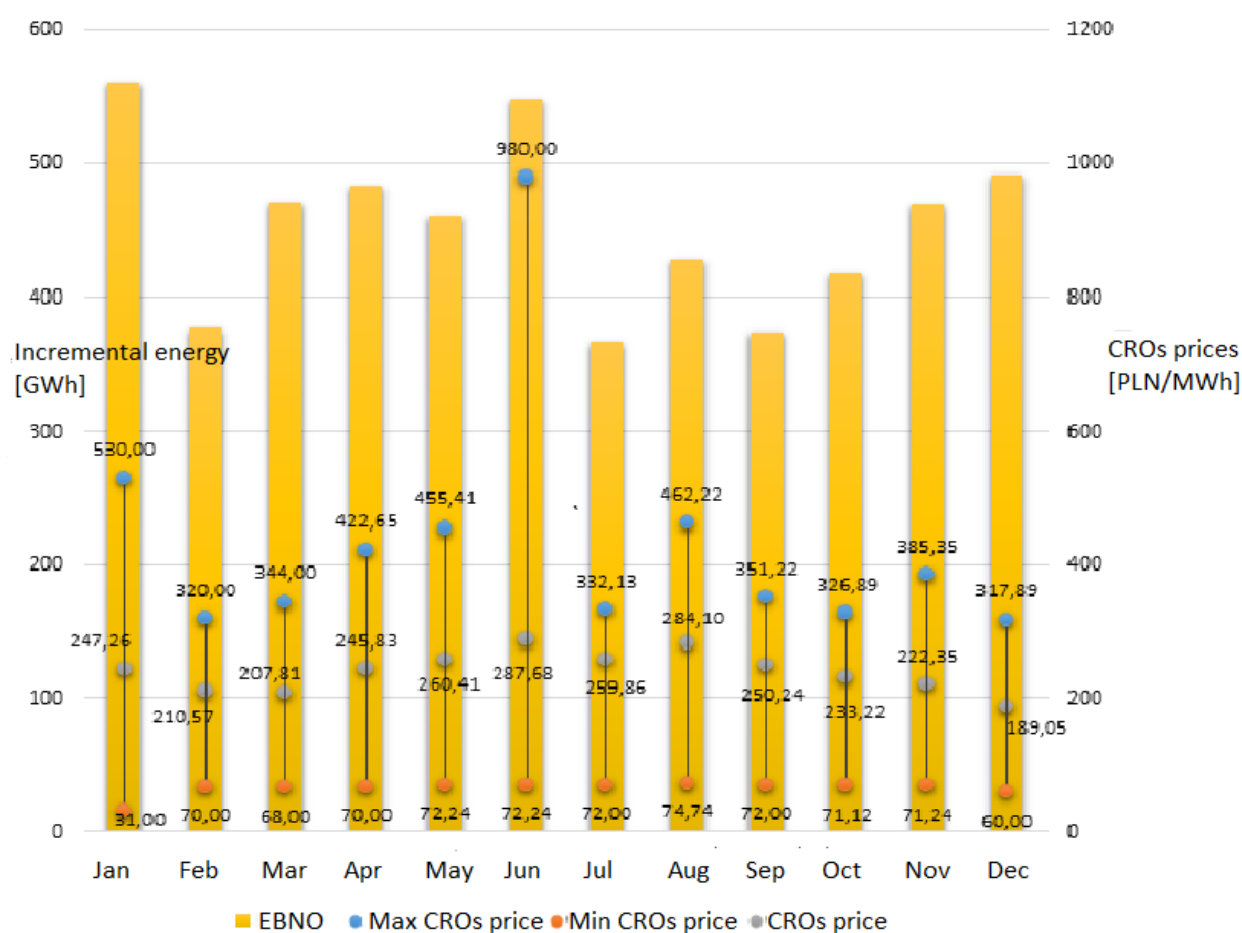
Balancing services

Rules for electricity system balancing (the Balancing Market) are determined by TSO in the TNC which is subject to approval by the President of ERO.

According to the amendment to the TNC approved by the President of ERO in 2018⁹⁾, on 1 January 2019 the electricity price limits on the balancing market, the rules of setting electricity generation prices of the active Scheduling Unit of the Transmission System Operator (SUTSOa) and updating prices for electricity generation of the active Generation Scheduling Unit (GSUa) with respect to the generation capacities covered by the Energy Commercial Contracts (ECC) executed on the intra-day balancing market were modified. The settlements rules for the GSUa's outage energy mechanism and the rules of determining the balancing market demand, and specification of the rules of qualification GSUa's bands utilization were also modified.

At the end of 2019, 129 entities participated in balancing market processes, including 23 generators, 9 final customers, 10 network customers, 80 trading companies, a power exchange, 5 DSOs and PSE S.A. as the TSO. Technical and commercial data were notified by 46 market operators and concerned 354 scheduling units.

Figure 1. Volume of purchased energy (EBNO) and the price of balancing energy on the Balancing Market and settlement prices of non-balancing on this market in particular months of 2019



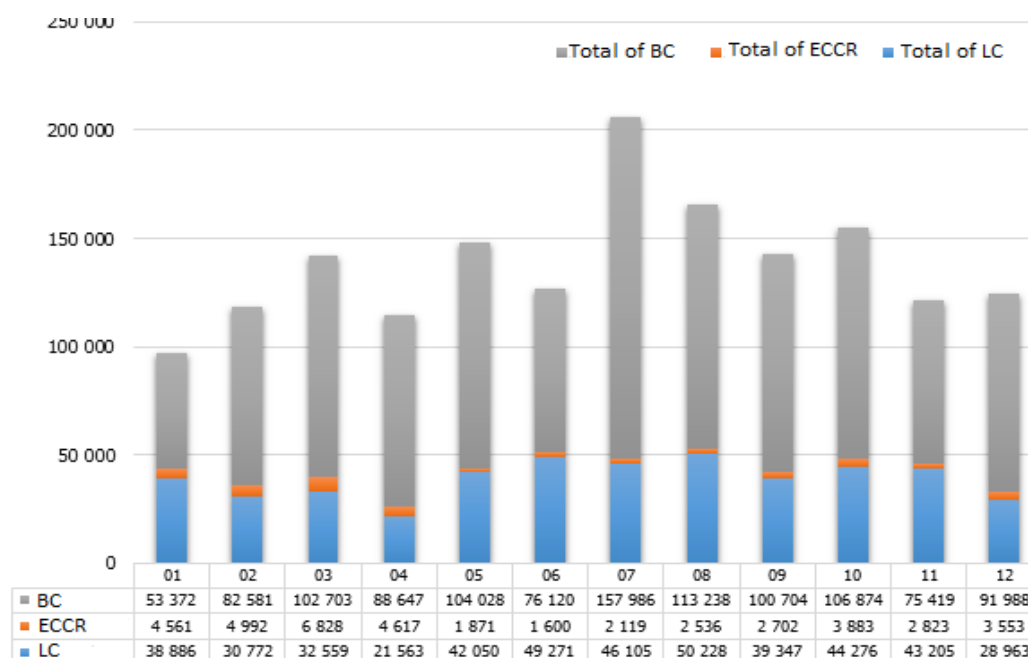
Source: ERO, on the basis of data provided by PSE S.A.

The maximum settlement price of deviation (CRO) in the balancing market varied between 317.89 PLN/MWh and 980 PLN/MWh and the minimum settlement price from 31 PLN/MWh to 74.74 PLN/MWh, whereas weighted average monthly prices of CRO oscillated between 189.05 PLN/MWh and 287.68 PLN/MWh. The situations described above depended on various conditions, with the key and repetitive ones including atmospheric conditions, demand for capacity in the NES, capacity reserves in this system and market conditions. It seems that in this context a change of price limits on the Balancing Market, which may have affected behaviour of this market participants, is not without significance.

⁹⁾ <http://bip.ure.gov.pl/download/3/10847/PSEzmianaIRiESP.pdf>

The costs of removing limitations determined in accordance with the definition in the TNC amounted to PLN 467.225 million. These costs along with the balancing costs and costs arising from reallocation of ECC in particular months of 2019 are presented in the figure below.

Figure 2. Surplus of energy supplied over energy purchased against volumes of these energies in particular months of 2019



Source: ERO.

The costs of balancing customers' demand (BC) varied from PLN 53,372 thousand to PLN 157,986 thousand, while the border values of costs incurred by the TSO were recorded in July 2019. Relatively high values were mainly due to overcontracting of customers (greater than in 2018). Whereas the costs of removing limitations (LC) and costs arising from ECC reallocation (ECCR) varied from PLN 21,563 thousand to PLN 50,228 thousand and PLN 1,600 thousand to PLN 6,828 thousand, respectively.

The operating power reserve (OPR) is acquired by the TSO under the rules described in the TNC approved by the President of ERO¹⁰). OPR is settled on an hourly basis, and complementarily on a monthly and annual basis. Within these settlements, the average OPR price does not exceed the value of the reference hourly price valid in a given year. The number of settlement hours of OPR in 2019 amounted to 3,765 of which for 951 hours the OPR settlement price was equal to the reference price (43.73 PLN/MWh). Weighted average hourly settlement price of OPR in 2019 amounted to 32.39 PLN/MWh, while average hourly volume of this reserve stood at 4,859.440 MW in an hour.

In relation to the role of the DSOs in the system balancing, it should be underlined that their tasks include mainly management of metering data. To this extent, DSOs co-manage with the Balancing Market. These rules are specified in the distribution network codes and have impact mainly on the TPA rule implementation. In addition, DSOs are obliged to undertake measures ordered by the TSO, and these rules have been described by the TSO in the TNC.

The most important amendments introduced to the DNCs of all five DSOs approved in 2019 by the President of ERO include:

- modification of the process of certification of Reduced Facilities (FRed) for the purpose of providing the Demand Reduction Service (DSR) at the request of the TSO and introduction of a new program within the DSR service – the Simplified Current Programme, in which the subject of settlements is

¹⁰ <http://bip.ure.gov.pl/download/3/5005/20141106ZmianaInstrukcjiRuchuiEksploatacjiSieciPrzesylowejPolskichSieciElektroen.pdf>
<http://bip.ure.gov.pl/download/3/4011/20131210ZmianaInstrukcjiRuchuiEksploatacjiSieciPrzesylowejPolskichSieciElektroen.pdf>

the use of the intervention reserve, similarly as in the Current Programme (as a result of adjustment to the relevant change in the TNC of 2018),

- modification of the TNC within the scope resulting from the amendment of the Act on Renewable Energy Sources and in which the provisions concerning additional technical requirements for microinstallations were supplemented,
- changes related to the General Distribution Agreement (GDA) and the General Distribution Agreement for the Complex Service (GDA-C). Among others, a general rule has been introduced stating that liability of DSOs and suppliers for non-performance or improper performance of their obligations specified in DNCs, as well as rules of information exchange not covered by the Central Information Exchange System, shall be specified in the GDA or GDA-C. The provisions concerning last resort supply for households who have concluded comprehensive agreements and for consumers who have concluded distribution agreements have also been clarified. The rules governing the manner of concluding distribution agreements with retail market participants, notification of concluded electricity sale contracts or comprehensive agreements have also been amended. The above changes were also an adjustment of the binding provisions of the DNC to the amendment of the Energy Law Act – mainly the provisions regulating the supplier of last resort (Article 5aa of the Energy Law Act) and imposing an additional role on the default supplier, namely that of an entity ensuring continuity of energy supplies in the event when a supplier of last resort is not designated or cannot take up supplies (Article 5ab of the Energy Law Act),
- updating of standard consumption profiles used in commercial balancing of electricity supply locations for customers with a contractual capacity of not more than 40 kW.

It is also important to note the modifications affecting the system balancing introduced to the TNC and approved in 2019 by the President of ERO, the most important of which are the following:

- changes related to limiting the effects of increasing risk of unsecured energy settlements on the Balancing Market, including those resulting from new electricity price limits on the Balancing Market (approved as a modification of the TNC in 2018) and consisting, among others, in modification of granting and using the reduction of the required amount of available collateral, introduction of the possibility to reject accepted applications for ECC to the extent not covered by collateral. In addition, the rules for acceptance of applications for ECC or Inter-system Exchange Schedules of the Balancing Market Participants, for which provision of transmission services has been suspended due to insufficient amount of collateral (decision of 10 April 2019), have been modified,
- amendments to the rules for determining transmission capacities on interconnections consisting in the specification of risk factors to be taken into account when defining alternative operating statuses of the power system for determining the Security of Transmission Margin for the NES, as well as improvement of the method for determining transmission capacities through the implementation of the statistical approach for determining the Security of Transmission Margin (Decision of 30 August 2019),
- introduction of modifications to the TNC concerning functioning of the Balancing Market with respect to the NEMO activity, including in particular: extension of the catalogue of entities which may be represented on the Balancing Market, determination of conditions of participation in the inter-system exchange on the asynchronous interconnections Poland-Sweden and Poland-Lithuania in connection with allocation of the transmission capacities on those interconnections under the single day-ahead market coupling and development of the procedure of data reporting by the Balancing Market Participant of the Power Exchange type (BMPPE) fulfilling the function of NEMO or Central Counter-Parties (CCP) of NEMO as part of the Single Day-Ahead Coupling (Decision of 9 October 2019),
- amendments concerning Single Intraday Coupling (SIDC), including, inter alia, the introduction of entities participating in SIDC and definitions for new concepts used in SIDC, the definition and introduction of rules on process organization, participation conditions, acceptance of results, TSO operating procedures under SIDC and the definition of communication and data exchange rules. In addition, for the purposes of SIDC, the division of the interconnection capacities determined jointly for the NES commercial profiles with the power systems of Germany, the Czech Republic and Slovakia (the so-called Technical Profile) into individual commercial profiles has been introduced until the technical profile service under SIDC is implemented (Decision of 21 October 2019).

3.1.5. Monitoring balance of supply and demand

Monitoring investments in generation and storage capacities with respect to security of supply

The President of ERO, performing the tasks arising from the Energy Law Act with respect to monitoring the security of electricity supply, carries out a biennial examination of investment plans of electricity generators fulfilling the obligation to prepare 15-year forecasts, pursuant to Article 16 items 20 and 21 of the Energy Law Act. The next reporting obligation falls in 2020.

According to these provisions, an energy company generating electricity from sources with a total installed capacity of not less than 50 MW, prepares and submits to the President of ERO forecasts for a period of 15 years, covering in particular: the amount of electricity generated, projects for modernization, expansion of existing sources or construction of new ones, as well as technical and economic data concerning the type and size of these sources, their location and the type of fuel used to generate electricity.

The survey will be carried out using questionnaires developed by the ERO, which will be sent to energy companies and groups, as well as data from PSE S.A.

Activities related to the capacity market

On 18 January 2018, the Capacity Market Act entered into force, which introduced a new state aid mechanism to guarantee security of electricity supply¹¹⁾. The introduction of the capacity market means a change in the architecture of the energy market from the energy-only to a dual-commodity market, where not only the electricity generated but also the net available capacity (i.e. readiness to supply energy to the grid) will be subject to buy-sell transactions.

The Capacity Market Act imposed a number of obligations on the President of ERO. The most important ones, carried out during the reporting year, include: approval and announcement of the final results of the capacity auctions for 2023 and 2024¹²⁾ and publication of the list of industrial customers pursuant to Article 71 items 3 and 4 of the Capacity Market Act¹³⁾.

Fulfilling the disposition of Article 34 item 1 of the Capacity Market Act, the President of ERO also issued an opinion on the parameters for the main auction submitted by the minister in charge of energy.

In addition, the President of ERO issued several notices and communications concerning mainly the obligation to undergo general certification in 2019.¹⁴⁾ Regulator also provided answers to a number of questions of the capacity market participants, which arose in connection with the Act in force, in particular with regard to the obligations to submit to general certification, certification for auction, or the date of calculation and publication of the capacity fee rates and the determination of selected hours of the day falling on the peak demand for capacity in the system for the supply year 2021¹⁵⁾.

Pursuant to the requirements of the Capacity Market Act, the President of ERO received information from the operator which, pursuant to Article 2 item 1 section 27 of the Capacity Market Act, is PSE S.A., regarding:

- the course of general certification in 2019, certification for the auction for supply year 2024 and the course of the main auction for supply year 2024,
- parameters for the main auction for supply year 2024 and for additional auctions for supply year 2021.

In connection with the requirement of Regulation 2019/943, it is necessary to introduce changes to the capacity mechanism operating in Poland. In particular, this concerns the exclusion from this

¹¹⁾ The above mentioned state aid system was approved by the decision of the European Commission of 7 February 2018: State aid No. SA.46100 (2017/N) – Poland – Planned Polish capacity mechanism (C(2018) 601 final), published on 18 April 2018, http://ec.europa.eu/competition/state_aid/cases/272253/272253_1977790_162_2.pdf.

¹²⁾ <https://www.ure.gov.pl/pl/energia-elektryczna/rynek-mocy/8040,Informacja-nr-102019.html>,
<https://www.ure.gov.pl/pl/energia-elektryczna/rynek-mocy/8634,Informacja-Nr-1062019.html>

¹³⁾ <https://www.ure.gov.pl/pl/energia-elektryczna/rynek-mocy/8641,Informacja-nr-1082019.html>

¹⁴⁾ <https://www.ure.gov.pl/pl/urzed/informacje-ogolne/komunikaty-prezesa-ure/7977,Komunikat-nr-32019.html>

¹⁵⁾ Information of the President of ERO No 69/2019 of 30 September 2019 on the calculation and publication of the capacity fee rates for the supply year 2021 and the determination and publication of selected hours of the day falling on the peak demand for capacity in the system for the quarters of the supply year 2021.

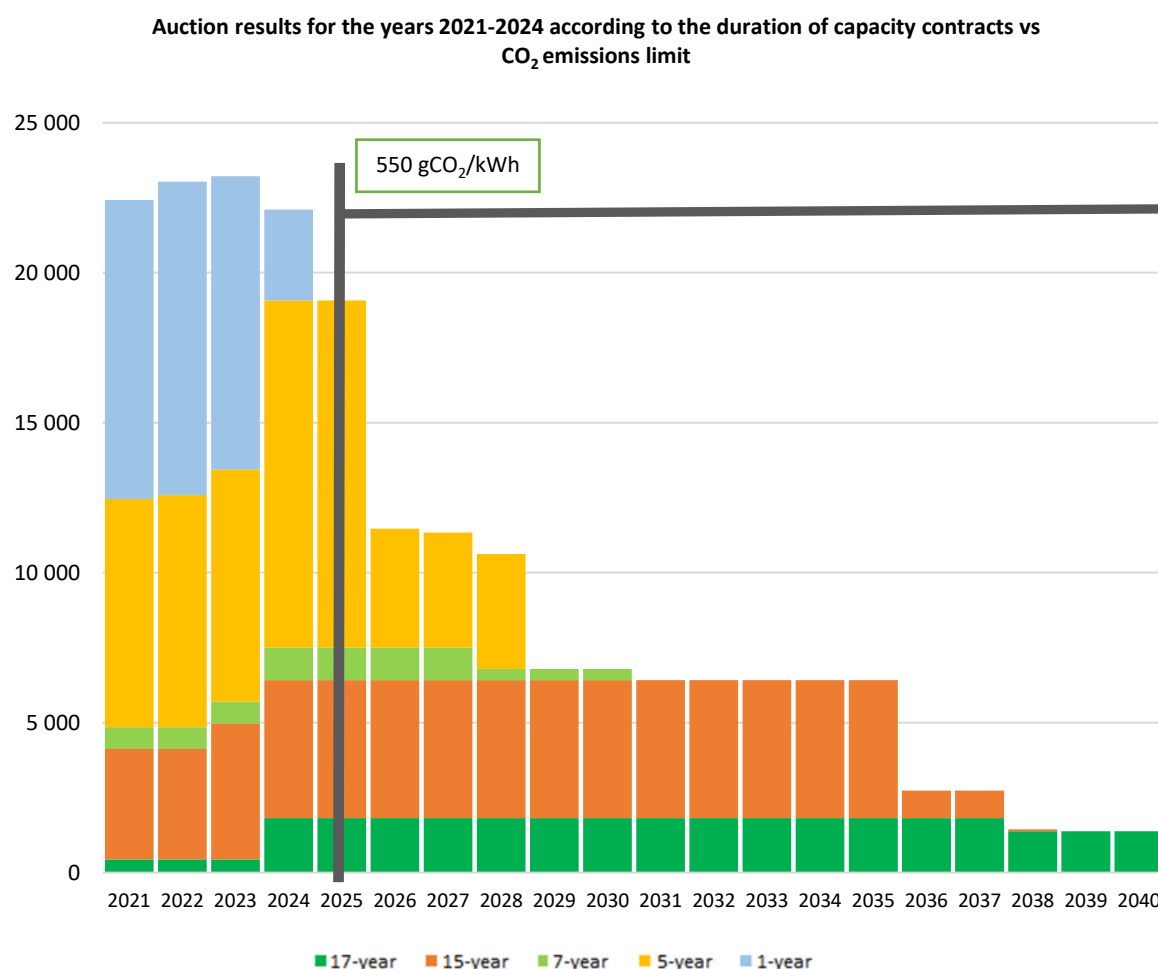
mechanism of entities which do not meet the standards indicated in Article 22(4) of the aforementioned Regulation¹⁶⁾.

For this reason, in 2019 ACER began work to prepare an opinion on a uniform methodology for calculating the emission limits of potential capacity market participants. The opinion was issued on 19 December 2019 (ACER Opinion No. 22/2019)¹⁷⁾.

With regard to the Regulation 2019/943, it should be underlined that as of 1 July 2025, all units whose contracts expire after that date and which do not comply with the emission limits cannot be beneficiaries of the capacity market.

Despite the loss of revenues from the capacity market, units that do not meet the emission requirements will not disappear from the power system overnight. Formally, they can only be operated with payment from the electricity market.

Figure 3. Impact of CO₂ emission limitation on capacity availability in auctions conducted so far



Source: ERO, on the basis of information provided by PSE S.A. on the auction course:

https://www.pse.pl/documents/20182/316843399/Wstepne_wyniki_aukcji_2021_do_publicacji_2018_11_20.pdf

https://www.pse.pl/documents/20182/98611984/Wstepne_wyniki_aukcji_2022_do_publicacji_2018_12_07.pdf

https://www.pse.pl/documents/20182/98611984/Wstepne_wyniki_aukcji_2023.pdf

https://www.pse.pl/documents/20182/98611984/Wstepne_wyniki_aukcji_glownej_na_rok_dostaw_2024.pdf

¹⁶⁾ Article 22(4) introduces a general prohibition on the financing of units which exceed the emission limits (550 g CO₂/kWh and/or 350 kg CO₂/kWh of installed capacity on average per annum) for units established after the date of entry into force of the Regulation and sets the date of 1 July 2025 for units which started commercial production of electricity before the date of entry into force of the Regulation. The same paragraph 4 obliges ACER to provide, within 6 months of the date of entry into force of the Regulation, an opinion on the appropriate way of calculating emissions.

¹⁷⁾ https://www.acer.europa.eu/Official_documents/Acts_of_the_Agency/Opinions/Opinions/ACER%20Opinion%2022-2019%20on%20the%20calculation%20values%20of%20CO2%20emission%20limits.pdf

General certification in 2019

According to the provisions of the Act, owners of physical units with a capacity of at least 2 MW are obliged to undergo general certification every year. In 2019, 1,103 applications were submitted under the Act, i.e. approximately 8% less than in 2018. 1,092 units were entered in the capacity market register, i.e. approximately 6% less than in 2018. The net available capacity of the physical units entered in the register is 54.4 GW (an increase by approximately 15% compared to the previous year).

For failure to submit to general certification, 11 proceedings were initiated to impose a fine under Article 85 item 1 section 1 of the Capacity Market Act.

Main auctions for supply year 2024

The precondition for participation in the main auction was previous joining the general certification and then the certification for the auction. On 6 December 2019 the main auction for the supply year 2024 took place.

Table 1. Data concerning the main auction for the supply year 2024

Supply year	Number of offers that won the main auction	Total volume of capacity obligations arising from concluded capacity contracts for a given supply year [MW]
2024	103	8,671.154

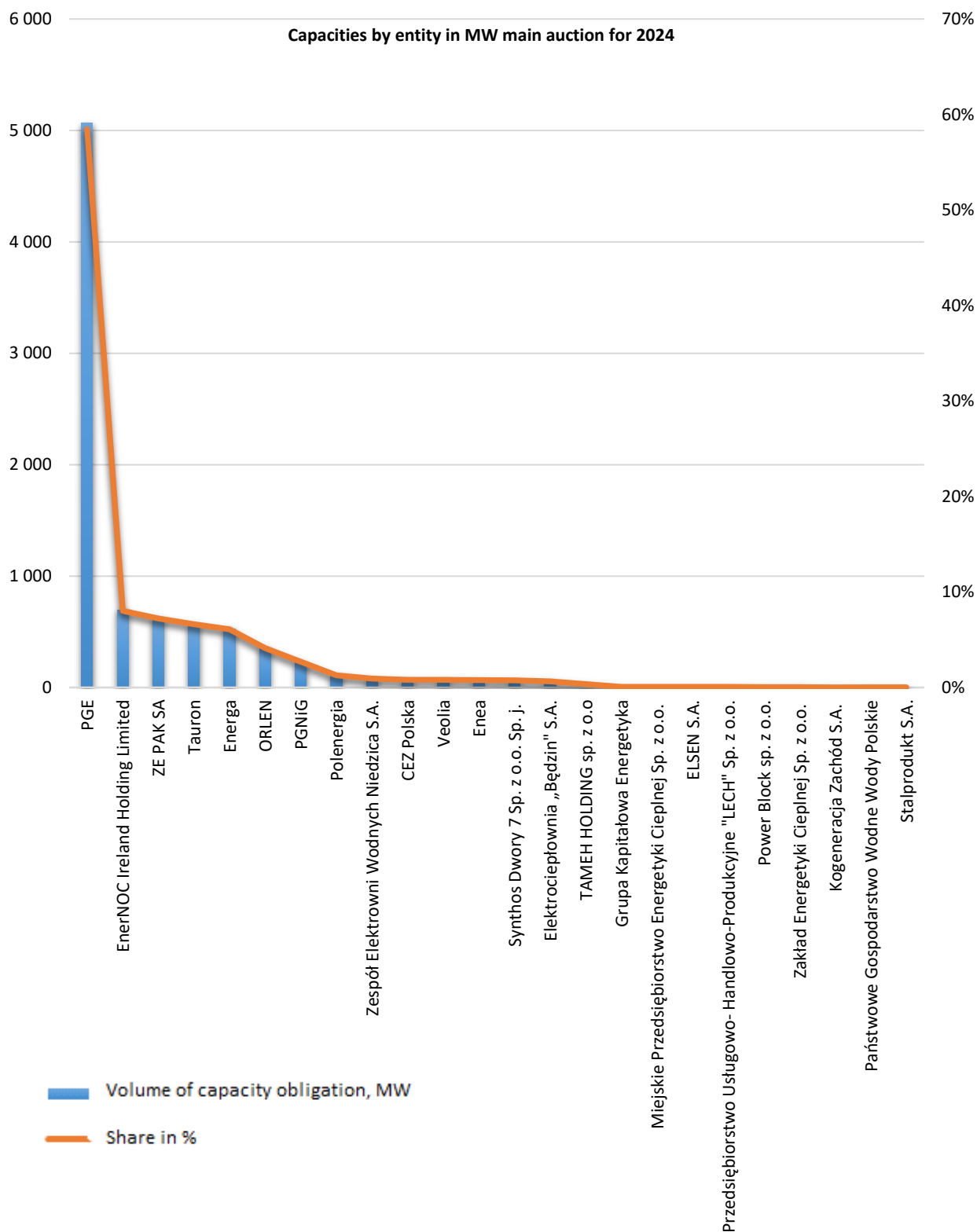
Source: ERO.

The main auction for the supply year 2024 ended in the fifth round with a closing price equal to 259.87 PLN/kW/year. The total volume of the capacity obligations arising from the capacity contracts for the year 2024 concluded as a result of the auction amounted to 8,671.154 MW. At the same time, the total volume of capacity obligations for the supply year 2024 arising from capacity contracts concluded for more than 3 years of supplies in the main auction for the year 2021 amounted to 12,458.819 MW. In turn, the total volume of capacity obligations for the supply year 2024 arising from the concluded capacity contracts for more than 2 years of supplies in the main auction for the year 2022 amounted to 125,000 MW. On the other hand, the total volume of capacity obligations for the supply year 2024 arising from concluded capacity contracts for more than 1 year of supplies in the main auction for the year 2023 amounted to 852.603 MW. As a result, capacity contracts for 22,107.576 MW were concluded for the year 2024.

The total volume of capacity obligations arising from the conclusion of capacity contracts for more than one year of supply in the main auction organized for the supply year 2024 amounted to 5,669.035 MW.

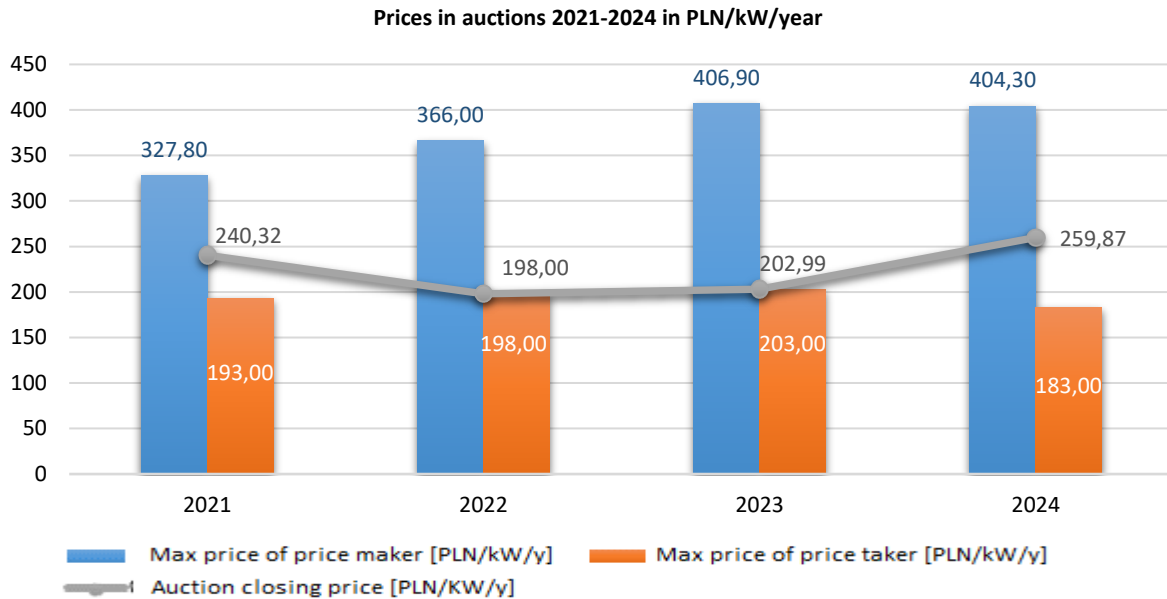
The results of the auctions that have taken place so far are presented below.

Figure 4. List of entities – beneficiaries of capacity auctions for 2024 according to total contracted capacity



Source: ERO on the basis of data published by PSE S.A.: https://www.pse.pl/documents/20182/98611984/Wstepne_wyniki_aukcji_glownej_na_rok_dostaw_2024.pdf

Figure 5. Changes in prices from auction to auction and comparison of annual costs of the capacity market for the years 2021-2024 (according to the actual costs shaped as a result of the conducted auctions)



Source: ERO on the basis of information provided by PSE S.A. on the auction course:

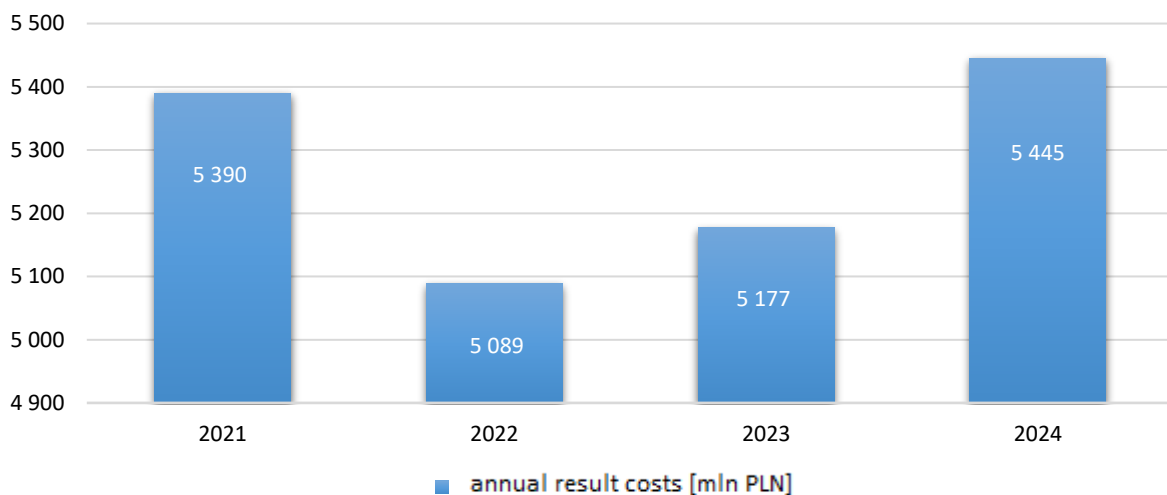
https://www.pse.pl/documents/20182/316843399/Wstepne_wyniki_aukcji_2021_do_publicacji_2018_11_20.pdf

https://www.pse.pl/documents/20182/98611984/Wstepne_wyniki_aukcji_2022_do_publicacji_2018_12_07.pdf

https://www.pse.pl/documents/20182/98611984/Wstepne_wyniki_aukcji_2023.pdf

https://www.pse.pl/documents/20182/98611984/Wstepne_wyniki_aukcji_glownej_na_rok_dostaw_2024.pdf

Annual costs of the capacity market (they do not include results of additional auctions conducted in March 2020)



Source: ERO on the basis of information provided by PSE S.A. on the auction course:

https://www.pse.pl/documents/20182/316843399/Wstepne_wyniki_aukcji_2021_do_publicacji_2018_11_20.pdf

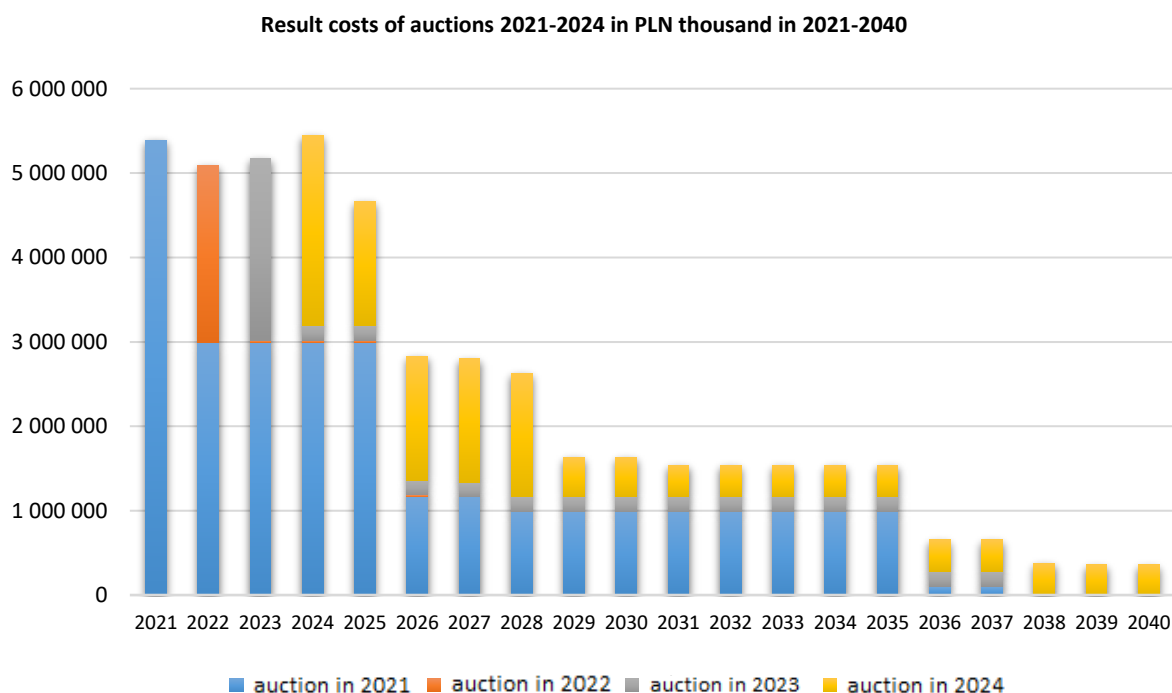
https://www.pse.pl/documents/20182/98611984/Wstepne_wyniki_aukcji_2022_do_publicacji_2018_12_07.pdf

https://www.pse.pl/documents/20182/98611984/Wstepne_wyniki_aukcji_2023.pdf

https://www.pse.pl/documents/20182/98611984/Wstepne_wyniki_aukcji_glownej_na_rok_dostaw_2024.pdf
and assessment of legislation impact for the Capacity Market Act, version of 23 June 2017

It should be noted that the full costs of the capacity market in each year will be known after the additional auctions have been conducted. Pursuant to Article 29 item 4 of the Capacity Market Act, additional auctions are carried out in the year preceding the year in which the supply periods of each of these auctions fall, with additional auctions for all supply periods taking place at the same time. The additional auctions for the 2021 supply period will be conducted in 2020. On 27 February 2019 PSE S.A. announced the date of conducting additional auctions for individual quarters of the supply year 2021. The auctions were held on 18 March 2020.

Figure 6. Annual costs of capacity contracts concluded as a result of capacity auctions for the years 2021-2024, broken down into auctions



Source: ERO on the basis of information provided by PSE S.A. on the auction course:
https://www.pse.pl/documents/20182/316843399/Wstepne_wyniki_aukcji_2021_do_publicacji_2018_11_20.pdf
https://www.pse.pl/documents/20182/98611984/Wstepne_wyniki_aukcji_2022_do_publicacji_2018_12_07.pdf
https://www.pse.pl/documents/20182/98611984/Wstepne_wyniki_aukcji_2023.pdf
https://www.pse.pl/documents/20182/98611984/Wstepne_wyniki_aukcji_glownej_na_rok_dostaw_2024.pdf

It should be pointed out that the implementation of capacity market processes in 2019 was timely and uninterrupted.

3.1.6. Cross-border issues

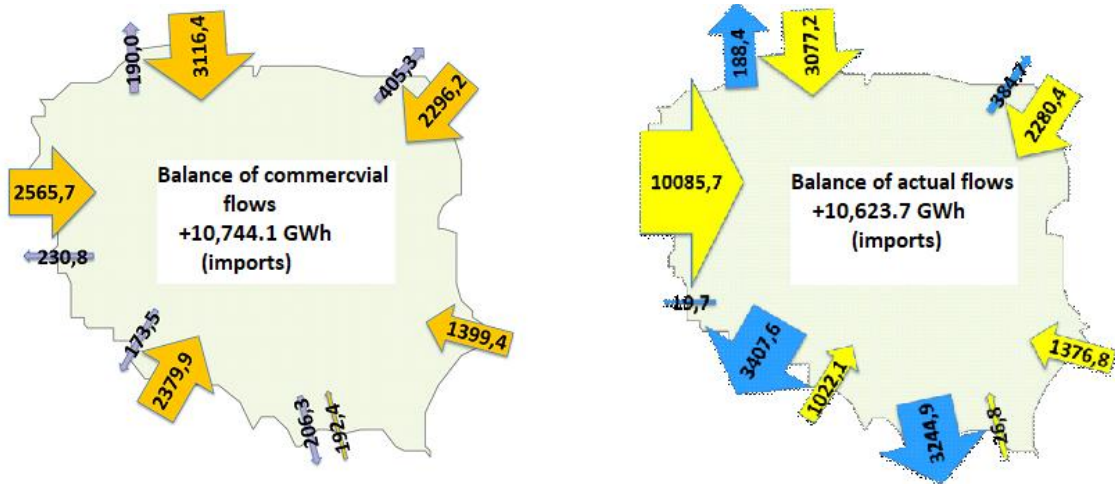
Monitoring technical cooperation between the EU and third country TSOs

National electricity system is connected only with the Ukrainian electricity system – out of third countries which are not members of the EU. The transmission capacities at the Poland-Ukraine interconnection were made available through explicit auctions organized on a monthly basis. The transmission capacities were made available only for import to Poland in the maximum volume of 210 MW. In 2019 there were no emergency disconnections resulting in a reduction of planned supplies. Several failures to comply with the exchange plans were caused by emergency disconnection of the Dobrotwór power plant unit.

Monitoring of coordinated interconnection exchange

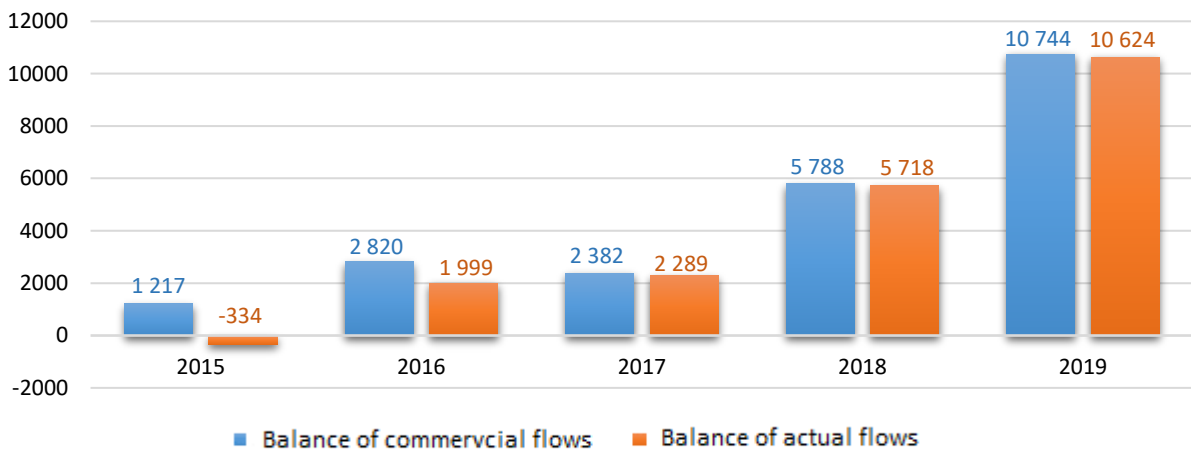
The commercial balance of electricity interconnection exchange and actual energy flows from individual countries to Poland and from Poland to other countries in 2019 are shown in the figure below.

Figure 7. Balance of commercial and actual electricity flows on interconnections with other countries in 2019 [GWh]



Source: ERO on the basis of data provided by PSE S.A.

Figure 8. Comparison of commercial flow balances and actual electricity flow balances on interconnections with other countries (in total) in particular years 2015-2019 [GWh]



Source: ERO on the basis of data provided by PSE S.A.

The figures below present a comparison of data on commercial flows (separately for imports and exports) and actual flows (separately for electricity flowing out of Poland and electricity flowing into Poland) broken down by individual interconnections with the neighbouring countries, i.e. on the interconnections of Poland with the Czech Republic, Lithuania, Germany, Slovakia, Sweden and Ukraine.

Commercial Balance – the balance on the Polish borders in 2019 – amounted to +10,744.1 GWh (imports). Exports of electricity amounted in total to 1,205.9 GWh and decreased by ca. 39% as compared to the previous year. Imports increased significantly in 2019 – in 2019 it amounted to a total

of 11,950.0 GWh (an increase of approx. 135% as compared to the previous year). It was carried out basically from all the neighbouring countries connected with the NES.

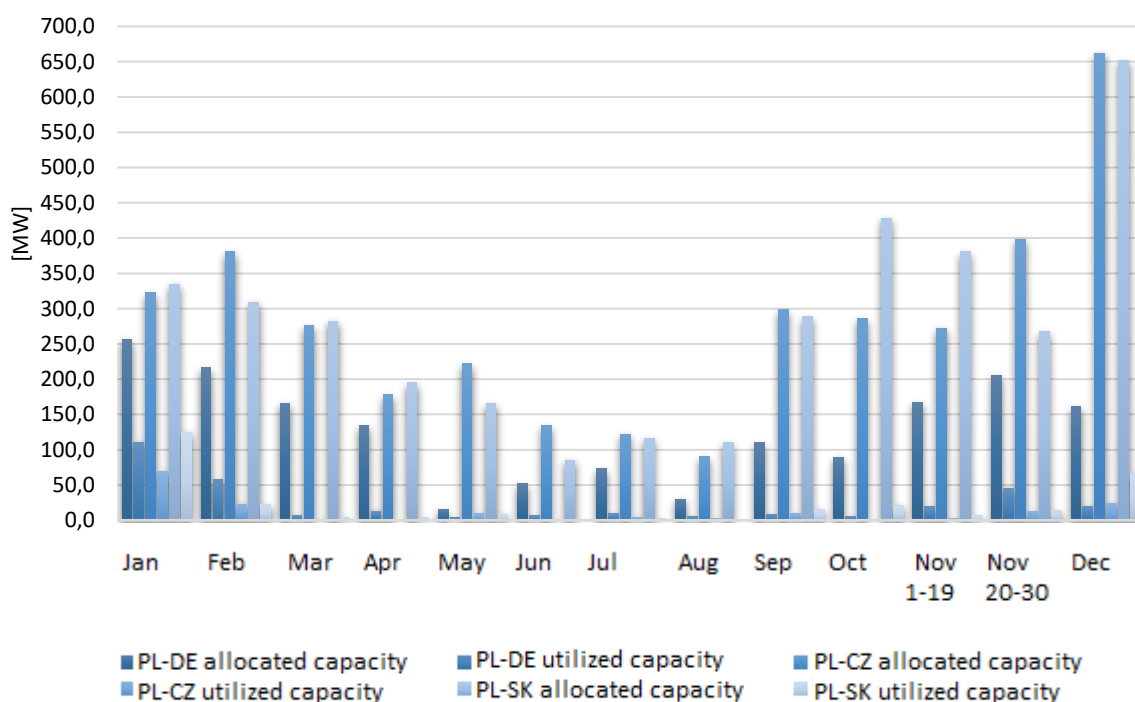
Such a significant increase in imports in comparison to last year was caused, among others, by the commissioning on 25 March 2019 of the northern Poland-Germany interconnection, i.e. the Krajnik-Vierraden line (which is discussed in more detail later in this chapter) and a change in the methodology for transmission capacities calculation, which took place at the beginning of September 2019 as a result of the decision of the President of ERO approving the modification of the TNC. The change of the method of determining the Transmission Security Margin from the deterministic to the statistical method enabled PSE S.A. to make greater transmission capacities available on a synchronous profile in compliance with the NES operation security standards.

At the same time, attention should be drawn to the significant difference between commercial and actual electricity flows at synchronous borders (Germany, Czech Republic, Slovakia), which has persisted for many years, as a result of unplanned electricity flows that contribute to a significant reduction in the capacity offered to participants at these borders.

In 2019, inter-system exchange transmission capacities were made available on synchronous profile via explicit auctions organized both in export direction and import direction in day-ahead and intra-day horizon, with intra-day capacity being allocated under the single market coupling mechanism (XBID) on a continuous basis from 20 November 2019.

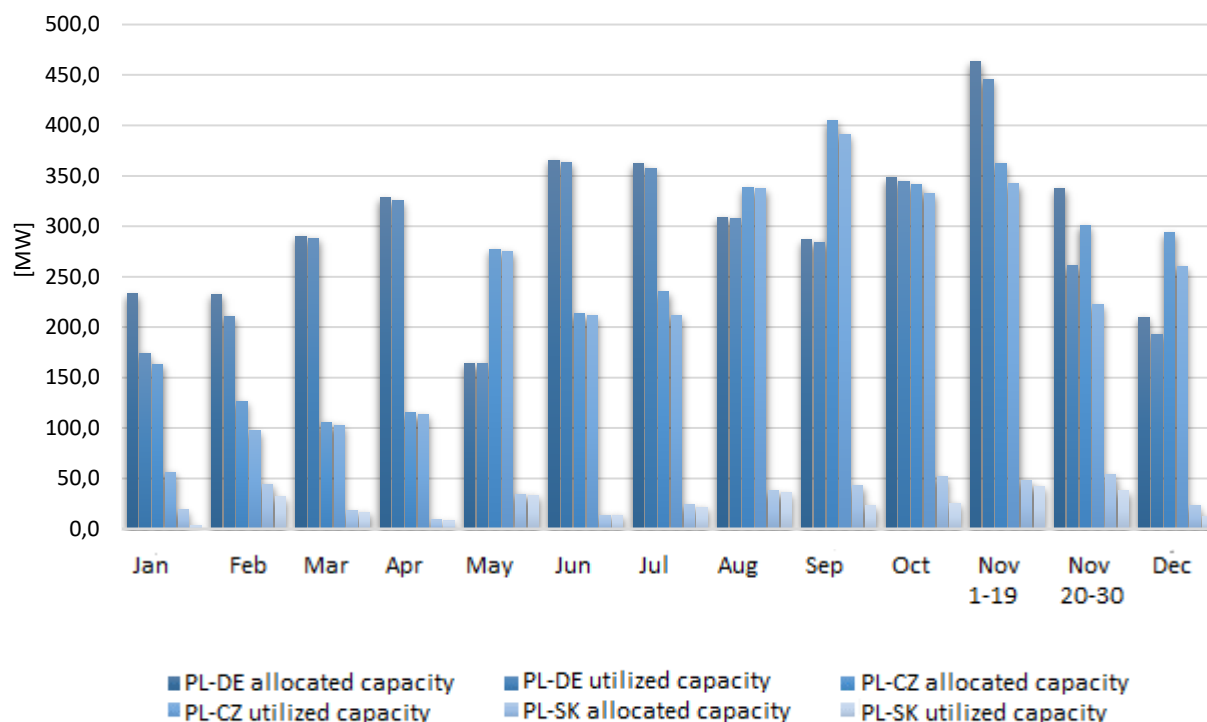
The figures below show monthly average volumes of allocated and utilized transmission capacities in export and import directions, respectively, on the synchronous interconnections in 2019.

Figure 9. Comparison of average monthly transmission capacity, allocated and utilized in export direction on synchronous interconnections in 2019 [MW]



Source: ERO, on the basis of data provided by PSE S.A.

Figure 10. Comparison of average monthly transmission capacity, allocated and utilized in import direction on synchronous interconnections in 2019 [MW]



Source: ERO, on the basis of data provided by PSE S.A.

Total transmission capacities offered on a technical profile (jointly: Germany, Czech Republic, Slovakia) among commercial profiles (separately: Germany, Czech Republic, Slovakia) is allocated according to a price ranking of offers submitted by participants. The data presented above indicate that in case of exports market participants in 2019 did not show any clear preference, though these preferences changed in particular months. While in the case of electricity imports in 2019, allocation and utilization from Germany and the Czech Republic were dominant.

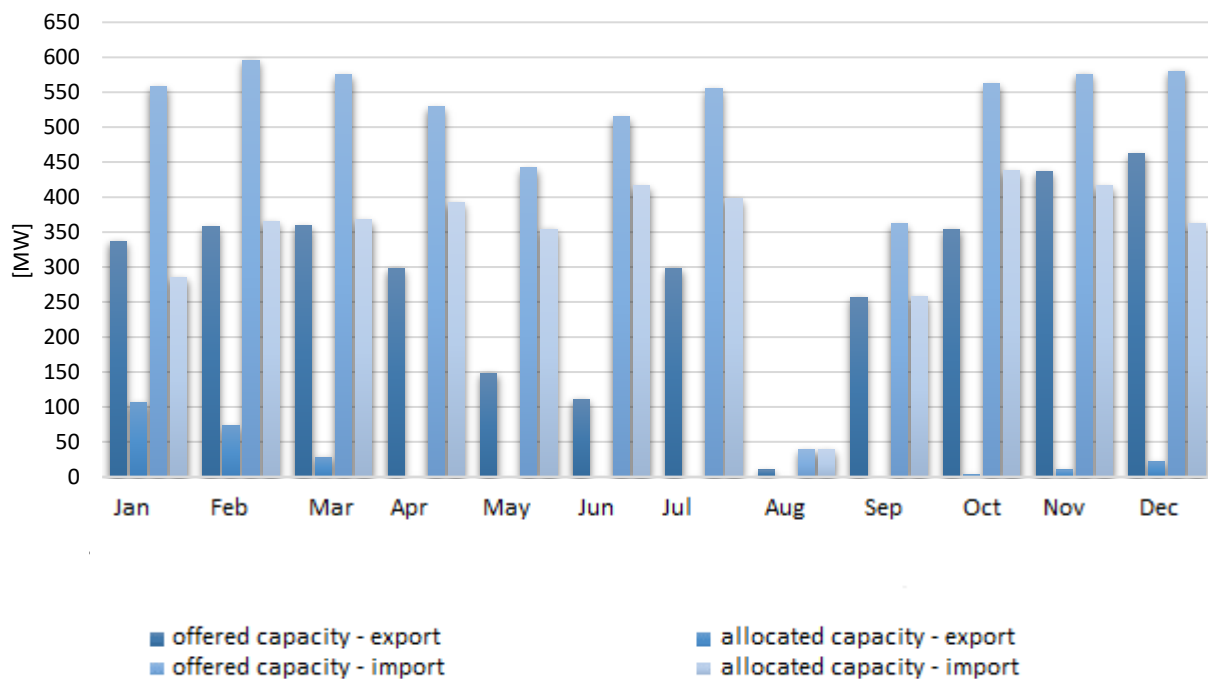
The amount of offered and allocated transmission capacities in 2019 differed in particular months, largely due to the operation of phase-shifting transformers and related problems. According to the agreement between PSE S.A. and 50Hertz, in 2016 PSE S.A. launched a set of four phase shifting transformers on the Polish side on the southern interconnection (Mikulowa-Hagenwerder), while 50Hertz was to install the shifters in its station, on the northern interconnection (Krajnik-Vierraden). Due to the delay in the implementation of the investment in the 50Hertz internal network (conversion of the 220 kV network to a 380 kV one) and the need to maintain the 380/220 kV transformation at the Vierraden substation (two transformers), it was not and is currently not physically possible to install a set of four phase shifters. 50Hertz therefore only installed two phase shifters. After the experience of the test run of the interconnection in August 2018, the Krajnik-Vierraden line in the parallel operation of the shifters with two tracks of the Krajnik-Vierraden line attached and the formal arrangements for the operation of the incomplete system with only two shifters, on 25 March 2019 the Krajnik-Vierraden line was connected to operate on one track and with two shifters connected in series as a temporary system. It was assumed that work in this system will continue until the internal 50Hertz network is modernized. The launch of the northern interconnection to the 50Hertz Krajnik-Vierraden at the end of March 2019 naturally increased the physical flows across the entire PL-DE border. At the same time, unplanned flows in the direction Germany → Poland increased – while it can be said that in the period January-March 2019 their volume was only slightly higher than in 2018, in the period April-December 2019 unplanned flows increased by as much as 43% in comparison to the corresponding period in 2018 (August was not taken into account in the April-December comparison period due to the testing of the Krajnik-Vierraden interconnection in 2018 and very high unplanned flows in that period). September 2019 was an exceptional month, with an 82% increase in unplanned flows. September 2019 was

the first month in which the new methodology for determining transmission capacities on the synchronous profile was in force, which made it possible to offer greater transmission capacities, especially in the import direction.

In 2019, as in previous years, inter-TSO remedial measures were taken, i.e. ad hoc measures to ensure the secure operation of the interconnected systems. These actions included bilateral and multilateral redispatching (MRA), but in 2019, as in 2018, it was not necessary to use the MRA to ensure security on the Poland-Germany border (criterion N-1). The MRA volume of 840 MWh only in August 2019 was due to the implementation of multilateral agreements on remedial measures. The scale of bilateral redispatching in 2019 was much higher than the volume in 2018 – an increase by 200%. In a monthly average perspective, the volume of redispatching was 3.27 GWh in comparison to 1.01 GWh in 2018. Such a high annual volume was influenced by the entry into force of a new methodology for calculation of transmission capacities on a synchronous profile, which makes it possible to offer greater transmission capacities, especially import capacities. In September-December 2019, the average monthly redispatching volume amounted to 8.68 GWh and was significantly higher in comparison to the volume in 2018 – an increase by 200%.

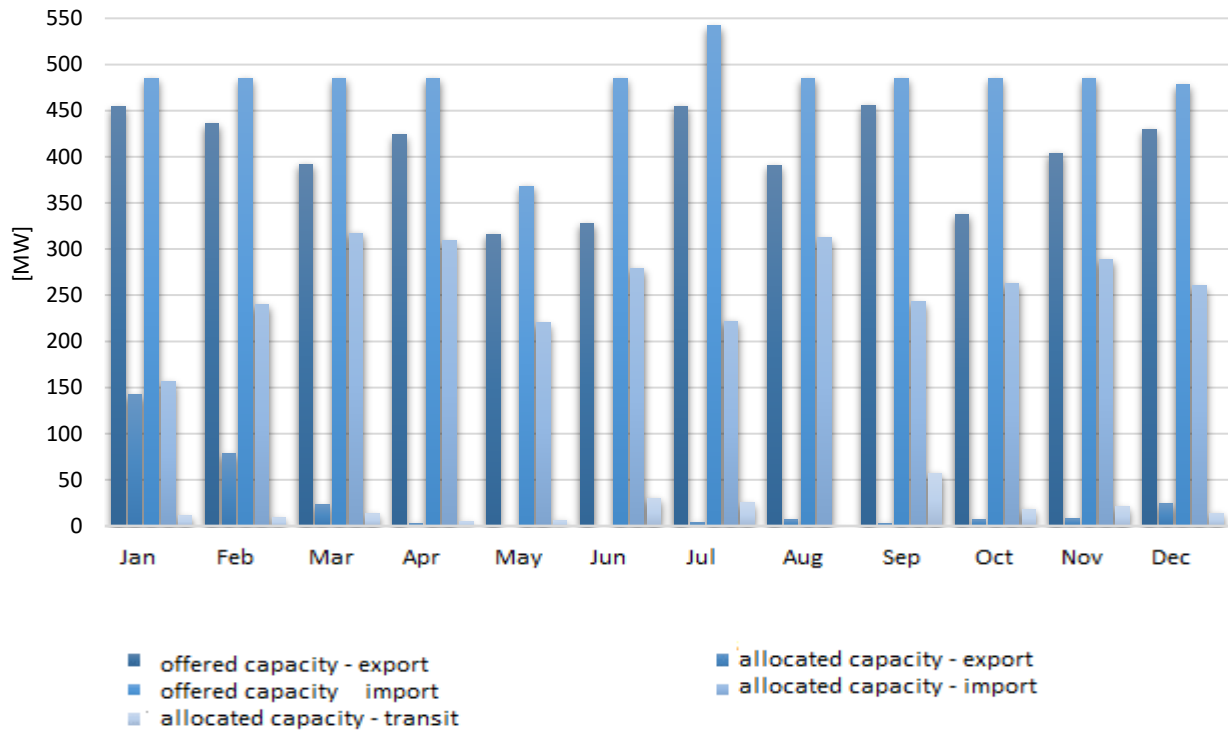
In 2019 transmission capacity allocation on direct current interconnectors Poland-Sweden and Poland-Lithuania was performed under implicit auctions by TGE S.A. and Nord Pool AS on the basis of market coupling mechanism. As of 20 November 2019, intra-day capacity allocation was made possible under the single market coupling mechanism (XBID) on a continuous basis.

Figure 11. Comparison of monthly average transmission capacities offered and allocated on the Poland-Sweden interconnector in 2019 [MW]



Source: ERO, on the basis of data provided by PSE S.A.

Figure 12. Comparison of monthly average transmission capacities offered and allocated on the Poland-Lithuania interconnector in 2019 [MW]. The chart also includes offered and allocated transmission capacity for transit from Sweden to Lithuania. There were no transit flows from Lithuania to Sweden in 2019

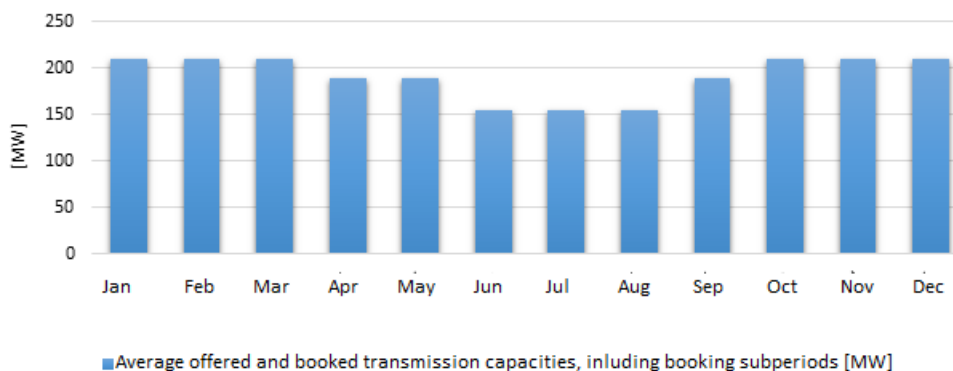


Source: ERO, on the basis of data provided by PSE S.A.

As shown by the data presented above, in 2019 for most of the time electricity prices were lower on the Scandinavian market, which in consequence resulted mainly in electricity imports to Poland from Sweden, limited due to the NES safety reasons during the night time. Maximum volumes of offered transmission capacities amounted to 580 MW in import direction and 462 MW in export direction. A similar situation occurred on the Poland-Lithuania interconnector, though the direction of commercial exchange on this interconnection was largely due to availability of the interconnector Lithuania-Sweden. Maximum volumes of offered transmission capacities amounted to 455 MW in export direction to Lithuania, and 455 MW in import direction to Poland. In addition, in 2019 transmission capacities for purposes of transit from Sweden to Lithuania, of average volume of 17 MW, were offered and allocated.

Transmission capacities on the Poland-Ukraine interconnection were made available on the basis of explicit monthly auctions. Transmission capacity was made available only in import direction to Poland of up to 210 MW.

Figure 13. Monthly average transmission capacities offered on the Poland-Ukraine interconnector (imports), 2019



Source: ERO, on the basis of data provided by PSE S.A.

Monitoring the limitations of transmission services in cross-border exchange due to lack of capacity or grid failures in 2019

In case of cross-border exchange on synchronous interconnections and interconnections Poland-Sweden and Poland- Lithuania, the limitations (reductions) of allocated transmission capacities did not occur in 2019.

On the Poland-Ukraine interconnector on the Polish side there were no emergency shutdowns resulting in a reduction of planned supplies, either. Failure to comply with the exchange plans which occurred several times was due to an emergency shut down in Dobrotwór Power Plant.

3.1.7. Implementation of Network Codes and guidelines

Regulation 714/2009 granted the European Commission competence to adopt network codes and guidelines detailing its provisions. Network codes and guidelines are adopted in the form of regulations. They cover cross-border network issues and market integration issues and their purpose is to create tools to implement cross-border solutions in a structured manner. These regulations are in force in the Member States and are directly applicable without the need to implement them into national legislation.

The regulations contain directly applicable legal standards, but also specify the methods, conditions, requirements and rules to be developed by the individual entities (TSOs and NEMOs), and are then subject to approval by all European regulators, all regional regulators or individually by each regulatory authority (or other competent authority of the Member State concerned).

CACM GL

The President of ERO, as part of its obligations under CACM GL, has taken part in the consultation, cooperation and joint coordination of regulatory authorities. Most of the conditions or methodologies submitted by a TSO or NEMO under that Regulation have been approved. Due to intensive work to implement day-ahead and intraday market coupling, some of the conditions or methodologies already approved needed to be amended. With the entry into force of Regulation 2019/943, requests for amendment of methodologies, originally subject to approval by all regulators, were addressed directly to ACER by the applicants. The President of ERO was involved in all cases processed by the Agency under that Regulation.

Table 2. Status of work on the methodologies or conditions arising from CACM GL, which are subject to approval by all regulators (status is given as at the end of 2019), as proceeded by the President of ERO in 2019

Terms and conditions or methodologies	Applicants	Status
Amendment of capacity calculation regions	TSO	Decision of ACER ¹⁸⁾
Amendment of price coupling and continuous trading algorithms	NEMO	Proceeded by ACER
Amendment of products for single day-ahead coupling	NEMO	Proceeded by ACER
Methodology for scheduled exchange resulting from single day-ahead coupling	TSO	Decision of the President of ERO ¹⁹⁾

¹⁸⁾ https://www.acer.europa.eu/Official_documents/Acts_of_the_Agency/Individual%20decisions/ACER%20Decision%2004-2019%20on%20electricity%20TSOs%20proposal%20for%20amendments%20of%20CCRs.pdf;
https://www.acer.europa.eu/Official_documents/Acts_of_the_Agency/Pages/Annexes-to-the-DECISION-OF-THE-AGENCY-FOR-THE-COOPERATION-OF-ENERGY-REGULATORS-No-04-2019.aspx

¹⁹⁾ <https://www.ure.gov.pl/pl/energia-elektryczna/europejskiree/decyzje/8101,Decyzja-w-sprawie-zatwierdzenia-wspolnej-metody-wyznaczania-planowanych-wymian-w.html>

Terms and conditions or methodologies	Applicants	Status
Methodology for scheduled exchange resulting from single intra-day coupling	TSO	Decision of the President of ERO ²⁰⁾
Intra-day capacity pricing methodology	TSO	Decision of ACER ²¹⁾

Source: ERO's own materials.

NC FCA

As part of its obligations under NC FCA, the President of ERO has taken part in the consultation, cooperation and joint coordination of regulatory authorities. Many of the conditions or methodologies submitted by the TSOs have already been approved and work on others is in progress.

Table 3. Status of work on the methodologies or conditions arising from NC FCA, which are subject to approval by all regulatory authorities (status as at the end of 2019), as proceeded by the President of ERO in 2019

Conditions or methodologies	Applicants	Status
Methodology for congestion income distribution	TSO	Decision of the President of ERO ²²⁾
Amendment of the harmonized allocation rules for long-term transmission rights	TSO	Decision of ACER ²³⁾

Source: ERO's own materials.

EB GL

As part of its obligations under EB GL, the President of ERO has taken part in the consultation, cooperation and joint coordination of regulatory authorities. Work on the conditions or methodologies submitted by all TSOs is in progress. With the entry into force of Regulation 2019/943, proposals for conditions or methodologies originally subject to approval by all regulatory authorities have been submitted to ACER. The President of ERO has been involved in all cases proceeded by the Agency under this Regulation.

Table 4. Status of work on the methodologies or conditions arising from EB GL, which are subject to approval by all regulatory authorities (status as at the end of 2019), as proceeded by the President of ERO in 2019

Conditions or methodologies	Applicants	Status
Framework for establishing a European platform for the exchange of balancing energy from frequency restoration reserves with manual activation	TSO	Proceeded by ACER

²⁰⁾ <https://www.ure.gov.pl/pl/energia-elektryczna/europejskiree/decyzje/8134,Decyzja-w-sprawie-zatwierdzenia-wspo-lnej-metody-wyznaczania-planowanych-wymian-w.html>

²¹⁾ https://www.acer.europa.eu/Official_documents/Acts_of_the_Agency/Individual%20decisions/ACER%20Decision%-2001-2019%20on%20intraday%20cross-zonal%20capacity%20pricing%20methodology.pdf;
https://www.acer.europa.eu/Official_documents/Acts_of_the_Agency/Pages/Annexes-to-the-DECISION-OF-THE-AGENCY-FOR-THE-COOPERATION-OF-ENERGY-REGULATORS-No-012019.aspx

²²⁾ <https://www.ure.gov.pl/pl/energia-elektryczna/europejskiree/decyzje/8312,Decyzja-ws-zatwierdzenia-metody-podzialu-dochodu-z-ograniczen-CID.html>

²³⁾ https://www.acer.europa.eu/Official_documents/Acts_of_the_Agency/Individual%20decisions/ACER%20Decision%2014-2019%20on%20the%20TSOs%20proposal%20for%20HAR%20amendment.pdf;
https://www.acer.europa.eu/Official_documents/Acts_of_the_Agency/Pages/ANNEXES-TO-THE-DECISION-OF-THE-AGENCY-FOR-THE-COOPERATION-OF-ENERGY-REGULATORS-No-14-2019.aspx

Conditions or methodologies	Applicants	Status
Framework for establishing a European platform for the exchange of balancing energy from frequency restoration reserves with automatic activation	TSO	Proceeded by ACER
Framework for establishing a European platform for the imbalance netting process	TSO	Proceeded by ACER
Classification methodology for the activation purposes of balancing energy bids	TSO	Proceeded by ACER
Pricing balancing energy and cross-zonal capacity used for the exchange of balancing energy or operating the imbalance netting process	TSO	Proceeded by ACER
TSO-TSO settlement rules for the intended exchange of energy	TSO	Proceeded by ACER
Harmonization of the main features of imbalance settlement	TSO	Proceeded by ACER
List of standard balancing capacity products for frequency restoration reserves and replacement reserves	TSO	Proceeded by ACER
Methodology for optimized allocation process of cross-zonal capacity for exchange of balancing capacity or sharing of reserves	TSO	Proceeded by ACER

Source: ERO's own materials.

Implementation of guidelines and network codes at the regional and national level

ACER's decision to determine the capacity calculation regions under Regulation CACM GL made it necessary for TSOs and national regulators to cooperate and coordinate jointly within the regions. The borders of the Polish market area are assigned to three independent CCRs (Hansa – Polish-Swedish border, Core – Polish-German, Polish-Czech and Polish-Slovakian border, Baltic – Lithuanian-Polish border). In addition, EB GL indicates as a region the relevant geographical area and the synchronous area in addition to the CCR. SO GL additionally distinguishes the load- frequency control block (LFC block), which means a part of the synchronous area or the entire synchronous area, physically separated by measurement points in interconnections with other LFC blocks, covering at least one LFC area, operated by at least one TSO fulfilling the obligations of load and frequency control.

The President of ERO actively participated in cooperation at the regional level.

The tables below present the status of work on the methodologies or conditions arising from the guidelines and network codes, which are subject to approval by the regulatory authorities of the region in question, which the President of ERO was proceeding in 2019.

Table 5. Status of work on the methodologies or conditions arising from Regulation CACM GL, which are subject to approval by all regulatory authorities (status as at the end of 2019), as proceeded by the President of ERO in 2019

Conditions or methodologies	CCR	Applicants	Status
Common capacity calculation methodology	Core	TSO	Decision of ACER ²⁴⁾
Methodology for coordinated redispatching and countertrading	Baltic	TSO	Decision of the President of ERO ²⁵⁾

²⁴⁾ https://www.acer.europa.eu/Official_documents/Acts_of_the_Agency/Individual%20decisions/ACER%20Decision%2002-2019%20on%20CORE%20CCM.pdf;

https://www.acer.europa.eu/Official_documents/Acts_of_the_Agency/Pages/Annexes-to-the-DECISION-OF-THE-AGENCY-FOR-THE-COOPERATION-OF-ENERGY-REGULATORS-No-02-2019.aspx

²⁵⁾ <https://www.ure.gov.pl/pl/energia-elektryczna/europejskiree/decyzje/8064,Zatwierdzenie-metody-koordynowanego-redysponowania-i-zakupow-przeciwnych-w-regio.html>

Conditions or methodologies	CCR	Applicants	Status
Methodology for coordinated redispatching and countertrading	Hansa	TSO	Decision of the President of ERO ²⁶⁾
Methodology for coordinated redispatching and countertrading	Core	TSO	Cooperation and joint coordination of regulatory authorities to reach agreement
Redispatching and countertrading cost sharing	Baltic	TSO	Decision of the President of ERO ²⁷⁾
Redispatching and countertrading cost sharing	Hansa	TSO	Decision of the President of ERO ²⁸⁾
Redispatching and countertrading cost sharing	Core	TSO	Cooperation and joint coordination of regulatory authorities to reach agreement
Amendment of redispatching and countertrading cost sharing	Hansa	TSO	Cooperation and joint coordination of regulatory authorities to reach agreement

Source: ERO's own materials.

The President of ERO, pursuant to CACM GL, approved the amendment of the conditions for the allocation of cross-border transmission capacities and other necessary mechanisms to enable more than one NEMO to operate in Poland²⁹⁾. In addition, the President of ERO re-designated TGE S.A. as a NEMO to carry out the single day-ahead and intra-day market coupling for the Polish market area for a period of four years, that is until 2 December 2023.

Table 6. Status of work on the methodologies or conditions arising from NC FCA, which are subject to approval by all regulatory authorities (status as at the end of 2019), as proceeded by the President of ERO in 2019

Conditions or methodologies	CCR	Applicants	Status
Methodology for long-term transmission capacity calculation	Baltic	TSO	Cooperation and joint coordination of regulatory authorities to reach agreement
Methodology for long-term transmission capacity calculation	Hansa	TSO	Cooperation and joint coordination of regulatory authorities to reach agreement
Methodology for long-term inter-area transmission capacity distribution	Core	TSO	Cooperation and joint coordination of regulatory authorities to reach agreement
Amendment of regional requirements of harmonized allocation rules for long-term transmission rights	Core	TSO	Decision of the President of ERO ³⁰⁾
Amendment of regional requirements of harmonized allocation rules for long-term transmission rights	Core	TSO	Decision of the President of ERO ³¹⁾
Amendment of regional design of long-term transmission rights	Core	TSO	Decision of ACER ³²⁾

Source: ERO's own materials.

²⁶⁾ <https://www.ure.gov.pl/pl/energia-elektryczna/europejskiree/decyzje/8105,Decyzja-w-sprawie-zatwierdzenia-wspolnej-metody-podzialu-kosztow-redysponowania-.html>

²⁷⁾ <https://www.ure.gov.pl/pl/energia-elektryczna/europejskiree/decyzje/8313,Decyzja-ws-zatwierdzenia-metody-podzialu-kosztow-redysponowania-i-zakupow-przeci.html>

²⁸⁾ <https://www.ure.gov.pl/pl/energia-elektryczna/europejskiree/decyzje/8105,Decyzja-w-sprawie-zatwierdzenia-wspolnej-metody-podzialu-kosztow-redysponowania-.html>

²⁹⁾ <https://www.ure.gov.pl/pl/energia-elektryczna/europejskiree/decyzje/8249,Decyzja-Zatwierdzenie-zmiany-warunkow-dotyczacych-alokacji-miedzyobszarowych-zdo.html>

³⁰⁾ <https://www.ure.gov.pl/pl/energia-elektryczna/europejskiree/decyzje/8177,Decyzja-w-sprawie-zatwierdzenia-zmiany-wymagan-regionalnych-dla-regionu-wyznacza.html>

³¹⁾ <https://www.ure.gov.pl/pl/energia-elektryczna/europejskiree/decyzje/8467,Decyzja-w-sprawie-zatwierdzenia-zmiany-wymagan-regionalnych-dla-regionu-wyznaczan.html>

³²⁾ https://www.acer.europa.eu/Official_documents/Acts_of_the_Agency/Individual%20decisions/ACER%20Decision%2001-2019%20on%20intraday%20cross-zonal%20capacity%20pricing%20methodology.pdf; https://www.acer.europa.eu/Official_documents/Acts_of_the_Agency/Pages/Annexes-to-the-DECISION-OF-THE-AGENCY-FOR-THE-COOPERATION-OF-ENERGY-REGULATORS-No-15-2019.aspx

Table 7. Status of work on the methodologies or conditions arising from EB GL, which are subject to approval by all regulatory authorities from the region concerned (status as at the end of 2019), as proceeded by the President of ERO in 2019

Conditions or methodologies	CCR or another region	Applicants	Status
Common settlement rules for intended exchanges of energy	synchronous area of continental Europe	TSO	Cooperation and joint coordination of regulatory authorities to reach agreement
Common settlement rules for intended exchanges of energy	all asynchronously connected TSOs	TSO	Cooperation and joint coordination of regulatory authorities to reach agreement
Common settlement rules applicable to all intended exchanges of energy	synchronous area of continental Europe	TSO	Cooperation and joint coordination of regulatory authorities to reach agreement
Common settlement rules applicable to all intended exchanges of energy	all asynchronously connected TSOs	TSO	Cooperation and joint coordination of regulatory authorities to reach agreement
Methodology for market-based allocation process of cross-zonal capacity for balancing energy exchange or sharing of reserves	Baltic	TSO	Cooperation and joint coordination of regulatory authorities to reach agreement
Methodology for market-based allocation process of cross-zonal capacity for balancing energy exchange or sharing of reserves	Hansa	TSO	Cooperation and joint coordination of regulatory authorities to reach agreement
Methodology for market-based allocation process of cross-zonal capacity for balancing energy exchange or sharing of reserves	Core	TSO	Cooperation and joint coordination of regulatory authorities to reach agreement
Methodology for the market-based allocation process of cross-zonal capacity based on economic efficiency analysis	Core	TSO	Cooperation and joint coordination of regulatory authorities to reach agreement

Source: ERO's own materials.

In 2019 the President of ERO under EB GL conducted the following proceedings on the conditions or methodologies subject to approval by every regulatory authority of each of the Member States concerned:

- proceedings for the approval of balancing conditions,
- proceedings for granting PSE S.A. a derogation from the implementation of the requirements concerning the use of the European platform for balancing energy exchange from substitute reserves,
- proceedings for granting PSE S.A. a derogation from the implementation of the requirements concerning the definition of the gate closing time for the integrated scheduling process in the central dispatch model completed by decision of the President of ERO in 2019³³).

³³) <https://www.ure.gov.pl/pl/energia-elektryczna/europejskiree/decyzje/8635,Decyzja-w-sprawie-odstepstwa-od-wdrozenia-wymogow-dotyczacych-zdefiniowania-czas.html>

Table 8. Status of work on the methodologies or conditions arising from SO GL, which are subject to approval by all regulatory authorities from the relevant region (status as at the end of 2019), as proceeded by the President of ERO in 2019

Conditions or methodologies	CCR or another region	Applicants	Status
Common provisions on regional coordination of operational security	Baltic	TSO	Cooperation and joint coordination of regulatory authorities to reach agreement
Common provisions on regional coordination of operational security	Hansa	TSO	Cooperation and joint coordination of regulatory authorities to reach agreement
Common provisions on regional coordination of operational security	Core	TSO	Cooperation and joint coordination of regulatory authorities to reach agreement

Source: ERO's own materials.

NC RfG

General requirements for connection to the distribution network

As part of its obligations under NC RfG, the President of ERO already approved the maximum capacity thresholds for type B, C and D power generation modules and a document containing general requirements for the connection of generation units to the grid at the request of the TSO and individual DSOs in 2018.

Following the amendment of the provisions of national legislation (the Energy Law Act), which implemented Article 7(9) of NC RfG in such a way that the TSO was indicated as responsible for determining the requirements of general application also with respect to the connection to the distribution network, the decisions issued at the request of the DSO became legally invalid. However, the decision issued at the request of the TSO was amended on 2 January 2019 in such a way that from now on it included requirements for the connection of generation units to both the transmission network and the distribution networks.

NC RfG covers synchronous power generation modules and power park modules, including marine power park modules, with a maximum capacity equal to or greater than 0.8 kW. The connection requirements shall apply to new generation modules and to existing type C or D modules where they have been modified to the extent that the connection contract has to be amended and to the modules covered by the requirements of the Regulation on the basis of a decision of the regulatory authority taken at the request of TSO.

Pursuant to the provisions of NC RfG, power generation modules existing on the date of entry into force of that Regulation are exempted from the new connection requirements. At the same time, Article 4(2) stipulates that generation modules (equipment, installations or networks) for which the power-generating facility has concluded a final and binding contract for the purchase of a main generating plant within two years after the entry into force of that Regulation and has notified the relevant system operator and the relevant TSO of contract conclusion within 30 months of the entry into force of this Regulation, should also be considered as existing.

The operator of the power system to whose network the equipment, installations or networks are connected may submit an application to the President of ERO for a decision whether such equipment, installations or networks meet the requirements to be considered as existing or new, in case of any doubts in this respect. Against this background, in the course of 2019, with respect to the three actual situations, the TSO raised doubts as to the qualification of the power generation modules and applied to the President of ERO to resolve them. All three cases concerned wind farms being connected. In all these cases, the fulfilment of the requirement to formally conclude an agreement for the purchase of the basic generation unit and to notify the relevant operators within the deadlines specified in the regulations was assessed. One of these three proceedings was completed before the end of 2019 with a decision on its discontinuance due to the change in the nature of the installation discharging

capacity from one of these wind farms to the distribution network, subject to the NC DCC requirements. The remaining two proceedings were not completed in 2019 and continued in 2020.

NC DC

Requirements of general application for demand connection

On 12 February 2019, at the request of PSE S.A., the President of ERO approved a document containing the requirements of general application for demand connection – a common document for the transmission network and distribution networks. The provision contained in Article 6(9) of NC DC, which gives Member States the right to indicate that the TSO will be responsible for defining the general requirements also for connection to the distribution network, was applied.

PSE S.A., the Operator responsible for the establishment of requirements for the entire area of the domestic power system, developed a proposal of requirements for demand for the distribution and transmission networks together, and consulted the proposal. Meetings with market participants were also organized as part of the process of consultation and issuing opinions on the proposals for requirements of general application. The comments submitted during the consultation and opinion issuance process were considered and properly taken into account, and the report on the consultation containing the submitted comments and the manner of accommodating them was presented by the TSO as an annex to the application for approval of the requirements of general application for demand connection.

Under the provisions of NC DC, the approved requirements of general application apply to new transmission-connected demand facilities, new transmission-connected distribution facilities, new distribution systems including new closed distribution systems and new demand units used by a demand facility or closed distribution system to provide demand response services to relevant system operators and relevant TSOs. However, facilities, units and systems existing at the date of entry into force of NC DC are exempted from the application of new connection requirements, which shall also be deemed to be those for which the owner or operator has concluded, within two years after the entry into force of that Regulation, a final and binding contract for the purchase of the main demand equipment and notified the relevant system operator and the relevant TSO of the conclusion of the contract within 30 months after the entry into force of this Regulation.

The applicability has, however, been extended to include facilities, units and systems that are modified to such an extent that the connection contract must be amended.

The decision on the need to amend the connection contract and the scope of requirements that will apply in a given case is to be taken by the President of ERO, after notification by the relevant system operator.

In 2019, the President of ERO did not receive any notification from any operator in this respect.

NC HVDC

Requirements of general application for grid connection of high voltage direct current systems

By the decision of 20 March 2020, at the request of PSE S.A., the President of ERO approved a document containing the requirements of general application for grid connection of high voltage direct current systems and direct current-connected power park modules. As in the case of other grid connection codes, these requirements were developed by the TSO for the entire NES and were subject to consultations with other operators.

SO GL

In 2019 the President of ERO under SO GL conducted a number of proceedings, in the course of which it approved the following proposals made by the TSOs concerning:

- 1) key organizational requirements, roles and responsibilities (KORRR) in relation to data exchange,
- 2) rules for determining the FCR (frequency containment reserves),

- 3) limits on the exchange and sharing of FRR (frequency restoration reserves) between synchronous areas,
- 4) limits on the exchange of RR (replacement reserves) between synchronous areas,
- 5) assumptions and methodologies of cost-benefit analysis (CBA for LER).

At the same time, the President of ERO discontinued two proceedings concerning the proposal for methodologies for the coordination of security analyses (CSAM proposal) and the proposal for methodologies for assessing the relevance of assets for outage coordination (RAOC proposal). These discontinuances resulted from the fact that these proceedings were transferred to ACER.

At the request of PSE S.A. the President of ERO approved by the decision of 15 March 2019 the submitted "Proposal for the scope of data exchange for the purposes of planning the work and operation of the NES", prepared in accordance with Article 5(1) in conjunction with Article 40(5) of SO GL. The approved document constitutes the scope of data exchange with distribution system operators and significant grid users referred to in Article 6(4)(b) of Regulation SO GL.

NC ER

In performing the tasks resulting from the NC ER, on 7 June 2019, the President of ERO approved, at the request of PSE S.A., three key documents in the scope of TSO management of emergency, blackout and system restoration state, coordination of system operation in emergency state, blackout and restoration state of the interconnected transmission systems to the normal state from emergency or blackout state.

The first approved document is the list of significant grid users (SGUs) responsible for the implementation in their facilities of measures arising from national regulations and the list of measures to be implemented by the SGUs concerned. In the course of the proceedings, when assessing the submitted List of SGUs, the President of ERO drew attention to the application of the principles set out in Article 4(1) of NC ER, i.e. the principles of proportionality and non-discrimination and the optimization between the highest overall efficiency and lowest total costs for all parties involved, the obligation to ensure transparency, the priority of using market-based mechanisms as far as is possible to ensure network security and stability, the obligation to respect technical, legal, personal safety and security constraints, and the need to take into consideration agreed European standards and technical specifications.

The President of ERO also approved the terms and conditions of acting as a restoration service provider, pursuant to Article 4(4) of NC ER. The proposal submitted by PSE S.A. was subject to consultation with DSOs and significant grid users. The comments raised during the consultation and opinion process were considered and properly taken into account in the document submitted for approval, and the report on the consultation containing information on the comments raised and the way they were accommodated was attached to the proposal. At the same time, considering the catalogue of actions to be taken by PSE S.A. in order to implement these conditions properly and fully, including the need to adjust transmission contracts, the President of ERO set the date of entry into force of the approved conditions for acting as restoration service providers for 7 April 2020, i.e. 10 months from the approval date.

The third of the documents approved (7 June 2019) are rules for suspension and restoration of market activities in accordance with Article 36 of NC ER and detailed rules for imbalance settlement and settlement of balancing energy during the period of suspension of market activities in accordance with Article 39 of that Regulation. The document submitted for approval was subject to consultations with DSOs and significant grid users initiated by the publication on the PSE S.A. website of a preliminary proposal of rules for suspension and restoration of market activities and detailed rules for imbalance settlement and settlement of balancing energy during the period of suspension of market activities, along with call for submitting comments. The comments submitted during the consultation and opinion process were considered and properly incorporated in the document submitted for approval, and the report on the consultations containing information on the submitted comments and the manner of their incorporation was attached to the proposal. In the course of the proceedings, PSE S.A. defined a catalogue of actions necessary to undertake in order to correctly and fully implement these rules and implement the provisions of Article 54 of NC ER, indicating the scope of tasks and the time required for their implementation amounting to 10 months. For this reason, the President of ERO set the date of entry into force of the approved rules for suspension and restoration of market activities for 7 April 2020.

The documents approved as a result of the above proceedings have been published on the website of PSE S.A. and ERO, with the exception of the first one, i.e. the list of significant grid users (SGUs) responsible for the implementation of measures arising from national legislation in their facilities and the list of measures to be implemented by the said SGUs. In this case, PSE S.A.'s reservation that the submitted list of SGUs is an internal document of PSE S.A. was deemed justified. In the opinion of the President of ERO the List of SGUs contains information concerning individual and specific entities, and the scope of this information may be protected. It was also considered that in relation to the List of SGUs (unlike in the case of other documents adopted under NC ER) the legislator did not provide for the obligation of public consultation or publication. Given the position of the Entrepreneur and the fact that the publication of the List of SGUs is not required by law, the content of the Annex to this decision has not been published.

In 2019, the President of ERO also received an application for approval of the test plan, specifying which equipment and generation capacities, relevant to the "System Defence Plan" and the "Restoration Plan", need to be covered by tests, in accordance with the minimum requirements laid down in that Regulation. The proceedings continue in 2020.

3.2. Competition and market functioning

3.2.1. Wholesale market

The volume of gross domestic electricity generation in 2019 was lower as compared to the previous year and totalled 158,767 GWh (decrease by 3.9% as compared to 2018). At the same time, gross domestic electricity consumption amounted to 169,391 GWh and decreased by over 0.9% in comparison to 2018.

In 2019 the rate of increase of domestic consumption of electricity was lower (negative) than the GDP increase rate, which – according to preliminary estimates of the Central Statistical Office – amounted to 4.0%.

In 2019, the share of imports in the domestic balance of electricity flows constituted 10.1% of total electricity fed into, while the share of exports constituted 4.1% of electricity off-taken. As compared to 2018, the share of imports increased by 2.4 percentage points and the share of exports decreased by 0.4 percentage point.

The electricity production structure in 2019 did not change considerably as compared to 2018. A great majority of generation is still based on conventional fuels, that is hard coal and lignite, though their share decreased from 80% to 75%. At the same time, the generation leader in the RES segment was still wind generation.

In 2019, the installed capacity in the NES amounted to 46,799 MW and the available capacity to 46,991 MW, which represents an increase by 1.9% and 2.9%, respectively, as compared to 2018³⁴⁾.

The average annual capacity demand was at the level of 23,082.0 MW, with the maximum demand at the level of 26,504.4 MW, which means a decrease by 1.0% and an increase by 1.0%, respectively as compared to 2018.

Wholesale electricity market structure by entities

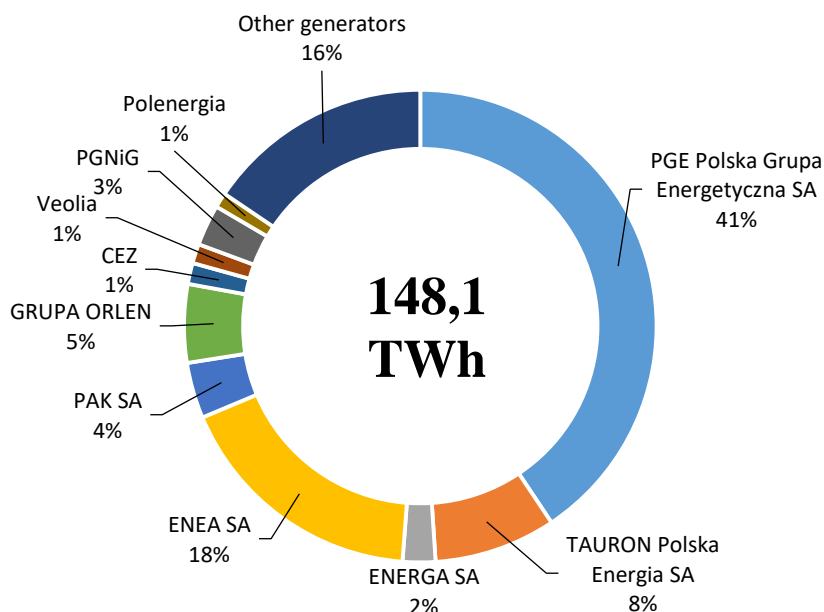
The largest share in electricity generation subsector is held by the group PGE Polska Grupa Energetyczna S.A. In 2019 its share amounted to 40.6%³⁵⁾ (decrease by 2.3 percentage point in comparison to the previous year). This group, having acquired the EDF group energy companies, also became leader on the market of sale to final customers and maintained it in 2019.

Share of groups in the volume of electricity fed into the grid is shown in the figure below.

³⁴⁾ As at 31 December 2018 and 31 December 2019, data of PSE S.A.

³⁵⁾ Share calculated according to the volume of electricity fed into the grid. When calculating this ratio, the entity structure as at 31 December 2019 was taken into consideration.

Figure 14. Share of groups in the volume of electricity fed into the grid in 2019 (considering the entity structure as at 31 December 2019)



NB. The group "Other generators" includes both generators which are part of groups (e.g. Azoty, innogy, FORTUM) and generators operating individually on the electricity generation market – outside groups.

Source: Data of the Ministry of Energy and ERO.

With respect to the market share of three largest entities measured according to the volume of electricity fed into the grid (taking into account the volume of electricity supplied by generators directly to final customers), in 2019³⁶⁾ it decreased for the first time for several years and amounted to 66.4% (which is a decrease by 3.3 percentage points as compared to 2018). At the same time, the index of the share held by three largest generators in installed capacity remained at the level from the previous year – an increase by 0.1 percentage point. Three largest generators (members of groups: PGE Polska Grupa Energetyczna S.A., ENEA S.A., TAURON Polska Energia S.A.) still held in total almost 2/3 of installed capacities and were responsible for almost 67% of domestic electricity production. The above mentioned indices are presented in Table 9. While among three dominant entities on the electricity generation market, in 2019 the importance of generators being part of PGE Polska Grupa Energetyczna S.A. increased. This is due to the fact that in 2019 exploitation of two new generation units no. 5 and no. 6 with installed capacity of 900 MW each began.

It is worth noting that the reduction in the number of entities holding at least a 5% share in the energy fed into the grid in 2019 as compared to 2018 was caused by the permanent withdrawal from exploitation of the generation asset in the ZE PAK S.A., which resulted in a decrease in the importance of this group in the electricity generation sub-sector. On the other hand, an increase in the number of entities holding at least a 5% share in the energy fed into the grid in 2019 as compared to 2018 is due to a growth of importance of the PKN ORLEN S.A. group in this subsector³⁷⁾.

³⁶⁾ When calculating the market share ratios of the three largest entities, both according to the energy fed into the grid and the installed capacity, the entity structure as at 31 December 2019 was taken into account.

³⁷⁾ Within PKN Orlen S.A. group, in the course of 2018 two new generation assets were put into operation – in Włocławek (463 MW) and in Płock (608 MW). 2019 was the first year when both generation units operated throughout the year with full use of their production capacities.

Table 9. Market shares and concentration of the generation subsector*

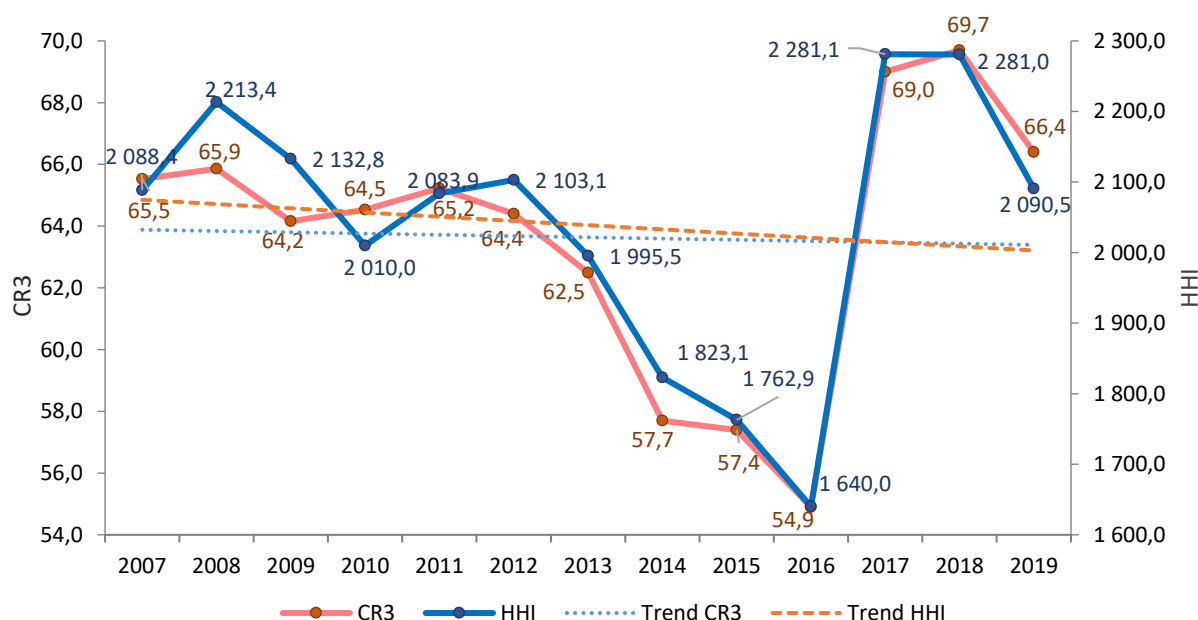
Year	Number of companies holding at least a 5% share in installed capacity	Number of companies holding at least a 5% share in electricity fed into the grid	Share of three largest entities in installed capacity [%]	Share of three largest entities in electricity fed into the grid	HHI ⁽³⁸⁾	
					Installed capacity	Electricity fed into the grid
2018	4	3	62.0	69.7	1,740.0	2,281.0
2019	3	4	62.1	66.4	1,809.2	2,090.5

* For all entities operating in the generation sector, which are subject to an obligation of reporting statistics, including installed capacity and energy fed into the grid from wind and hydro sources.
When calculating the market share ratios of the three largest entities and HHI ratios, both according to the energy fed into the grid and the installed capacity, the structure of the entity as at 31 December 2019 was taken into account.

Source: Data of the Ministry of State Assets and ERO.

A many-year downward trend concerning in particular HHI measured according to installed capacity and according to volume of electricity fed into the grid (including volume of electricity supplied by generators directly to final customers) changed considerably in 2017 and the intensity of this change was observed in 2018. The level of both concentration ratios was also high in 2019, as compared to the years 2017-2018. In terms of installed capacity, it increased by 4.0% and in terms of energy fed into the grid it decreased by 8.4%. It is worth emphasizing that this index calculated for generation in 2019, similarly as in the years 2017-2018, maintained a value indicating a high market concentration. It should also be noted that in 2019, the concentration index calculated for installed capacity crossed the upper limit of average concentration for the first time and moved to a high concentration level in the generation market.

The changes of concentration index (HHI) and index of market shares of three largest entities in the generation subsector in the years 2007-2019 are presented in the figure below.

Figure 15. Concentration level in generation subsector (HHI) and market shares of three largest entities by volume of electricity fed into the grid, in 2007-2019

Source: Data of the Ministry of State Assets and ERO.

³⁸⁾ The Herfindahl-Hirschman index (HHI) is defined as the sum of squares of individual market shares of all companies forming a given branch: HHI > 5,000 – very high concentration, HHI from 1,800 to 5,000 – high concentration, HHI from 750 to 1,800 – medium concentration, below 750 – low concentration (according to the “Report on progress in creating the internal electricity and gas market”, Brussels 2005 and J. Kaminski: *Methods for estimating market power in the energy sector*, Energetyczna Polityka, Volume 12, Zeszyt 2 / 2, 2009).

With reference to the data presented above regarding concentration, it should be noted that these indices changed so significantly in 2017 due to organizational changes in the generation sector, that is taking over by two groups – PGE Polska Grupa Energetyczna S.A. and ENEA S.A. of generation assets of other groups, that is EDF and ENGIE Energia Polska, respectively. Putting into operation of new generation assets in the groups of ENEA S.A. and PKN ORLEN S.A. also contributed to the consolidation of concentration indices in 2019 at the same high level as in the previous years. In 2019 the decrease in the concentration index calculated according to energy fed into the grid was influenced by a decrease in electricity production at the main player on the generation market – generators in the PGE Polska Grupa Energetyczna S.A. group.

Sales of electricity in respective market segments

The structure and mechanisms of market operation do not differ from the corresponding structures and mechanisms, which formed in a majority of other European states deemed competitive markets. Market participants have, on a non-discriminatory basis, wide access to various forms of electricity sales and access to information on volumes and prices at which electricity is contracted and sold on a wholesale market.

The tables below present shaping the types of electricity sales in segments of generation and trading in the years 2018-2019.

Table 10. Types of electricity sales by generators in 2018-2019 [TWh]

Year	Trading companies	Regulated markets, including power exchange	Balancing market	Exports	Final customers	Other sales*
2018**	101.7	35.1	8.6	0.0	3.2	1.9
2019	62.7	77.0	8.8	0.0	2.0	1.9

* Other sales include volumes of electricity sold to TSO and DSOs as well as sales to small local distributors.

** The data were changed compared to the data in the National Report of the President of the Energy Regulatory Office for 2018 due to the correction of the data by the surveyed entities.

Source: Data of the Ministry of State Assets and ERO.

Table 11. Types of electricity sales by trading companies in 2018-2019 [TWh]

Year	Trading companies	Regulated markets, including power exchange	Balancing market	Exports	Final customers	Other sales*
2018**	131.9	71.7	6.6	2.6	127.0	24.2
2019	122.7	103.5	7.4	2.4	127.1	17.8

* Other sales include volumes of electricity sold to TSO and DSOs as well as sales to small local distributors.

** The data were changed compared to the data in the National Report of the President of the Energy Regulatory Office for 2018 due to the correction of the data by the surveyed entities.

Source: Data of the Ministry of State Assets and ERO.

As a result of a significant drop in trading on the power exchange in 2017 as compared to 2016, in the subsequent year the obligation for electricity generators to sell in public trading was increased to 30% in 2018 and then to 100% as of 1 January 2019³⁹). The purpose of this action was to maintain the original concept of introducing an exchange obligation. In 2019 a significant increase in the volume of sales by generators and trading companies via power exchange was recorded. In 2019, both generators and trading companies sold part of their electricity to trading companies of their own group.

³⁹) This obligation was introduced by Act of 9 November 2018 amending the Energy Law Act and certain other acts (JoL of 2018, item 2348) and has been in force as of 1 January 2019.

3.2.1.1. Monitoring the level of prices, the level of transparency, the level and effectiveness of market opening and competition

The prices of electricity delivered in 2019 are illustrated by three price indices published by the President of ERO, i.e. the annual and quarterly average selling price of electricity on the competitive market and the quarterly average selling price of electricity on terms other than those provided for in Article 49a items 1 and 2 of the Energy Law Act.

On the basis of surveys submitted by electricity producers and trading companies, as well as from reports of public statistics and data from power exchange, information on, among others, the average annual prices of electricity sales on the competitive market, and average quarterly prices of electricity sales on competitive market, as well as average quarterly prices of electricity sold under other rules than sale on Polish Power Exchange are calculated and published.

Average annual price of electricity sales on the competitive market and the method for its calculation

In 2019, the average annual price of electricity sales on the competitive market was 245.44 PLN/MWh. This price was by 7.0% lower than the weighted-average price of a contract for baseload delivery on the day-ahead market in 2019 (229.30 PLN/MWh) and by 7.9% lower than the weighted-average price of a contract for baseload delivery in 2020 (BASE_Y-20) on the CDM, which in the contracts concluded in 2019 was at the level of 266.40 PLN/MWh.

The algorithm for calculating the average quarterly selling price of electricity on the competitive market was presented in the Information of the President of ERO on the above mentioned price level⁴⁰.

Average quarterly price of electricity sales on the competitive market and the method for its calculation

The algorithm for calculating the average quarterly selling price of electricity on the competitive market is the same as in the case of the average annual selling price of electricity on the competitive market.

The Table below shows average quarterly prices of electricity sales on the competitive market in 2019.

Table 12. Average quarterly prices of electricity sales on the competitive market in 2019

2019	
Quarter	Average quarterly price of electricity sales on the competitive market [PLN/MWh]
I	241.81
II	247.21
III	252.65
IV	241.41

Source: Data of TGE S.A. and ERO.

Relating the average quarterly price of electricity sales on the competitive market in 2019 to the exchange market operated by TGE S.A., it should be stated that this price is similar to the quarterly prices on the exchange market. The algorithm adopted for price calculation to a great extent takes into account volumes of electricity sold on the power exchange, which allows electricity wholesale market participants to estimate its level in close approximation even before official publication of this price by the President of ERO.

⁴⁰ Information on annual and quarterly prices may be found on the ERO's website at: <https://www.ure.gov.pl/pl/energia-elektryczna/ceny-wskazniki/7852,Srednia-cena-sprzedazy-energii-elektrycznej-na-rynku-konkurencyjnym-roczna-i-kwa.html>

Average quarterly price of electricity which is not subject to the public sale obligation

The volumes and average quarterly price of electricity sold under rules other than those determined in Article 49a items 1 and 2 of the Energy Law Act⁴¹⁾, in respective quarters of 2019, are presented in the Table below:

Table 13. Volumes and average quarterly price of electricity sold under the rules other than those stipulated in Article 49a (1) and (2) of the Energy Law Act, in 2019.

2019		
Quarter	Average quarterly price of electricity sold under rules other than those determined in Article 49a items 1 and 2 of the Energy Law Act* [PLN/MWh]	Volume of electricity sold under rules other than those determined in Article 49a items 1 and 2 of the Energy Law Act [TWh]
I	221.28	15.08
II	214.07	10.79
III	213.60	9.79
IV	223.36	12.08

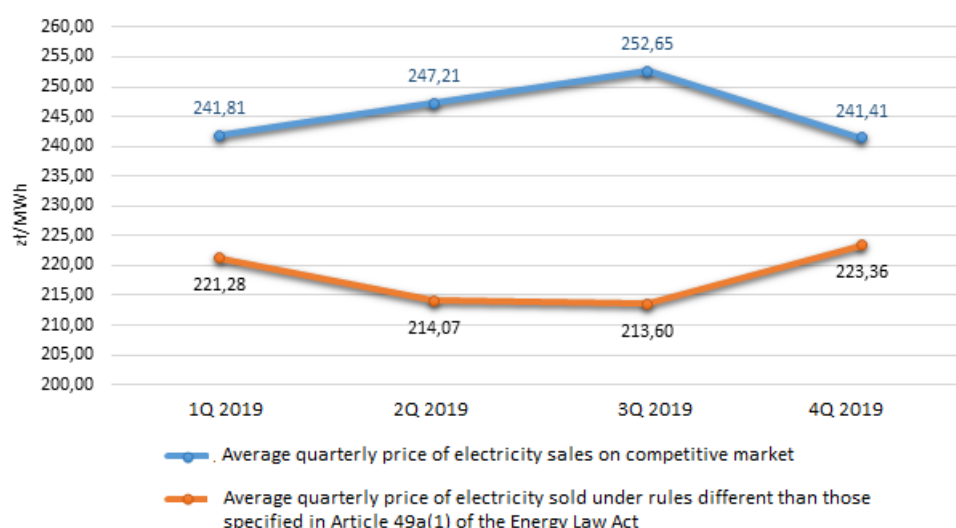
* The price does not include taxes (VAT, excise tax), charges not related to the volume of sold electricity or obligations related to certificates of origin.

Source: ERO, on the basis of data submitted by electricity producers for respective quarters of 2019.

The quarterly prices referred to above were set on the basis of data⁴²⁾ concerning performance of contracts on electricity sales to trading companies, concluded by energy companies generating electricity, obliged to sell part of generated electricity in the manner specified in Article 49a item 1 of the Energy Law Act.

The figure below shows a comparison of average quarterly price of electricity sold under rules different than those specified in Article 49a item 1 of the Energy Law Act with an average quarterly price of electricity sales on a competitive market in particular quarters of 2019.

Figure 16. Average quarterly prices of electricity sold under rules different than those specified in Article 49a items 1 and 2 of the Energy Law Act and average quarterly prices of electricity sales on a competitive market in 2019



Source: ERO's own analysis.

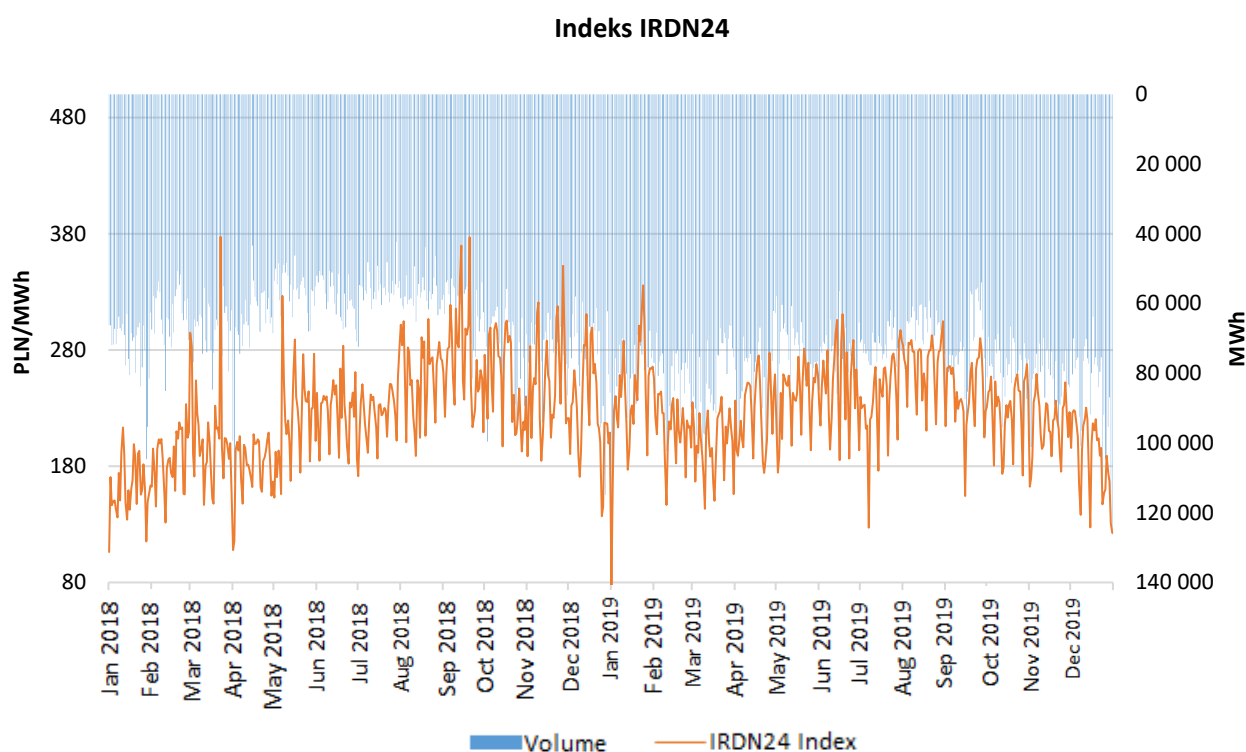
⁴¹⁾ Article 49a items 1 and 2 of the Energy Law Act specifies the obligations with respect to sale of electricity in the manner ensuring public access to it (power exchange obligation).

⁴²⁾ Data provided by generators in accordance with the call published on the ERO's website at: <https://www.ure.gov.pl/pl/biznes/obowiazki-sprawozdawcze/energia-elektryczna/8241,Prezes-URE-wzywa-wytworcow-energii-elektrycznej-do-cyklicznego-skladania-informa.html>

Prices on SPOT market of TGE S.A.

The below figure presents development of electricity prices on the spot market – day ahead market (DAM), managed by TGE S.A., measured with the IRDN24 index. This index shows arithmetic average price of all transactions, except for block contracts, of DAM trading session, calculated after the supply date for the entire 24 hours.

Figure 17. Average monthly electricity price of spot transactions, measured by IRDN24 [PLN/MWh], and volume of electricity traded on DAM market (without block contracts) [MWh] in 2018-2019



Source: ERO, on the basis of data provided by TGE S.A.

Volume-weighted average price of electricity on DAM in 2019 amounted to 229.62 PLN/MWh and was higher by 4.91 PLN/MWh in comparison to 2018 when this price was 224.71 PLN/MWh.

Prices of electricity sold in 2019 on TGE S.A.

In 2019 an increase in electricity prices on commodity forward instruments market run by TGE S.A. was observed. This tendency was reflected by the y/y increase of prices in BASE_Y forward contracts (yearly contract with baseload delivery for another year). The volume-weighted average transaction price of BASE_Y-20 contract in the entire year 2019 was at the level of 266.40 PLN/MWh, in comparison to 2018, when the volume weighted average transaction price of the corresponding BASE_Y-19 forward contracts amounted to 242.40 PLN/MWh.

At the same time, average monthly price of BASE_Y-20 contracts concluded in December 2019 was equal to 242.14 PLN/MWh, whereas the monthly average price of corresponding contracts (BASE_Y-19) concluded in December 2018 amounted to 281.17 PLN/MWh, which indicates a decrease of the price of these contracts by 13.9%.

Transparency of the wholesale energy market – fulfilment of obligations under the REMIT Regulation

Participants of the wholesale energy market, pursuant to the provisions of the REMIT regulation, are subject to the prohibition of manipulation or attempts to manipulate the market, as well as conducting trade based on inside information.

A special role in the process of detecting irregularities on the wholesale energy market rests with persons professionally arranging transactions (PPATs) that are required to create and maintain effective mechanisms and procedures to identify cases of violation of the prohibition of use of inside information and the prohibition of market manipulation. Close cooperation between these entities and regulators is crucial in preventing abuses on the energy market. In 2018, activities recognized as the activity proper to PPATs were actively conducted by three entities: TGE S.A., PSE S.A. and OGP Gaz-System S.A.

These entities are obliged to notify the President of ERO if they have reasonable grounds to suspect that a given transaction on the wholesale energy market may constitute a breach of the prohibitions of manipulation or illegal use of inside information. In addition, the above mentioned entities conduct periodic trainings for market participants in order to update the implemented principles of monitoring the wholesale energy market for detecting and preventing abuses defined in the REMIT regulation.

The most important information related to the REMIT Regulation has been published on the ERO's website⁴³). Market players may also send their questions about performance of obligations arising from the above mentioned Regulation and from secondary legislation on registration of market participants in the national register of market participants, to the ERO's dedicated e-mail address⁴⁴). ACER runs a REMIT Portal⁴⁵) dedicated to any issues included in the REMIT Regulation on its website.

Participants of the Polish energy market are registered by the President of ERO by means of the Centralized European Register of Energy Market Participants (CEREMP) developed by ACER. As at the end of 2019, the number of market participants registered in the CEREMP system was over 14,655, out of which 650 market participants from Poland (some 4.4% of all registered entities). The number of registered market participants from Poland in 2019 increased by around 3.5% as compared to 2018. Information on concluded transactions and orders in Poland by wholesale energy market participants is reported⁴⁶) by intermediary of four entities, i.e.: TGE S.A., OGP Gaz-System S.A., PSE S.A. and PGE Dom Maklerski S.A., which have a status of the Registered Reporting Mechanism (RRM). At the end of 2019, there were 120 entities with RRM status throughout the European Union. In 2019, inside information was published by market participants on their websites as well as via Inside Information Platforms registered in ACER. In Poland, the Inside Information Platform for electricity, available free of charge for each market participant, is operated by TGE S.A. S.A., the so-called Regulated Information Services (GPI)⁴⁷). This platform has been registered with ACER and operates as RIS (Regulated Information Services). In 2019 OGP Gaz-System S.A. sought ACER certification for Gas Inside Information Platform (GIIP).

In 2019, representatives of the President of ERO participated in the work of ACER working groups and meetings at which the issues of how to conduct wholesale energy market supervision were discussed, including, among others, the issues of clarification of the definition and publication of inside information by market participants, in particular through Inside Information Platforms meeting the ACER requirements and recommended by the Agency in the context of the fulfilment by market participants of the criteria of effective and timely public disclosure of inside information arising from Article 4 of the REMIT Regulation, or improvement of alerts for monitoring possible cases of manipulation on the wholesale energy market.

⁴³) <http://www.ure.gov.pl/pl/urząd/prawo/prawo-wspolnotowe/remit/6013,REMIT.html>

⁴⁴) REMIT.rejestracja@ure.gov.pl

⁴⁵) <https://www.acer-remit.eu/portal/home>

⁴⁶) Data provided is gathered by ACER using the ARIS system developed for this purpose (ACER REMIT Information System).

⁴⁷) Regulated Information Services (RIS, in Polish: Giełdowa Platforma Informacyjna (GPI)) has been operational since 27 February 2014 and has been created in cooperation with representatives of the entire power sector, under the patronage of the President of the ERO.

Explanatory proceedings

In 2019, the President of ERO received 7 notifications about manipulation/attempted manipulation on the wholesale energy market, submitted by PPATs pursuant to Article 15 of the REMIT Regulation.

One of these notifications concerned the activities of market participants on TGE S.A. S.A. in relation to annual contracts with electricity supply for 2019 (BASE_Y-19 instrument), already covered by the explanatory proceedings ordered by the President of ERO on 19 December 2018. The proceedings in question were concluded with the submission by the President of ERO on 29 May 2019 of a notice of suspicion of a crime.

In 2019 the President of ERO, pursuant to Article 23p item 1 of the Energy Law Act, ordered three investigations to be carried out to determine whether there is a reasonable suspicion of market manipulation or attempted market manipulation as defined in the provisions of the REMIT Regulation. Two of the above mentioned proceedings were related to the cases reported to the President of ERO by PPATs in 2018.

The above three investigations were not completed in 2019. In the light of Article 23p item 1 of the Energy Law Act, the explanatory proceedings may last no longer than 6 months.

In case of the remaining five notifications received by the President of ERO in 2019, by the end of 2019 no grounds had been found for the ordinance pursuant to Article 23p item 1 of the Energy Law Act, for the explanatory proceedings concerning market manipulation or attempted market manipulation, specified in Article 2 of the REMIT Regulation, or for the REMIT inspection referred to in Article 23c item 1 of the Energy Law Act.

In addition, in 2019, foreign entities submitted notifications via ACER Notification Platform of suspected or attempted manipulation on the wholesale energy market by two Polish market participants operating on energy markets in other EU countries. In one case, in cooperation with ACER and other regulators, the President of ERO was asked by ACER to assist as a supporting body the leading regulator from another EU country in gathering a certain amount of evidence.

Administrative proceedings to impose financial penalties

In 2019, administrative proceedings were conducted to impose financial penalties under Article 56 item 1 of the Energy Law Act with respect to sales of energy products on the wholesale energy market without the required entry into the national register of market participants (section 42). In one case the proceedings were discontinued and in 8 cases the financial penalty was waived.

3.2.2. Retail market

In 2019, as in previous years, there were five large DSOs on the electricity market, whose networks are directly connected to the transmission network (DSOt). They are legally obliged to separate the distribution activities from other activities not related to electricity distribution (unbundling). In addition, in 2019, there were 184 companies designated as DSOs (the so-called DSO_n) operating within vertically integrated companies that are not subject to the unbundling obligation.

The so-called incumbent suppliers still have the largest share in electricity sales to final customers which remained after the separation of the distribution network operators, as a party to comprehensive contracts, i.e. contracts combining the provisions of an electricity sales contract and an energy distribution contract. They act as default suppliers for household consumers who have not decided to choose a new supplier. In 2019, there were 5 default suppliers and 136 alternative trading companies actively selling electricity to final customers, including 26 suppliers operating on the household market. There are also suppliers (184) operating within companies vertically integrated with the DSO_n on the electricity market.

In 2019, there were about 17.8 million final customers, 91% of which (16.2 million) were from the G tariff group, including the overwhelming majority of household customers (over 15.1 million) who purchase energy for household consumption. The remaining group of final customers are consumers belonging to tariff groups A, B and C. Groups A and B are consumers supplied from the high and medium voltage grid and are the so-called industrial consumers from groups A and B, while group C includes consumers connected to the low-voltage grid, which consume electricity for the purposes of their

business activities, so-called business consumers. Electricity consumers are entitled to receive electricity continuously and reliably from a selected electricity supplier.

After the release of electricity trading prices for industrial and business consumers in 2008, suppliers performing tasks of default suppliers and suppliers in vertically integrated companies not obliged to unbundle their activities are not obliged to submit a tariff for electricity sales in relation to non-household consumers to the President of ERO for approval. It should be noted that suppliers, which also perform the function of default suppliers, are entitled to present market offers to all consumers, including consumers in tariff group G connected to the network of the operator where the suppliers perform the tasks of default supplier, provided that these suppliers have informed the consumer in advance of the electricity prices set out in the tariff currently in force. In 2019 more than 291,000 households used the possibility of amending the electricity sales contract (internal switching), understood as signing a new electricity sales contract or annexing it in such a way that the terms and conditions of a sales contract based on the terms and conditions set out in the approved tariff were changed into a so-called free market offer, while remaining with the same supplier⁴⁸⁾.

3.2.2.1. Monitoring the level of prices, the level of transparency, the level and effectiveness of market opening and competition

Since 2010, all electricity suppliers selling electricity to final consumers are legally obliged to publish on their websites and make publicly available in their premises information on prices of electricity sales and terms and conditions of their application. In case of big industrial/commercial consumers, offers are presented individually by trading companies. Prices and other terms and conditions of the agreement are each time negotiated with the contractor and are different, depending on delivery time, volume and firmness of off-take.

Average electricity sale prices broken down by electricity consumption are presented in the Table below.

Table 14. Number of consumers, volume, value and average prices of electricity applied to final consumers, broken down by consumption

Consumption	Number of customers [items]	Volume [MWh]	Value [PLN thousand]	Average price [PLN/MWh]
< 50 MWh	69 469 036	46 611 484	12 423 881	266,54
50 – 2 000 MWh	167 808	28 151 980	7 982 280	283,54
> 2 000 MWh	5 148	33 619 323	8 036 405	239,04
TOTAL	69 641 992	108 382 787	28 442 565	262,43

Source: On the basis of quarterly surveys of default suppliers in 2019.

In order to make their offers available in previous years, suppliers also used the Energy Pricing Online Calculator on ERO's website, thanks to which household consumers could compare and choose the most advantageous offer. On 2 January 2019, in connection with the entry into force on 1 January 2019 of the Pricing Act, the website of the Energy Offers/Tariffs Calculator was temporarily suspended until trading companies submitted information on current electricity sales offers addressed to household customers. The tool also required a technical update, so work on the concept of a new tool to meet the challenges posed by Directive 2019/944 regarding the requirements for comparison tools in the EU countries started in parallel in 2019. In 2019 the President of ERO published a list of offers of electricity suppliers for households, updated on a cyclical basis, containing prices proposed by suppliers, trade fees and the territorial area of the offer. At the end of 2019, the President of ERO published the offers of 26 electricity suppliers currently operating on the household electricity market.

Undoubtedly, a possibility to take advantage of the list of suppliers active within an operational area of the operator to whose grid the customer is connected, which is published on the website of that operator, is a great facilitation to a consumer who switches supplier.

⁴⁸⁾ Data collected on the basis of monitoring performed by the President of ERO among 6 largest electricity suppliers in Poland.

Electricity prices

On 1 January 2019, the provisions of the Pricing Act entered into force, imposing obligations on entrepreneurs selling electricity, including: adjustment of prices to the 2018 level, appropriate amendments to contracts with customers, or re-issuing invoices.

The primary objective of the Pricing Act was to ensure that electricity prices did not increase in 2019 compared to 2018 prices, using three mechanisms: a reduction in the rate of excise duty, a reduction in the rate of the transitional charge and an obligation for trading companies to 'freeze prices' of electricity to final customers. At the same time, the trading companies were given the right to request appropriate compensation in connection with the sale of electricity at the statutory price

Each company selling electricity in 2019 was obliged to adjust contracts and prices with final customers to the requirements of the Pricing Act. In relation to households, trading companies applying tariffs should apply tariff prices valid on 31 December 2018, while companies applying market offers – prices not higher than those valid on 30 June 2018.

The Pricing Act provides for sanctions for non-compliance, and the President of ERO is the competent authority to conduct proceedings and impose fines on entrepreneurs which have not fulfilled their statutory obligations. In the Communication of 14 January 2020 the President of ERO announced that a comprehensive market monitoring will be performed to ensure that electricity suppliers comply with their obligations imposed by the Pricing Act.

The data presented in the table below concern average electricity prices and distribution fees applied in the indicated periods to consumers with comprehensive contracts.

Between Q4 2018 and Q4 2019, electricity prices increased for tariff groups A and B, while for tariff group C a slight price decrease was noted. In the analyzed period, energy prices for G tariff group significantly decreased by 4.1%, of which prices for households decreased by as much as 4.7%, which was an intended consequence of the introduction of the so-called Pricing Act.

Distribution fees in 2019 showed a downward trend for all tariff groups. The highest decrease of the distribution fee was for the consumers in tariff group A – by 11%, and the lowest for the consumers in tariff group C – by 2.6%. For the consumers in tariff group G, the distribution fee decreased by 7.18%, including for the households by 7.95%.

Table 15. Electricity prices and distribution fees applicable to consumers with comprehensive contracts

Specification	Q4 2018			Q4 2019		
	Average sales price	including:		Average sales price	including:	
		Energy fee	Distribution fee		Energy fee	Distribution fee
[PLN/MWh]						
Consumers in total	475.00	264.60	210.30	477.00	277.90	199.00
including: consumers on HV (group A)	279.40	213.00	66.30	325.20	266.20	59.00
consumers on MV (group B)	351.70	237.20	114.50	395.00	284.10	110.90
consumers on LV (group C)	602.40	333.80	268.60	600.30	338.50	261.70
Consumers of group G	506.00	258.00	248.00	485.50	255.30	230.20
including: households	505.60	257.90	247.70	481.60	253.70	228.00

Source: ERO's data on the basis of data of the Ministry of State Assets and ERO.

Supplier switching

The actual freedom of choice of supplier, measured by the number of active consumers and the number of supplier switching over a given period of time, is the result of numerous overlapping circumstances, ranging from the degree of final consumer awareness, through their motivation to switch suppliers, to the ease of switching and the availability of competing offers on the market. In Poland,

since all consumers obtained the right to change supplier, i.e. since 1 July 2007, relatively few consumers have used this possibility so far. When assessing the switching rates in 2019, it should be noted that, globally, there are still relatively few consumers who have used the right to switch, i.e. about 4.86%. Although there has been a slight increase in this indicator in relation to 2018 (in 2018 this level was 4.58%), its dynamics is decreasing in comparison to previous years.

Dynamic prices

The concept of a contract with dynamic prices, and in particular the right of consumers to use such prices, has been regulated by the Directive 2019/944. According to data provided during the monitoring carried out by the President of ERO among the six largest electricity suppliers in Poland, none of the suppliers offers a contract based on dynamic tariffs.

Interventions

In 2019, the President of ERO was asked to intervene in cases concerning unfair practices of trading companies. As in previous years, it was common practice for suppliers not to inform consumers about all elements of the offer, e.g. about additional fees (trade fee) or to mislead them, which resulted in consumers concluding contracts unfavourable to them. The President of ERO, not being a competent authority in such cases, nevertheless informs consumers about their rights. Actions taken by suppliers often bear the hallmarks of practices that infringe the collective interests of consumers by violating the obligation to provide consumers with reliable, truthful and complete information and by using unfair market practices or acts of unfair competition. In 2019, as in previous years, the President of ERO, in accordance with its jurisdiction, forwarded to the President of UOKiK letters from customers which may indicate illegal activities of suppliers' representatives. In addition, the President of ERO received complaints about non-compliance by energy companies conducting business activity in the field of trade in electricity with the provisions of the Pricing Act, which notified about unjustified price increases by electricity suppliers, retroactive invoicing and demands for payment under the threat of suspension of supplies.

In connection with the problems reported by market participants to the ERO concerning the launch and servicing of last resort supply to final customers, in 2019 the President of ERO extended the cyclical monitoring of the retail market, taking into account the new provisions of Article 5aa and 5ab introduced into the Energy Law Act. The first survey within regulator's monitoring of the retail market functioning with respect to the launch and servicing of last resort supply in 2018 was addressed to the five largest DSOs. The scope of the survey included information on (i) suppliers which offered last resort supply to final customers connected to the network of DSOs (ii) consumers for which the operator launched last resort supply and/or a designated supplier provided last resort supply and (iii) suppliers of last resort designated by final customers in electricity distribution services contracts or comprehensive contracts. The results of this study will be used in the current work of the ERO, e.g. to develop appropriate solutions and to indicate to the operators the necessary actions to be taken. A summary of the survey was also submitted to the President of UOKiK for possible use.

Smart metering

DSOs in Poland are developing a smart metering system among final customers. The share of smart meters understood as metering systems enabling automatic collection, storage and transfer of detailed data on electricity consumption in relation to the number of metering systems installed among final customers in particular tariff groups at the end of 2019 amounted respectively to: for tariff group A – 41.38%, for tariff group B – 50.50%, for tariff group C – 41.38%, for tariff group G – 8.53%.

Withholding energy supplies

Pursuant to the provisions of the Energy Law Act, the supply of electricity may be withheld only in circumstances specified by law. This may take place only if: 1) as a result of the inspection it has been

found that illegal consumption of electricity has taken place; 2) the customer is in delay with payment for the services provided, at least for the period of 30 days after the payment deadline expires⁴⁹⁾.

According to the monitoring carried out by the President of ERO among the five largest DSOs in Poland, supplies were withheld to the following number of customers in 2019, broken down into tariff groups: in tariff group A – 0, in tariff group B – 543 (including 86.56% due to arrears in payment), in tariff group C – 45,415 (including 99.75% due to arrears in payment), in tariff group G – 218,279 (including 99.72% due to arrears in payment). It should be added that the process of withholding electricity supply to households with arrears in payment for the electricity consumed and services provided, counted in business days from the moment when the supplier provided the consumer with information on arrears until the moment of withholding the supply by the DSO, was on average about 31 days in 2019.

Prepayment meters

The electricity company may, in accordance with the applicable law, install a prepayment meter at a final customer having difficulties with timely payment of bills. In 2019 the following number of prepayment meters per tariff group was installed: in tariff group C – 1,139, in tariff group G – 104,162.

Ensuring access to data on energy consumption by customers

Pursuant to the provisions of the Energy Law Act, electricity suppliers are obliged to inform their customers about the amount of electricity consumed by these customers in the previous year and about the place where information about the average consumption of electricity for a given group of connected customers is available, as well as about energy efficiency improvement measures and energy-efficient technical equipment.

In addition, a company providing an energy distribution service or an energy supplier which provides a comprehensive service, when issuing an invoice to the customer, should provide information on, inter alia, the following, in a billing attached to the invoice:

- the amount of electricity consumption in the settlement period on the basis of which the amount due was calculated,
- the manner in which the metering and settlement system was read, whether it was a physical or remote reading performed by an authorized representative of the company or a reading performed and reported by a consumer,
- the manner of determining the amount of electricity consumption in a situation when the settlement period is longer than one month and when the first or last day of the settlement period does not coincide with the dates of readings of the metering and billing system, or when during the settlement period there has been a change in prices or fee rates, or about the place where this information is available,
- the time allowed for interruptions in the supply of electricity.

3.2.2.2. Consumer protection and disputes settlement

Disputes settlement

Pursuant to Article 8 of the Energy Law Act, the President of ERO resolves disputes concerning refusal to conclude a grid connection agreement, including those related to increasing connection capacity, sale agreement, agreement to provide transmission or distribution services for fuels or energy, agreement to provide natural gas transport services, agreement to provide storage services for gas

⁴⁹⁾ An energy company performing the business of transmission or distribution of electricity shall, at the supplier's request, withhold the supply of energy if the consumer is in default of payment for services rendered or for the gaseous fuel or energy taken, for at least 30 days after the due date.

An energy company to which a consumer is in default of payment for services provided or for energy consumed shall give written notice to the consumer or the household of its intention to interrupt the supply of electricity if that consumer does not pay its outstanding and current charges within 14 days of receipt of that notice.

fuels, agreement referred to in Article 4c item 3, agreement to provide services for liquefaction of natural gas and a comprehensive agreement, as well as in the event of an unjustified suspension of gaseous fuels or energy supply, refusal to connect a renewable energy installation in the first place, refusal to connect a microinstallation, failure to connect a microinstallation despite the expiry of the deadline referred to in Article 7 item 8d⁷ section 2, unjustified limitation of operation or disconnection of a microinstallation from the network. This is one of the exceptions giving the President of ERO a prerogative to interfere with civil law relations of entities.

Since May 2017 the Coordinator for Negotiations has been operating with the President of ERO. The Coordinator's tasks include conducting proceedings on out of court resolution of disputes between consumers of gaseous fuels, electricity or heat in households and energy undertakings, or between prosumers that are consumers and energy undertakings, arisen under agreements:

- 1) on connection to the electricity, gas or heat grid, including connection of a microinstallation,
- 2) on provision of services of transmission or distribution of electricity or natural gas,
- 3) on provision of services of transmission and distribution of heat,
- 4) on sales,
- 5) comprehensive agreements.

There are also Municipal and District Consumer Ombudsmen in Poland, to whom customers can complain in individual cases, including the energy-related cases. The competences of Customer Ombudsmen comprise, among others, providing free of charge customer advice and legal advice on the protection of consumer interests, bringing proceedings for the consumers and joining the ongoing proceedings on the protection of consumer interests upon the consumer consent.

Processing complaints

Complaints against energy companies reported to ERO by households are processed by individual organizational units of ERO. The range of issues raised by consumers in 2019 was very wide and the complaints were often multithreaded. In 2019 the President of ERO undertook actions aimed at clarifying the issues covered by the submitted complaints, which concerned such areas as:

- connection to the grid – complaints in this category mainly concerned the deadline for the performance of the grid connection agreement,
- metering – customers reported problems with the operation of measuring systems, which directly affected the size of settlements,
- quality of supply – customers complained about the failure to meet energy quality parameters,
- unfair commercial practices – consumers reported on the activities of electricity suppliers which, in the so-called door-to-door formula (sale outside the company's premises) – acting also through specialized agencies and sales representatives (sellers) – in order to conclude agreements with consumers, did the following, among others:
 - did not provide the customers with the name of the supplier, or were misleading as to the name of the supplier (they were claiming to be employees of other entities);
 - misled customers by informing them of the obligation to sign new contracts, annexes to contracts or other documents related to the supply of electricity and gave false reasons for this obligation (e.g. planned cessation of the supply of gas or electricity by an existing supplier, or change of data of an existing supplier);
 - did not inform consumers about the change of supplier and the rights and obligations resulting from this procedure.

- It is worth mentioning that the scale of the notifications was also determined by the specific nature of 2019 and the functioning of the Pricing Act, which resulted in a freeze of the acquisition activity of suppliers on the energy market and a reduction in the number of offers addressed to customers,
- contracts and sales – Complaints reported by customers in this category mainly concerned the performance of contracts, including last resort supply, problems with contract termination and penalty charges, qualification for the relevant tariff group and change of tariff group,
 - activation,
 - disconnection due to non- or late payment – in this category, customers complained about the companies' failure to comply with the procedure of suspension of supply, in particular the failure to inform the household consumer of their intention to suspend supply,

- invoice/billing issued and debt collection – the largest number of households' complaints submitted to the President of ERO in 2019 concerned this area. Consumers signalled problems related to the correctness of settlements as well as timely receipt of invoices and reimbursement of overpayments – in reference to the situation that took place in 2018, when two suppliers stopped selling electricity to final customers,
- price/tariff – complaints lodged by consumers in this category were related to the implementation in 2019 of Pricing Act, ensuring that prices for the sale of electricity to final customers in 2019 are maintained at the level of those in force in 2018. In connection with the new regulations, consumers reported numerous problems. The most frequently reported ones are the following:
 - lack of reliable information, understandable to households, on the mechanism regulating energy prices in 2019, including deadlines for settlement adjustments;
 - discrepancies in the adjustment of contracts, e.g. in terms of price (unjustified price increases by electricity suppliers, which are not in line with the Pricing Act, retroactive billing and demands for payment under the threat of supply being suspended),
- redress,
- supplier switching – consumers complained about problems with the entry into force of the new contract after the change of supplier,
- customer service – in this category, complaints most often concerned the timeliness of response to complaints, problems with establishing telephone contact with the company (complaints made by phone).

Protection of justified customers' interests

In order to minimize the practices reported by consumers in complaints about the actions of sales representatives in the context of supplier switching, mainly related to misleading when concluding an energy sales agreement with a new supplier, especially unfair commercial behaviour, and bearing in mind the provisions of Article 23 item 2 section 14 of the Energy Law Act, the President of ERO started cooperation with the President of UOKiK by submitting letters from customers concerning, among others, the above mentioned topics.

It is worth noting that in 2019 the scale of consumer notifications of unfair practices was lower than in 2018 as it was determined by the specific nature of 2019 and the functioning of the Pricing Act, which resulted in a freeze of the electricity market and of activity of suppliers, and a reduction in the number of offers addressed to consumers.

At the same time, the President of ERO cooperated with the Office of Competition and Consumer Ombudsmen, each time providing detailed explanations in connection with letters sent to ERO by these institutions.

The tasks of the President of ERO include, among others, carrying out information activities to protect justified interests of household electricity consumers, in particular, publishing on the ERO website information on recurring or significant problems leading to disputes between energy enterprises and consumers of electricity in the household, as well as on energy companies about which complaints regarding these problems have been submitted by those consumers. As part of information actions, information is provided to energy consumers via comprehensive information point comprising an info-line regarding supplier switching with respect to promote the right to choose supplier. In order to fulfil this task, the Information Point for Fuel and Energy Customers operates within the structure of ERO, where consumers can obtain advice regarding their rights and information on dispute settlement and complaints processing (by phone, in writing, as well as electronically).

Pursuant to the obligation imposed by the Energy Law Act, suppliers of gas or electricity shall provide households with copies of the Set of Energy Consumer Rights developed by the President of ERO in cooperation with the President of UOKiK, and ensure public access to this document.

Vulnerable consumer protection

Amendment to the Energy Law Act which came into force in September 2013 introduced the definition of vulnerable consumer of electricity and vulnerable consumer of gaseous fuels, and established a system of financial support for these consumers. The financial support system provides

for payment of energy allowances by municipalities to vulnerable consumers who were granted housing allowance (electricity consumers) or a lump sum for the purchase of fuel (gaseous fuels consumers) and who are, respectively, a party to a comprehensive agreement or agreement on supply of electricity or gaseous fuels, and reside in the place of supplying this energy or fuels. According to the estimates of the Central Statistical Office, energy allowance was paid out to 75,636 households in 2019.

3.2.3. Antimonopoly proceedings in cases of competition restricting practices and other activities undertaken by the President of the Office for Competition and Consumer Protection (UOKiK) in relation to companies in the energy sector⁵⁰⁾

Concentrations of energy companies and the impact of these changes on the development of competition on the market

In 2019, the President of UOKiK conducted seven anti-monopoly proceedings concerning concentration with the participation of entrepreneurs from the energy sector (producers /suppliers of electricity). In all cases a consent was issued pursuant to Article 18 of the Act of 16 February 2007 on Competition and Consumer Protection (consolidated text: JoL of 2020, item 1076). It was considered that as a result, there would be no significant restriction of competition, in particular through arising or strengthening of a dominant position on the market. These were the proceedings concluded with the issuance of the following decisions:

- 1) By Decision No DKK-36/2019 of 7 February 2019 the President of UOKiK issued a consent to the concentration consisting in the establishment by innogy SE with its registered office in Essen, Germany and DKV Euro Service GmbH + Co. KG with its registered office in Ratingen, Germany, of a joint venture,
- 2) By Decision No DKK-60/2019 of 4 March 2019 the President of UOKiK issued a consent to the concentration consisting in the establishment by Wind Power AS with its registered office in Stavanger, Norway and Polenergia S.A. with its registered office in Warsaw of a joint venture under the business name of MFW Bałtyk I Sp. z o.o. with its registered office in Warsaw,
- 3) By Decision No DKK-61/2019 of 6 March 2019 the President of UOKiK issued a consent to the concentration consisting in the establishment by Solaque Holding Ltd., Cyprus and Wind Power Invest A/S, Denmark of a joint venture,
- 4) By Decision No DKK-94/2019 of 25 April 2019 the President of UOKiK issued a consent to the concentration consisting in the establishment by Tauron Polska Energia S.A. with its registered office in Warsaw of control over PGE Gaz Toruń sp. z o.o. with its registered office in Toruń,
- 5) By Decision No DKK-116/2019 of 31 May 2019 the President of UOKiK issued a consent to the concentration consisting in the establishment by Eurowatt S.A. with its registered office in Luxembourg, Predica Prévoyance Dialogue du Crédit Agricole with its registered office in Paris (France) and Omnes Capital SAS with its registered office in Paris (France) of a joint venture,
- 6) By Decision No DKK-134/2019 of 14 June 2019 the President of UOKiK issued a consent to the concentration involving the acquisition by innogy Polska S.A. with its registered office in Warsaw of control over Foton Technik sp. z o.o. with its registered office in Warsaw,
- 7) By Decision No DKK-159/2019 of 24 July 2019 the President of UOKiK issued a consent to the concentration involving the acquisition by Tauron Polska Energia S.A. with its registered office in Katowice of control over IN.VENTUS sp. z o.o. EW Gołdap sp.k with its registered office in Poznań, IN.VENTUS sp. z o.o. INO 1 sp.k. with its registered office in Poznań, IN.VENTUS sp. z o.o. EW Sniatowo sp.k. with its registered office in Poznań, IN.VENTUS sp. z o.o. EW Dobrzyń sp.k. with its registered office in Poznań, IN.VENTUS sp. z o.o. Mogilno I sp.k. with its registered office in Wrocław, IN.VENTUS sp. z o.o. Mogilno II sp.k. with its registered office in Wrocław, IN.VENTUS sp. z o.o. Mogilno III sp.k. with its registered office in Wrocław, IN.VENTUS sp. z o.o. Mogilno IV sp.k. with its registered office in Wrocław, IN.VENTUS sp. z o.o. Mogilno V sp.k. with its registered office in Wrocław, IN.VENTUS sp. z o.o. Mogilno VI sp.k. with its registered office in Wrocław,

⁵⁰⁾ On the basis of information provided by UOKiK.

- 8) By Decision No DKK-197/2019 of 7 October 2019 the President of UOKiK issued a consent to the concentration involving the acquisition by Fundusz Inwestycji Infrastrukturalnych – Kapitałowy Fundusz Inwestycyjny Zamknięty Aktywów Niepublicznych with its registered office in Warsaw of control over Polska Grupa Biogazowa S.A. with its registered office in Warsaw,
- 9) By Decision No DKK-235/2019 of 18 November 2019 the President of UOKiK issued a consent to the concentration consisting in the establishment by Tauron Polska Energia S.A. with its registered office in Katowice and Grupa Azoty S.A. with its registered office in Tarnów of a joint venture with its registered office in Warsaw.

Administrative proceedings conducted by the President of UOKiK regarding competition restricting practices

In 2019, the President of UOKiK did not conduct any antimonopoly proceedings concerning abuse of dominant position on the electricity market. The following explanatory proceedings were conducted:

1. On 14 August 2019 explanatory proceedings were initiated in order to determine whether the actions applied by ENERGA – OPERATOR S.A. with its registered office in Gdańsk when applying the procedures related to collision elimination within the meaning of Article 32 of the Act of 21 March 1985 on public roads as part of road investments carried out by other entities fulfil the prerequisites for abuse of a dominant position, including whether the case is of an antitrust nature.
2. On 29 November 2019, explanatory proceedings were initiated with respect to the preliminary determination whether the dominant position on the market of last resort supply of electricity in the electricity distribution areas of individual operators could be abused by suppliers of last resort (including by Energa Obrót S.A. with its registered office in Gdańsk), including whether the case is of an antitrust nature.

Other conducts of energy companies that may violate competition rules, observed by the UOKiK

In 2019 the President of UOKiK continued monitoring the last resort supply in connection with complaints received.

Measures implemented to promote market transparency, i.e. measures aimed at providing customers with relevant market information

It should be pointed out that the deregulation of the electricity market, which has given consumers a free choice of electricity supplier, has contributed to the start of a competitive struggle by electricity trading companies for customers. This has led to a situation where energy companies have started to use completely new distribution channels of their offer to consumers. Under the prevailing conditions of competition, the majority of electricity suppliers introduced, among other things, an off-premises sales model, i.e. in consumers' homes (door-to-door), in order to reach as many consumers as possible. The analysis of signals coming from the market showed that competition on the electricity sales market has led to an intensification of unfair behaviour towards consumers.

On the basis of the collected information on unfair market practices applied by electricity suppliers – complaints received by UOKiK about irregularities in conclusion of contracts on electricity sales with consumers (e.g. concerning misleading consumers as to the identity of an entrepreneur by impersonating an existing electricity supplier or failing to provide the consumer with a copy of the electricity sales contract concluded by him/her), the President of UOKiK took numerous actions in 2019 within the scope of its powers, i.e. it initiated explanatory proceedings, proceedings in the case of practices infringing the collective interests of consumers, in the case of recognition of the provisions of the model contract as prohibited, addressed positions to entrepreneurs pursuant to Article 49a of the Act on Competition and Consumer Protection, and issued decisions referred to in Articles 23b, 26, 27 and 28 of the aforementioned Act.

In addition, the UOKiK Press Office prepared press releases in which UOKiK warned consumers against unfair practices of electricity suppliers and informed them about their rights in connection with the violation of their legally protected interests, including, among other things:

- Communication of 3 January 2019 “Energetyczne Centrum has declared bankruptcy” – informing about bankruptcy and cessation of electricity and gas sales by the company Energetyczne Centrum. From the communication, consumers learnt how they can get their money back for the period when the company was no longer selling,
- Communication of 15 February 2019 “Penalty for Energy Match – Decision of UOKiK” – informing about the decision of the President of UOKiK imposing a fine of PLN 103 thousand on company Energy Match. The entrepreneur illegally charged consumers higher fees than in the price list,
- Communication of 11 March 2019 “Consumer Week – videos with advice from the Aquila Association” – informing about the activities of the Aquila Association, which, on behalf of UOKiK, provides assistance to persons cheated by companies selling electricity, gas or telecommunications services,
- Communication of 12 March 2019 “Competition protection – the latest activities of UOKiK” – informing about the antimonopoly proceedings concerning the division of the heat market in Warsaw and the price and tender fixing between Veolia Energia Polska, Veolia Energia Warszawa, PGNiG Termika and PGNiG,
- Communication of 4 October 2019 “Senior Citizens' Day in the Social Insurance Office (ZUS)” – a collection of information for the elderly on health, safety, rights and legal advice in difficult life situations,
- Communication of 13 May 2019 “Polski Prąd i Gaz – clauses in contracts” – providing information on the initiation of the proceedings for declaring 47 clauses applied by the company Polski Prąd i Gaz to be unlawful.

Most important actions taken by the President of the Office for Competition and Consumer Protection in the area of competition protection on the retail and wholesale markets

Apart from the actions mentioned above, in 2019 the President of UOKiK did not take any actions to protect competition on the retail and wholesale markets.

Measures taken to deconcentrate the market

In 2019 the President of UOKiK did not undertake any actions aimed at market deconcentration.

4. THE NATURAL GAS MARKET

4.1. Network regulation

4.1.1. Network and LNG tariffs for connection and access

Gas enterprises with licences for the transmission, distribution, storage of gaseous fuels, natural gas liquefaction or regasification of liquefied natural gas conduct the above-mentioned activities based on tariffs set by themselves and approved by the President of ERO. These tariffs are established under the provisions of the Energy Law Act and the Ordinance on detailed rules for the formation and calculation of tariffs and settlements in the trade in gaseous fuels, and in the case of transmission tariffs – also under the provisions of the TAR NC.

On 8 October 2019 the Minister of Energy signed the Ordinance of 22 September 2019 amending the Gas Tariff Ordinance. The new regulations introduced changes in the definitions of contracted capacity and settlement period. Article 2a was added, which specifies the rounding applied to the fees. A change was introduced regarding qualification of customers which draw gaseous fuel in quantities smaller than 110 [kWh/h], by introducing a provision that their qualification is made on the basis of the volume of gas consumed, expressed in volume units [cubic meters]. The purpose of the change in the eligibility criteria for the tariff groups was to lead to a situation in which customers qualified for

the level of gas consumption, by controlling the gas meter readings, will have an impact on the level of gas charges. Another change is the introduction of the possibility of setting rates for entry and exit from the transmission system expressed in [grosz] and in PLN, related to [kWh/h] and [kWh/day] and [MWh/h] and [MWh/day] respectively. In Article 21 items 2 and 5 the provision concerning the conversion factor was changed.

The amendment to the Ordinance clarified the timing of the inclusion of a regulatory account due to the need to align with the TAR NC.

As a result of the changes introduced, suppliers and operators had to make a number of changes in the area of trading policy and settlement rules, and adapt the contractual rules to the new requirements.

A prerequisite for the approval of the tariff is its compliance with the provisions of the Energy Law Act and the executive acts to this Act, including in particular the Ordinance on detailed rules for the formation and calculation of tariffs and settlements in the trade in gaseous fuels.

In the tariff approval proceedings, the President of ERO thoroughly analyzes the costs which form the basis for calculating the rates of fees, ensuring that there is no cross-subsidies between the licensed and non-licensed activities and between the various types of licensed activities. The basis for the assessment of costs accepted for the calculation of tariffs are the data included in the financial statements.

Tariffs approved by the President of ERO are published in the ERO Bulletin within 14 days of the date of approval. Gas companies introduce tariffs for application not earlier than after 14 days and no later than 45 days of the date of their publication, while energy companies involved in the transmission of gaseous fuels introduce the tariff for application on the date specified by the President of ERO in the decision approving the tariff, not earlier than 14 days after its publication.

The decision of the President of ERO approving or refusing to approve the company's tariff may be appealed from to the District Court in Warsaw – the Competition and Consumer Protection Court, via the President of ERO, within two weeks of the date of its delivery.

Enterprises dealing with the transmission or distribution of gaseous fuels are required to conclude an agreement for connection to their network with entities applying for connection on a non-discrimination basis, if there are technical and economic conditions for connection and delivery of these fuels, and the contracting party meets the conditions of network connection and off-take, specified by these companies. For the connection to the high-pressure network, entities that do not perform activities in the field of transmission or distribution of gaseous fuels, their production or extraction, storage of gaseous fuels and liquefaction or regasification liquefied natural gas, pay a fee of 1/4 of actual expenditures incurred for the connection. For connection of entities performing activities indicated in the preceding sentence, a fee is charged in the amount corresponding to the actual expenses incurred for the implementation of the connection. On the other hand, entities whose devices, installations and networks are connected to low, medium and higher pressure networks, pay a fee determined on the basis of rates calculated by the distribution network operators and contained in their tariffs approved by the President of ERO. These rates are calculated on the basis of 1/4 of the average annual investment expenditure on the construction of sections of the network used to connect these entities, as defined in the development plan, developed by the DSO.

The key infrastructure companies in the gas sector include OGP Gaz-System S.A. (TSO), PSG Sp. z o.o. (DSO) and EuRoPol Gaz S.A. (transmission system owner), Gas Storage Poland Sp. z o.o. (SSO) and Polskie LNG S.A. (a company providing services in the area of regasification of liquefied natural gas).

Tariff of OGP Gaz-System S.A.

As of 1 January 2019, in the settlements for gaseous fuels transmission services provided by OGP Gaz-System S.A., tariff no. 12 approved by the decision of the President of ERO of 1 June 2018 was applied for the period until 31 December 2019.

For the first time the tariff had been approved so much in advance, which arose from the provisions of Article 29 of the TAR NC, pursuant to which the information specified in the above mentioned provisions (transmission fee rates, among others) arising from the tariff of OGP Gaz-System S.A. which will be valid in 2019 shall be published before the annual auction of annual capacity in 2018. While pursuant to Article 32(a) of the TAR NC, the information specified in Article 29 should be published no later than 30 days before the annual auction of annual capacity, which – pursuant to the provisions of Article 11(4) of the CAM NC – begins on the first Monday of July each year.

On 25 March 2019 OGP Gaz-System S.A. was requested to submit an application for approval of Tariff no. 13 for gaseous fuels transmission services (for 2020). The relevant application was submitted on 8 April 2019. By decision of 31 May 2019, the President of ERO approved the Tariff for gaseous fuels transmission services No. 13 for the period from 1 January 2020 to 31 December 2020⁵¹⁾.

The tariff set by OGP Gaz-System S.A. ensured coverage of the planned costs with a reasonable return on capital employed. The tariff was calculated in accordance with the requirements of the Ordinance of the Minister of Energy of 15 March 2018 on detailed rules for the formulation and calculation of tariffs and settlements in the gaseous fuels trade⁵²⁾. The transmission fee rates were set at the entries and exits to/from the transmission system (for high-methane and high-nitrogen natural gas), including high-methane natural gas also at the entries and exits to/from underground gas storage facilities.

In addition, the tariff calculation took into account the provisions of the decision of the President of ERO of 29 March 2019, approving the Method of determining reference prices No. 1/OGP regarding own transmission network of OGP Gaz-System S.A. for the period: from 1 January 2020 to 31 December 2022, constituting an annex to this decision (ERO Industry Bulletin – Gaseous fuels No. 32 (1226) of 29 March 2019)⁵³⁾ and Communication No. 24/2019 on the level of multipliers, seasonal coefficients and discounts referred to in Article 28 item 1 sections (a) to (c) of the TAR NC, taken into account in the calculation of tariffs for gaseous fuels transmission services for the period from 1 January 2020 to 31 December 2020⁵⁴⁾, issued under the provisions of the TAR NC.

In the tariff for 2020, the share of revenues from fixed charges, both for high-methane and high-nitrogen gas, amounted to 100%. The division of revenue into entry and exit points in the proportion of 45/55 was maintained. The rates at entry and exit points to/from storages were set in accordance with the existing principles – i.e. these rates amount to 20% of the transmission rates at entry and exit points to/from the high-methane natural gas transmission network other than storages. At the entry point to the transmission system from the LNG terminal, a 100% discount was applied, resulting in no fees for feeding gas into the transmission system at that point.

Introduction to the application of tariff No. 13 for the largest players on the Polish gas market (PGNiG S.A., PSG Sp. z o.o., PGNiG OD Sp. z o.o. and Gas Storage Poland Sp. z o.o.) resulted in a decrease in the total cost of purchase of transmission services at the level of ca. 1%, while for other customers of transmission services, the maximum decrease in the total cost of purchase of transmission services (for entry to and exit from the transmission system in total) was 5.9%.

Furthermore, it should be noted that pursuant to Article 10 item 5) of the Tariff Ordinance, the balance of the regulatory account referred to in Article 3(24) and Articles 19 and 20 of the TAR NC shall be taken into account when determining revenues to cover costs justified by the business activity of transmitting gaseous fuels. However, Article 50a of that Ordinance provides that the balance of the regulatory account referred to in Article 10 item 5) shall be taken into account for the first time when determining the revenue covering justified costs for 2021.

Tariff of PSG Sp. z o.o.

In 2019 the President of ERO published twice the tariff decisions regarding conducted administrative proceedings of PSG Sp. z o.o. with its registered office in Tarnów – the largest operator providing gas distribution services in Poland.

On 25 January 2019 the President of ERO approved and published in the ERO Bulletin, the decision approving tariff No 7, with its validity until 31 December 2019. The approved tariff No. 7 resulted in a decrease in the value of the average distribution service fee by ca. 5% for high-methane and high-nitrogen natural gas customers and an increase in the value of the average distribution service fee by 40% for coke-oven gas customers. The tariff in question was introduced for application on 15 February 2019.

Then on 7 June 2019, at the request of the company, the President of ERO discontinued the proceedings concerning the amendment No. 1 to tariff No. 7 for distribution services, related to

⁵¹⁾ <https://bip.ure.gov.pl/bip/taryfy-i-inne-decyzje-b/paliwa-gazowe/3779,Taryfy-opublikowane-w-2019-r.html>

⁵²⁾ JoL of 2018 item 640.

⁵³⁾ <https://www.ure.gov.pl/pl/biznes/taryfy-zalozenia/wyznaczenie-cen-referen/8186,Kodeks-sieci-dotyczacy-zharmonizowanych-struktur-taryf-przesylowych-dla-gazu.html>

⁵⁴⁾ <https://www.ure.gov.pl/pl/biznes/taryfy-zalozenia/konsultacje-art-28-nc-t/7848,Konsultacje-w-zakresie-rabatow-mnozni-kow-i-wspolczynnikow-sezonowych-do-taryf-na.html>

the change of the connection fee rate for entities applying for connection, included in connection group B, subgroup I.

Tariff of Gas Storage Poland Sp. z o.o.

Tariff 1/2019 with respect to gaseous fuel storage services for Gas Storage Poland Sp. z o.o. was approved on 29 March 2019 for a period of 12 months from the date of its application. In this tariff, the Company reduced its working capacity in the package five times (from 1 000 [MWh] to 200 [MWh]). At the same time, after the expansion of the Kosakowo storage facility, the volume of available working storage capacity increased to a total of 3 075 [million cubic meters]. For the storage year starting on 15 April 2019 GSP offered a total of 166,752 packages, 3.6% more than in the previous year (under comparable conditions). Average fees for storage services were reduced by about 6.3%.

The scope of storage services provided for in the Tariff 1/2019 did not change compared to the Tariff 1/2018 Gas Storage Poland Sp. z o.o. in 2019.

Tariff of POLSKIE LNG S.A.

As of 1 January 2019, in settlements of services provided by Polskie LNG S.A. – the operator of the Lech Kaczyński LNG Terminal in Świnoujście – LNG regasification services and additional services, tariff no. 4 was applied, approved by the decision of the President of ERO of 17 December 2018 for a period of 12 months from the date of entry into force⁵⁵).

On 2 September 2019 Polskie LNG S.A. was requested to submit an application for approval of the tariff no. 5 for LNG regasification services. The relevant application was submitted on 4 October 2019. By decision of 16 December 2019 the President of ERO approved Tariff No. 5 for LNG regasification services for a period of 12 months from the date of the tariff entry into force⁵⁶), which, according to the information provided by Polskie LNG S.A., took place on 1 January 2020.

The approval of the tariff resulted in an increase in the average rate for regasification services by 1.9% compared to the average rate calculated based on the valid tariff (for the value of contractual capacity and the quantity of gas after regasification accepted for calculation of the approved tariff), while the rate for reloading LNG onto tank trucks increased by 0.4%. This resulted from the planned increase in regulated revenue compared to revenue for tariff No. 4 (by 2.7%), which consisted mainly of an increase in the cost of purchase of CO2 emission allowances and the cost of third-party advisory, consulting and legal services. The tariff calculation also took into account the planned increase in the quantity of gas after regasification (by 12.7%) compared to the quantity adopted for tariff No. 4.

In tariff no. 5, similarly to the previous one, (fixed and variable) fee rates were established for units of regasification services for liquefied natural gas, including: unloading LNG from a tanker, process storage in reservoirs, regasification and transfer of gaseous fuel to the transmission system, and fee rates for additional services in the field of trans-shipment of LNG to road tankers. LNG regasification services may be provided on a long-term basis – in a period longer than one year, and on a short-term basis – for a period of at least one gas day. In addition, the tariff contains fees for unbundled services, i.e. unbundled prolonged process LNG storage and unbundled regasification contracted capacity, which may be provided in addition to the unit services.

Tariff of SGT EuRoPol GAZ S.A.

On 31 May 2019, the Tariff for high-methane natural gas transmission services set by the SGT EuRoPol GAZ S.A. for 2020 was approved. The obligation to approve the tariff well in advance resulted from the provisions of Articles 29 and 32(a) of the TAR NC and Article 11(4) of the CAM NC. According to these provisions, 30 days before the annual capacity auction (which takes place on the first Tuesday of July), the transmission tariffs that will apply during the period when the product to which the auction relates is made available must be known.

⁵⁵) <https://bip.ure.gov.pl/bip/-i-inne-decyzje-b/paliwa-gazowe/3638,Taryfy-opublikowane-w-2018-r.html>

⁵⁶) <https://bip.ure.gov.pl/bip/taryfy-i-inne-decyzje-b/paliwa-gazowe/3779,Taryfy-opublikowane-w-2019-r.html>

The calculation of the tariff incorporated the provisions of the decision of the President of ERO of 29 March 2019, approving the Method of determining reference prices No. 1/SGT for the transmission network owned by Europol Operator Gazociągów Przesyłowych Gaz-System S.A. for the period from 1 January 2020 until 31 December 2022 and Communication No. 24/2019 on the level of multipliers, seasonal coefficients and discounts referred to in Article 28 item 1 sections (a) – (c) of the TAR NC, taken into account in the calculation of tariffs for the transmission services of gaseous fuels for the period from 1 January 2020 to 31 December 2020.

As in the case of the tariffs of SGT EuRoPol GAZ S.A. for 2018 and 2019, the tariff approved on 31 May 2019 was not implemented as a result of an appeal filed against the decision approving the tariff, of which the President of ERO notified on 12 June 2019, by publishing a relevant announcement in the ERO Industry Bulletin – Gaseous Fuels No. 52 (1246). For settlements for gas transmission services provided on the Polish section of the Yamal-Europe gas pipeline, owned by the SGT EuRoPol GAZ S.A., the last legally binding tariff of this Company, i.e. the tariff for 2017, continues to apply.

Monitoring access to storage, linepack and other ancillary services

The President of ERO is conducting activities monitoring the rules of access to gaseous fuels storage, linepack and other auxiliary services, within the framework of the powers granted to it in the Polish Energy Policy and in the Energy Law Act.

In 2019 the President of ERO monitored the functioning of the gas system on an ongoing basis with respect to the conditions for the provision of, inter alia, gaseous fuels storage services.

The President of ERO actively participates in the consultation processes of amendments to the Storage Services Rules. Based on its own market analysis, including information obtained from gas market participants, the President of ERO presented to the SSO suggestions for provisions in Storage Services Rules to ensure equal and non-discriminatory rules for the provision of storage services, as required by law.

In 2019 Gas Storage Poland Sp. z o.o. amended the current Storage Services Rules for the provision of storage services twice. The Rules of 21 March 2019 entered into force on 14 April 2019. Subsequently, the company consulted on amendments to the Rules in the period from 2 to 16 September 2019, after which Storage Services Rules in its version of 17 October 2019 came into force on 1 November 2019.

Gas Storage Poland Sp. z o.o. was designated SSO by the President of ERO. The company provides storage capacities in the following installations and installation groups:

- Group of Storage Facilities Kawerna (GSF Kawerna), including CUGS Mogilno and CUGS Kosakowo,
- Group of Storage Facilities Sanok (GSF Sanok), including UGS Husów, UGS Strachocina, UGS Swarzów and UGS Brzeźnica,
- Storage Facility – UGS Wierzchowice.

Table 16. Working storage capacities in 2019 (as at 1 January 2020, 6.00 am)

Group of storage facilities /storage facility		Working capacity			
		[mln cubic meters]		[GWh*]	
GSF Kawerna	CUGS Mogilno	824.8	585.4	9,190.7	6,521.4
	CUGS Kosakowo		239.4		2,669.3
GSF Sanok	UGS Husów	1 050.0	500.0	11,808.0	5,625.0
	UGS Strachocina		360.0		4,050.0
	UGS Swarzów		90.0		1,008.0
	UGS Brzeźnica		100.0		1,125.0
UGS Wierzchowice		1,200.0		13,200.0	
TOTAL		3,074.8		34,198.7	

* The working capacity of the storage facility expressed in energy units was determined on the basis of the maximum values of heat combustion in MFPWE_{SSO}/MFPWY_{SSO}, published by OGP Gaz-System S.A.

Source: Analysis of Gas Storage Poland Sp. z o.o.

In 2019, the working capacity of GSF Kawerna was increased compared to 2018. The change results from increasing the working capacity of CUGS Kosakowo from 145.5 million cubic meters to 239.4 million cubic meters during 2019 and decreasing the working capacity of KPMG Mogilno from 589.85 million cubic meters to 585.4 million cubic meters.

According to the period of provision of the storage service, they are divided into long-term, short-term and intra-day services. According to the type of services, firm storage and interruptible storage services are distinguished.

The party ordering the storage service can order storage services in the form of bundled unit, a flexible unit or as a unbundled storage service.

In 2019 SSO did not have the capacity of storage facilities exempted from third party access, in particular, it did not use the exemption under Article 4i of the Energy Law Act.

The table below summarizes the storage capacities offered in 2019.

Table 17. Storage capacity offered on request by Gas Storage Poland Sp. z o.o. in 2019

Storage facility	Service type	Service provision conditions	Storage capacity offered			
			Working capacity [MWh]	Injection capacity [MWh/h]	Capacity take-off [MWh/h]	period
GSF Kawerna	Long-term storage service or short-term storage service	firm	1 305 200	958.426	2 238.418	from the beginning of the 2019/2020 storage year starting on 15.04.2019 at 6:00 a.m. until the end of the 2022/2023 storage year ending on 15.04.2023 at 6:00 a.m.
			55 000	41.525	94.325	from 1.08.2019 at 6:00 a.m. to the end of the 2022/2023 storage year ending on 15.04.2023 at 6:00 a.m.
UGS Wierzchowice	Long-term storage service	firm	110 000	45.650	124.850	from the beginning of the 2019/2020 storage year starting on 15.04.2019 at 6:00 a.m. until the end of the 2022/2023 storage year ending on 15.04.2023 at 6:00 a.m.
GSF Sanok	Long-term storage service	interruptible	600	0.240	0.531	from the beginning of the 2019/2020 storage year starting on 15.04.2019 at 6:00 a.m. until the end of the 2022/2023 storage year ending on 15.04.2023 at 6:00 a.m.
UGS Wierzchowice	Long-term storage service	interruptible	115 400	33.466	54.238	from the beginning of the 2019/2020 storage year starting on 15.04.2019 at 6:00 a.m. until the end of the 2022/2023 storage year ending on 15.04.2023 at 6:00 a.m.
GSF Kawerna	Short-term storage service	interruptible	408 000*	352.512	757.248	until 15.04.2019 by 6:00 a.m.
			329 000*	245.105	564.235	from 6.00 a.m. on 15.04.2019 to 6.00 a.m. on 1.07.2019.
			175 400	130.673	300.811	from 6.00 a.m. on 1.07.2019 to 6.00 a.m. on 1.06.2020.
			10 800	8.046	18.522	from 6.00 a.m. on 1.10.2019 to 6.00 a.m. on 1.06.2020
			65 800	49.021	112.847	from 6.00 a.m. on 14.12.2019 to 6.00 a.m. on 1.6.2020.

* Storage capacity made available under the procedure launched in June 2018.

Source: ERO's own analysis on the basis of Gas Storage Poland Sp. z o.o.

The released storage capacities resulting from the expiry of storage contracts and storage capacities created due to the construction of CUGS Kosakowo were offered under the application procedure.

By way of an auction, Gas Storage Poland Sp. z o.o. offered, on an interruptible basis under short-term storage contract, 505 gas units for 3 gas months at GSF Kawerna. The units were offered for the period starting from 1 January 2020 from 6:00 a.m. to 1 April 2020 until 6:00 a.m. The auction was conducted on the Storage Services Platform. No entity participated in the auction, therefore no bids were made and no storage capacities were allocated.

The SSO declares to comply with its disclosure obligations under applicable laws, in particular under Articles 15(1) and 19 of Regulation 715/2009. The following information, among others, is published on the company's website at <https://ipi.gasstoragepoland.pl>:

- detailed information on storage capacity allocation mechanisms, including the services offered by the SSO and the terms and conditions applied by it, along with the technical information necessary for storage facility users to gain effective access to storage facilities,
- numerical information on contracted and available storage capacity,
- information on the quantity of gas in each storage facility or group of storage facilities, the quantities of gas injected and off-taken and the available storage capacity.

Pursuant to Article 22 of Regulation 715/2009, the SSO provides for secondary trading of storage capacity on the basis of the rules set out in the Storage Services Rules. The storage capacity made available to create and maintain mandatory stocks are not subject to trading. In 2019 the SSO did not receive any application for the sale of storage capacities ordered by the customer of the storage service on the secondary market.

After the end of the 2019/2020 storage year, the SSO plans to increase the working capacity of UGS Wierzchowice. At the end of December 2019 an application was submitted for the modification of UGS's licence in this respect. Moreover, work is in progress on expanding the capacity of CUGS Kosakowo. The investment is planned to be completed in 2021.

Currently, storage capacities of gas pipelines are not offered for gas storage.

4.1.2. Balancing the system

Balancing services

The concept of balancing services (balancing service) can have a dual meaning. Under Directive 2009/73/EC, the concept of balancing services should be understood as all activities undertaken by the transmission system operator to balance the entry-exit area. The BAL NC gives a slightly different meaning to balancing services. Pursuant to Article 3(7) of the BAL NC, a "balancing service" means a service provided to a transmission system operator via a contract for gas required to meet short term fluctuations in gas demand or supply, which is not a short-term standardized product.

The President of ERO, as the national regulatory authority, is responsible for monitoring the application of balancing rules. The balancing regulations are included in the Energy Law Act, the Ordinance of the Minister of Economy on the detailed rules of gas system operation. The detailed rules are specified in the Transmission Network Code of the National Transmission System (TNC NTS), the Transmission Network Code of the Transit Gas Pipeline System (TNC TGPS), and the "Mechanism for ensuring cost neutrality of balancing activities of the Transmission System Operator GAZ-SYSTEM S.A."

The TSO, Gaz-System is responsible for balancing gas in all three balancing zones. The balancing rules of the TSO have been regulated in the TNC, which is subject to approval by the President of ERO. The TNC contains a separate part concerning system balancing and congestion management. The system users, including customers whose facilities, installations or networks are connected to the network of the gas TSO or using the services provided by it, are obliged to comply with the terms and requirements and procedures of conduct and exchange of information specified in the TNC. The TNC constitutes a part of a contract for the provision of gaseous fuels transmission services or a comprehensive contract.

In accordance with the provisions of the Energy Law Act, the balancing of the gas system in the national gas system is performed by the TSO as part of the gaseous fuels transmission services provided. Three balancing zones are distinguished. The so-called National Transmission System comprises two zones: (i) balancing zone for high-methane gas (NTSHM) and (ii) balancing zone for high-nitrogen gas (NTSN). The Polish part of the Yamal pipeline (the Transit Gas Pipeline System – TGPS) is the third separate balancing zone. The high-methane gas balancing zone in the National Transmission System and the TGPS balancing

zone are connected by the relevant point of the transmission system – the so-called Interconnection Point, through which natural gas can be transmitted.

The commercial balancing is based on the daily settlement principle. The TSO undertakes balancing activities by buying and selling standard short-term products on a trading platform approved by the President of ERO. This contributes to increasing the liquidity of the short-term product market in Poland. The TGE S.A. S.A. conducts trading on the following markets: Gas Forward Market, Gas Day-Ahead Market and Gas Intra-Day Market. Since 1 March 2016, it has also been possible to trade in natural gas transmitted via the Yamal pipeline using short-term instruments – at a virtual point created for this purpose in the TGPS balancing zone. Initially, only products on the day-ahead market could be traded. At present, intra-day products can also be traded on TGE S.A. in the balancing zone.

The balancing zone for high-nitrogen gas (Lw group), on the other hand, has very limited possibilities to connect to the other balancing zones. The balancing zone also has no connections to balancing systems in neighbouring countries. In the balancing zone for high-nitrogen gas (Lw group), natural gas is supplied exclusively from local natural gas mines and from the denitrification and mixing plants in Grodzisk Wielkopolski. A virtual point was established in this balancing zone in March 2016. Starting from 1 December 2018 TGE S.A. ensures the possibility of trading in high-nitrogen natural gas, both on the intraday market and on the day-ahead market.

According to the TNC, physical (operational) balancing is carried out by the TSO in order to ensure operational security and integrity of the transmission system. On the other hand, commercial balancing is the TSO's activity consisting in determining and settling the imbalance resulting from the difference between the quantities of gaseous fuel delivered and received in a given balancing zone by system users. It should also be emphasized that in accordance with the TNC, the daily imbalance limit in the high-nitrogen gas zone is 0. In the high-methane gas balancing zone, the imbalance limit of 0 is valid from 1 April 2019. This is a result of a gradual departure from the application of the so-called interim measure, allowed under the BAL NC, in the form of an imbalance tolerance, which was initially set at 5% of the volume of gaseous fuel at physical points of the system, and was reduced to 2.5% as of 1 April 2018. If, at the end of the day, a given system user is unbalanced, the TSO imposes on it an imbalance charge referred to in Article 19 of the BAL NC.

The rules of the settlement allocation, consisting in assigning to individual customers of the transmission service the amount of gaseous fuel delivered for transmission at the entry point or received at the exit point, are also important for the TSO's balancing activities. In the case of exit points from the transmission system, the allocation is made by the gaseous fuel customer at that point or, if it is a connection point with the cooperating system operator, this cooperating system operator. On connections with the distribution system, in accordance with the provisions of the TNC, the allocation is made by the DSO. The allocation is made on the basis of actual or projected gas consumption of individual customers.

4.1.3. Cross-border issues

Access to cross-border infrastructure, including allocation of transmission capacity and congestion management

The principles of capacity allocation resulting from the provisions of the CAM NC, which regulates the principles of capacity allocation at interconnection points and the principles of cooperation of transmission system operators in this process, have been regulated in the TNC and TNC TGPS developed by the TSO and subsequently approved by the President of ERO. As a capacity allocation mechanism, the CAM NC provides for an auction procedure with the use of an Internet platform designed to reserve firm and interruptible capacity at interconnection points. The capacity offered at these points should be linked. The same auction model is used at all interconnection points and the relevant auction processes start simultaneously for all relevant points. In each auction process for one standard capacity product, capacity shall be allocated independently of any other auction process, except for so-called competing capacity.

Cooperation with the regulatory authorities from other countries

In 2019, bilateral cooperation between the ERO and the German regulator Bundesnetzagentur (BNetzA) was continued with regard to approval of a project of incremental capacity for intersystem connections Poland-Germany (GCP Gaz-System/ONTRAS) and Poland SGT – Germany (Mallnow).

Monitoring investment plans and assessment of their consistency with the Community-wide development plan

Energy undertakings involved in the transmission or distribution of gaseous fuels, pursuant to Article 16 item 1 of the Energy Law Act, are obliged to prepare, for the area of their activity, development plans for satisfying current and future demand for those fuels.

Agreeing of the draft development plans is aimed at ensuring compliance of these draft plans with the Act and its implementing provisions and compliance with the state's energy policy. The investments included are also in line with the EU's policy and are consistent with the EU Ten-Year Network Development Plan (TYNDP). Development plans – due to a multiannual investment cycle and involvement of significant financial resources (high capital-intensity), which cause long-term financial consequences for the company and its customers – have a direct impact on the level of the future tariffs of the company. Therefore, agreeing the draft development plans is directly connected with issuing decisions on tariff approval.

Development plans are also a source of information on the investment plans of the company in terms of planned investments aimed to connect new customers and projects necessary to maintain an appropriate level of reliability and quality of provided network services.

Transmission System Operator

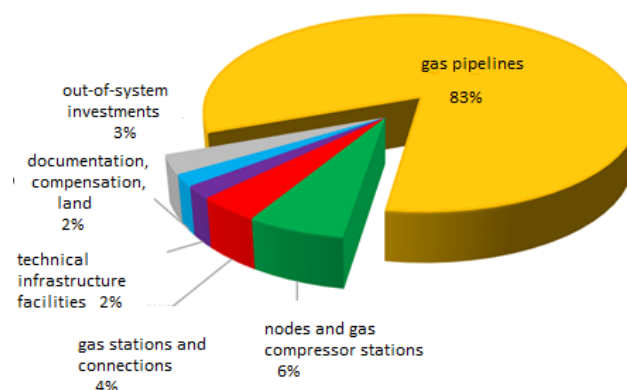
In 2019 OGP Gaz-System S.A. carried out investment tasks in the transmission system planned and settled in two basic areas:

- development area: construction of new system facilities and modernization of the existing ones, aimed at increasing technical capabilities of the transmission system,
- security area: modernization and restoration tasks due to technical or operational needs.

Development area

As part of the implementation of the investment plan in the area of development, 261 tasks were carried out, of which 36 were fully completed. The financial implementation in the area of development was 96.4% of the plan.

Figure 18. Structure of investment expenditures in 2019



Source: "Survey on the company's activity for the period from 00:00 (midnight) 1 January 2019 to 24:00 (midnight) 31 December 2019", OGP Gaz-System S.A., p. 31.

In 2019 OGP Gaz-System S.A. completed the construction and put it into operation:

- gas pipeline between Lwówek and Odolanów, stage I Lwówek-Krobia, about 113.5 km long and 1,000 mm in diameter,
- gas pipeline from Zdzieszowice to Kędzierzyn Koźle, about 17.4 km long and 1,000 mm in diameter,
- gas pipeline between Mora and Piotrków Trybunalski on the Wolbórz-Piotrków Trybunalski section, about 5 km long and 400 mm in diameter.

In addition, the TSO implemented a number of investments consisting in the connection of distribution networks, construction of a measurement station, construction of a cathodic protection station or construction of a storage facility.

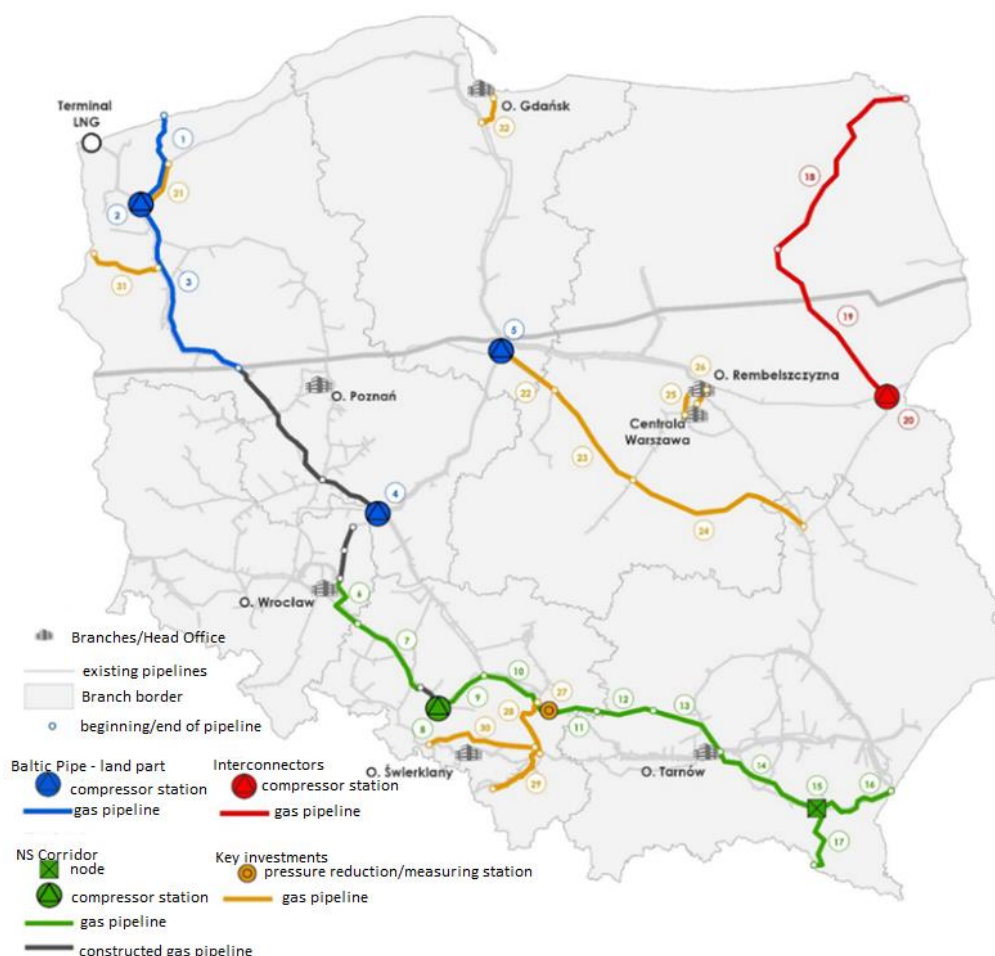
As part of the continued tasks, in the year in question, the Operator carried out 12 investments in new gas pipelines which were at the design stage and 12 investments in new gas pipelines which were under construction. In addition, 3 gas pipelines designed under the Baltic Pipe Project are at the design stage.

In the area of security, 402 tasks were implemented in 2019, including 190 planned to be completed in 2019, of which 129 (67.9%) were finished. Financial implementation in the area of security was 85.8% of the plan.

Material effects of investments carried out in 2019 include:

- replacement of a section of the DN 500 gas pipeline approximately 8.1 km long (Brzezie – Wieniec),
- construction of the Koło and Turek control stations,
- reconstruction of the Gustorzyn node control automation,
- expansion of the Poznań field operation unit,
- modernization of power supply to the Pogórska Wola gas compressor station,
- installation of the balancing system for the operation of the Maćkowice gas compressor station's motocompressors,
- construction of the Lwówek Śląski, Gryfów Śląski and Mirsk/Krzewie stations,
- modernization of equipment on 96 non-linear facilities, 10 corrosion protection stations,
- 45 general construction works.

Figure 19. Strategic / key investments as at 31.12.2019



Source: "Survey on the company's activity for the period from 00:00 (midnight) 1 January 2019 to 24:00 (midnight) 31 December 2019", OGP Gaz-System S.A., p. 38.

Table 18. Key investments in 2018

Programme	item	Name of key investment valid in 2018	Phase
Baltic Pipe onshore	1	Construction of a gas pipeline connecting the subsea gas pipeline with the national transmission system: Niechorze - Płoty, Goleniów - Płoty	Design
	2	Expansion of Goleniów compressor station capacity = 30 MW	Design
	3	Goleniów-Lwówek gas pipeline DN=1000, L=188.3 km	Design
	4	Construction of Odolanów compressor station capacity = 30 MW (phase I) + 20 MW (phase II) + 15 MW (phase III)	Design
	5	Gustorzyn compressor station capacity = 30 MW	Design
N-S corridor	6	Zdzieszowice – Wrocław gas pipeline (section: Brzeg – Zębice – Kiełczów) DN=1000, L=49km	Implementation
	7	Zdzieszowice – Wrocław gas pipeline (section: Zdzieszowice – Brzeg) DN=1000, L=84 km	Implementation
	8	Construction of Kędzierzyn compressor station capacity = 23 MW	Implementation
	9	Tworóg – Kędzierzyn Koźle gas pipeline DN=1000, L=43.4 km	Implementation
	10	Tworóg – Tworzeń gas pipeline DN=1000, L=56 km	Implementation
	11	Pogórska Wola – Tworzeń gas pipeline DN=1000, section: 3L=34 km	Implementation
	12	Pogórska Wola – Tworzeń gas pipeline DN=1000, section: 1 L=78 km	Implementation
	13	Pogórska Wola – Tworzeń gas pipeline DN=1000, section: 2 L=56 km	Implementation
	14	Strachocina – Pogórska Wola gas pipeline DN=1000, L=97.5 km	Implementation
	15	Construction of Strachocina compressor station phase 1 - hub	Implementation
	16	Hermanowice – Strachocina gas pipeline DN=700, L=72 km	Implementation
	17	Poland – Slovakia gas pipeline DN=1000, L=59 km	Implementation
Poland-Lithuania interconnector	18	Poland – Lithuania gas pipeline (Rudka Skroda - Gr. PL - LT) DN=700, L=185 km	Tender (WRB/WNI)
	19	Poland – Lithuania gas pipeline (Hołowczyce - Rudka Skroda) DN=700, L=153 km	Tender (WRB/WNI)
	20	Expansion of TG Hołowczyce II compressor station to compress gas to pressure of 8.4 Mpa	Design
Key	21	Szczecin – Gdańsk gas pipeline (phase V Goleniów – Płoty) DN=700, L=41 km	Implementation
	22	Gustorzyn – Wronów gas pipeline (phase I Gustorzyn - Leśniewice) DN=1000, L=60 km	Design
	23	Gustorzyn – Wronów gas pipeline (phase II Leśniewice - Rawa Mazowiecka) DN=1000, L=100 km	Design
	24	Gustorzyn – Wronów gas pipeline (phase III Rawa Mazowiecka - Wronów) DN=1000, L=156 km	Design
	25	Rembelszczyzna – Mory gas pipeline DN=700, L=29 km	Design
	26	Construction of connection to a facility of Elektrociepłownia Żerań heat and power plant (PGNiG TERMIKA S.A.) DN=500, L=10 km	Implementation
	27	Tworzeń System Reduction and Measurement Station in the area of Sławków (phase I)	Design
	28	Oświęcim – Tworzeń gas pipeline wraz z Systemową Stacją Redukcyjno-Pomiarową Oświęcim (phase II) DN=700, L=50 km	Design
	29	Skoczów – Komorowice – Oświęcim gas pipeline (phase III) DN=500, L=53 km	Design
	30	DN 1000 Racibórz – Oświęcim gas pipeline L=110 km wraz z SSRP Suszec	Design
	31	Connection of ZEDO DN 700 L=63 km	Design
	32	DN 1000 Płońsk – Olsztyn – Gdańsk gas pipeline phase I Kolnik – Bogatka L=35 km	Tender (Design)

Source: "Survey on the company's activity for the period from 00:00 (midnight) 1 January 2019 to 24:00 (midnight) 31 December 2019", OGP Gaz-System S.A., p. 39.

Under Polish legislation, OGP Gaz-System S.A., as an enterprise engaged in the transmission of gaseous fuels, draws up the Ten-year National Transmission System Development Plan for meeting the current and future demand for gaseous fuels.

On 27 August 2019 the President of ERO agreed on a development plan for OGP Gaz-System S.A. entitled "Ten-year National Transmission System Development Plan. The development plan for meeting the current and future demand for gaseous fuels for the years 2020 – 2029". The year 2019 was treated as the base year of the new Development Plan. The discussed TYNDP consists of two parts, i.e. Part A, which concerns the development of the transmission infrastructure owned by OGP, and Part B, which concerns the development of the transmission infrastructure owned by the SGT EuRoPol GAZ S.A., where OGP acts as an operator under the ISO formula.

The extract from the agreed TYNDP is available on the website of OGP Gaz-System S.A. at the following address: https://www.gaz-system.pl/fileadmin/pliki/do_pobrania/KRAJOWY_DZIESIECIOLETNI_PLAN_ROZWOJU_SYSTEMU_PRZESYLOWEGO.pdf

Work conducted by OGP Gaz-System S.A. in 2019 regarding construction of interconnections

The European transmission network is shaped on the basis of European law, where the most important provisions regulate, among others, the following:

- Regulation (EC) No 715/2009,
- Regulation (EU) 2017/1938 of the European Parliament and of the Council of 25 October 2017 concerning measures to safeguard security of gas supply and repealing Regulation (EU) No 994/2010,
- Regulation (EU) No 347/2013 of the European Parliament and of the Council of 17 April 2013 on guidelines for trans-European energy infrastructure,
- TYNDP developed by ENTSOG on the basis of Regulation No 715/2009.

The priority objectives of the EU as set out in the above mentioned documents are to ensure equality of access to the transmission network, sustainable development of gas transmission systems, increase of competitiveness while ensuring security of supply and stability, as well as integration of the markets of the EU. The development of transmission infrastructure should lead to the improvement of energy security and diversification of natural gas supply sources. Taking into account the above, as well as domestic legal regulations and objectives set out, inter alia, in the "Energy Policy of Poland until 2030", in 2019 OGP Gaz-System S.A. continued to carry out cross-border investments, which are part of the European Union policy.

In 2019 the Company continued the implementation of strategic investments of European importance, in particular for the integration process of the Central and Eastern European market:

1. The Baltic Pipe project

Project of common interest (PCI)

The Poland-Denmark gas interconnection project involves the construction of a gas pipeline that will connect the natural gas transmission systems of Poland and Denmark. It is an element of the Norwegian Corridor aimed at creating technical possibilities of gas transmission from the Norwegian Continental Shelf through the Danish transmission system and an offshore connection from Denmark to Poland and, in the longer term, to other countries of Central and Eastern Europe and the Baltic Sea region.

The implementation of the project is identical to the implementation of the objectives of the energy policy of the European Union, i.e.: strengthening competition, integration of gas markets, increasing security of supply and effective implementation of sustainable development principles. The Baltic Pipe project is part of the North-South Corridor concept and the Baltic Energy Market Interconnection Plan (BEMIP), which are priorities for the development of EU energy infrastructure.

In 2019 a number of steps were taken to implement the project:

- an agreement was signed with the Innovation and Networking Executive Agency (INEA) to co-finance construction work for the Baltic Pipe under the Connecting Europe Facility,
- the relevant EIA reports, applications for building permits and applications for environmental decisions were submitted,
- appropriate environmental decisions, building permits and location decisions were obtained,
- a cross-border consultation on the ESPOO report was conducted,

- work was carried out on the design documentation and executive design in the offshore part and the content of the intersection agreements was agreed with the owners of the offshore infrastructure with which the Baltic Pipe will intersect,
- within the proceedings of the offshore component, a company responsible for the supply of pipes was selected,
- archaeological surveys and UXO surveys in the coastal and offshore parts of the gas pipeline route were completed,
- a contract was signed for the supply of compressor units for 3 gas compressor stations,
- construction projects for all onshore projects under the Baltic Pipe PL Onshore Programme were approved.

2. Gas Interconnection Poland-Lithuania (GIPL) project

Project of common interest (PCI)

The implementation of the Poland-Lithuania gas cross-border interconnection aims at connecting the natural gas transmission systems of Poland and Lithuania, and consequently the other Baltic States, with the European gas network. This interconnection is in line with the main objectives of the European Union's energy policy (priority infrastructure project under the Baltic Energy Market Interconnection Plan for Gas – BEMIP) and is intended to solve problems related to security of gas supply and end the isolation of the Baltic States from the EU gas market.

In 2019, both Operators (OGP Gaz-System S.A. and AB Amber Grid) continued their efforts to implement the GIPL project. In early November 2019 OGP Gaz-System S.A. obtained the last necessary construction permits for the cross-border gas interconnection with Lithuania and launched tender procedures to select construction contractors for the southern section of the pipeline. In addition, a location decision for the construction of the Gustorzyn Gas Compressor Station along with the infrastructure necessary for its operation was issued in July 2019, and in August 2019 OGP Gaz-System S.A. signed a contract for the supply of compressor units for this compressor station. In October 2019, a tender procedure was launched to select contractors for the construction of this facility.

The deadline for the putting to use of the gas interconnection Poland-Lithuania project is planned for the end of 2021.

3. Gas Interconnection Poland-Slovakia project

Project of common interest (PCI)

The aim of the project is to build a new cross-border gas pipeline that will connect the natural gas transmission systems of Poland and Slovakia. The Poland-Slovakia interconnection is part of the European initiative to build the North-South Corridor. The interconnection is an important element of the North-South Gas Interconnection in Central and South-Eastern Europe (NSI East Gas) and will contribute to regional security of supply and the integration of gas markets in the region, as well as will allow to improve the efficiency of gas markets in the CEE region. In 2019 OGP Gaz-System S.A. signed a contract for construction works, which were subsequently launched on the Polish side.

4. Gas Interconnection Poland-Czech Republic project

The project involves the construction of a new cross-border gas pipeline that will connect the natural gas transmission systems of both countries. The parties to the project are: OGP Gaz-System S.A. and the Czech transmission system operator – Net4Gas s.r.o. The length of the gas pipeline in Poland is 54 km, while in the Czech Republic it is 52 km. In 2019 OGP Gaz-System S.A. continued its efforts to secure the project implementation. A construction permit for the Polish section of the Poland-Czech Republic interconnector has been issued.

5. Gas Interconnection Poland-Ukraine

The Poland-Ukraine gas interconnection project involves the construction of a new cross-border gas pipeline that will connect the natural gas transmission systems of Poland and Ukraine. In 2019 OGP Gaz-System S.A. continued cooperation with the TSO from Ukraine in the implementation of the Poland-Ukraine interconnection project. The permit for the construction of the Polish section of the interconnection of the transmission systems of the Republic of Poland and Ukraine was obtained.

The other tasks of the company that are in line with the assumption of developing the EU-wide transmission network are the following:

1. Construction of the North-South corridor in western Poland,
2. Construction of the North-South corridor in eastern Poland,
3. Construction of the Damasławek underground gas storage facility,
4. Extension of the LNG Terminal in Świnoujście,
5. Construction of the FSRU terminal in Gdańsk (PCI),
6. Grid Connection Point GCP Gaz-System/ONTRAS – capacity increase project.

All of the projects mentioned above are included in the Ten-Year Network Development Plan 2020 (the list of projects was published in November 2019), while on 11 March 2020 the European Commission published a list of projects of common interest (PCI). These are key infrastructure projects aimed at increasing the level of security on the European energy market. Their implementation is designed to help implement the EU's energy policy and climate goals. Amongst them there are the following projects:

1. North-South gas interconnections in Central-Eastern and South-Eastern Europe, including the eastern line of the North-South corridor in eastern Poland (item 6.2.2 from the PCI list) along with the Poland-Slovakia interconnection (item 6.2.1) and construction of the FSRU terminal in the port of Gdańsk (item 6.27),
2. BEMIP, which includes the Baltic Pipe (item 8.3.2) and GIPL projects (item 8.5).

The implementation of all these projects will improve energy security, including by ensuring uninterrupted gas supply in the event of supply disruptions, will increase the number of possible gas supply routes and affect the integration and competitiveness of gas markets in the countries of this part of Europe. It will also develop the transit functionality of the national transmission system.

4.1.4. Implementation of Network Codes and guidelines

CAM NC

Following the failure of the transmission system operators (OGP Gaz-System S.A. with GASCADE Gastransport GmbH for the Mallnow connection point and ONTRAS Gastransport GmbH for the Grid Connection Point Gaz-System/ONTRAS) to reach an agreement on the selection of a common booking platform at interconnection points on the German-Polish border and given that the regulatory authorities were unable to make a joint selection of the platform, in accordance with Article 37(3) (4) and (5) of the CAM NC, ACER initiated proceedings in that case and on 16 October 2018 it issued a decision on the selection of a GSA platform owned by OGP Gaz-System S.A. PRISMA European Capacity Platform brought an appeal against that decision before ACER Board of Appeal on 14 December 2018, which, by decision of 14 February 2019, repealed ACER's decision of 16 October 2018 to select the GSA platform for the Mallnow and GCP interconnection points. Accordingly, ACER re-conducted the proceedings for the selection of the capacity booking platform at points of interconnection at the Polish-German border and on 6 August 2019 it issued a decision on the selection of the RBP – Regional Booking Platform, owned by FGSZ Ltd. On 7 October 2019, OGP Gaz-System S.A. filed an appeal against the decision in question with the ACER Board of Appeal. As a result of the appeal proceedings, the above mentioned Board dismissed the appeal of OGP Gaz-System S.A. and upheld the ACER decision of 6 August 2019.

The failure to select the above mentioned capacity booking platform at interconnection points on the Polish-German border contributed to the failure of the President of ERO and the German regulator to issue coordinated decisions on the approval of the proposal for an incremental capacity project for the border of the market zone Poland (high-methane natural gas transmission system group E) – GASPOOL. The administrative procedure conducted in this case in coordination with the BNetzA pursuant to Article 28(1) and (2) of the CAM NC, initiated in 2018 at the request of OGP Gaz-System S.A., was discontinued by decision of the President of ERO of 14 May 2019. The decision of the BNetzA was conditional in nature and was to cease to be binding if, by 30 April 2019, no agreement had been reached between ONTRAS and OGP Gaz-System S.A. to offer capacity on a single platform at GCP Gaz-System/ONTRAS or no ACER decision had been issued indicating the platform on which the capacity booking was to be offered. On the other hand, according to the regulations governing administrative proceedings conducted by the administrative bodies of the Republic of Poland, it was impossible to issue a conditional decision in this case, as the substantive law did not provide for the possibility or obligation for the President of ERO to issue such a decision. Due to the lack of coordination between the two regulatory authorities in approving the project proposal within 6 months of obtaining the application, i.e. by 23 April 2019, the case was referred to ACER.

In accordance with Article 26 of the CAM NC, OGP Gaz-System S.A. together with the neighbouring transmission operators conducted the second assessment of market demand for incremental capacity between the Polish and neighbouring transmission systems. The incremental procedure 2019-2021 started on 1 July 2019. On the basis of received non-binding notifications, the operators prepared joint market

demand assessment reports. Conclusions from the conducted market research on incremental capacity in the interconnections between Poland and Germany, Poland SGT-Germany, Poland-Czech Republic, Poland-Lithuania, Poland-Slovakia and market demand assessment reports were published on the website of OGP Gaz-System S.A. https://www.gaz-system.pl/centrum_press/updates/information/article/203048/. The reports estimated the potential demand for incremental capacity within a given entry-exit system and determined whether the implementation of the incremental capacity project should be initiated.

BAL NC

The provisions of the BAL NC are either implemented on the basis of decisions issued by the regulatory authority or are directly applicable.

On 1 April 2019, in all three balancing zones, the TSO ceased to apply interim measures⁵⁷⁾. According to the provisions of the BAL NC, the report on the interim measures shall foresee their termination no later than five years as from the entry into force of this Regulation.

By decision of 28 August 2019 the President of ERO again gave its consent for the TSO to trade in gas on the trading platform in the GASPOOL balancing zone (Federal Republic of Germany) and to transmit gas to and from this balancing zone for the purpose of carrying out balancing activities in the balancing zone of the Transit Gas Pipeline System and in the balancing zone of the National Transmission System for high-methane gas. In addition, according to the above mentioned decision of the President of ERO, the TSO may trade in gas on the territory of the Czech Republic for the purpose of balancing the National Transmission System for high-methane gas. The possibility of purchase or sale of standard short-term products by the TSO is an additional opportunity, alternative to transactions concluded on the trading platform operated by TGE S.A. S.A., to undertake effective balancing activities by the TSO. Finally, the TSO may undertake balancing activities in the balancing zone of the National Transmission System for high-methane gas to balance the TGPS balancing zone. The aforementioned decision also allows for gas transmission to and from these adjacent balancing zones in order to perform balancing tasks.

Balancing activities in the adjacent balancing zones may be undertaken by the operator if it is not possible to use the trading platform on which the TSO is obliged to carry out balancing activities for the given balancing zone or if it is necessary to undertake balancing activities related to the given location on the border with the Gaspool balancing zone, the balancing zone in the Czech Republic or at the Interconnection Point between the TGPS and the balancing zone of the National Transmission System for high-methane gas. It is worth explaining that the consent applies only to the above-mentioned cases. The decision to approve balancing activities in the adjacent balancing areas is valid from 1 October 2019 to 30 September 2020. In 2019 the TSO did not undertake balancing activities in the adjacent balancing zone.

On 1 January 2019, the decision of the President of ERO of 15 December 2018 approving the new "Mechanism to ensure cost neutrality of balancing activities of the Transmission System Operator Gaz-System S.A. in connection with the entry into force of Commission Regulation (EU) No. 312/2014 of 26 March 2014 establishing a Network Code on Gas Balancing of Transmission Networks" became effective. The new mechanism to ensure neutrality of balancing activities primarily introduces new rules for determining the amount of necessary financial securities, which users are obliged to provide to the TSO. Network users must maintain financial securities that double the value of their allocated capacity or correspond to 125% of the value of the shipper's unpaid obligation arising from invoice issued by TSO and the daily imbalance charge, whichever is greater. New rules of financial securities verification were also introduced. The TSO verifies the amount of financial security safeguards for the previous day and if it is found that they are too low, it is obliged to take appropriate measures. It should be noted that if the financial security is more than 50% but less than 125% of the TSO's requested amount, the TSO shall call upon the user to supplement the collateral within 48 hours. However, if the financial security safeguards amount is less than 50% of the amount requested by TSO, the suspension shall take place without the call to replenish the financial security safeguards.

In 2019, modifications were also introduced to the TNC and distribution codes regulating the activities of DSOs, including the largest operator. The provisions of the BAL NC serve the purpose

⁵⁷⁾ In accordance with Article 45(4) of Regulation 312/2014, the report on interim measures shall foresee the termination of the interim measures no later than five years as from the entry into force of this Regulation. The 5-year deadline expired on 16 April 2019. Therefore, the last report on the interim measures approved by the President of ERO by decision of 24 September 2018 provided for their termination on 1 April 2019.

of creating a uniform balancing zone within a given entry-exit system in which the TSO balances the entire system and performs settlements for all users. Appropriate changes were introduced by the decision of the President of ERO approving the TNC of the OGP GAZ-System S.A., and then by the decision approving the DNC of PSG Sp. z o.o. The DNC of PSG Sp. z o.o., which is the largest DSO in Poland, is subject to approval by the decision of the President of ERO. By the decision of 23 December 2019, the President of ERO approved the modifications to the DNC of PSG Sp. z o.o. The new regulations concerned, among others, the rules of settlements for gas collected and introduced into the distribution system by users (the so-called compensation procedure). The implemented regulations constitute an important step in the process of construction of the entry-exit system in which the responsibility for balancing the entire system, including the distribution networks connected to the transmission system, lies with TSO. The other DSOs should adjust the provisions of their network codes to the provisions of the TNC on their own, without the need to approve their codes by the President of ERO.

In 2019, balancing services were used at the Branice interconnection point on the Polish-Czech border. The rules for the application of balancing services are contained in Article 8 of the BAL NC and the contract for the provision of these services, which is concluded by the transmission system operator following a non-discriminatory tendering procedure.

INT NC

In 2019 the President of ERO was involved in the work of ACER and ENTSOG on the lack of harmonization of interfaces on the booking platforms, which started on the basis of market participants' applications on the Gas Network Codes Functionality Platform (FUNC Platform).

At national level, there were no projects carried out or supervised under the above mentioned Regulation.

TAR NC

In 2019, work on fulfilling obligations under the TAR NC continued. That Regulation entered into force on 6 April 2017 with the exception of Chapters VI and VIII, which are applicable from 1 October 2017, and Chapters II, III and IV, which are applicable from 31 May 2019. The TAR NC is one of the so-called 'network codes', the procedure for the development and adoption of which is provided for in Article 6 of Regulation 715/2009, which is binding in its entirety and directly applicable in all EU Member States.

The purpose of this regulation is to increase the transparency of the process of establishing gas transmission tariffs and to unify their structures within the EU. TAR NC introduces consultation and publication obligations with respect to the calculation methodology and technical parameters adopted for the calculation of transmission tariffs in order to provide EU gas transmission system users with greater predictability of the level of charges and their comparability.

Implementation of the NC should contribute to greater integration of the European gas market, increase security of supply and develop interconnections, which in turn can improve the competitiveness of European companies and reduce gas bills for households.

The financial stability of gas TSOs is to be strengthened by the so-called regulatory account introduced by the TAR NC. This solution is used in most EU countries, while in Poland it will be used for the first time in the case of tariffs for gas transmission services. Thanks to its application, it will be possible to settle and include in the calculation of tariffs for subsequent years the difference between revenues planned before the beginning of the tariff year and revenues actually generated by the TSO in that period, as part of the reconciliation of the regulatory account referred to in Article 20 of the TAR NC. Pursuant to Article 18(1) of the TAR NC, insufficient or excessive recovery of revenues for a given tariff period shall be the difference between the value of actual revenues generated in relation to the provision of transmission services in that period and the planned value of transmission revenues included in the calculation of the tariff for that period. A positive value of the above mentioned difference means excessive recovery of revenues from transmission services for a given year and will result in a reduction of revenues accepted for tariff calculation in subsequent years, while a negative value means insufficient recovery of revenues and will result in an increase of revenues accepted for calculation of future tariffs. Thanks to this mechanism, the risk of transferring the effects of incorrect forecasts

regarding, among others, planned long-term or short-term capacity orders, to the transmission system users will be eliminated. The first tariff period covered by this regulation will be the year 2019.

The OGP Gaz-System S.A. conducted the above mentioned consultations for the first time regarding its own transmission network⁵⁸⁾ and the transmission network owned by SGT EuRoPol GAZ S.A.⁵⁹⁾ in 2018. After their completion, it also published the responses received and a summary thereof. However, pursuant to Article 27(3) of the TAR NC, on 13 December 2018 ACER published and sent to OGP Gaz-System S.A. the conclusions of the analysis of the consultation documents carried out in accordance with paragraph 2 of the aforementioned provision⁶⁰⁾.

Pursuant to Article 27(4) of the TAR NC, the President of ERO was required to take and publish a motivated decision on the reference price methodology covering the elements set out in Article 26(1) of the TAR NC with respect to the OGP Gaz-System S.A. transmission network and the network owned by the SGT EuRoPol GAZ S.A. within 5 months of the final consultation (i.e. by 31 March 2019). Decisions approving the above methodologies after their publication should be sent to ACER and the European Commission.

Pursuant to Article 27(4) of the TAR NC, the President of ERO, by decision⁶¹⁾ of 29 March 2019, approved the *Reference Price Methodology No 1/OGP for Operator Gazociągów Przesyłowych Gaz-System S.A.'s own transmission network for the period: from 1 January 2020 to 31 December 2022*, which is attached to that decision, and with the decision⁶²⁾ of 29 March 2019, the *Reference Price Methodology No. 1/SGT for the transmission network owned by the energy company System Gazociągów Transitowych EuRoPol GAZ S.A. with its registered office in Warsaw for the period from 1 January 2020 to 31 December 2022*, constituting an annex to this decision. The above decisions covered all the elements specified in Article 26(1) of the TAR NC and were published in the ERO Industry Bulletin – Gaseous Fuels, both in Polish⁶³⁾ and English⁶⁴⁾, and were sent to ACER and the European Commission.

The President of ERO consulted for the first time on the issues referred to in Article 28 of the TAR NC concerning, inter alia, the multipliers and seasonal factors for short-term gas transmission services, levels of entry point discounts from the LNG terminal and discounts used to calculate base prices for standard interruptible capacity products⁶⁵⁾ in 2018. The consultations concerned the OGP Gaz-System S.A.'s network and the transmission network owned by the SGT EuRoPol GAZ S.A. The issuance of a communication on the aspects referred to in Article 28(1)(a) to (c) of the TAR NC, taking into account the requirements of Article 41(6)(a) of Directive 2009/73/EC and the positions of the regulatory authorities of the directly connected EU Member States was to take place at the same time as the decisions on reference price methodologies. On 29 March 2019 the President of ERO issued *Communication No 24/2019 on the level of multipliers, seasonal coefficients and discounts referred to in Article 28(1)(a) to (c) of the Tariff Code, which are included in the calculation of tariffs for gas transmission services for the period from 1 January 2020 to 31 December 2020*⁶⁶⁾. Subsequent consultations will be held in each tariff period starting from the date of taking the above mentioned decision by the President of ERO.

Pursuant to Article 27(5) of the TAR NC, the procedure including final consultation on the reference price calculation methodology referred to in Article 26, the decision of the President of ERO on the elements to be consulted pursuant to Article 27(4), the tariff calculation pursuant to that decision and the publication of the tariff had to be completed by 31 May 2019 at the latest. This procedure is repeated at least every five years, starting on 31 May 2019.

The parameters set out in the decision of the President of ERO approving reference price methodologies and concerning the aspects referred to in Article 28(1)(a) to (c) of the TAR NC were

⁵⁸⁾ <http://www.gaz-system.pl/strefa-klienta/taryfa/konsultacje-nc-tar/>

⁵⁹⁾ <http://www.gaz-system.pl/strefa-klienta/sgt-gazociag-jamalski/taryfa-sgt/konsultacje-nc-tar/>

⁶⁰⁾ https://www.acer.europa.eu/en/Gas/Framework%20guidelines_and_network%20codes/Pages/Harmonised-transmission-tariff-structures.aspx

⁶¹⁾ Decision of 29 March 2019, ref. no: DRG.DRG-2.745.1.2019.JDo1.

⁶²⁾ Decision of 29 March 2019, ref. no: DRG.DRG-2.745.3.2019.JDo1.

⁶³⁾ ERO Industry Bulletin – Gaseous Fuels no 32/2019, <https://bip.ure.gov.pl/bip/taryfy-i-inne-decyzje-b/inne-decyzje-informacj/3777,Inne-decyzje-informacje-sprawozdania-opublikowane-w-2019-r.html>

⁶⁴⁾ ERO Industry Bulletin – Gaseous Fuels no 41/2019, <https://bip.ure.gov.pl/bip/taryfy-i-inne-decyzje-b/inne-decyzje-informacj/3777,Inne-decyzje-informacje-sprawozdania-opublikowane-w-2019-r.html>

⁶⁵⁾ <http://www.ure.gov.pl/pl/biznes/taryfy-zalozenia/konsultacje-art-28-nc-t/7848,Konsultacje-w-zakresie-rabatow-mnozownikow-i-wspolczynnikow-sezonowych-do-taryf-na.html?search=88914673268370>

⁶⁶⁾ <https://www.ure.gov.pl/pl/biznes/taryfy-zalozenia/konsultacje-art-28-nc-t/7848,Konsultacje-w-zakresie-rabatow-mnozownikow-i-wspolczynnikow-sezonowych-do-taryf-na.html>

taken into account by OGP Gaz-System S.A. and the SGT EuRoPol GAZ S.A. in the tariff calculation for 2020, which were published on 31 May 2019⁶⁷⁾.

In the period from 14 October to 14 December 2019, a second consultation was held⁶⁸⁾ regarding the multipliers, seasonal factors, levels of discounts at entry points from the LNG terminal and discounts used to calculate base prices for standard interruptible capacity products and concerned the Operator's transmission network and the network owned by the SGT EuRoPol GAZ S.A. During the consultations, opinions were received from: the regulatory authority of the directly interconnected EU Member State, the Operator, the transmission system user and 2 opinions from industry organizations. Pursuant to Article 28(1), the President of ERO, in accordance with Article 41(6)(a) of Directive 2009/73/EC, shall take a reasoned decision on the aspects referred to in points (a) to (c) above, taking into account the views of the regulatory authorities of the directly connected Member States. The provisions of that decision (communication) will apply in the calculation of tariffs for 2021. The Communication⁶⁹⁾ was published on 6 March 2020.

In addition, OGP Gaz-System S.A. published on its website the information referred to in Article 30 of the NC TAR Regulation⁷⁰⁾, concerning tariff No 13 (for 2020) 30 days before the beginning of the tariff period. OGP Gaz-System S.A. was appointed by the decision of the President of ERO of 27 October 2017 to publish this information.

4.2. Competition and market functioning

4.2.1. Wholesale market

Natural gas acquisition and flows

Gas purchases from abroad, in the amount of 169.1 TWh, were supplemented with gas from domestic sources in the amount of 42.5 TWh. Total gas supplies from abroad in 2019 included imports and intra-Community acquisitions. In 2019, imports from the eastern direction, carried out under a long-term contract concluded between PGNiG S.A. and Gazprom, continued to account for a significant part of the total gas supplies from abroad.

Information on the structure of gas supplies in 2019 is presented in the table below.

Table 19. Structure of gas supplies in 2019

Specification	Quantity [TWh]
1. Supplies from abroad	169.1
2. Extraction from domestic sources	42.5
3. Change in the stocks level	-7.3

Source: ERO on the basis of data of OGP Gaz-System S.A. and gas-trading companies and the Ministry of Climate.

In 2019, 557.6 TWh of high-methane gas and 8.4 TWh of high-nitrogen gas flew through the Polish transmission system. Most of the high-methane gas was transported in transit using the Yamal pipeline. The table below presents the most important directions of gas flow in the transmission system.

⁶⁷⁾ ERO Industry Bulletin – Gaseous Fuels no 47 i 48/2019, <https://bip.ure.gov.pl/bip/taryfy-i-inne-decyzje-b/paliwa-gazowe/3779,Taryfy-opublikowane-w-2019-r.html>

⁶⁸⁾ <https://www.ure.gov.pl/pl/biznes/taryfy-zalozenia/-2019/8439,Konsultacje-w-zakresie-rabatow-mnoznikow-i-wspolczynnikow-sezonowych-do-taryf-na.html>

⁶⁹⁾ Communication no 14 of 6 March 2020 regarding levels of multipliers, seasonal factors, discounts referred to in Article 28 item 1 section a)-c) of the Tariff Code, taken into account in the calculation of tariffs for transmission of gaseous fuels for the period from 1 January 2021 to 31 December 2021. <https://www.ure.gov.pl/pl/urzed/informacje-ogolne/komunikaty-prezesa-ure/8754,Komunikat-nr-142020.html>

⁷⁰⁾ <https://www.gaz-system.pl/strefa-klienta/taryfa/publikacja-nc-tar/>

Table 20. Balance of trade flows* of high-methane and high-nitrogen gas in the transmission network (including the Transit Gas Pipeline System) in 2019

Gas type		High-methane gas	High-nitrogen gas
Entry to the system in total [TWh]		557.6	8.4
Out of which:	mines and denitrification plants	22.0	4.0
	storages	18.0	0.0
	non-EU supplies (without LNG)	430.3	0.0
	supplies from the EU	49.7	0.0
	LNG terminal	35.9	0.0
	other (entries from distribution)	1.7	4.4
Exit from the system in total [TWh]		557.6	8.4
Out of which:	mixing plants and denitrification plants	0.0	1.8
	storages	25.3	0.0
	to the distribution network	135.3	6.4
	to final customers on the transmission network	49.3	0.2
	supplies to the EU	328.4	0.0
	deliveries outside the EU	14.9	0.0
	operator's own needs (including change in operator accounts)	4.4	0.0

* The data refers to the amount of gas injected into the network and off-taken from the transmission network as a result of execution of transmission contracts by the TSO. The data may differ from physical flows in the system.

Source: ERO on the basis of data of OGP Gaz-System S.A. and SGT EuRoPol GAZ S.A.

Trading in natural gas

As at the end of 2019, 186 entities held a licence for trade in gaseous fuels, as compared to 197 entities as at the end of 2018, while 99 undertakings actively participated in the trade in natural gas. Gas trading undertakings from outside the Group PGNiG S.A. group acquired 118.5 TWh of natural gas. The data on purchase and sale of gas by trading companies are presented in the table below. This value does not incorporate acquisition for own needs by trading companies under monitoring and gas acquisition by energy companies which are large final customers at the same time.

Table 21. Volumes of gas acquired and sold under wholesale trading by the surveyed trading companies in 2019 [TWh]

	Total	GK PGNiG	Other trading companies
Gas acquisition (purchase and extraction)	442.8	324.3	118.5
Wholesale sales of gas	196.3	118.0	78.3

Source: Data of the Ministry of Climate and ERO.

4.2.1.1. Monitoring the level of prices, the level of transparency, the level and effectiveness of market opening and competition

The sale and purchase of gaseous fuels on the Polish wholesale market takes place primarily on the commodity exchange operated by TGE S.A.. Gas exchange participants are mainly gas fuel trading companies and the largest final customers which can act independently after concluding an appropriate agreement with TGE S.A., becoming gas exchange members or through brokerage houses or through other entities having the status of a gas exchange member from its own group which may conclude transactions for the benefit of other entities belonging to the same group.

Stock exchange trading takes place by concluding sales agreements (transactions) between exchange members.

In 2019 TGE S.A. carried out the following gas sales markets: Intra-day Market (IDMg), Day-Ahead Market (DAMg) and Commodity Forward Instruments Market with Physical Delivery (CFMg). Sales of natural gas were also conducted in the auction system.

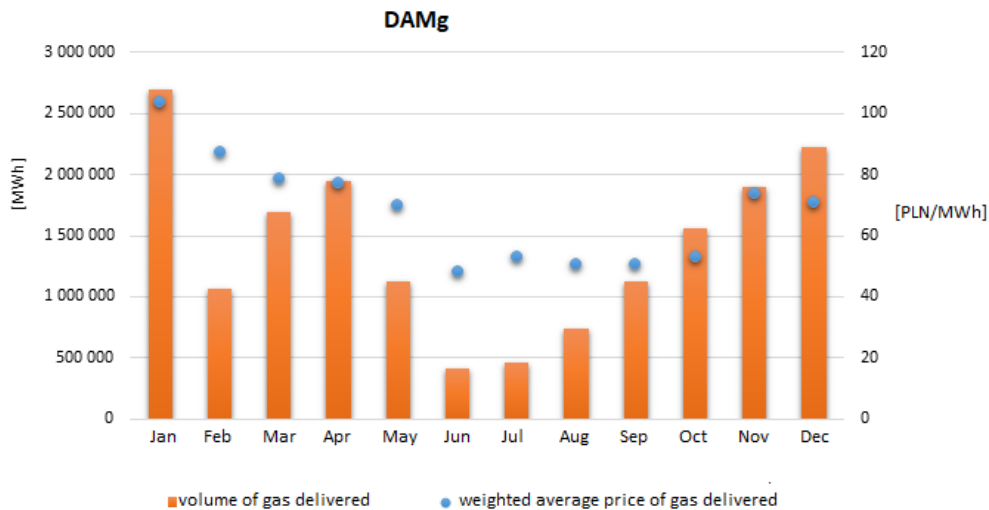
Subject of trade on the CFMg is the supply of gas in equal volumes at all hours of the delivery period (weekly, monthly, quarterly and yearly).

Subject of trade on the DAMg is the supply of gas in equal volumes at all hours of the delivery day. It is a base instrument and one contract corresponds to the delivery of 1 MWh of gas in each hour of the delivery day. Trading is conducted during one day preceding the date of delivery in the fixing and continuous trading system. In addition, the subject of trading on the day-ahead gas market are weekend instruments with the delivery period from 6:00 a.m. on Saturday to 6:00 a.m. on Monday (gas weekend) in the equal amount of 1 MWh for each hour of the contract execution deadline. Quotations of the weekend instrument are carried out for 2 days preceding the delivery period.

Trading on the IDMg is conducted in the continuous trading mode.

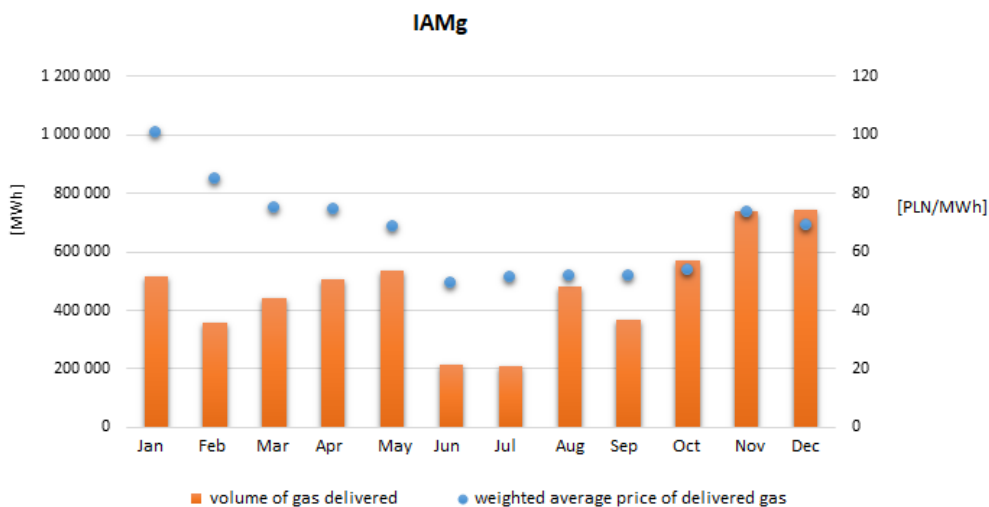
The figures below show the volume and price of gas delivered under contracts concluded on the IDMg, DAMg and CFMg.

Figure 20. Volume and price of gas supplied as a result of the performance of contracts executed on the Day-Ahead Market (DAMg) in 2019



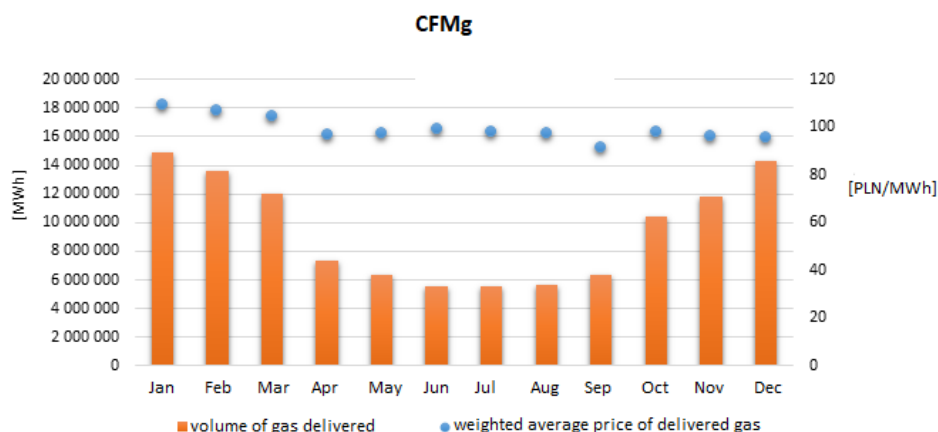
Source: Own analysis on the basis of data provided by TGE S.A.

Figure 21. Volume and price of gas supplied as a result of the performance of contracts executed on the Intra-Day Market (IDMg) in 2019



Source: Own analysis on the basis of data provided by TGE S.A.

Figure 22. Volume and price of gas supplied as a result of the performance of contracts executed on the Commodity Forward Instruments Market (CFMg) in 2019



Source: Own analysis on the basis of data provided by TGE S.A.

In 2019, as a result of contracts concluded on TGE S.A., in the entire period of listing a given type of contract, 136,394,588 MWh of natural gas were delivered at an average price of 95.77 PLN/MWh (16,957,418 MWh were delivered on the DAMg at the average price of 73.99 PLN/MWh; 5,689,478 MWh on the IDMg at the average price of 69.02 PLN/MWh and 113,747,692 MWh on the CFMg at the average price of 100.35 PLN/MWh).

Trading in high-methane natural gas in the virtual point on the Over-the-Counter (OTC) market

In 2019, the President of ERO also monitored transactions concluded at the virtual point on the OTC market. As a result of performance of contracts executed in the virtual point on OTC market, regardless of the contract conclusion date, a total of 34.9 TWh of natural gas was delivered at an average price of 89.75 PLN/MWh. The prices in particular quarters in comparison to gas exchange prices and prices of gas imports from the EU are presented in the Table below.

Table 22. Comparison of average prices from contracts of sales in the virtual point on OTC and purchase from abroad, in particular quarters of 2019 [PLN/MWh]

	QI	QII	QIII	QIV
Average prices from contracts on sales in the OTC virtual point with delivery in a specified period	102.85	84.25	76.05	90.37
Average prices from contracts on sales via TGE S.A. with delivery in a specified period	104.94	92.25	88.29	91.41
Average prices of natural gas purchase from abroad from EU Member States or EFTA Member States – parties to the EEC Agreement	96.11	66.18	58.54	65.08

Source: ERO.

Efficiency of competition on wholesale market of natural gas

Wholesale trade on the Polish gas market focuses on the commodity exchange, mainly due to the obligation of public sale of gas by the largest entities (currently PGNiG S.A.), arising from the legal provisions. The level of liquidity of this market is high in comparison to final consumption. However,

a large part of transactions is executed between entities from the PGNiG group, which may impact the transparency of price terms.

4.2.2. Retail market

The analysis of the retail market for gaseous fuels, was made by the President of ERO – separately for high-methane, high-nitrogen gas and LNG – on the basis of annual monitoring of suppliers. The analysis showed that total sales of high-methane and high-nitrogen gas to final customers in 2019 amounted to 203.6 TWh. The level of total sales was influenced by the decrease in sales by alternative suppliers. In comparison to 2018, gas consumption for own needs, generated mainly by industrial customers, increased. The sale of gas to final customers was dominated by entities from the PGNiG Group. The share of these entities amounted to 82.77% and it increased in comparison to the previous year by around 0.69%. The observed increase of the PGNiG Group's share in the sale of gaseous fuel to final customers since 2017 was due to a significant drop in gas purchase from abroad directly by final customers for their own needs as a result of amendments to legal regulations regarding mandatory reserves, and due to taking over of part of customers by PGNiG OD Sp. z o.o. under launching last resort supply after a collapse of several suppliers at the end of 2018 and in 2019. The remaining 17.23% of gas sales to final customers were made by alternative trading companies selling gas to final customers in Poland. The table below presents information on the structure of natural gas sales to final customers.

Table 23. Structure of sales of natural gas to final customers in 2019 [MWh]

Sale of high-methane and high-nitrogen gas to final customers			
	Alternative suppliers	Group PGNiG	Total
Sale of gas to final customers by suppliers operating in Poland	34 961 481	166 581 278	201 542 759
out of which: industry	27 567 285	107 498 662	135 065 947
agriculture	114 947	378 554	493 501
services and public utilities	5 193 580	13 153 213	18 346 793
households	2 085 669	45 550 849	47 636 518
Sale for own needs	115 844	1 920 641	2 036 485
Total	35 077 325	168 501 919	203 579 244

Source: ERO and the Ministry of State Assets.

The President of ERO also monitored the sale of LNG in 2019. Most of the LNG gas acquired was sold to final customers after regasification and the introduction of high-methane gas to the gas network. As indicated in the table below, the volume of LNG gas sales in liquefied form to final customers amounted to approx. 667,296.241 MWh and was performed mostly by alternative suppliers.

Table 24. Structure of LNG sale to final customers in 2019 [MWh]

Sale of LNG to final customers			
	Alternative suppliers	Group PGNiG	Total
Sale of gas for the needs of final customers	655 288	12 008	667 296
out of which: industry	554 349	12 008	566 357
agriculture	34 036	-	34 036
services and public utilities	50 413	-	50 413
households	16 490	-	16 490
Total	655 288	12 008	667 296

Source: ERO and the Ministry of State Assets.

On 18 June 2019, the last provisions on last resort supply set out in the Act of 9 November 2018 amending the Energy Law Act and certain other acts entered into force⁷¹⁾. In addition to the existing regulation of Article 5ab, which specifies in detail the obligations of the supplier, DSO and TSO and the last resort supplier to ensure gas supply to the final customer in a situation where the consumer did not have a designated supplier of last resort in the comprehensive contract or the gas distribution contract (in this case, in accordance with Article 5ab item 1 of the Energy Law Act, the DSO or TSO, acting in the name and on behalf of that final customer, concludes a comprehensive contract with the default supplier), Article 5aa applies, which comprehensively regulates the rules of last resort supply for newly concluded contracts, as well as for those concluded so far in which the name of the reserve supplier is indicated. These provisions were long-awaited solutions to protect consumers in the event of a sudden cessation of operations by the previous supplier with which the consumer in question had signed a comprehensive contract for the sale of gaseous fuels.

4.2.2.1. Monitoring the level of prices, the level of transparency, the level and effectiveness of market opening and competition

Tariffs for gaseous fuels

Pursuant to Article 29 item 4 of the Tariff Ordinance, the prices of gaseous fuels and subscription fee rates set in the tariff have the character of maximum prices and subscription fee rates. The gas supplier may use lower prices and subscription fee rates in settlements with consumers than those set in the tariff approved by the President of ERO, provided that the consumers are treated equally in individual tariff groups. Pursuant to the provisions of Article 47 of the Energy Law Act, energy companies develop a tariff according to the scope of their activity (licences held) and submit it for approval to the President of ERO, which approves or refuses to approve the tariff, if it finds that it has been established contrary to the provisions of Articles 44-46 of the Act. Whereas the provision of Article 45 item 1 of the above Act requires energy companies to calculate tariffs in a manner that ensures: covering the justified costs of their operations, a justified return on equity engaged in this activity, and protecting the interests of consumers from unjustified levels of prices and rates.

In the procedure for approving the tariff, the President of ERO shall in particular examine whether the prices and fee rates set out in the tariff have been calculated in accordance with Article 45 of the Energy Law Act, i.e. whether they ensure coverage of only justified costs and protect the interests of customers against their unjustified level.

In 2019, the tariffs set by energy companies for the sale of natural gas were subject to approval by the President of ERO when gas is sold to household customers.

The tariff of PGNiG OD Sp. z o.o. is of key importance, as the company supplies gaseous fuels to over 90% of households. Since 15 February 2019, PGNiG OD Sp. z o.o.'s tariff No. 7 has been in force, which resulted in a 2.5% increase in prices compared with the current ones. The main reason for the increase in gas prices was the observed increase in the cost of purchase of high-methane natural gas bought by the company on the TGE S.A., which is the main source of gas purchase by PGNiG OD Sp. z o.o.

In 2019 the President of ERO conducted two administrative proceedings concerning the tariff of PGNiG OD Sp. z o.o. on the approval of the tariff established by the company for the supply of gaseous fuels. The President of ERO made and published two tariff decisions concerning prices and fee rates for household customers, applied by PGNiG OD Sp. z o.o. The first decision taken by the President of ERO was published in the ERO Bulletin on 25 January 2019 and entered into force on 15 February 2019. The second one, taken on 16 December 2019, was published on the following day, i.e. 17 December 2019.

Tariff no. 7 of PGNiG OD Sp. z o.o. approved on 25 January 2019 resulted in an increase in gas prices as a commodity by 2.5% compared to the current tariff. The reason for the increase in the price of gaseous fuels was an increase in the cost of its purchase. As the subscription fee rates remained unchanged (except for groups W-2.2 and W-3.6). The increase in average trading prices is 2.3% for both high-methane gas and high-nitrogen gas (Lw subgroup and Ls subgroup).

The company providing consumers with the comprehensive service of gas supply uses the rates of distribution fees of PSG Sp. z o.o. in settlements. Considering that the above mentioned rates were

⁷¹⁾ JoL of 2018 item 2348.

reduced, the effect in payments charged to the consumers was at the level of about 0% for high-methane gas consumers (group E) and high-nitrogen gas consumers (in Lw and Ls subgroups).

Then, by the decision of the President of ERO of 16 December 2019, tariff no. 8 of PGNiG OD Sp. z o.o. was approved. The gas prices set therein were reduced by 2.9% and the subscription fee rates were maintained unchanged. Average prices in trade for all types of gas were reduced by 2.6%. When providing consumers with the comprehensive service of gas supply, the company uses the rates of distribution fees of PSG Sp. z o.o. in its settlements. Considering that the above mentioned rates are on the same level, the average payments charged to the consumers were reduced by 1.82% for high-methane gas consumers, 1.93% for high-nitrogen gas group Lw consumers and 1.89% for high-nitrogen gas group Ls consumers.

As a result of this decision, the change of average monthly payments for consumers in households served by PGNiG OD Sp. z o.o. connected to the PSG Sp. z o.o. distribution network was as follows:

- a) for consumers qualified to the W-1 group using gaseous fuel for meal preparation, for the country's average annual consumption of 1,312 [kWh] it was (-) 0.7%, which means a decrease in average monthly payments by PLN 0.17,
- b) for consumers qualified to the W-2 group using gaseous fuel for meal preparation and water heating, for the country's average annual consumption of 7,367 [kWh], the payment has not changed,
- c) for consumers qualified to the W-3 group using gaseous fuel for meal preparation and heating water and for room heating, for the country's average annual consumption of 22,339 [kWh] it was (+) 0.1%, which means an increase in average monthly payments by PLN 0.27.

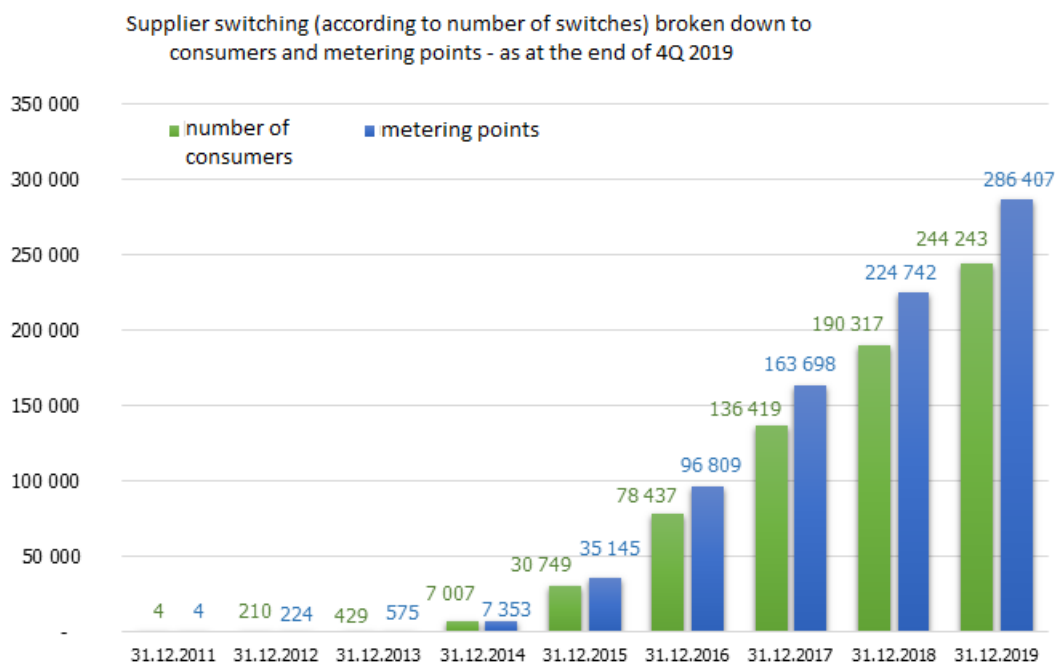
Supplier switching

The TPA principle, regulated in Article 4 item 2 of the Energy Law Act, means that the consumer can use the local distributor's network to supply gas or electricity purchased by it from any supplier. As of 1 July 2007, all gas consumers obtained the right to freely choose and change the supplier. The number of supplier switching is a simple but authoritative measure of the development of a competitive gas market. Therefore, the President of ERO systematically monitors the degree of effective use of the right to choose a supplier by eligible consumers. Systematic monitoring of the degree of real use of the right to choose a supplier was undertaken due to the gradually progressing liberalization of the gas market.

The freedom to choose supplier is influenced by several important factors, including the level of consumer awareness and motivation to change the supplier, as well as the ease of making changes or the number of competitive offers available on the market. The analysis of data from completed surveys shows an increase in the number of consumers switching supplier in 2011-2019. In 2011, only a few cases of switching were noted, in 2012 their number increased to 210, while the total number of switches from the beginning of monitoring until the end of 2019 was already 244,243. Supplier switching made by the end of 2019 in the vast majority, because as much as 233,230 (95.5%), concerned consumers from W 1-4 tariff groups, i.e. households. Such a state of affairs may be caused by intensification of advertising campaigns dedicated to this group of consumers.

It is noteworthy that on 1 December 2019 the supplier which sold gaseous fuel to 2.7% of final consumers and was one of the largest alternative suppliers ceased its operations, which will most likely involve a change in the market structure in 2020.

Figure 23. Number of switches of natural gas supplier by consumers (according to the number of consumers and measurement facilities)



Source: ERO.

The above figure does not include cases of last resort supply launched for consumers in December 2019 after a trading company with a total of 24 thousand customers ceased operations. In 2019, a last resort supply was launched for over 21 thousand consumers (over 23 thousand measuring systems), including in the W1-4 tariff group for 20,162 final customers, in the W5 tariff group – 812, in the W6 tariff group – 157, in the W7 tariff group – 37, in the W8 tariff group – 4, in the W9 tariff group – 3.

An important factor supporting the increase in the number of supplier switches on the gas market is the DSO having as many as possible contracts signed with suppliers for the provision of gas fuel distribution services (Framework Contracts). Framework Contracts, concluded between the operator and the supplier, condition that the gas supplier conducts activity on the premises of a given DSO. This contract defines the terms of the supplier's operation in the operator's area and its cooperation with this operator. At the end of the fourth quarter of 2019, 149 suppliers had valid contracts with the TSO, out of which 81 suppliers also had agreements with the PSG Sp. z o.o.

In 2019, at the request of the energy companies concerned, the President of ERO conducted three administrative proceedings concerning the exemption from the obligation to provide distribution services on the networks of so-called small DSOs⁷²⁾. All of them ended with a negative decision.

Compliance Programmes

There are two entities operating on the gas market which are obliged to develop Compliance Programmes and submit reports on their performance to the President of ERO. The first one is the distribution system operator PSG Sp. z o.o. and the other one – Gas Storage Poland Sp. z o.o. Both entities are part of the PGNiG S.A. group.

Both PSG Sp. z o.o. and Gas Storage Poland Sp. z o.o. published their Compliance Programmes on their websites. The obligation to train employees was fulfilled.

As part of tasks performance, Compliance Officers undertook, among others, the following measures:

⁷²⁾ The so-called small DSOs are energy companies exempted from the unbundling obligation, pursuant to Article 9d item 7 of the Energy Law Act.

- Provided answers to questions asked by employees, including interpretations of Compliance Programmes,
- Issued opinions on internal legal acts on these areas of activity which were covered by the Compliance Programme,
- Analyzed provisions of internal regulations in force as to their consistency with the provisions of the Programme, participated in the process of making information on the Company's activity available to third parties, including public administration bodies and energy undertakings,
- Conducted training for employees, including the newly recruited ones.

In 2019, no cases of violation of the principle of equal and non-discriminatory treatment of users were identified by the DSO and SSO. There were no complaints regarding the application of the provisions of the Compliance Programme or the notification of suspected conflicts of interest, either.

On 20 February 2019 the President of ERO published the Guidelines for the content of the Compliance Programmes developed by distribution system operators and storage system operator. The Guidelines have been extended to include in the Compliance Programme, among others, management of network infrastructure and its development – including ICT; principles of knowledge sharing with market participants, marketing activities and operator sponsorship; operation of the operator in a vertically integrated company; centralization or outsourcing of the operator's services and purchases. The President of ERO indicated that by the end of May 2019 it expects DSOs and SSO to submit Compliance Programmes adapted to the Compliance Programme Guidelines for approval. The DSO and SSO submitted applications for changes to the Compliance Programmes to the President of ERO. The administrative proceedings in this matter had not been completed by the end of 2019.

Suspension of gaseous fuels supplies

In accordance with the provisions of the Energy Law Act, the suspension of gas fuel supplies may take place only in circumstances specified by law. It may take place in the case when: 1) as a result of the inspection it has been identified that illegal collection of gaseous fuels has taken place; 2) the consumer is in default of payment for the services provided, at least for a period of 30 days after the expiry of the payment deadline⁷³⁾. According to the monitoring carried out by the President of ERO among the 12 largest DSOs in Poland, in 2019 supplies to the following number of consumers were suspended – in tariff group W1-4 – 83,749 (including 34.57% under arrears in payment), in tariff group W5 – 267 (including 41.57% under arrears in payment), in tariff group W6 – 55 (including 41.82% under arrears in payment), in tariff group W7 – 4 (including 50.00% under arrears in payment). No suspension of supplies was recorded in tariff groups W8, W9 and W10. It should be added that the process of suspension of gaseous fuels supplies to households who are in arrears with payment for the gaseous fuels collected and services provided, calculated in working days from the moment the supplier provides the consumer with information about arrears until the moment the DSO stops supplies, amounted in 2019 to approximately 31 days on average.

⁷³⁾ An energy enterprise conducting business activity in the field of transmission or distribution of gaseous fuels shall, at the supplier's request, withhold the supply of energy if the consumer is in arrears with the payment for the services rendered or for the gaseous fuel collected, for at least 30 days after the expiry of the payment deadline.

The energy enterprise to which the customer is in arrears with the payment for the services rendered or for the energy off-taken, notifies in writing the electricity consumer or household consumer about the intention to suspend the supply of electricity, if the consumer does not settle the overdue and current receivables within 14 days from the day of receiving this notification.

Prepayment meters

The energy company may, in accordance with the applicable law, install a so-called prepayment meter at the final customer who has difficulties with timely payment of bills. The monitoring carried out by the President of ERO shows that in 2019 only one prepayment system was installed in the W1-4 tariff group.

4.2.3. Consumer protection and dispute resolution

The competences of the President of ERO in the field of consumer protection, dispute resolution and the system of out-of-court dispute resolution are described in section 3.2.2.2.

4.3. Security of supply

Pursuant to the Energy Law Act, in 2019 the government authority in charge of energy policy, including issues related to energy security, in particular supervision over security of natural gas supplies, was the Minister of Energy, and as of November 2019 – the Minister of State Assets. These entities were also the competent authority within the meaning of Regulation 2017/1938, that is acting as an authority responsible for the implementation of measures specified in the above mentioned Regulation, with the purpose to ensure security of gas supplies.

In 2019 the regulator cooperated with the Minister of Energy, and then with the Minister of State Assets, with respect to ensuring the security of gas supplies in relation to the tasks resulting from the aforementioned regulation and Directive 2009/73/EC in connection with the competences of the President of ERO determined by national legislation.

Measures to cover peak demand and manage shortfalls of suppliers

Monitoring of the security of gas supply, carried out in 2019, was focused on the areas of the market functioning which related in particular to the issues referring to:

1) licences

As already indicated in last year's report, licences for foreign trade in natural gas are issued with consideration of diversification of natural gas supplies and energy security. An energy company dealing with foreign trade in natural gas is obliged to diversify natural gas supplies from abroad (Article 32 item 2 of the Energy Law Act). In addition, in 2019, licences for foreign trade in natural gas included a condition relating to the obligation to diversify natural gas supplies. As part of the procedure for granting licences for foreign trade in natural gas, the President of ERO also verifies whether the applicant has submitted a declaration to comply with the diversification obligation.

2) Diversification of supplies of natural gas from abroad

In 2019, the President of ERO monitored compliance with the provisions of the Ordinance of the Council of Ministers of 24 April 2017 on the minimum level of diversification of natural gas supplies from abroad by energy companies licensed to foreign trade in natural gas in 2018. The monitoring covered 57 entities. Due to the need to supplement the information and documentation provided, these activities were continued in 2020. On the other hand, the proper fulfilment of the 2019 diversification obligation by energy companies holding a licence for foreign trade in natural gas in 2019 will be monitored by the President of the ERO in 2020.

3) tariffs

An indirect method of monitoring the security of gas supply is tariffing of infrastructure companies. In the course of the tariff process, the extent of financing of assets (transmission, distribution, storage and LNG installations), necessary for the supply of fuels to customers, is resolved. The amount of investment expenditures on network assets and the amounts allocated to repairs and modernization of these assets determine their physical condition, i.e. operational security.

4) approval of plans for introducing natural gas consumption restrictions developed by operators

Pursuant to Article 58 item 1 of the Act on Stocks, the gas TSO and the gas DSOs are obliged to develop plans for introducing restrictions to natural gas consumption, and pursuant to Article 58 item 17 of the Act on Stocks, the above mentioned operators update their restriction plans annually and submit them, by 15 November of a given year, to the President of ERO for approval by way of a decision. Restriction plans developed by operators define maximum hourly and daily amounts of natural gas offtake by individual customers connected to their networks, meeting the criterion of being included in the restriction plan, for individual supply levels from 2 to 10 (cf. Article 58 item 2 of the Act on Stocks in connection with Article 4 item 1 section 1 of the Ordinance of the Council of Ministers of 19 September 2007 on the manner and mode of introducing restrictions in natural gas offtake⁷⁴⁾). The creation of restriction plans, and then the possible introduction of restrictions in natural gas offtake by the Council of Ministers by way of an ordinance, is to facilitate the assurance of the security of natural gas supply in the following cases: threat to the state's fuel security, an unexpected increase in natural gas consumption by customers, the occurrence of disruptions in natural gas imports, failures in the networks of gas system operators, threats to the security of gas network operation, threats to the safety of persons, threats of the occurrence of significant material losses and the need for the Republic of Poland to meet its international obligations (cf. Article 54 item 1 of the Act on Stocks).

5) analysis of the information provided, pursuant to Article 27 item 2 of the Act on Stocks, to the President of ERO by energy companies conducting business activity in the field of foreign trading in natural gas and entities purchasing natural gas from abroad

Pursuant to Article 27 item 2 of the Stocks Act, energy companies conducting business activity in the field of foreign trade in natural gas and entities purchasing natural gas from abroad provide the Minister of Energy and the President of ERO, by 15 May of each year, with information on actions taken in the period from 1 January to 31 December of the previous year to (1) ensure the state's fuel security in the field of foreign trade in natural gas or importing natural gas, and (2) fulfil the obligation to maintain mandatory reserves of natural gas. These entities are also required to provide information on the actual volume of natural gas mandatory stocks held and their storage location by 20 September of each year (as of 15 September).

6) agreeing on the draft network development plan for gas companies and monitoring their implementation

Agreeing with the President of ERO on the draft network development plan allows for monitoring of undertakings necessary to maintain the appropriate level of reliability and quality of provided network services. As a result of agreeing on draft development plans, infrastructural companies carry out investments and repair projects in order to ensure security of gas supply to customers.

7) verification and determination of the amount of mandatory natural gas stocks and monitoring their maintenance

The obligation to maintain mandatory reserves of natural gas by energy companies conducting business activity in the field of foreign trade in natural gas and entities importing natural gas results from Article 24 item 1 of the Act on Stocks. The purpose of its realization is to ensure the supply of natural gas to the Republic of Poland and to minimize the effects of: (1) threats to the state's fuel security, (2) the occurrence of an emergency situation in the gas network, and (3) an unexpected increase in natural gas consumption. Pursuant to Article 25 item 3, the President of ERO verifies the information submitted by the aforementioned entities on the amount of mandatory reserves of natural gas, and, pursuant to Article 25 item 5 for entities planning to start purchasing natural gas from abroad or applying for a licence to foreign trade in natural gas, determines the amount of mandatory reserves.

8) giving consent to conclude the so-called ticket agreement

According to Article 24b, item 1, an energy company conducting business activity in the field of foreign trade in natural gas and an entity importing natural gas may commission, under an agreement, the execution of tasks in the field of maintenance of mandatory reserves of natural gas to another energy company conducting business activity in the field of foreign trade in natural gas or an energy company conducting business activity in the field of trade in gaseous fuels. Then, before concluding the so-called ticket agreement, the above mentioned entities are obliged to submit a draft of the agreement to the President of ERO and obtain consent to its conclusion (Article 24b item 6 of the Act on Stocks).

⁷⁴⁾ JoL of 2007 No 178, item 1252.