

# NATIONAL REPORT

OF THE PRESIDENT OF URE

2024

JULY 2024

# → TABLE OF CONTENTS

Ab	brevia	itions us	sed in the report	5
1.	Fore	word		8
2.	Lega	l and re	gulatory changes in the electricity and gas markets	9
3.	Elect	ricity m	arket	14
	3.1.	Netwo	rk regulation and technical functioning	14
		3.1.1.	Unbundling	14
		3.1.2.	Extension and optimisation of network operation	15
		3.1.3.	Network tariffs	18
		3.1.4.	Security and reliability regulation	20
		3.1.5.	Monitoring the balance of supply and demand	24
		3.1.6.	Cross-border issues	32
		3.1.7.	Implementation of guidelines and network codes	36
		3.1.8.	Electromobility	43
	3.2.	Compe	etition and market operation	44
		3.2.1.	Wholesale market	44
			3.2.1.1. Monitoring the level of prices, the level of transparency, the level and effectiveness	
			of market opening and competition	49
		3.2.2.	Retail market	54
			3.2.2.1. Monitoring the level of prices, market the level of transparency, the level	
			and effectiveness of market opening and competition	55
			3.2.2.2. Consumer protection and dispute settlement	61
4.	Natu	iral gas i	market	66
	4.1.	Netwo	rk regulation	66
		4.1.1.	Network and LNG tariffs for connection and access	66
		4.1.2.	Balancing of the system	78
		4.1.3.	Cross-border issues	78
		4.1.4.	Implementation of guidelines and network codes	91
4.2. Competition and market operation				
		4.2.1.	Wholesale market	96
		4.2.2.	Retail market	99
			4.2.2.1. Monitoring the level of prices, market the level of transparency, the level	
			and effectiveness of market opening and competition	101
			4.2.2.2. Consumer protection and dispute settlement	105
	4.3.	Securit	y of supply	105

# 

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 (EU OJ L 211/94, as amended)
Directive 2019/944	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 (EU OJ L 158/125, as amended)
ENTSO-E	The European Network of Transmission System Operators for electricity
DNC	Distribution Network Code
TNC	Transmission Network Code
NES	National Electricity System
NEMO	Nominated Electricity Market Operator
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 URE	President of the Energy Regulatory Office
President of UOKiK	President of the 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 715/2009	Regulation (EU) No715/2009 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)
Regulation 2015/1222	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)
Regulation 2016/631	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)
Regulation 2016/1388	Commission Regulation (EU) 2016/1388 of 17 August 2016 establishing a Network Code on Demand Connection (EU OJ L 223/10)
Regulation 2016/1447	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)

Regulation 2016/1719	Commission Regulation (EU) 2016/1719 of 26 September 2016 establishing a guideline on forward capacity allocation (EU OJ L 259/42, as amended)				
Regulation 2017/1485	Commission Regulation (EU) 2017/1485 of 2 August 2017 establishing a guideline on electricity transmission system operation (EU OJ L 220/1, as amended)				
Regulation 2017/2195	Commission Regulation (EU) 2017/2195 of 23 November 2017 establishing a guideline on electricity balancing (EU OJ L 312/6, as amended)				
Regulation 2017/2196	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, as amended)				
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)				
INT NC R	Commission Regulation (EU) 2015/703 of 30 April 2015 establishing a network code on interoperability and data exchange rules (EU OJ L 113/13)				
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, as amended)				
electricity system ordinance	Ordinance of the Minister of Climate and Environment of 22 March 2023 on detailed conditions of electricity system operation (JoL of 2023, item 819, as amended)				
gas tariff ordinance	Ordinance of the Minister of Energy of 15 March 2018 on the detailed rules for development and calculation of tariffs and settlements in trade in gaseous fuels (JoL of 2021, item 280, as amended)				
SGT EuRoPol GAZ S.A.	System Gazociągów Tranzytowych EuRoPol GAZ S.A.				
TGE S.A.	Towarowa Giełda Energii S.A.				
ТРА	Third Party Access				
EU	European Union				
URE, the Office	Energy Regulatory Office				
Act of 7 October 2022	Act of 7 October 2022 on special solutions for the protection of electricity customers in 2023 and in 2024 in connection with the situation on the electricity market (JoL of 2023 item 1704 as amended)				
Act of 15 December 2022	Act of 15 December 2022 on special protection of certain customers of gaseous fuels in 2023 and 2024 in connection with the situation on the gas market (JoL of 2024 item 303)				
Act of 28 July 2023	Act of 28 July 2023 amending the Energy Law Act and certain other acts (JoL of 2023 item 1681)				

->

Act of 17 August 2023	Act of 17 August 2023 amending the RES Act and certain other acts (JoL of 2023 item 1762)
Act of 7 December 2023	Act of 7 December 2023 on amending acts to support customers of electricity, gaseous fuels and heat (JoL of 2023 item 2760)
Energy Law Act, the Act	Energy Law Act of 10 April 1997 (JoL of 2024 item 966, as amended)
Electromobility and Alternative Fuels Act. Electromobility Act	Act of 11 January 2018 on electromobility and alternative fuels (JoL of 2023 item 875, as amended)
RES Act	Act of 20 February 2015 on renewable energy sources (JoL of 2023 item 1436, as amended)
Capacity Market Act	Act of 8 December 2017 on the Capacity Market (JoL of 2023, item 2131)
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 2023 item 1650, as amended)

Legal status as at 12 July 2024

### **1. FOREWORD**

Dear All,

this National Report of the President of URE provides an in-depth insight into the situation on the Polish electricity and gas market in 2023.

The year 2023 saw dynamic changes in Poland's and Europe's energy sector, related both to the geopolitical situation and the accelerating transition process.

In 2023, the situation on the electricity and energy commodity markets began to stabilise, but throughout the entire previous year the prices of electricity, gas and heat remained significantly higher than before the energy crisis. Therefore, customers were covered by shielding legal solutions, which consisted, among others, in establishing maximum price for energy carriers. The price freeze did not mean, however, that the President of URE was deprived of its obligation to approve tariffs for the sale and distribution of energy, gas and heat, which were, among others, the basis for compensation payments to energy companies. At the same time, the regulator consistently emphasised the need to discuss a return to market mechanisms in the energy sector.

In 2023, fundamental amendments to the Act – Energy Law and the Act on Renewable Energy Sources, which implement the provisions of Directive 2019/944 and the RED II Directive<sup>1)</sup> into the Polish legal order were introduced. The new regulations are another major step in the energy transition process, enabling the acceleration of the development of renewable and local energy sectors, the real launch of biogas production, or the testing of new solutions in the energy sector.

A detailed description of the condition of the electricity and gas market in Poland and actions taken by the Polish Regulator in 2023 have been presented in this National Report of the President of URE, submitted to the European Commission and ACER. In doing so, the President of URE fulfils its reporting obligation under Polish and European law.

Rafar Daniy

<sup>&</sup>lt;sup>1)</sup> Directive of the European Parliament and of the Council (EU) 2018/2001 of 11 December 2018 as regards the promotion of energy from renewable energy sources (OJ.L.2018.328.82).

# 2. LEGAL AND REGULATORY CHANGES IN THE ELECTRICITY AND GAS MARKET

The Energy Law Act remains the basic legal act defining the competences of the President of URE, yet throughout the years many other obligations of the regulator have also been defined in other legal acts, including EU regulations, which are directly applicable without the obligation to implement them into the national legal order. As a consequence, the competences of the President of URE have been included in a variety of legal acts regulating separate market segments (in 2023, there were 17 acts and 21 EU regulations). It should be emphasised, however, that the above expansion is not accompanied by adequate strengthening of the resources at the disposal of the President of URE – the definition of new tasks in 2023 in legal regulations, was not in most cases coupled with the allocation of financial resources to the Office for their implementation.

#### Legal and regulatory changes

The year 2023 was characterised by intensive legislative work.

In 2023, an extensive amendment to the Energy Law Act took place by the Act of 28 July 2023. The Act implements a number of European legal acts in the area of energy into the Polish legal order, including Directive 2019/944.

The Act introduced significant changes to existing regulations as well as new institutions and new market actors. Due to a number of market-oriented and pro-consumer solutions, the Polish energy market will be more competitive and open to the changes that the energy industry is subject to in the age of transition. The key solutions include:

- active customers,
- aggregators,
- citizen energy communities,
- dynamic price contracts.

Under the new legal provisions, citizen energy communities (CECs) will be authorised to operate across Poland from August 2024. The main purpose of CECs is to provide environmental, economic or social benefits to their members, shareholders, partners or areas where the CEC will engage in activities. The object of CECs activity may be generation, distribution, sale, consumption, aggregation or storage of energy, as well as the provision of energy efficiency services, charging of electric vehicles or the provision of other energy services to its members or shareholders. At the same time, a customer joining a CEC preserves full consumer rights. The establishment of a legal framework for the operation of CECs is intended to enable electricity final customers to participate directly in the generation and sharing of electricity with other customers. The aim of introducing this solution is to provide affordable electricity to community members and to increase energy efficiency at the household level by reducing electricity consumption and lowering the price of electricity supply. The launch of a CEC requires registration in a list maintained by the President of URE.

As of August 2024, customers will have the right to enter into contracts with dynamic electricity prices with any supplier that serves more than 200,000 customers. The price of energy in such a contract will reflect price fluctuations in the electricity markets, in particular the day-ahead and intraday markets. Only customers with a remote reading meter installed will be able to take advantage of such an offer. Therefore, the entry into force of the dynamic price is closely related to the moment when such meters are installed, and the remote reading systems and the Central Energy Market Information System (CSIRE) become operational. The establishment of these systems will create opportunities for price comparisons and rapid response to changing circumstances. Energy suppliers

using dynamic price contracts were obliged to inform customers, in a transparent and understandable manner, about the costs and benefits, as well as the risks associated with such contracts. An obligation was imposed on the regulator to monitor the electricity market situation related to dynamic pricing. The President of URE will also publish annually a report on the market segment where dynamic pricing is applied.

The Act also introduced new rights and obligations for customers and energy companies (among others, the so-called regulatory sandbox), as well as amendments to existing regulations, among others, in the area of licensing, tariffing and last resort supply.

In the area of licensing, the legislator, at the request of the regulator, introduced an additional premise for the granting, modification or withdrawal of a licence, which will be a guarantee of proper performance of the activity covered by the licence. The President of URE will now be able to refuse to grant a licence to an applicant which fails to provide the guarantee of proper performance of the activity covered by the licence. Similarly, the regulator will be able to withdraw the licence or change its scope in the event that it is revealed that the licensee does not give the guarantee of proper performance of the licensed activity.

Once CSIRE is launched, new rules for backup supplies to electricity customers will be introduced, which will take into account the automated circulation of energy market information between users of the central system. As a result, the procedure for triggering last resort supply will be simplified, while increasing the level of protection and security for customers. The last resort electricity supply contract will be of indefinite duration and will be terminated when the customer enters into a contract with a new energy supplier. At the same time, the price of electricity sold under the last resort supply will be higher than that on the competitive market, which is expected to motivate the final customer to choose a new supplier as soon as possible.

It is also necessary to highlight the changes to fuel and energy sales contracts, including obligations relating to the conclusion of contracts:

- comprehensive contracts with household customers,
- distribution contracts with the supplier in order to perform comprehensive contracts,
- for the provision of gas transmission services in accordance with a model contract developed by the operator.

In addition, an obligation to provide a summary of the key provisions of the electricity sales contract was introduced, as well as a number of information obligations (e.g. about changes in prices and tariffs and possible savings). The amendment equipped final customers with the right to notify the President of URE of suspected breaches of obligations of distribution and transmission system operators, thereby imposing an obligation on the regulator to provide these customers with information on how the notification was handled.

The regulator has been vested with the power to maintain new registers and lists, that is, a list of aggregators, a list of citizen energy communities, as well as a comparison tool of electricity sales offers. In addition, the above amendment made the regulations more specific with regard to direct lines, thus extending the competences of the President of URE (maintenance of the list of direct lines and its publication in the Public Information Bulletin (BIP) of URE). The regulations concerning the preparation of network development plans were also updated, also including in this area issues concerning the implementation of priority investments (the task of the President of URE concerning the development of guidelines and recommendations, as well as reconciliation).

The President of URE also develops guidelines and recommendations for electricity distribution system operators on the procurement of flexibility services, including for congestion management in their area of operation, and assesses the market for flexibility services. It approves capacity allocation and congestion management methods and collects reports from transmission and distribution system operators (redispatch mechanisms). The Act contains an extensive amendment related to the requirements for the preparation and approval of the TNC and DNC. In addition, the remit of the President of URE was supplemented to include agreement on plans for introducing restrictions on the supply and off-take of electricity, and this body was also designated as competent to perform tasks related to the establishment of a regional coordination centre (approval of

an application for the establishment of this centre or costs related to its operation), provided that such a centre is located in the territory of Poland. The above act also amended the RES Act by introducing, among others, provisions on peer-to-peer trading in energy from renewable energy sources.

Another major, comprehensive amendment in the reporting year was the amendment of the RES Act by the Act of 17 August 2023. This amendment changed the scope of the subject matter of the Act, introducing regulations for the performance of the business activity of producing biomethane in a RES installation. The mechanisms and instruments supporting the production of electricity from renewable energy sources and agricultural biogas and heat so far included also the production of biomethane in RES installations. In addition, biomethane, heat, cooling, renewable hydrogen, biogas and agricultural biogas were covered by a system of issuing guarantees of origin.

The amendment to the Act provides for the discontinuation of the support system in the form of certificates of origin for agricultural biogas. As a consequence, the provisions of the Act in this respect were repealed and others concerning, among others, this type of support were amended accordingly. New regulations were introduced in the FIT support system (RES installations with a total installed electrical capacity of less than 500 kW) and the FIP support system (RES installations with a total installed electrical capacity of no more than 1 MW) for modernised installations using biogas, hydropower or biomass. New support rules for modernised installations were also introduced into the auction system. Attention should be drawn to the new form of auction, that is, the operating support auction dedicated to entities that have already benefited from the mechanisms provided for in the RES installations benefiting from support based on the rules of the FIP system. The possibility for generators to benefit from support for modernised units and operational support was made conditional on the issuance of a positive decision by the European Commission on the compatibility of public aid with the internal market.

The amended provisions of the RES Act also include provisions intended to facilitate the activities of energy cooperatives and energy clusters.

As far as clusters are concerned, regulations were drafted, including a modification of the definition of an energy cluster, enhancing the role of local government units (municipalities, poviats), as well as defining the area of cluster operations, the role of the cluster coordinator and the scope and content of an agreement on the establishment of energy clusters. In addition, the rules for cooperation of clusters with operators of energy distribution systems and energy suppliers were modified. Another key element of the changes introduced are provisions establishing real support for energy clusters in the form of reductions in the payment of distribution fees, fees associated with support systems for RES, highly efficient cogeneration and energy efficiency, which are meant to accelerate the development of clusters. In order to benefit from these reductions, it is necessary to be entered in the register of clusters kept by the President of URE and to meet the minimum requirements for the energy cluster in terms of energy consumption from RES, installed capacity of generation sources and energy storage facilities, as well as covering the demand for electricity with own production. The possibility to benefit from these provisions was also made conditional on the issuance of a positive decision by the European Commission on the compatibility of the state aid provided for in these regulations with the internal market or the recognition by the European Commission that the changes to the regulations do not constitute new state aid.

As regards energy cooperatives, in particular the regulations concerning: the definition of an energy cooperative and a member of an energy cooperative, the area of operation of the cooperative, the reductions available to energy cooperatives, the obligations of distribution system operators and energy suppliers towards cooperatives were amended. At the same time, the amended provisions of the Energy Law Act provide for preferences for the connection of energy cooperatives to the electricity grid.

The Act also regulates the possibility of cable pooling. It consists in using secured energy transmission capacities, e.g. for a previously established wind power plant, to launch a photovoltaic power plant in the same location (on the same connection). An important point is that the new

infrastructure may belong to the same or different investors. In this situation, both investments share energy infrastructure and their operation is more balanced in terms of a generation profile. The amendment provides for cable pooling by the beneficiaries of the auction support scheme and the FIT/FIP schemes, with the proviso that the generator of electricity in the installation planned for connection does not benefit, nor will it benefit, from any mechanism supporting the generation of energy from renewable sources provided for in the RES Act.

Also worth noting is the new regulation on the National Contact Point, established to support entities with respect to administrative procedures for connecting renewable energy installations to the grid and producing energy from renewable sources. The operation of this point remains within the competence of the minister responsible for climate affairs.

In 2023, a set of new rules were prepared that will be crucial for the functioning of the electricity market in the following years. Among such measures, the rules for the operation of the CSIRE and the conditions for balancing are of particular importance.

Given the amendment of the Energy Law Act of 20 May 2021, one of the main tasks of the Energy Market Information Operator, which is the electricity transmission system operator, is to build and launch Centralised Energy Market Information System (CSIRE) in which energy market information will be processed. In this respect, on 6 April 2023 the President of URE approved the TNC in the part concerning the manner of operation of the CSIRE and the cooperation of the electricity TSO, acting as the energy market information operator, with electricity system users and other entities obliged or entitled to use the CSIRE (TNC-EMIO). This part of the Code is a key document for the launch of CSIRE.

As part of the implementation of the second phase of the balancing market reform, the Electricity System Regulation was adopted. The core subject of this regulation includes the rules for the operation of the electricity balancing market. Therefore, on 27 September 2023 the President of URE approved in part the new balancing conditions – respecting the amended regulations – with an effective date of 14 June 2024 (new BCs). In January 2024, the regulator approved the new BCs in the remaining scope, that is, the provisions on the valuation of the operating reserve. For more information on the new BCs, see item 3.1.4. The regulatory change also imposed an obligation on the TSO to align the TNC, against which administrative proceedings were pending before the President of URE in 2023.

On 28 November 2023, the Ordinance of the Minister of Climate and Environment of 23 November 2023 amending the Ordinance on the Detailed Rules for Development and Calculation of Tariffs and Settlements in Trade in Gaseous Fuels was announced. The amendment to the Ordinance introduced, among others, a regulatory account mechanism for companies conducting business activities in the distribution of gaseous fuels, storage of gaseous fuels, liquefaction of natural gas and regasification of liquefied natural gas. The purpose of the introduction of regulatory accounts for energy infrastructure activities in the field of gaseous fuels is, on the one hand, to ensure stable operating conditions for operators (it provides protection against incomplete recovery by the operator of revenues which are supposed to cover justified costs) and, on the other hand, to protect entities ordering infrastructure services from incurring unreasonable costs in a situation where the actual revenue of the operator exceeds the justified costs of operating.

In November 2023 the President of URE published a methodology for determining the justified level of the weighted average cost of capital (WACC) for gas system operators conducting transmission, distribution, storage, liquefaction and regasification of liquefied natural gas, for the period 2024-2028. The paper draws on the latest report prepared by the Council of European Energy Regulators (CEER) entitled "Report on Regulatory Frameworks for European Energy Networks 2022"<sup>2</sup>). The methodology offers gas system operators the choice of a method of determining the weighted average cost of capital (WACC): a) in a fixed WACC formula of 7.597% for the entire validity period of the methodology or b) in a variable WACC formula based on risk-free rate values published quarterly – by making a declaration by 31 January 2024. What is important is that the method of determining the WACC chosen by the aforementioned deadline (that is, either in the fixed WACC formula or in the variable

<sup>&</sup>lt;sup>2)</sup> https://www.ceer.eu/documents/104400/-/-/2a8f3739-f371-b84f-639e-697903e54acb

WACC formula) will be consistently applied until the end of 2028. This means that after 31 January 2024 it is not possible to change the chosen method of determining the WACC (the declaration made).

#### Implementing the "Clean Energy for All Europeans" package (CEE)

On 4 July 2019, Regulation 2019/943, which replaced Regulation 714/2009<sup>3)</sup> entered into force. However, this does not affect the validity of the network codes and guidelines adopted so far, and work on their implementation continues, both on the TSO and NEMO side and on the side of the regulators and ACER. It should be noted that Regulation 2019/943 has imposed a number of new regulatory obligations on regulators and ACER.

Article 16(8) of Regulation 2019/943 imposed an obligation on the TSO to make cross-zonal capacity available to market participants at a level of not less than 70% of the capacity at a given border or critical network element, determined respecting operational security limits of the system. As the aforementioned conditions could not be fulfilled by the Polish TSO at the moment of entry into force of the aforementioned regulation, an action plan was developed by the competent ministry, in cooperation, adopted on 17 December 2019, which defines the level of minimum cross-zonal trading capacities to be made available to market participants by the Polish TSO from the beginning of 2020 until the end of 2025. This plan shall also include a timetable for the adoption of measures to achieve the target level of minimum capacity of 70% of the transmission capacity in accordance with Article 16(8) of Regulation 2019/943.

Regulation 2019/943, in Article 16(9), provides for the possibility of granting a derogation from the obligation to make cross-zonal capacity available, in accordance with paragraph 8 of that Article, where this is necessary to maintain operational security. In 2023, the decision of the President of URE of 9 December 2022<sup>4)</sup> granting PSE S.A. such a derogation, was in force, while on 21 December 2023 the decision of the President of URE for 2024 was issued<sup>5)</sup>.

On 18 July 2023 the President of URE, pursuant to Article 15(4) of Regulation 2019/943, approved the contribution to the TSO's 2022 report on allocation of capacity in accordance with the linear trajectory set out in the action plan<sup>6</sup>.

The Regulator was also involved in cases processed by ACER under Regulation 2019/943, among others on the alternative bidding zone configurations considered, a method for facilitating the purchase of balancing power at regional level and a method for determining the amount of reserve power at regional level.

<sup>&</sup>lt;sup>3)</sup> Regulation (EC) 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 (OJ L 211/15 as amended).

<sup>&</sup>lt;sup>4)</sup> https://www.ure.gov.pl/pl/energia-elektryczna/europejskiree/decyzje

<sup>&</sup>lt;sup>5)</sup> ibidem

<sup>6)</sup> ibidem

# → 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, operators for electricity and gas system (hereinafter referred to as "system operators") are designated by decision of the President of URE:

- at the request of the owner of the network or installation referred to in Article 9h para. 1 of the Act,

- ex officio in cases specified in Article 9h para. 9 of the Act.

The Energy Law Act specifies the conditions of operation and tasks of system operators. The electricity 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 organisationally unbundled and independent in terms of their decisions (Article 9d of the Energy Law Act).

There is one electricity transmission system operator in Poland – PSE S.A. On 4 June 2014 a certificate of complying with independence criteria determined in Article 9d para. 1a of the Energy Law Act for the period until 31 December 2030 was granted to PSE S.A. Compliance with independence criteria and conditions of conducting licensed activity and exercising the TSO function is monitored and periodically examined. In 2023 no irregularities in the functioning of the TSO were revealed.

In 2023, as in previous years, there were five large DSOs on the electricity market, whose networks are directly connected to the transmission network (so-called 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, at the end of 2023, there were 186 companies designated as DSOs operating within vertically integrated undertakings (so-called DSOn).

#### **Compliance Programmes**

The President of URE approves programmes which set out the measures taken to ensure nondiscriminatory treatment of system users (Compliance Programmes) developed by the obligated distribution system operators and monitors proper implementation of provisions of these programmes. Operators are required to send, each year by 31 March, reports containing a description of actions taken in the previous year to implement the Compliance Programmes. Based on an analysis of the content of reports, letters received by the office, changing regulations and factual changes within the energy market, the President of URE developed and published in 2019 new *Guidelines for the content of Compliance Programmes developed by distribution system operators and storage system operator*.

In 2023, four distribution system operators pursued Compliance Programmes adapted to the content of these Guidelines, and the proceedings for approval of the revised Compliance Programme of the fifth DSO were completed (the Programme became effective in 2024). In 2023, an application was also received for the approval of the Compliance Programme of another operator, which, due to organisational and ownership changes, became obligated to have such a Compliance Programme.

Distribution system operators fulfilled their obligation to publish Compliance Programmes on their websites.

The Compliance Programme reports for 2023 were submitted by the statutory deadline of the end of March 2024 and were published on the URE website.

In 2023, training sessions for newly hired employees were conducted in all operators, within a maximum of 30 days from the date of employment. Trained employees made declarations that they were familiar with the provisions of the Compliance Programme and committed to applying them. Training on the Compliance Programmes was also provided to all or selected employees of certain service providers whose scope of tasks poses a risk of violating the principle of equal treatment of system users (e.g. measurement services or customer service). Service providers in key compliance areas have, in some cases, undertaken to apply the DSO's existing Compliance Programme.

In the opinion of the Compliance Officers, they have the conditions to act independently. In 2023, there was a personnel change in the position of Compliance Officer in one DSO, due to the termination of the employment relationship. The Compliance Officers also assess that there is a growing awareness of the importance of equal treatment of system users and familiarity with the provisions of the Compliance Programmes among employees and board members of individual companies. The increasing number of reports of suspected violations of the Compliance Programme provisions by persons from inside the DSO companies may attest to the validity of this assessment. Such cases help in early detection of irregularities and prevention or mitigation of their effects when the incident itself could not be prevented.

The Compliance Officers did not indicate any incidents of violation of the Compliance Programmes in their reports for 2023. Some incidents described by the Compliance Officers and raising doubts of the President of URE are subject to explanations still pending.

In 2023 no complaints concerning the implementation of the provisions or violation of the principles of the Compliance Programmes were identified in the Office.

### 3.1.2. Extension and optimisation of network operation

#### 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 electricity transmission system operator (TSO) operating on the territory of Poland, designated by the President of URE – performs investment tasks in accordance with the development plan agreed with the President of URE 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 para. 13 of the Energy Law Act – is subject to reconciliation with the President of URE. When reconciling the TSO development plan, the President of URE 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 voivodship 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 para. 10 of the Energy Law Act, according to which the plan should ensure long-term maximisation 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 2023, the development plan reconciled by the President of URE in 2022 for meeting current and future electricity demand for 2023-2032 was in force, under which investment expenditures to be executed by the transmission system operator in the years 2023–2032 were agreed at PLN 36,619.4 million (data at fixed prices of 2022).

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 2023 (which enterprises are obliged to submit, pursuant to Article 16 para. 18 of the Act), the TSO notified about the execution

of planned investment outlays of PLN 1,849.6 million (that is 76%, with the plan assumed for that year of PLN 2,433.7 million).

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

When agreeing on the TSO's development plan, the President of URE shall also verify its consistency with the ten-year EU-wide 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 2023 to develop interconnections and increase technical transmission capacities in interconnection, included in the ten-year EU development plan TYNDP 2020, which the TSO incorporated into the previous edition of the development plan for 2023-2032 (including 2023) reconciled with the President of URE, are specified below:

- Construction of 400/220/110 kV Baczyna substation with the introduction of 400 kV Krajnik-Plewiska and 220 kV Krajnik-Gorzów line (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 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 Wyszków substation (TYNDP 123.373),
- Construction of 400 kV Baczyna-Plewiska line (TYNDP 230.1232),
- Construction of 400 kV Piła Krzewina-Dunowo-Żydowo Kierzkowo line (TYNDP 170.1662),
- Modernisation of 400 kV Krajnik-Morzyczyn line (TYNDP 170.1663),
- Modernisation of 400 kV Morzyczyn-Dunowo-Słupsk-Żarnowiec line (TYNDP 170.1664),
- Construction of 400 kV Dunowo-Żydowo Kierzkowo line (TYNDP 170.1661),
- Modernisation of 400 kV Żarnowiec-Gdańsk I/Gdańsk Przyjaźń line (TYNDP 170.1665),
- Modernisation of 400 kV Gdańsk Błonia-Gdańsk I/Gdańsk Przyjaźń-Gdańsk Błonia line (TYNDP 170.1665),
- Construction of a HVDC cable interconnection Poland-Lithuania (TYNDP 170.1034).

It has to be highlighted that some of the tasks included in the draft development plan are broader in scope compared to the TYNDP. This is the case for the following tasks:

- modernisation of the 400 kV Krajnik-Morzyczyn, Morzyczyn-Dunowo and Krajnik-Baczyna lines on the section using the existing 400 kV Krajnik-Plewiska line. Only the modernisation of the Krajnik-Morzyczyn and Morzyczyn-Dunowo lines was included in the TYNDP,
- modernisation of the 400 kV Słupsk-Żarnowiec line with construction of a section of the 400 kV Choczewo line and a section of the Słupsk-Żarnowiec line. Only the modernisation of the Słupsk-Żarnowiec line was included in the TYNDP,
- extension and modernisation of the Piła Krzewina substation. Only the extension of the Piła Krzewina substation for the introduction of the Piła Krzewina-Zydowo Kierzkowo line was included in the TYNDP.

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 factors: 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, if such a need arises.

#### Smart electricity grids

Systemic solutions for smart metering were introduced in 2021 by amendment to the Energy Law Act. An obligation was imposed on DSOs to install by 31 December 2028 remote reading meters connected to a remote reading system at energy consumption points constituting at least 80% of the total number of energy consumption points of final customers, including those representing at least 80% of the total number of energy consumption points of final customers in households, with metering and billing systems without current or voltage transformers, connected to a network with a rated voltage of no more than 1 kV.

The modernisation processes carried out by the DSOs, in accordance with the development plans reconciled with the President of URE, led to noticeable effects in the decrease of SAIDI and SAIFI indices in 2016-2021 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.

In 2023, the electricity supply reliability indicators on the networks of most of the companies of the largest DSOs improved significantly. When taking into account the combined results of the 5 DSOs, it should be indicated that they are better in relation to those achieved in 2022 by 41% for the SAIDI index and by 22% for the SAIFI index, respectively.

The SAIDI index (for unscheduled interruptions including disaster and planned interruptions) for the five largest DSOs was 207.75 min/customer in 2023 and increased by 145.47 min/customer compared to the previous year.

The SAIFI index (for unplanned interruptions including disaster and planned interruptions) for the five largest DSOs was 2.85 units/customer in 2023 and increased by 0.80 units/customer compared to the previous year.

In 2023, the most common causes of outages in most companies were adverse weather conditions such as storms, windstorms and gale force winds, which result in the breaking of overhead line conductors and damage to the supporting structures of these lines. The consequences of these phenomena are the destruction of the electricity infrastructure, which for the most part is still the overhead network. In addition, common causes of network failures, according to the Companies, include damaged low-voltage cables, fatigue/ageing of the material, the proximity of trees – branches to the devices, road accidents, the action of third parties and birds and other animals, faulty operation of devices belonging to the Company's customers, execution errors and insufficient quality of the devices provided by the suppliers.

Due to the DSOs' implementation of 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). Nevertheless, such projects were monitored annually through individual DSO reports or on the occasion of the execution of an investment plan.

In the light of the above, in their reports on the implementation of the development plan for 2023, the five largest electricity distributors notified of:

- the predominant share of outlays (in total outlays) for investments related to network investments, that is, those serving directly to fulfil the statutory obligations of the distribution system operator and to fulfil the obligations under its licence to provide distribution services, including investments related to the connection of electricity customers and producers and the modernisation and restoration of existing assets, related to the improvement of service quality and/or the increase in demand for capacity. These investments were aimed at both the construction of new elements of the power grid and the modernisation of existing elements. At the same time, it should be noted that the modernisation tasks were in most cases related to increasing the performance parameters of the grid, enhancing its functionality and applying solutions facilitating changes in the management of the power grid operation,
- a significant factor shaping the level of expenditure realised in 2023, which was the implementation
  of investment activities in the area of grid connection,

- at the same time, due to the growing dynamics of connection of dispersed sources (including the prosumer market), DSOn and the development of e-mobility, companies have been making the necessary investments to adapt and rebuild their networks in order to accommodate the connection of these entities to the grid,
- 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. In order to fully exploit the network automation functionalities and achieve optimum benefits resulting from the automation, actions related to the change of the current network topology were carried out in parallel, with the aim of adapting the network in the long run to the possibility of bilateral supply of MV/IV substations,
- continuation of activities intended to improve operational efficiency, further construction as well as development of IT and telecommunications systems and systematic strengthening of the infrastructure supporting distribution activities through the acquisition of means of transport, in particular specialised equipment, tools, as well as the construction and modernisation of facilities.

Nonetheless, the priority for the companies in 2023 was to connect new entities to the grid, both customers and generators, and to provide them with the highest possible level of energy security, understood as an uninterruptible supply of energy of appropriate quality (SAIDI/SAIFI indices and appropriate voltage and frequency levels).

The higher implementation of capital expenditures was related in particular to the needs arising from the implementation of investments concerning precisely the connections to the power grid of the companies and the need to maintain a certain level of investment expenditures for the modernisation of the grid, as well as to the increase in the prices of materials, services and electrical works.

The investment projects completed sought to:

- ensure the correct parameters of the electricity supplied to customers,
- connect new entities to the grid,
- create opportunities for future connections and covering increased power demand by existing customers,
- reduce electricity losses
- decrease of equipment failure rate,
- improve reliability of network operation.

### **3.1.3. Network tariffs**

In 2023 the President of URE conducted proceedings regarding approval of electricity tariff for:

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

#### Tariff approval for the transmission system operator – PSE S.A.

The procedure for the approval of PSE S.A.'s tariff for 2024 ended with the President of URE issuing a decision on 15 December 2023. The tariff of the transmission system operator was approved for the period from 1 January until 31 December 2024.

#### Approval of tariffs for distribution system operators that unbundled on 1 July 2007

The tariffs for electricity distribution services for the five largest DSOs, namely PGE Dystrybucja S.A., TAURON Dystrybucja S.A., ENEA Operator Sp. z o.o., ENERGA-OPERATOR S.A. and Stoen Operator Sp. z o.o., were approved by the President of URE on 15 December 2023 for the period from 1 January until 31 December 2024.

From 1 January to 30 June 2024, the distribution fee rates for eligible customers including household customers, were frozen to the limits indicated in the Act of 7 October 2022. In the event that customers exceed the specified energy consumption limits, these customers will be billed for the energy supplied at the distribution fee rates resulting from the distribution system operators' tariffs for 2024 approved by the President of URE.

#### Approval of tariffs for suppliers exercising the function of default suppliers

On 18 October 2023, the President of URE approved changes to the tariffs for trading companies performing the tasks of default supplier, whose tariffs were approved in December 2022. The above was the result of taking into account new legal regulations introduced by the Act of 16 August 2023 amending the Act on Special Solutions for the Protection of Electricity Customers in 2023 in Connection with the Situation on the Electricity Market and Certain Other Acts<sup>7)</sup>, consisting in increasing the limits of electricity consumption covered by the 2022 price, resulting from the Act of 7 October 2022.

At the end of October 2023, the process of approval of electricity tariffs for 2024 for tariff group G customers began for the four trading companies acting as default suppliers, namely ENEA S.A., ENERGA-OBRÓT S.A., PGE Obrót S.A., TAURON Sprzedaż Sp. z o.o.

As a result of the administrative proceedings, on 15 December 2023, the President of URE approved and subsequently published the electricity tariffs for tariff group G customers in the URE Public Information Bulletin of the above default suppliers, that is ENEA S.A., ENERGA-OBRÓT S.A., PGE Obrót S.A., TAURON Sprzedaż Sp. z o.o., for the period until 31 December 2024.

It should be reminded that due to the unstable situation on the commodity markets, in particular gas and coal in 2022, which translated into high wholesale electricity prices and thus into sharp increases in electricity prices, the electricity prices approved by the President of URE in 2022 with regard to tariff group G customers were not directly applicable to customers in these groups in 2023. Instead, these tariffs served as the basis for calculating the level of compensation payable to energy companies. Electricity prices for household customers up to the specified consumption limits resulting from the Act of 7 October 2022, were frozen at the level of prices resulting from the suppliers' tariffs of January 2022 approved by the President of URE .

Towards the end of the tariff process for the approval of tariffs of default suppliers for 2024, that is on 7 December 2023, the Act on Amending Acts to Support Customers of Electricity, Gaseous Fuels and Heat was passed, which introduced, among others, an amendment to the Act of 7 October 2022. Its result was an extension of the application of 'frozen' electricity prices in settlements with eligible customers in the period from 1 January to 30 June 2024 up to certain limits of electricity consumption at the level resulting from the tariffs applied in 2022. The Act entered into force on 31 December 2023.

<sup>&</sup>lt;sup>7)</sup> JoL of 2023 item 1785.

#### Approval of tariffs for so-called industrial energy companies

In addition to tariffs for the TSO, DSOs and default suppliers, the President of URE also approves electricity tariffs for so-called industrial energy companies, namely companies that had no obligation to unbundle their electricity distribution and supply activities. These tariffs are approved with regard to the activity related to electricity distribution, with respect to customers of all tariff groups at all voltage levels, while with regard to the activity related to electricity supply – only with respect to customers qualified to tariff group G connected to the network of the given company, that is, for customers consuming electricity for, among others, the needs of households, premises of a collective dwelling character, etc., detailed in the company's tariff. It should be noted that the rules for the classification of customers into tariff groups are uniform nationwide.

### 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 operability 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 supplier of gaseous fuels, electricity or heat 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 such 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 Act, contained in 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 transmission system operator and the distribution system operator are obliged to develop a transmission network code (TNC) or a distribution network code (DNC), respectively. Subsequently, the aforementioned codes are approved by the President of URE, and the methods, 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 energy security, which is mainly determined by: the amount of capacity 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 energy security on the electricity markets:

- on the system market TSO,
- on local markets DSO.

Pursuant to Article 9g para. 4 of the Act, codes prepared for the electricity 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 characterising 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 transmission network code.

#### Electricity storage facilities integrated into the grid of the electricity system operator

In 2023, URE received applications from two DSOs, concerning a total of 29 energy storage facilities, for decisions pursuant to Article 9d1 para. 1 of the Energy Law Act, recognising these energy storage facilities as fully integrated elements of the grid and giving consent for the electricity system operator to own, build, manage or operate these energy storage facilities. By May 2024, the President of URE had issued four decisions recognising PGE Dystrybucja S.A.'s electricity storage facilities as fully integrated network elements and consenting to this distribution system operator owning, building, managing and operating three storage facilities. In one case, the President of URE issued a decision refusing to recognise an energy storage facility as a fully integrated network element and did not consent to the electricity system operator owning, building, managing or operating the storage facility in question.

#### **Congestion management**

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

The rules on capacity allocation and congestion management of interconnectors are governed by Regulation 2019/943 and Regulation 2015/1222 (on short-term allocation and congestion management) and Regulation 2016/1719 (on long-term allocation).

In 2023, transmission capacities were calculated and allocated separately for: the synchronous profile (covering interconnections with Germany, the Czech Republic and Slovakia), the DC interconnection with Sweden, the DC interconnection with Lithuania and the interconnection with Ukraine (Zamość-Dobrotwór radial interconnection and Rzeszów-Chmielnicka synchronous interconnection). On each of these interconnections, a calculation methodology based on net transfer capacity (NTC)<sup>8</sup> was used, taking into account the balancing conditions, whereas:

- for the synchronous profile, import and export capacities were calculated for annual auctions, monthly auctions, daily auctions and the intraday procedure,
- the Flow Based Allocation (FBA) method<sup>9)</sup> was used for the daily horizon for a synchronous profile,
- for connections with Sweden and Lithuania, export and import capacities were calculated for the daily auction and intraday procedure,
- for the Zamość-Dobrotwór radial connection, capacity was calculated for imports only for the purpose of monthly auctions,
- for the Rzeszów-Chmienicka synchronous interconnection, as of 15 May 2023, transmission capacity for imports and exports were calculated for monthly auctions.

In the long-term horizon for the synchronous profile, the cross-zonal capacity allocation took place in accordance with the allocation rules for the long-term horizon approved by ACER Decision No. 03/2017 of 2 October 2017, as amended.

Allocation was carried out through coordinated explicit auctions organised by the Joint Allocation Office S.A. auction office (JAO).

Short-term capacity allocation at all borders of the NES with the EU Member States is performed under the pan-European mechanisms of single day-ahead market coupling and single intraday market coupling, in accordance with Regulation 2015/1222.

Transmission capacity on the Poland-Ukraine interconnection was allocated through explicit auctions organised on a monthly basis.

<sup>&</sup>lt;sup>8)</sup> Capacity calculation method based on the principle of estimating and defining ex ante the maximum energy exchange between bordering bidding zones

<sup>&</sup>lt;sup>9)</sup> A capacity calculation method in which energy exchanges between bidding zones are limited by power transfer distribution factors and available margins on critical network elements.

As of May 2023, the allocation of long-term transmission capacity at the border with Ukraine was carried out through unilateral auctions, operated on the basis of dedicated agreements between PSE S.A. and the TSO from Ukraine – UKRENERGO. At the same time, work was underway in 2023 to implement the target model of coordinated auctions operated by the JAO auction office, which was launched on 16 January 2024.

# *Revenues from transmission capacity allocation on interconnections with the EU states and their utilisation in 2023*

The volume of revenues from cross-zonal capacity allocation on the interconnections with the EU member states in the period from 1 January to 31 December 2023 amounted to PLN 873,457,400. Under Regulation 2019/943, regulators are required to publish a detailed report on the use of congestion revenues. The President of URE published such a report on 1 March 2024<sup>10</sup>.

#### **Balancing services**

At the end of 2023, 147 entities participated in the balancing market processes, including 29 generators, 10 final customers, 11 network customers, 88 trading enterprises, 3 energy exchanges, 5 DSOs and PSE S.A. as TSO. Technical and commercial data were submitted by 52 market operators and concerned 361 schedule units.

The figure below presents information on the volume of unscheduled balancing energy (UBE) withdrawn from the balancing market (purchase from the BM) and the settlement prices of imbalance in this market in individual months of 2023.

**Figure 1.** Unplanned energy withdrawn (UBE) and prices of balancing energy on the balancing market (SPD<sub>s</sub>) in 2023



Source: URE, on the basis of data acquired from PSE S.A.

<sup>&</sup>lt;sup>10</sup> https://www.ure.gov.pl/pl/urzad/informacje-ogolne/komunikaty-prezesa-ure/11776,Informacja-nr-142024.html

The maximum settlement price of deviation (SPD) in the balancing market varied between 811.97 PLN/MWh and 1,014.41 PLN/MWh and the minimum settlement price from -50.00 PLN/MWh to 344.97 PLN/MWh, whereas weighted average monthly prices of SPD oscillated between 381.28 PLN/MWh and 681.21 PLN/MWh. The situations described above depended on various conditions, with the key ones including atmospheric conditions, demand for capacity in the NES, capacity reserves in this system and atmospheric conditions.

For the most hours of 2023, there was an overcontracting of market participants (in contrast to 2022, where the market was under-contracted). The cost of removing limitations (LC), determined in accordance with the definition of LC in the Balancing Conditions (BC), amounted to PLN 1,321.3 million, whereas in January-May 2023 period the costs so determined were reduced in total by PLN 33.1 million due to avoided costs of thermal energy generation by backup heat sources. Receivables for additional generation costs resulting from the reallocation of energy sales contracts (ESC) to active generating units amounted to PLN 1,437.5 million in 2023.

Customer demand balancing costs (BC) totalled PLN 883.013 million and ranged from PLN -358.738 million to PLN 404.225 million. On the other hand, the costs of removing limitations and the costs resulting from reallocation of ESC ranged from PLN 26.793 million to PLN 189.818 million and from PLN 27.340 million to PLN 244.454 million, respectively.





Source: URE on the basis of data of PSE S.A.

The rules for the operation of the electricity system balancing mechanism (the so-called balancing market – BM), have been defined by the electricity transmission system operator in the TNC and – as of April 2020 – in the Balancing Conditions (BC), developed on the basis of Article 18 of Regulation 2017/2195. The above document replaced to a large extent the regulations previously contained

in the TNC – System Balancing and Congestion Management. Both the TNC and the BC are subject to approval by the President of URE.

In 2023, system balancing was affected by amendments to the BC, TNC and DNC approved by the President of URE<sup>11)</sup>.

In 2023 the President of URE also approved new BCs, which is the final stage of the regulatory changes resulting from the implementation of the second phase of the balancing market reform in Poland. The new BC will introduce the following main changes, which will take effect from mid-June 2024:

- a new entity structure of the balancing market,
- new object structure of the balancing market,
- a new catalogue of balancing services,
- changes to commercial and technical data reporting, including the introduction of operation schedule reporting,
- changes to the process of planning the operation of the national electricity system,
- rules for participation in the European platform for the exchange of balancing energy from replacement reserves and the European platform for the imbalance netting process,
- market-based rules for the procurement of balancing power,
- pricing of the operational reserve
- settlement of the operational reserve,
- changes to the rules for the pricing of balancing energy and imbalance and their settlement rules, including balancing energy and imbalance settlement periods equal to 15 minutes.

As part of the implementation of balancing energy exchange platforms, PSE S.A., in accordance with the provisions of Regulation 2017/2195, has been operationally active since 2020 in the European platform for the imbalance netting process, implemented as part of the IGCC project. The IGCC platform enables imbalance netting between TSOs in the continental European area. Participation in this mechanism allows a reduction in the activation of balancing energy by individual TSOs, including PSE S.A., when their systems are imbalanced in different directions.

Furthermore, PSE S.A. participates in the implementation of the three European balancing energy exchange platforms provided for by Regulation 2017/2195 – TERRE (for replacement reserves), MARI (for manual frequency restoration reserves), PICASSO (for automatic frequency restoration reserves).

### **3.1.5.** Monitoring the balance of supply and demand

#### Monitoring investment plans of energy companies in new generation capacity

Performing the tasks arising from the Energy Law Act with respect to monitoring the security of electricity supply, every 2 years the President of URE examines investment plans of electricity generators fulfilling the obligation to prepare 15-year forecasts, pursuant to Article 16 para. 20 and 21 of the Energy Law Act. 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 URE forecasts for a period of 15 years, covering in particular: the amount of electricity generated, projects for modernisation, 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 next reporting obligation falls in 2024. Questionnaires developed by URE which will be sent to energy companies and groups as well as data from PSE S.A. will be used to carry out the survey.

<sup>&</sup>lt;sup>11)</sup> https://bip.ure.gov.pl/bip/taryfy-i-inne-decyzje-b/inne-decyzje-informacj/4368,Inne-decyzje-informacje-sprawozdaniaopublikowane-w-2023-r.html

#### Activities related to the capacity market

Under the capacity mechanism, capacity providers in 2023 received additional revenues for generation readiness and demand reduction providers received Demand Side Response (DSR) payments, and energy storage facilities also received support.

Year	Net payments [PLN million]
2021	5 334.7
2022	5 296.5
2023	5 477.2
Total	16 108.4

Table 1. Funds paid to capacity providers under capacity contracts in the years 2021–2023<sup>12)</sup>

Source: URE on the basis of data of Zarządca Rozliczeń S.A.

The implementation of the capacity market processes in 2023 progressed on time and without disruption. Four supplementary auctions for deliveries in each quarter of 2024 were held on 16 March 2023, while on 14 December last year – the main auction for the delivery year 2028.

The volume of capacity obligations offered in the main auction by capacity providers for the delivery year 2028 exceeded the capacity demand in the main auction by 44% (offered volume – 8,352 MW, demand – 5,791 MW). With such a large surplus of offered capacity over demand, the auction ended only in the sixth round with a clearing price 46% lower than the maximum price (auction closing price 244.90 PLN/kW/year, maximum price in the main auction 453 PLN/kW/year).

The increased supply of capacity was due to the following factors:

- the increased volume of capacity available to foreign providers, in the auction for 2028 it was more than double that of the auction for 2027 (total for the auction for 2027 – 1,415 MW and for the auction for 2028 – 2,844 MW), the volume of capacity contracted by them for 2028 doubled compared to the volume contracted for 2027,
- the development of electrochemical battery energy storage technology, which has moved from the research project phase to the commercial project phase, the volume of capacity contracted by capacity providers planning to build this type of unit in the auction for 2028 increased more than tenfold compared to the volume contracted for 2027 (165 MW and 1,734 MW respectively),
- the clearing prices of the main auctions, which for 2026 and 2027 ended in the first rounds with maximum prices of PLN 400.39/kW/year and PLN 406.35/kW/year, respectively, resulted in increased interest from both domestic and foreign capacity providers.

In fulfilment of its obligations under the Capacity Market Act, in 2023 the President of URE:

- announced the final results of the main auction for the delivery year 2027<sup>13</sup>
- announced the estimated value of electricity not supplied in the territory of the Republic of Poland<sup>14)</sup>
- announced the cost of entry for new capacity and DSR<sup>15</sup>
- announced the final results of the additional auctions for each quarter of the delivery year 2024<sup>16</sup>

<sup>&</sup>lt;sup>12)</sup> The amount of funds that were paid to capacity providers and the amounts of capacity market costs resulting from the auctions may differ due to the inclusion in the amount of funds of valorisation and settlements of providers resulting from demonstrations, tests and the performance of the capacity obligation.

<sup>&</sup>lt;sup>13)</sup> Information no. 2/2023 – Information of the President of URE – Energy Regulatory Office

<sup>&</sup>lt;sup>14)</sup> Information no. 10/2023 – Information of the President of URE – Energy Regulatory Office

<sup>&</sup>lt;sup>15)</sup> Information no. 12/2023 – Information of the President of URE – Energy Regulatory Office

<sup>&</sup>lt;sup>16)</sup> Information no. 23/2023 – Information of the President of URE – Energy Regulatory Office

- submitted a request to the Minister of Climate and Environment regarding the volume of capacity demand in the main auction for the delivery year 2028 and in the additional auctions for the delivery year 2025,
- gave its opinion to the Minister for Climate and Environment on the parameters of the main auction for the delivery year 2028 and on the parameters of the additional auction for the delivery year 2025,
- indicated selected hours of the day falling within the hours of peak capacity demand in the system determined separately for the quarters of the delivery year 2024<sup>17</sup>,
- calculated the capacity fee rates for 2024<sup>18</sup>
- calculated the unit rate of penalty for non-compliance with the capacity obligation applicable in 2024<sup>19)</sup>.
   Pursuant to the requirements of the Capacity Market Act, the President of URE received information from the operator which, pursuant to Article 2 para. 1 item 27 of the Capacity Market Act, is PSE S.A., regarding:
- the course of general certification in 2023, certification for the auction for delivery year 2028, the course for additional auctions for delivery year 2024 and the course of the main auction for delivery year 2028,
- parameters for the main auction for delivery year 2028 and for additional auctions for delivery year 2025.

By decision of 3 February 2023<sup>20)</sup>, the President of URE approved amendments to the Capacity Market Rules. The update was related to the entry into force of the Emergency Measures Act, which introduced a modification of the provisions of the Capacity Market Act including the replacement of the previous phrase "emergency period" with "power market invocation period". The change concerned only the terminology used in the provisions of the Act itself and did not include any substantive changes. As a result, it was necessary to adapt the wording of the Capacity Market Rules to the amended nomenclature.

#### **General certification in 2023**

As part of the general certification, owners of physical generation units, both existing and planned, as well as planned DSR units, apply to the operator for their registration. This is a condition for entering the certification for the main or supplementary auctions in a given year and for setting up a capacity market unit, without which it is not possible to participate in the auctions.

Participation in the general certification was voluntary, with the exception of existing physical generation units with a gross capacity of at least 2 MW, whose owners were required to notify them each year, pursuant to Article 11 of the Capacity Market Act. The Act of 28 July 2023 introduced, among others, modifications of provisions of the Capacity Market Act, including the repealing of Article 11<sup>21)</sup>.

In 2023, 1,735 applications were submitted under general certification, that is by 22.9% more than in 2022. 1,679 units were registered in the capacity market register, that is by 21.8% more than in the preceding year. The net generating capacity of the physical units entered in the register amounts to 69.6 GW (an increase by 29.4% compared to the previous year)<sup>22)</sup>.

<sup>&</sup>lt;sup>17)</sup> Information no. 47/2023 – Information of the President of URE – Energy Regulatory Office

<sup>&</sup>lt;sup>18)</sup> Information no. 48/2023 – Information of the President of URE – Energy Regulatory Office

<sup>&</sup>lt;sup>19)</sup> Information no. 74/2023 – Information of the President of URE – Energy Regulatory Office

<sup>&</sup>lt;sup>20)</sup> Capacity Market Regulations – Capacity market – BIP – Energy Regulatory Office (ure.gov.pl)

<sup>&</sup>lt;sup>21)</sup> Article 10 item 3 of the Act of 28 July 2023 amending the Energy Law Act and certain other acts.

<sup>&</sup>lt;sup>22)</sup> General certification 2023

# Certification for the main auction in 2022 for delivery year 2027 and certification for the main auction in 2023 for delivery year 2028

**Table 2.** Data on the issuance of certificates as part of the certification for the main auction in 2022 fordelivery year 2027 and in 2023 for delivery year 2028

Conscinu Markat Units	2022	2023
Capacity Market Onits	[items]	[items]
Existing generation units, including:	82	107
- electricity storage facilities	5	13
- other	77	94
Upgraded generation units, including:	10	11
- electricity storage facilities	1	2
- other	9	9
New generation units, including:	10	74
- electricity storage facilities	6	69
- other	4	5
Demand reduction units	76	99
Units consisting of foreign physical units	7	68
TOTAL	185	359

Source: URE.

**Table 3.** Capacity obligations in the main auction and secondary market for 2027 and 2028 offered aspart of the 2022 and 2023 certifications conducted

Conscitu Markat Units	2022	2023
Capacity Market Offics	[MW]	[MW]
Existing generation units, including:	1 822	1 960
- electricity storage facilities	277	735
- other	1 545	1 225
Upgraded generation units, including:	334	1 315
- electricity storage facilities	121	239
- other	213	1 076
New generation units, including:	1 799	3 696
- electricity storage facilities	370	3 139
- other	1 429	557
Demand reduction units	1 900	1 984
Units consisting of foreign physical units	550	1 590
TOTAL	6 405	10 545

Source: URE.

### Additional auctions for Q1, Q2, Q3 and Q4 of supply year 2024 (held on 16 March 2023)

Table 4. Data regarding additional a	auctions for all c	quarters of supply y	year 2024
--------------------------------------	--------------------	----------------------	-----------

Quarter of delivery year 2024Number of successful bids in the additional auctionTotal volume total volume arising from t concluded for auction		Total volume of capacity obligations arising from the capacity agreements concluded for a given delivery quarter [MW]	Clearing price [PLN/kW/year]
I	70	1 766	387.00
П	57	1 022	241.92
III	58	1 154	199.55
IV	69	1 654	387.00

Source: URE.

#### Main auction for supply year 2028 (held on 14 December 2023)

Table 5. Data regarding the main auction for supply year 2028

	Number of successful bids in the main auction	Total volume of capacity obligations arising from the capacity agreements concluded for a given delivery year [MW]	Clearing price [PLN/kW/year]
Polish units	111	5 992	244.90
Foreign units – total, including:	48	1 079	х
- synchronous profile zone	6	628	207.00
<ul> <li>transmission system of the Kingdom of Sweden</li> </ul>	42	451	244.90
TOTAL	159	7 071	x

Source: URE.

A total of 21,151 MW has been contracted for the delivery year 2028, including 7,071 MW in the main auction for the delivery year 2028 and 14,080 MW as a result of long-term contracts in the auctions for 2021–2027.

The total volume of capacity obligations resulting from the conclusion of capacity contracts for more than one delivery year in the main auction held for the delivery year 2028 is 2,063 MW.





Source: URE on the basis of information provided by PSE S.A.



Figure 4. Annual costs of the capacity market for the years 2021–2028 [PLN million]

The costs of the capacity market in 2025–2028 will be increased by the costs of purchasing capacity obligations in additional auctions<sup>23</sup>.



**Figure 5.** Annual costs of capacity contracts for 2021-2044 concluded as a result of capacity auctions that took place in the years 2018–2023 [PLN million]

Source: URE on the basis of information provided by <u>PSE S.A.</u>

Source: URE on the basis of information provided by PSE S.A.

<sup>&</sup>lt;sup>23)</sup> Pursuant to Article 29 para. 4 of the Capacity Market Act, additional auctions are carried out in the year preceding the year in which the delivery periods of each of these auctions fall, with additional auctions for all delivery periods taking place at the same time.



Figure 6. Contracted capacity for the years 2021–2028 [MW]

Source: URE on the basis of information provided by PSE S.A.

**Figure 7.** Contracted capacity for 2021–2044 as a result of capacity auctions that took place in the years 2018–2023 [MW]



Source: URE on the basis of information provided by <u>PSE S.A.</u>

	2021	2022	2023	2024	2025	2026	2027	2028
Capacity supply [MW]	25 505	12 534	13 301	11 914	2 851	7 000	5 000	8 000
Capacity demand in the main auction [MW]*	22 732	10 544	10 708	9 088	2 526	7 991	6 237	5 791
Capacity contracted in the main auction [MW]	22 427	10 580	9 779	8 671	2 367	7 189	5 379	7 071
Price max of the price maker [PLN/kW/year]	327.80	366.00	406.90	404.30	414.70	400.40	406.40	452.60
Price max of the price taker [PLN/kW/year]	193.00	198.00	203.00	183.00	179.00	186.00	187.00	183.00
Clearing price of auction [PLN/kW/year]	240.32	198.00	202.99	259.87	172.85	400.39	406.35	244.90
Annual costs [PLN million]**	5 530	5 249	5 267	5 723	4 877	5 563	5 918	5 887
Annual costs according to DSO [PLN million]	3 979	3 819	3 529	3 789	3 909	3 959	3 839	-
Total contracted capacity [MW]**	22 916	23 701	23 213	22 654	20 620	17 969	18 712	21 151

Table 6. Summar	ry of auction	results for the	years 2021-2028
-----------------	---------------	-----------------	-----------------

\* The demand for capacity is determined for each year by the ordinance of the minister responsible for energy on the parameters of the main auction.

\*\* Additional auctions and multi-year contracts are included.

Source: URE.

As a result of the capacity market auctions for 2021-2028, contracts were concluded under which the construction of new generating units and energy storage facilities with a capacity of approximately 10.5 GW will be financed, of which 6.5 GW are units for which investment decisions on launching were made after the implementation of the capacity market. During the same period, contracts were concluded under which 14 GW of generation capacity will be upgraded.





Source: URE on the basis of Information of PSE S.A. on the course of main auctions for the years 2021–2028



Figure 9. Results of auctions for the years 2021–2028 broken down by unit types [MW]

# *Source: URE on the basis of information of PSE S.A. Capacity volume for the years 2021–2024 includes main and additional auctions.*

The regulations in the Capacity Market Act allow two types of physical demand reduction units, with or without internal generation, to be submitted for participation in the capacity market auctions. The capacity contracted by capacity providers with demand reduction capacity market units as a result of the main auction for 2028 was approximately 36% lower than the capacity contracted by such suppliers for 2026 and 2027.



Figure 10. Share of DSR in capacity contracted in main auctions for the years 2021–2028

Source: URE on the basis of information of PSE S.A.

#### Other activities in the capacity market

#### European Resources Adequacy Assessment 2023 (ERAA 2023)

On 15 December 2023 ENTSO-E submitted the third ERAA 2023 to ACER. The Agency, in cooperation with Member States' regulators, assessed ERAA 2023 in terms of its compliance with the requirements of Regulation 2019/943 and the methodology for assessing resource adequacy at the European level approved by ACER Decision 24/2020.

In ACER's view, the progress in relation to ERAA 2022 is significant and the submitted document fulfils in part the requirements of Regulation 2019/943 and, for the remaining part, the simplifications introduced by ENTSO-E are acceptable.

In view of the above, ACER and Member States' regulators concluded that ERAA 2023 can provide an objective basis for assessing resource adequacy as required by Regulation 2019/943. ERAA 2023 was approved by ACER in 2024 and is the first resource adequacy analysis prepared by ENTSO-E after the entry into force of Regulation 2019/943, approved by the Agency.

### 3.1.6. Cross-border issues

#### Monitoring technical cooperation between the EU and third country operators

In 2023, the technical possibilities of interconnection exchange were determined separately for: the synchronous profile (interconnection with Germany, the Czech Republic and Slovakia), interconnections with Sweden and Lithuania, the radial operating line 220 kV Zamość-Dobrotwór (Ukraine) and the synchronous interconnection Rzeszów-Chmielnicka (Ukraine).

The applicable rules for calculation and allocation of capacity and congestion management are described in Chapter 3.1.4 "Approval of the rules for access to cross-border infrastructure, including capacity allocation and congestion management".

In 2023, as in previous years, inter-operator remedial actions were taken, namely measures of an *ad hoc* nature to ensure the safe operation of the interconnected systems. These measures included

only bilateral redispatching (no multilateral redispatching was required), and its scale with the German TSO 50 Hertz was similar to the previous year.

### Monitoring of coordinated interconnection exchange

The trade balance of electricity interconnection exchanges and the actual energy flows from individual countries to Poland and from Poland to other countries in 2023 are shown in the figure below.

**Figure 11.** Balance of commercial and actual electricity flows on interconnections with other countries in 2023 [GWh]



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

**Figure 12.** Comparison of commercial flow balances and actual electricity flow balances on interconnections with other countries (in total) in particular years 2018–2023 [GWh]



Source: URE 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 connections with the neighbouring countries, that is on the connections of Poland with the Czech Republic, Lithuania, Germany, Slovakia, Sweden and Ukraine.

**Figure 13.** Comparison of commercial and actual electricity flows on the Poland-Czech Republic interconnection in the years 2018–2023 [GWh]



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

**Figure 14.** Comparison of commercial and actual electricity flows on the Poland-Lithuania interconnection in the years 2018–2023 [GWh]



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

**Figure 15.** Comparison of commercial and actual electricity flows on the Poland-Germany interconnection in the years 2018–2023 [GWh]



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



# **Figure 16.** Comparison of commercial and actual electricity flows on the Poland-Slovakia interconnection in the years 2018–2023 [GWh]

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

**Figure 17.** Comparison of commercial and actual electricity flows on the Poland-Sweden interconnection in the years 2018–2023 [GWh]



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

**Figure 18.** Comparison of commercial and actual electricity flows on the Poland-Ukraine interconnection (only for imports and energy flows out of Poland) in the years 2018–2023 [GWh]



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

When comparing import commercial flows and actual flows on the interconnections with Ukraine, attention is drawn to the significant difference between trade commercial and actual flows, which did not occur in previous years. As for the reasons for the above phenomena, it should be indicated that in May 2023 the synchronous 400 kV connection Rzeszów-Chmielnicka was launched, on which circular flows occur in both directions, mainly via Slovakia and to a lesser extent via the Czech Republic, so there are similar dependencies as on the other synchronous connections. The differences in commercial and actual flows between Poland and Ukraine in 2023 were also influenced by concluded emergency supplies: in the import direction 5.1 GWh, and in the export direction 28.2 GWh.

The commercial balance – the balance at Poland's borders in 2023 – amounted to 4,053.8 GWh (imports). Electricity exports totalled 9,773.5 GWh, a decrease of 17% compared to the previous year. Imports increased quite significantly, totalling 13,827.3 GWh against 9,911.3 GWh in 2022 (an increase of almost 40% compared to the previous year).

Such a high increase in imports and the fact that, after a period of two years, Poland became a net importer of energy again, was the result of a return to the trends observed before 2021, which were disrupted in 2021 and 2022 due to Russia's invasion of Ukraine.

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 is due to unplanned electricity flows that contribute to a significant reduction in the transmission capacity offered to participants at these borders.

# Monitoring the limitations of transmission services in cross-border exchange due to lack of capacity or grid failures in 2023

In the case of cross-border exchange on synchronous interconnections and on the interconnections with Sweden and Lithuania, there were no limitations to allocated transmission capacity (reductions) in 2023. On the Poland-Ukraine interconnections, on the Polish side, there was a prolongation of the repair of the 400 kV Rzeszów-Chmielnicka line resulting in a reduction of scheduled supplies to 0 MW during 7-8 October 2023, 14-15 October 2023 and 21-22 October 2023, whereas for the 220 kV Zamość-Dobrotwór interconnection, a line outage occurred resulting in a reduction of the transmission rights allocated in the monthly auction in the import direction to 0 MW on 15 November 2023 (from 12:00 to 24:00) and 16 November 2023 (from 00:00 to 24:00).

### 3.1.7. Implementation of guidelines and network codes

**Table 7.** Applicable European Commission regulations concerning the development of a single electricity market

Name of network code / guidelines	Published
Commission Regulation (EU) 2015/1222 of 24 July 2015 establishing a guideline on capacity allocation and congestion management	OJ L 197, 25.07.2015, p. 24 as amended
Commission Regulation (EU) 2016/1719 of 26 September 2016 establishing a guideline on forward capacity allocation	OJ L 259, 27.09.2016, p. 42 as amended
Commission Regulation (EU) 2017/2195 of 23 November 2017 establishing a guideline on electricity balancing	OJ L 312, 28.11.2017, p. 6 as amended
Commission Regulation (EU) 2016/1388 of 17 August 2016 establishing a Network Code on Demand Connection	OJ L 223, 18.08.2016, p. 10
Name of network code / guidelines	Published
---	--
Commission Regulation (EU) 2016/631 of 14 April 2016 establishing a network code on requirements for grid connection of generators	OJ L 112, 27.04.2016, p. 1, as amended
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	OJ L 241, 8.09.2016, p. 1
Commission Regulation (EU) 2017/1485 of 2 August 2017 establishing a guideline on electricity transmission system operation	OJ L 220, 25.08.2017, p. 1, as amended
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 L 158, 14.06.2019, p. 1
Regulation (EU) 2019/943 of the European Parliament and of the Council of 5 June 2019 on the internal market for electricity	OJ L 158, 14.06.2019, p. 54, as amended
Consolidated text: 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 L 158, 14.06.2019, p. 22, as amended

### Source: URE's own materials.

In accordance with the provisions of the regulatory acts indicated in the table above, the regulatory authorities of the European Union are responsible for approving the conditions and methods set out therein. These methods can be divided into European, regional and national methods and are developed by NEMO, ENTSO-E and the TSOs concerned, that is, national methods by national TSOs, regional methods by regional TSOs and European methods by all TSOs. The situation is similar with the approval of methods by the regulators, except for the European methods, for which the decision always rests with ACER. In case the regulators within a region are not able to agree on a common position, either due to lack of consensus (it is sufficient for one regulator to oppose), or if the deadline for the decision has passed, this method is also subject to ACER approval.

ACER's decision on the determination of Capacity Calculation Regions (CCRs)<sup>24)</sup>, issued on the basis of Regulation 2015/1222, outlined the framework for cooperation and joint coordination within particular regions for TSOs and national regulators. The borders of the Polish bidding zone are assigned to three independent CCRs (Hansa – Polish-Swedish border, Core – Polish-German, Polish-Czech and Polish-Slovak borders, Baltic – Polish-Lithuanian border). Furthermore, Regulation 2017/2195 identifies as a region, in addition to the CCR, the relevant geographical area and the synchronous area. Regulation 2017/1485 further distinguishes a load-frequency control block (LFC block), which means a part of a synchronous area or an entire synchronous area, physically demarcated by measurement at the interconnections to other LFC blocks, covering at least one LFC area, operated by one or more TSOs fulfilling obligations of load-frequency control.

With regard to electricity trading in the day-ahead and intraday market, Regulation 2015/1222 required each Member State to designate at least one NEMO in each bidding zone on its territory. The role of the NEMO is primarily to match and allocate bids and offers for the sale and purchase of electricity from across the EU for the day-ahead and intraday market, to publish prices and to conduct clearing and settlement of concluded contracts. Due to the specific nature of the activities, these roles are fulfilled in practice by power exchanges. The above regulation established two methods for allowing NEMOs to offer energy trading services in a Member State.

<sup>&</sup>lt;sup>24)</sup> The capacity calculation regions were established by ACER Decision No. 06/2016 of 17 November 2016 (published on the ACER's website, as amended).

In the first case, a NEMO can be designated by the regulator to act as NEMO in a given Member State. In the second case, if the NEMO in question is designated in another Member State, it can act as NEMO on the basis of a Member State notification (so-called passport). There are currently three NEMOs operating in the Polish bidding zone. The role of designated NEMO is currently performed by TGE S.A., which in 2023, was again designated by the President of URE as NEMO for another four years, that is until 2 December 2027, and two passported NEMOs -EPEX SPOT SE and Nord Pool EMCO A.S.

In order to enable the operation of more than one NEMO in a given Member State, the establishment of common relations between NEMOs as well as their relations with the TSO, it was necessary to implement the so-called Multi-Nemo Arrangements (MNA). Due to the implementation of this mechanism, it is possible, among others, to match bids and offers within one market process and settle offers based on a single price in the Polish bidding zone, regardless of which NEMO services were used by a given market participant. The President of URE approved the MNA by a decision issued on 5 June 2017, which, as amended, is currently in force.

The methods or conditions approved in 2023 under the aforementioned legislation are set out in the table below.

Regulation	Conditions or methods	Zone	Authority issuing a decision <sup>25)</sup>
	Amendment to harmonised maximum and minimum clearing price methodology for the single day-ahead coupling	EU	ACER Decision no. 01/2023 of 10 January 2023
	Amendment to harmonised maximum and minimum clearing price methodology for the single intraday coupling	EU	ACER Decision no. 02/2023 of 10 January 2023
2015/1222	Amendment of the congestion income distribution methodology	EU	ACER Decision no. 16/2023 of 21 December 2023
	Amendment of the methodology for calculating scheduled exchanges resulting from single day-ahead coupling	EU	ACER Decision no. 10/2023 of 30 May 2023
	Amendment to the determination of capacity calculation regions	EU	ACER Decision no. 8/2023 of 31 March 2023
	Amendment to the methodology for calculating the day-ahead capacity	Core	Decision of the President of URE of 5 December 2023
	Amendment to the methodology for requirements for Single Allocation Platform and sharing costs related to its establishment and operation	EU	ACER Decision of 22 March 2023
2016/1719	Amendment to the congestion income distribution methodology	EU	ACER Decision no. 6/2023 of 22 March 2023
	Amendment to the methodology for sharing firmness and remuneration costs of long-term transmission rights	EU	ACER Decision no. 7/2023 of 22 March 2023
	Amendment to the methodology for cross-zonal capacity allocation	Core	Decision of the President of URE of 13 April 2023

Table 8. Methods or conditions approved in 2023 under Regulation 2019/943 and guidelines

<sup>&</sup>lt;sup>25)</sup> Decisions issued by ACER are available on their website: <u>https://www.acer.europa.eu/documents/official-documents/individual-decisions</u>, while decisions issued by the President of URE are available on its website: https://www.ure.gov.pl/pl/energia-elektryczna/europejskiree/decyzje

Regulation	Conditions or methods	Zone	Authority issuing a decision <sup>25)</sup>
	Amendment of the harmonised allocation rules for long-term transmission rights	EU	ACER Decision no. 18/2023 of 21 December 2023
	Amendment to the long-term capacity calculation methodology	Core	ACER Decision no. 3/2023 of 18 January 2023
	Revised implementation framework for the establishment of a European platform for the exchange of balancing energy from replacement reserves	EU	Decision of the President of URE of 10 May 2023
2017/2195	Amendment to the methodology of the allocation process for cross-zonal capacity	Baltic	Decision of the President of URE of 29 September 2023
	Methodology for the harmonized cross-zonal capacity for the exchange of balancing capacity or sharing of reserves per timeframe	EU	ACER Decision no. 11/2023 of 19 July 2023
2017/2196	Amendment of the list of SGUs responsible for the implementation on their installations the measures that result from the mandatory requirements set out in Regulations (EU) 2016/631, (EU) 2016/1388 and (EU) 2016/1447 or from national legislation, and the list of measures to be implemented by the SGUs concerned as determined by the TSO in accordance with Article 11(4)(c) and Article 23(4)(c) of Regulation 2017/2196	PL	Decision of the President of URE of 14 June 2023
	Regional sizing of reserve capacity methodology	EU	ACER Decision no. 12/2023 of 19 July 2023
	Regional procurement of balancing capacity methodology	EU	ACER Decision no. 13/2023 of 19 July 2023
2010/042	Decision approving PSE S.A.'s contribution to the report on the assessment of whether available cross-border transmission capacity reached a linear trajectory in 2022	PL	Decision of the President of URE of 18 July 2023
2019/943	Decision to grant PSE S.A. a derogation from the obligation to make interconnection capacity available as required by Article 16(8) of Regulation 2019/943	PL	Decision of the President of URE of 21 December 2023
	Decision on the alternative bidding zone configurations to be considered in the bidding zone review process for the Baltic region	EU	ACER Decision no. 17/2023 of 22 December 2023

Source: URE's own materials.

### **Regulation 2017/2196**

In June 2023, at the request of the TSO, the President of URE approved an amendment to the document currently in force entitled: "List of SGUs responsible for the implementation on their installations the measures that result from the mandatory requirements set out in Regulations (EU) 2016/631, (EU) 2016/1388 and (EU) 2016/1447 or from national legislation and the list of measures to be implemented by the SGUs concerned as defined by the TSO in accordance with Articles 11(4)(c) and 23(4)(c) (Commission Regulation (EU) 2017/2196 of 24 November 2017 establishing a network code on electricity emergency and restoration)". As with the previous revision of the SGU List, the update of the existing SGU List was due to the need to update the following documents: *System Defence Plan* and *Recovery Plan* in terms of the SGU List due to the decommissioning of generating modules as well as the commissioning of generating modules – classified as existing and new generating modules in accordance with Regulation 2016/631.

**Table 9.** Status of work on the President of URE's 2023 methods or conditions resulting from Regulation2017/2196

Conditions or methods	Applicant	Status
List of SGUs responsible for the implementation on their installations the measures resulting from the mandatory requirements set out in Regulations (EU) 2016/631, (EU) 2016/1388 and (EU) 2016/1447 or from national legislation and the list of measures to be implemented by the SGUs concerned as defined by the TSO in accordance with Articles 11(4)(c) and 23(4)(c) (Commission Regulation (EU) 2017/2196 of 24 November 2017 establishing a network code on electricity emergency and restoration)	TSO	Decision of the President of URE <sup>26)</sup>

Source: URE's own materials.

### **Regulation 2017/1485**

In December 2023 PSE S.A. applied for approval of a document entitled: "All Continental Europe TSOs' proposal for assumptions and methodology for a FCR probabilistic dimensioning in accordance with Article 153(2) of the Commission Regulation (EU) 2017/1485 of 2 August 2017 establishing a guideline on electricity transmission system operation. 28 November 2023". This methodology contains the principles on the basis of which, in accordance with Article 153(2) of Regulation 2017/1485, the modalities and conditions for determining the probabilistic dimensioning approach for the frequency containment reserve for the synchronous area of continental Europe are determined. An analogous request has been submitted to their respective regulatory authorities by all TSOs of the synchronous area of considered in cooperation between regulators within ACER. The proceedings were not concluded in 2023.

### Implementation of connection network codes

In 2023 the President of URE continued its activities related to the Grid Connection Network Codes (Regulations: 2016/631, 2016/1388 and 2016/1447).

Regulation 2016/631, in part 'Title III', set out the operational notification procedure for connection of new generating modules, with the connection procedure applying to each new generating module

<sup>&</sup>lt;sup>26)</sup> https://bip.ure.gov.pl/download/3/17160/WykazSGU.pdf

of types A, B, C and D. Pursuant to Article 33 of Regulation 2016/631, the operational notification procedure for connection of each new type D power-generating module<sup>27)</sup> shall comprise: (i) energisation operational notification ("EON"), (ii) interim operational notification ("ION") and (iii) final operational notification ("FON"). An ION shall entitle the power generating facility owner to operate the power generating module and generate power by using the grid connection for a limited period of time and shall be issued by the relevant system operator subject to a completion of the data and study review process required under Article 35 of Regulation 2016/631. The maximum period during which the power generating facility owner may maintain ION status shall be 24 months, whereby Article 35(5) of Regulation 2016/631 allows for the possibility to extend this period – if a request for a derogation is made to the relevant system operator before the expiry of the aforementioned period in accordance with the derogation procedure laid down in Article 60 of Regulation 2016/631. This procedure granted the regulatory authorities the power to grant derogations at the request of a power-generating facility owner or prospective owner, relevant system operator or relevant transmission system operator – from a provision or provisions of this regulation.

In 2023, six applications were received from generating module owners to extend the validity of the temporary 'ION' operating notification issued by the TSO/DSO for type D generating modules. By May 2024, the President of URE had issued 3 decisions to extend the period for which the owner of a generating module can maintain the status of the "ION" operating notification – issued by the TSO for type D energy generating modules. Information on the derogations was included in the Register of derogations from the connection requirements of the Network Codes maintained by the President of URE, in accordance with Article 64 of Regulation 2016/631, published on the website of URE<sup>28)</sup> and was also published on the dedicated register of derogations maintained by ACER<sup>29)</sup>.

At the end of 2023 the President of URE began monitoring the fulfilment by electricity system operators of their obligations to issue an interim operating notification ("ION") for the connection of each new type D generating module, taking into account the derogation procedure laid down in Article 60 of Regulation 2016/631. The monitoring covered the TSO and the five largest DSOs. The monitoring was not completed in 2023.

Regulation 2016/631, in Article 3(1), prejudges that, as a general rule, the connection requirements apply to new generating modules which are considered significant, in accordance with the criteria set out in Article 5, however, Article 4(1)(a) and (b) set out exceptional cases where existing generating modules are subject to the requirements of this Regulation. According to these provisions, existing generation modules shall not be subject to the requirements set out in this Regulation, except where a type C or type D generating module has been modified to such an extent that its connection agreement must be substantially revised in accordance with the following procedure:

- power-generating facility owners who intend to undertake the modernisation of a plant or replacement of equipment impacting the technical capabilities of the power-generating module shall notify their plans to the relevant system operator in advance,
- if the relevant system operator considers that the extent of the modernisation or replacement of equipment is such that a new connection agreement is required, the system operator shall notify the relevant regulatory authority or, where applicable, the Member State; and
- the relevant regulatory authority or, where applicable, the Member State shall decide if the existing connection agreement needs to be revised or a new connection agreement is required and which requirements of this Regulation shall apply.

In 2023, the President of URE received seven requests from the DSO, pursuant to Article 4(1)(a)(iii) of Regulation 2016/631, for a decision stating the need to conclude a new connection agreement and specifying the requirements of the Regulation – as a result of the DSO being duly notified by the owner of the existing power generating module of the planned upgrade of the wind farm facility. Pursuant to

<sup>&</sup>lt;sup>27)</sup> Type D includes generating modules with a maximum power rating of 75 MW and above, as well as all generating modules, regardless of their maximum power, if the voltage at their point of connection is at least 110 kV.

<sup>&</sup>lt;sup>28)</sup> <u>https://bip.ure.gov.pl/bip/rejestry-i-bazy/rejestr-odstepstw-od-wymogow-p/4301,Rejestr-odstepstw-od-wymogow-przylaczeniowych-kodeksow-sieciowych.html</u>

<sup>&</sup>lt;sup>29)</sup> <u>https://aegis.acer.europa.eu/record/</u>

the above referenced provisions, four decisions were issued. The other proceedings were not concluded in 2023.

In accordance with Article 4(1)(a) and (b) of Regulation 2016/1388, the requirements set out in that Regulation shall not apply to transmission-connected demand facilities, existing distribution facilities connected to the transmission system, existing transmission-connected distribution facilities, existing distribution systems and existing demand units that are or can be used by a demand facility or a closed distribution system to provide demand response services to a relevant system operator or relevant TSO, unless:

- a) an existing transmission-connected demand facility, an existing transmission-connected distribution facility, an existing distribution system, or an existing demand unit within a demand facility at a voltage level above 1 000 V or a closed distribution system connected at a voltage level above 1 000 V, has been modified to such an extent that its connection agreement must be substantially revised in accordance with the following procedure:
  - demand facility owners, DSOs, or CDSOs who intend to undertake the modernisation of a plant or replacement of equipment impacting the technical capabilities of the transmission-connected demand facility, the transmission-connected distribution facility, the distribution system, or the demand unit shall notify their plans to the relevant system operator in advance;
  - if the relevant system operator considers that the extent of the modernisation or replacement of equipment is such that a new connection agreement is required, the system operator shall notify the relevant regulatory authority or, where applicable, the Member State; and
  - the relevant regulatory authority or, where applicable, the Member State shall decide if the existing connection agreement needs to be revised or a new connection agreement is required and which requirements of this Regulation shall apply; or
- b) a regulatory authority or, where applicable, a Member State decides to make an existing transmission-connected demand facility, an existing transmission-connected distribution facility, an existing distribution system, or an existing demand unit subject to all or some of the requirements of this Regulation, following a proposal from the relevant TSO in accordance with paragraphs 3, 4 and 5.

In 2023, the President of URE issued two decisions pursuant to Article 4(1)(a)(iii) of Regulation 2016/1388 as to whether a modification of the existing connection agreement is necessary or whether a new connection agreement is needed, and which requirements set out in that Regulation apply – in relation to making an appropriate notification to the DSO of a planned upgrade or replacement of equipment that may affect the technical capacity of the existing distribution system connected to a system other than a transmission system.

As part of its cooperation with the Agency, URE representatives participated in ACER's work on the amendment of Regulations 2016/631 and 2016/1388. Between 17 July and 25 September 2023 ACER conducted a public consultation on the amendments to these Regulations and, in December 2023, forwarded the proposed amended Regulations to the European Commission for further work. Details of the amendments to the codes and the consultation carried out can be found on ACER's website<sup>30)</sup>.

In 2023, work began on the drafting of a new grid code on demand response. It is planned that the code will set out requirements for demand response, energy storage, distributed generation and demand reduction, including aggregation provisions, to contribute to market integration, nondiscrimination, effective competition and the smooth functioning of the market. In addition, it will set out obligations to ensure that energy resource and energy service providers have access to electricity markets, as well as facilitate the procurement of relevant services by system operators for the operation and planning of the EU electricity grid.

<sup>&</sup>lt;sup>30)</sup> https://www.acer.europa.eu/news-and-events/news/acer-will-consult-amendments-electricity-grid-connection-network-codes

## **3.1.8. Electromobility**

The President of URE continued to implement the obligation related to the sale by DSOs of public charging stations by tender<sup>31</sup>). In the first quarter of 2023 the President of URE, at the request of the DSOs, approved the General Terms and Conditions of the tender for the sale of public charging stations to two operators: Grupa Azoty S.A. and Zespół Elektrowni Wodnych Niedzica S.A. Five DSOs informed the President of URE<sup>32</sup> on the course and results of the tender for the sale of public charging stations. In one case, due to lack of offers, the tender proceedings did not lead to the selection of a purchaser of the public charging stations.

The amendment to the Electromobility Act<sup>33)</sup> repealed the previous provisions on the intervention mechanism for the construction of public charging stations by DSOs and introduced a transitional provision in Article 25, according to which, to:

- 1) the commenced construction of a public charging station that was not commissioned before 24 December 2021,
- 2) the construction of a public charging station not commenced before 24 December 2021, whose deadline for connection by the DSO, in accordance with the connection programme referred to in Article 62 para. 11 of the Electromobility Act before the amendment, expires on 31 December 2021

- the provision of Article 64 of the Electromobility Act before the amendment, in its current wording, which specifies the obligation of the DSO to build public charging stations indicated in the plan for the construction of public charging stations, and the costs incurred by the DSO for the construction of these charging stations are included in justified costs within the meaning of Article 3 para. 21 of the Energy Law Act, shall apply, among others.

The amendment to the Electromobility Act also introduced a provision prohibiting a DSO from being the operator of a public charging station, the owner of the station or the charging service provider. There is an exception to this provision in the case where the DSO has conducted a tender procedure for the sale of public charging stations in an open, transparent and non-discriminatory manner. This is because, pursuant to Article 3a para. 2 of the Electromobility Act, a DSO may remain the owner of a public charging station where the following conditions are jointly met:

- 1) in order to sell the public charging station, it conducted an open, transparent and nondiscriminatory tender:
  - a) the general conditions of which have, at its request, been approved by a decision of the President of URE;
  - b) as a result of which a contract for the sale of that station has not been concluded, in particular due to the impossibility of ensuring the provision of charging services immediately after the acquisition of that station and at market prices,
- 2) it takes measures to ensure that, in a public charging station of which it is the owner, the operator of that station carries out its obligation to ensure that charging service providers have access to the public charging station, on the basis of a contract concluded at arm's length.

In view of the above, until May 2024, the President of URE found 14 decisions on the designation of an energy company to act as an operator of a public charging station and a charging service provider to be groundless (municipalities: Lublin, Białystok, Radom, Rzeszów, Kielce, the city of Warsaw, Płock, Olsztyn, Gdynia, Koszalin, Elbląg, Toruń, Włocławek and Gdańsk). Further proceedings on this subject will be conducted during 2024.

<sup>&</sup>lt;sup>31)</sup> Article 3a para. 2 of the Electromobility Act.

<sup>&</sup>lt;sup>32)</sup> Pursuant to Article 3a para. 4 of the Electromobility Act.

<sup>&</sup>lt;sup>33)</sup> Act of 2 December 2021 on amending the Electromobility and Alternative Fuels Act and Certain Other Acts (JoL of 2021 item 2269), hereinafter: "amendment to the Electromobility Act".

## 3.2. Competition and market operation

## 3.2.1. Wholesale market

The volume of gross domestic electricity production in 2023 was lower than that of the preceding year and amounted to 163,629 GWh (decrease by (-)6.58% in comparison to 2022). In the reported period, gross domestic electricity consumption amounted to 167,518 GWh and decreased by (-) 3.44% as compared to 2022.

The GDP in 2023, which according to the Central Statistical Office's (GUS) preliminary estimate increased by 0.2%<sup>34)</sup> was by 3.64 percentage points higher than the decrease in the domestic energy consumption.

In 2023, in the national balance of physical flows of electricity, the share of imports accounted for 8.5% of total revenue, while the share of exports amounted to 6.3% of electricity outflows.

In comparison to 2022, the share of imports increased by 0.5 percentage point, while the share of exports decreased by (-)2.6 percentage points.

The structure of electricity generation in 2023 changed only slightly compared to the preceding year. The vast majority of generation is still based on conventional fuels, that is hard coal and lignite. In contrast, a noticeable change is the increase in the share of generation from renewable sources of electricity. In wind sources, the share of electricity generation increased from 10% to 13%, and in other renewables it increased from 5% to 8%.

In 2023, the installed capacity of the national electricity system was 67,770 MW and the generating capacity was 66,311 MW, an increase of 12.12% and 11.30%, respectively, compared to 2022<sup>35)</sup>.

The average annual capacity demand was 22,825.9 MW, with a maximum demand of 27,325.9 MW, a decrease of 2.41% and an increase of 0.11%, respectively, compared to the previous year.

A slightly upward trend was observed for the ratio of available capacity to generating capacity in 2023 which amounted to 51.9% (an increase by 0.1 percentage point compared to 2022).

### Entity structure of the energy wholesale market

In 2023, similarly to previous years, the largest market share in the electricity generation subsector was held by the PGE Polska Grupa Energetyczna S.A. group<sup>36)</sup>. However, the share of this group decreased by more than 8 percentage points compared to 2022. This change is the result of a significant reduction in gross electricity generation in 2023 compared to 2022 from fossil fuels, which dominate the generation mix of the described group. During the period in question, the Group also maintained its leading position on the market for sales to final customers. 2023 was another year which saw an increase in the importance of the Orlen Group in terms of energy fed into the NES.

<sup>&</sup>lt;sup>34)</sup> <u>https://stat.gov.pl/obszary-tematyczne/rachunki-narodowe/roczne-rachunki-narodowe/produkt-krajowy-brutto-w-</u> 2023-roku-szacunek-wstepny,2,13.html

<sup>&</sup>lt;sup>35)</sup> As at 31 December 2022 and 31 December 2023, data of PSE S.A.

<sup>&</sup>lt;sup>36)</sup> Share calculated by volume of electricity fed into the grid. The calculation of this indicator takes into account the structure of entities as at 31 December of the year under examination.



**Figure 19.** Share of particular groups in the volume of electricity fed into the grid in the years 2022–2023 (considering the entity structure as at 31 December of the given year)

**NB:** The group "Other generators" includes both generators which are part of groups (for example Azoty, E.ON, FORTUM) and generators operating individually on the electricity generation market, that is outside groups. An increase in the share of these generators in 2023 is due to a significant increase of generation in PV installations.

### Source: Data of the Ministry of Climate and Environment and URE.

The market share ratio of the three largest market players, measured by energy fed into the grid (taking into account the amount of energy supplied by generators directly to final customers), in 2023<sup>37)</sup> declined significantly and amounted to 61.4% (down 7.1 percentage points compared to 2022). The share of the three largest generators in installed capacity also continued its clear downward trend, for the second consecutive year, with a decrease of 8.5 percentage points. Among the three largest generators, concentrated in groups in the 2023 under survey, were PGE Polska Grupa Energetyczna S.A., ENEA S.A. and Orlen S.A.. The generators of the TAURON Polska Energia S.A. group ranked fourth for the first time in many years. In terms of the volume of electricity fed into the grid, in 2023, as in 2022, the group of the three largest generators accounted for almost two-thirds of the country's electricity production).

<sup>&</sup>lt;sup>37)</sup> 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 2022 was taken into account.

	Number of	Number of		Share of three	HHI <sup>38)</sup>		
Year	companies holding at least a 5% share in installed capacity	companies holding at least a 5% share in electricity fed into the grid	Share of three largest entities in installed capacity [%]	largest entities in electricity fed into the grid [%]	Installed capacity	Electricity fed into the grid	
2020	3	4	58.3	63.8	1 562.2	2 019.9	
2021	4	4	54.5	67.1	1 370.6	2 198.9	
2022	4	4	48.3	66.1	1 156.7	2 088.1	
2023	4	4	44.2	61.4	976.2	1 762.1	

#### Table 10. Market shares and concentration of the generation subsector\*

\* 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 entities as at 31 December of the examined year was taken into account.

### Source: Data of the Ministry of Climate and Environment and URE.

A many-year downward trend concerning in particular HHI measured according to installed capacity and according to the volume of electricity fed into the grid (including the volume of electricity supplied by generators directly to final customers) changed considerably in 2017 and the intensity of this change was also observed in 2023. The concentration ratios for installed capacity and electricity fed into the grid maintained their downward trend for another year (both ratios decreased by almost 16% in 2023 compared to 2022).

It is worth emphasising that this index calculated for electricity fed into the grid in 2023 decreased in value to such an extent that the concentration index in a generation market changed from high to medium. The concentration index calculated for installed capacity still remained at a level indicating medium concentration in the generation market.

The change in the concentration index and the market share index of the three largest entities in the generation sub-sector between 2007 and 2023 is shown in the figure below.

<sup>&</sup>lt;sup>38)</sup> 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*, Polityka Energetyczna, Volume 12, Paper 2/2, 2009).



**Figure 20.** Concentration level in generation subsector and market shares of largest entities by volume of electricity fed into the grid, in 2007–2023

Source: Data of the Ministry of Climate and Environment and URE.

When referring to the concentration data from recent years presented above, it should be noted that they reflect the dynamics of electricity production from fossil fuels and various renewable sources. The decreases in both concentration indices in 2023, compared to 2022, were mainly driven by the increase in electricity generation from small, dispersed renewable energy sources in the national electricity generation mix. Another reason for the decreases is the organisational changes made in the generation sector.

### Sale and purchase of electricity in particular 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 purchase and sales and access to information on volumes and prices at which electricity is contracted and sold on a wholesale market.

The tables below present the forms of electricity purchase and sales in segments of generation and trading in the years 2021–2023.

Year	Trading companies	Regulated markets, including power exchange	Balancing market	Exports	Final customers	Other sales*
2021	31.9	108.2	14.0	0.1	1.7	1.5
2022**	29.7	99.9	11.2	0.0	2.8	1.5
2023	38.7	69.1	12.0	0.0	2.1	0.2

Table 11. Forms of electricity sales by generators in the years 2021–2023 [TWh]

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

\*\* The data were changed compared to the data in the National Report of the President of URE for 2022 due to the correction of the data by the surveyed entities.

Source: Data of the Ministry of Climate and Environment and URE.

Year	Trading companies	Regulated markets, including power exchange	Balancing market	Exports	Final customers	Other sales*
2021	111.0	118.9	7.3	1.4	133.1	23.8
2022**	108.7	90.5	7.0	2.8	128.7	21.6
2023	112.3	102.4	11.2	4.2	125.7	20.0

Table 12. Forms of electricity sales by trading companies in the years 2021–2023 [TWh]

\* Other sales include volumes of electricity sold to TSO and DSOs as well as sales to small local distributors, generating companies and to other customers.

\*\* The data were changed compared to the data in the National Report of the President of URE for 2022 due to the correction of the data by the surveyed entities.

Source: Data of the Ministry of Climate and Environment and URE.

### Purchase of electricity in respective market segments

The tables below present forms of electricity purchase in segments of generation and trading in the years 2021–2023.

Tab	le	13	. F	orm	S O	fe	electric	ity	purc	hase	by	generators	in	the	years	2021-	-2023	[TWh]	

Year	Trading companies	Regulated markets, including power exchange	Balancing market	Imports	Other purchase directions
2021	8.9	6.8	9.8	0.2	0.2
2022*	9.7	3.0	5.8	0.0	0.1
2023	4.6	2.1	7.2	0.0	0.0

\* The data were changed compared to the data in the National Report of the President of URE for 2022 due to the correction of the data by the surveyed entities.

Source: Data of the Ministry of Climate and Environment and URE.

Year	Power plants	RES installations directly	Trading companies	Regulated markets, including power exchange	Balancing market	Imports	Other purchase directions	Obliged supplier**
2021	51.3	12.5	107.2	213.0	5.5	2.8	2.2	0.2
2022*	44.1	16.1	104.1	183.2	7.6	2.7	2.8	0.2
2023	61.3	20.6	108.1	171.1	8.8	4.0	1.7	0.2

Table 14. Forms of electricity purchase by trading companies in the years 2021–2023 [TWh]

\* The data were changed compared to the data in the National Report of the President of URE for 2022 due to the correction of the data by the surveyed entities.

\*\* Obliged supplier – includes the purchase of electricity from a micro-installation other than a prosumer and from an installation other than micro-installation.

Source: Data of the Ministry of Climate and Environment and URE.

TGE S.A. closed the year 2023 with a good result. It was a record period in terms of the volume of spot electricity trading (up 91.4% year-on-year), as well as trading in guarantees of origin for electricity generated from RES (up 1.1% year-on-year).

The elimination of the exchange bond in December 2022 substantially reduced market liquidity in futures contracts, in particular the annual BASE\_Y and PEAK\_Y contracts, which are the primary contracts enabling risk hedging in the retail market. In accordance with the law, the main "market players", that is, generators and trading companies, contracted more than 70% of their sales (in the case of generators) and more than 70% of their planned purchases (trading companies hedging the retail portfolio) among themselves in bilateral contracts within their own groups limiting access to the above energy to external customers – no competition on the wholesale market.

The substantial reduction in turnover on the public wholesale market translates directly into restricted competition on the retail market. The limited possibilities for independent suppliers to contract energy on the wholesale market prevent them from competing on the retail market. At the same time, it should be pointed out that the provisions of Article 49a of the Energy Law Act contained a number of exemptions for generators from the obligation to sell. The volume of energy sold has never amounted to 100%.

# **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 supplied in 2023 are illustrated by three price indices published by the President of URE, that is the annual and quarterly average selling price of electricity on the competitive market and the quarterly average price of electricity sold on terms other than those provided for in Article 49a para. 1 of the Energy Law Act.

Index	2023				
The price of electricity for a household customer including the fee for the provision of electricity distribution services [PLN/kWh] ( <i>excise duty included and VAT excluded</i> )	0.7840				
Average annual selling price of electricity on the competitive market [PLN/MWh]		759	0.29		
Average quarterly selling price of electricity on the competitive market [PLN/MWh]	l quarter 889.69	ll quarter 751.44	lll quarter 736.39	IV quarter 679.20	
Average quarterly price of electricity calculated on the basis of information about contracts or settlement agreements concluded within groups, under which energy enterprises engaged in electricity generation sell, purchase or settle electricity [PLN/MWh].	l quarter 864.02	ll quarter 784.02	lll quarter 748.58	IV quarter 736.61	

### SPOT MARKET OF TGE S.A.

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



**Figure 21.** Average daily electricity price in SPOT transactions, measured by IRDN24 [PLN/MWh], and daily volume of electricity traded on DAM market (without block contracts) [MWh] in particular months of the years 2021–2023

Volume-weighted average price of electricity on DAM in 2023 amounted to 533.62 PLN/MWh and was lower by 262.55 PLN/MWh in comparison to 2022 when this price was 796.17 PLN/MWh.

### Prices on CFIM/EFM OTF market of TGE S.A.

A decrease in electricity prices on the forward market run by TGE S.A was observed, which was reflected by the y/y increase of prices in BASE\_Y forward contracts (a yearly contract with baseload delivery for another year). The volume-weighted average transaction price of a BASE\_Y-24 contract in the entire year 2023 was at the level of 642.19 PLN/MWh, while the year before the volume weighted average transaction price of the corresponding BASE\_Y-23 forward contracts amounted to 1110.04 PLN/MWh.

At the same time, average monthly price of BASE\_Y-24 contracts concluded in December 2023 was equal to 491.72 PLN/MWh, whereas the monthly average price of corresponding contracts (BASE\_Y-23) concluded in December 2022 amounted to 1068.63 PLN/MWh, which indicates a decrease of the price of these contracts by around 54%.

Within its limited resources, the President of URE also performs cyclical monitoring of the wholesale electricity market, including with regard to components affecting the level of electricity prices, such as, among others, CO<sub>2</sub> emission allowance prices and coal prices. In particular, the level of the Clean Dark Spread (CDS) indicator was examined by the President of URE<sup>39)</sup>.

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

<sup>&</sup>lt;sup>39)</sup> **CDS** =  $C_{EE} - (CP + C_{CO2})$ , where: CDS – Clean Dark Spread index; CEE – net electricity price in PLN/MWh; CP – coal price converted into the cost of production of 1 MWh of electricity net from hard coal in PLN/MWh;  $C_{CO2} - CO_2$  emission allowance price converted into the cost of CO<sub>2</sub> emission for production of 1 MWh of electricity net in PLN/MWh.





Source: Own analysis on the basis of data of TGE S.A., ICE, ARP.

# Transparency of the wholesale energy market – implementation 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.

### Registration in the national registry for market participants

As part of its REMIT obligations, URE registers Polish energy market participants in the Centralised European Register of Energy Market Participants (CEREMP<sup>41)</sup>), prepared by ACER.

At the end of 2023, 998 market participants from Poland were registered in the CEREMP system (approximately 5.71% of all registered entities). The increase in registered market participants from Poland in 2023 compared to 2022 was 22.15%.

### Reporting data to ACER

Reporting of data to ACER is preceded by the obligation to register market participants in the national register of these participants. Wholesale energy market participants report information on concluded transactions and orders<sup>42)</sup> to trade through entities that have been granted the status of the so-called Registered Reporting Mechanism (RRM)<sup>43)</sup>. At the end of 2023 three entities in Poland held the status of RRM, that is: TGE S.A., OGP Gaz-System S.A. and PSE S.A.

<sup>&</sup>lt;sup>40)</sup> One-year forward contract for the supply of electricity, due to be performed in 2024.

<sup>&</sup>lt;sup>41</sup> <u>https://www.acer-remit.eu/ceremp/home?nraShortName=20&lang=pl\_PL</u>

<sup>&</sup>lt;sup>42)</sup> The data to be transmitted are collected by ACER using the ARIS system (ACER REMIT Information System) set up for this purpose.

<sup>&</sup>lt;sup>43)</sup> Registered Reporting Mechanisms (RRMs) – reporting parties are market participants, or entities providing information on their behalf, that comply with technical and organisational requirements to ensure the efficient, effective and secure exchange of information and processing of information for the handling of information in accordance with Article 8 of the REMIT Regulation and Implementing Regulation (EU) No 1348/2014.

### Publication of inside information

Effective compliance with the obligation of market participants to publish inside information, as from 1 January 2021, can only take place through ACER-registered Inside Information Platforms (IIPs) and (under certain conditions) through the relevant Transparency Platforms.

As of 1 January 2023, wholesale energy market participants can no longer use their websites as a back-up solution to publish inside information. In the event of an emergency, market participants must only use the back-up solution provided by the relevant IIP, including such as publishing inside information via another IIP<sup>44</sup>.

Wholesale energy market participants are required to indicate in the national register of market participants the selected IIPs where they publish the required inside information.

In 2023, the ACER list published on the REMIT PORTAL website<sup>45)</sup>, among the entities applying for the status of platforms operated by these entities as Inside Information Platforms and entities whose platforms passed at least the first stage of the ACER assessment, included TGE S.A. operating the Exchange Information Platform (GPI)<sup>46)</sup> for the wholesale electricity market and OGP Gaz-System S.A. operating a platform for the wholesale gas market since 2019 and also for the wholesale electricity market since 2021 – the Gas Inside Information Platform (GIIP). Both TGE S.A. and OGP Gaz-System S.A. have successfully passed all stages of the ACER assessment.

#### Obligations of persons professionally arranging transactions

A special role in monitoring irregularities arising from the REMIT Regulation rests with persons professionally arranging transactions (PPATs) on the energy wholesale market that are required to create and maintain effective mechanisms and procedures to identify cases of violation of the prohibition of market manipulation, attempted market manipulation or illegal use of inside information.

In 2023 in Poland, transactions on the energy wholesale market were actively arranged by three entities: TGE S.A., PSE S.A. and OGP Gaz-System S.A.

Under the REMIT Regulation, these entities are obliged to notify the President of URE 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 abovementioned entities conduct periodic training for market participants in order to update the implemented principles of monitoring the wholesale energy market aimed at detecting and preventing abuses defined in the REMIT Regulation.

In 2023, one Polish PPAT reported three cases of suspected market manipulation or attempted market manipulation by wholesale energy market participants to the President of URE.

### Table 15. Categories of entities resulting from the REMIT Regulation

Status as at the end of 2023	European Union	Poland
Market participants registered with CEREMP	17 481	998
Registered Reporting Mechanisms (RRM)	105	3
Entities applying to ACER for IIP status and entities having passed at least the first stage of ACER* evaluation as IIP	21	2
PPATs	No current data	3

\* As at 15 January 2024 except for Central Transparency Platforms.

Source: ACER website - REMIT PORTAL.

<sup>&</sup>lt;sup>44)</sup> ACER publication entitled "REMIT Quarterly" (Issue No. 31 /Q4 2022), information entitled "Disclosure of inside information"; <u>REMITQuarterly\_Q4\_2022\_1.0.pdf (europa.eu)</u>

<sup>45) &</sup>lt;u>REMIT PORTAL (acer-remit.eu)</u>

<sup>&</sup>lt;sup>46)</sup> The Exchange Information Platform (GPI) has been in place since 27 February 2014 and was established with the cooperation of representatives from the entire electricity sector under the patronage of the President of URE.

## Cooperation of the President of URE with other regulatory authorities and ACER with regard to the implementation of obligations under the REMIT Regulation

In 2023, representatives of the President of URE participated in ACER working groups, as well as in bilateral meetings with other regulators. In addition to discussions concerning the effectiveness of wholesale energy market supervision in the context of, among others, algorithmic trading, issues concerning the amendment of the REMIT Regulation were raised, the draft of which<sup>47</sup>, along with subsequent versions, was subject to consultation from March to December 2023. In the context of the amendment of the REMIT Regulation, issues such as the remit of ACER's new powers, the new obligations of market participants, in particular from third countries, and the new definition of wholesale energy products were discussed and commented on. The cooperation took place in the form of online meetings, as well as physical meetings, and through the exchange of information and opinions in electronic form.

In addition, representatives of the President of URE held a series of bilateral online meetings with ACER representatives to discuss and develop a harmonised approach to issues related to the actions of certain market participants that may indicate potential manipulation or attempted manipulation of the market.

### Communication with wholesale energy market participants

The most important information related to the REMIT Regulation has been published on the URE's website<sup>48)</sup>. 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 URE's dedicated e-mail address<sup>49)</sup>. Employees of URE who perform tasks related to the REMIT Regulation are also available by telephone<sup>50)</sup>. ACER runs a REMIT Portal on its website<sup>51)</sup> dedicated to any issues included in the REMIT Regulation.

Wholesale energy market participants, as well as other entities and institutions, may report suspected violations of the REMIT Regulation through ACER's online platform (Notification Platform)<sup>52)</sup>, as well as directly to the President of URE.

### Explanatory proceedings

As part of the supervision of the wholesale energy market, in 2023 the President of URE analysed 10 cases of potential manipulation or attempted manipulation of the market as referred to in the REMIT Regulation. Five of these cases were received in 2022 and continued in 2023, with one case reported in 2022 by a Polish PPAT, one via ACER's online dedicated platform for reporting violations of the REMIT Regulation (Notification Platform) by a foreign PPAT and the remaining three cases by Polish natural gas final customers. After a detailed analysis, the President of URE concluded that in the aforementioned three cases of 2022 reported by natural gas final customers, there were no grounds to initiate a REMIT control <sup>53</sup>, or to order explanatory proceedings<sup>54</sup>. The analysis of the remaining cases continued in 2023.

In addition, during the period under review, the President of URE received five cases indicating suspected abuse related to potential market manipulation or attempted market manipulation, with

<sup>47)</sup> COM(2023) 147 1 PL ACT part1 v2.pdf (sejm.gov.pl);

https://www.europarl.europa.eu/RegData/seance\_pleniere/textes\_adoptes/definitif/2024/0229/0116/P9\_TA(2024)0116\_EN.pdf
<sup>48)</sup> https://www.ure.gov.pl/pl/urzad/prawo/prawo-wspolnotowe/remit/aktualnosci-remit\_

<sup>&</sup>lt;sup>49)</sup> <u>REMIT.rejestracja@ure.gov.pl</u>

<sup>&</sup>lt;sup>50)</sup> Departament Monitorowania Rynku – Departamenty – Urząd Regulacji Energetyki (ure.gov.pl)

<sup>&</sup>lt;sup>51)</sup> <u>https://www.acer-remit.eu/portal/home</u>

<sup>&</sup>lt;sup>52)</sup> <u>https://www.acer-remit.eu/np/home</u>

<sup>&</sup>lt;sup>53)</sup> Article 23c para. 1 of the Energy Law Act.

<sup>&</sup>lt;sup>54)</sup> Article 23p para. 1 of the Energy Law Act.

three cases forwarded by a Polish PPAT and two reported via the ACER Notification Platform by a foreign PPAT. The proceedings regarding these cases are continuing in 2024.

In 2023, one notification was submitted by the President of URE to the Public Prosecutor's Office on suspicion of an offence of electricity market manipulation. This notification followed explanatory proceedings conducted in 2022 in a case concerning suspected market manipulation or attempted market manipulation ordered by the President of URE pursuant to Article 23p para. 1 of the Energy Law Act, in connection with the surge in electricity prices observed since 1 January 2022. In April 2023, under the supervision of the Public Prosecutor's Office, an investigation into the case was initiated.

In 2023, eight proceedings were conducted to impose a financial penalty for failing to submit the data referred to in Article 8(1) of Regulation 1227/2011 to the Agency (ACER) within the deadline referred to in Article 7 of Commission Implementing Regulation (EU) No 1348/2014 of 17 December 2014 on data reporting implementing Article 8(2) and (6) of Regulation (EU) No 1227/2011 of the European Parliament and of the Council on wholesale energy market integrity and transparency<sup>55)</sup> – Article 56 para. 1 item 40 of the Energy Law Act. Seven of the aforementioned proceedings in 2023 ended with imposing financial penalties. One was not completed in 2023.

### 3.2.2. Retail market

In 2023, out of over 17.5 million customers in the retail market (almost 19.1 million energy consumption points), around 86.8% were customers who purchase energy for household consumption (data based on a survey conducted by the President of URE among DSOs). The remaining group of final customers were customers belonging to tariff groups A, B and C. Groups A and B consist of customers supplied from the high and medium voltage grid and are the so-called industrial customers, while group C includes customers connected to the low voltage grid, who use electricity for business purposes, the so-called business customers. Electricity customers have the right to receive electricity in an uninterrupted and reliable manner from the supplier of the energy of their choice.

In the retail electricity market, there were five large DSOs, subject to the obligation of legal unbundling, whose networks are directly connected to the transmission network (so-called DSOp), and 186 undertakings designated as DSOs, whose networks have no direct connections with the transmission network (so-called DSOn). In the case of DSOn operating within the structures of vertically integrated enterprises, accounting and bookkeeping separation is required by law, as well as the obligation to separate the distribution activity conducted by the system operator from other activities not related to electricity distribution – organisational unbundling.

The supply side of the retail energy market consists of energy suppliers offering the commodity to final customers. This group includes six suppliers operating within groups, jointly with distribution system operators, but as separate legal entities. The second group consists of suppliers in entities that are also distribution system operators (in 2023, there were 186 of them), and the third is independent electricity suppliers – entities not related to distribution activity in Poland.

With regard to institutional customers, suppliers are not obliged to submit electricity tariffs to the President of URE for approval, while tariffs for households are approved only at the request of the default suppliers and with regard to those customers who choose not to change their suppliers (sales under public obligation). However, default suppliers may – in addition to selling energy using the prices and rates specified in the tariff – present a market offer with a freely shaped price to all customers, including all customers in households. In the case of household customers connected to the network of the operator on whose territory the suppliers perform the tasks of a default supplier, the choice of tariff or market offer depends on the customer.

<sup>&</sup>lt;sup>55)</sup> EU OJ L 363 of 18.12.2014, p. 121.

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

All electricity suppliers selling electricity to final customers are legally obliged to publish on their websites and make information on electricity sales and terms and conditions of their application publicly available in their premises. In case of large industrial/commercial customers, 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 16.** Number of customers, volume, value and average prices of electricity applied to final customers, broken down by consumption criterion

Consumption criterion	Number of customers [items]	Volume [MWh]	Value [PLN thousand]	Average price [PLN/MWh]
< 50 MWh	18 495 893	44 541 768	23 934 518	537.35
50-2 000 MWh	35 244	27 579 388	19 210 314	696.55
> 2 000 MWh	1 031	26 855 726	20 142 668	750.03
Total	18 532 168	98 976 882	63 287 500	639.42

Source: On the basis of quarterly surveys from 6 largest suppliers: PGE Obrót S.A., Energa Obrót S.A., ENEA S.A., E.ON Polska S.A., Tauron Sprzedaż Sp. z o.o. and TAURON Sprzedaż GZE Sp. z o.o.

In 2023, compared to 2022, a further significant increase (by 2.23%) was recorded in the number of customers consuming less than 50 MWh of energy per year, including households, while the volume of energy sold in this group of customers decreased (by as much as 5.58%). Due to an increase in the average sales price from 505.21 PLN/MWh to 537 PLN/MWh, the value of energy sold increased by 0.43%. Even greater decreases in sales volumes with a simultaneous increase in the value of energy sold were recorded in the other customer groups. In the group of the largest customers, whose number decreased by as much as 4.27%, the volume of energy sold decreased by 15.45% and the value of energy was recorded (by 33.73%). In contrast, the average price for all customer categories increased by 19.67% in 2023 compared to 2022.

The table below shows data on electricity prices and distribution charges in Q4 2022 and 2023, for customers with comprehensive contracts. The increase in energy prices in Q4 2023 was recorded in tariff groups A (6.1%) and B (8.3%). In 2023, electricity prices for households continued to remain frozen.

	Q4 2022		Q4 2023			
	Average	verage including:		Average incl		uding:
Specification	sales	Fee for	Distribution	sales	Fee for	Distribution
	price	electricity	fee	price	electricity	fee
	[PLN/MWh]					
Consumers in total	879.20	600.60	278.60	895.45	547.07	348.39
including: consumers on HV (group A)	797.02	726.68	70.34	880.34	771.17	109.17
consumers on MV (group B)	838.20	620.80	217.39	984.97	672.41	312.56
consumers on LV (group C)	1476.19	1107.07	369.12	1303.55	765.12	538.43
consumers of group G	736.70	442.05	294.65	737.00	416.78	320.23
including: households	755.92	453.92	302.00	757.85	426.98	330.87

Table 17. Electricity prices and distribution fees applicable to consumers with comprehensive contracts

Source: URE on the basis of data of the Ministry of Climate and Environment.

The average energy price for all consumer groups fluctuated throughout the year to fall below the price level of Q4 2022 in Q4 2023 (a decrease of almost 9%), while the average increase in the distribution fee on a quarter-on-quarter basis amounted to just over 25%. The increase in energy prices in comparison Q4 2023 to Q4 2022 was recorded in tariff groups A (6.1%) and B (8.3%). However, the strongest decrease was observed in tariff group C (just over 30%), where the energy price in Q4 ranked very close to the energy price for the other groups of business consumers. Groups A, B and C also saw the highest increases in the distribution fee (values of 55.2, 43.8 and 45.9% respectively). The energy price for household customers decreased by nearly 6%, and this result, despite the price freeze at the 2022 level, is due to an increase in the pool of consumers benefiting from frozen energy prices (as a result of regulatory changes and individual consumer decisions). The distribution fee for this group of consumers increased by 9.6%.

Ultimately, from the consumer's point of view, what is important is the level of the average price at which they purchase electricity at the point of consumption (that is, the price of energy including the distribution service). On a Q4 2023 to Q4 2022 basis, we can observe a 1.8% increase in the average selling price of energy, on average, for all tariff groups. Higher increases were recorded for tariff groups A (10.5%) and B (17.5%), while group C saw a decrease of 11.7%. The described dynamics of electricity prices – significantly smaller price increases compared to the dynamics in 2022 – allow for a cautious assessment regarding the stabilisation of prices in the retail market in 2023. It can also be noted that 2023 was a year of favourable development of the situation of consumers in tariff group C, who probably became the object of competitive interest (a catchall) of energy suppliers.

For suppliers offering energy to household customers, the regulator continued to publish a summary of offers in 2023, including prices, fee rates and information on the area of validity of such offer. At the end of 2023, offers for households were presented by 12 electricity suppliers, and in December 2023, offers for January were presented by only 10 suppliers. The small and decreasing number of offers is a result of the freezing of energy prices at a relatively low level, as a result of which it was difficult for suppliers to prepare offers that could prove attractive to energy consumers. In 2023, work continued on the concepts for a new tool to meet the challenges posed by Directive 2019/944 in terms of requirements for comparison tools in European Union countries.

In addition, the possibility to use the list of suppliers operating on the territory of the DSO to whose network the consumer is connected, which is available on the website, is of a great convenience for a customer selecting a supplier.

#### Supplier switching

The total volume of electricity supplied in 2023 to final customers under market conditions, that is after the use of the TPA rule, amounted to 78,746,477 MWh, that is 55.39% of the total energy supplied to final customers. Compared to 2022, the volume of energy supplied to consumers exercising the supplier switching right decreased by 2,226,718 MWh, and despite a decrease in volume in 2023, the share of this energy in the total energy supplied to customers increased at the same time by 0.5 percentage point in this period (in 2022 it was 54.89%).

The data obtained show that in 2023 the number of consumers exercising the right to choose a supplier increased by 3.15% compared to 2022, while in the group of institutional customers (tariff groups A, B and C) this change amounted to 5.88% and in tariff group G (including households) it was an increase by 2.25%.

The increasing number of TPA customers (cumulatively) is not indicative of increased market development in a given year – in order to form an assessment in this respect, the President of URE calculates the TPA ratio for a given year, understood as the ratio of the number of supplier switches to the total number of customers. In 2023, this ratio decreased slightly compared to the previous year and reached 0.11 (in 2022 it was 0.13). The main reason for this ratio remaining at a low level is the lack of competitive offers in the situation of a continued freeze in energy prices for households in 2023.

The data obtained from the President of URE's monitoring (a survey of the six largest suppliers) shows that, as at 31 December 2023, nearly 64% of energy customers bought energy based on contracts with approved tariffs, while the rest bought energy with prices resulting from market offers.

In 2023, an option to purchase energy with a dynamic price was not widely offered in Poland. Legislative work to prepare for the implementation of contracts with a dynamic price to be offered to customers as of 24 August 2024 was completed.

### Interventions

In 2023, the President of URE received requests from consumers to intervene in matters related to grid connection and the implementation of the terms and conditions of contracts already concluded and billing. Prosumers reported comments regarding the failure to meet quality parameters and the manner of billing for energy generated in micro-installations. A significant part of consumers' doubts concerned the application to consumers of frozen prices within the energy consumption limits specified in the Act.

Complaints about the actions of entrepreneurs bearing the hallmarks of practices infringing the collective interests of consumers by breaching the obligation to provide consumers with reliable, true and complete information and applying unfair market practices or acts of unfair competition were forwarded by the President of URE to the President of UOKiK, in accordance with its jurisdiction.

The Office undertook intervention and explanatory measures within the limits of the powers granted, among others, pursuant to Article 28 para. 1 of the Energy Law Act, granting the President of URE the right to demand documents and information from the energy company, under the threat of a financial penalty. In most of the described cases, the so-called "soft competences" of the President of URE are used, and the actions taken often allow to obtain positive results for consumers.

As part of the monitoring of the activities of DSOs and suppliers of electricity and gaseous fuels, the President of URE analysed the complaints/notifications of consumers against the activities of energy companies submitted between 1 May 2021 and 30 April 2023. As a result of the quantitative and qualitative analysis of the complaints/notifications, URE organised meetings with representatives of selected energy companies in order to jointly analyse the problematic areas and determine measures that can be taken to limit undesirable occurrences.

### Smart metering

The obligations imposed on Poland by the 3rd package of EU market directives, in particular those concerning the provision of all energy customers with access to information enabling them to manage their own electricity consumption in a practical manner, result in the successive installation by DSOs and electricity trading companies of modern metering and billing systems.

A smart metering and billing system is an electronic system with which energy consumption can be measured, allowing to acquire more information than with a conventional meter, and to transmit and receive data using electronic communications. These systems include energy customers' smart electricity meters, telecommunications infrastructure, a central database and a management system.

Changes to the energy market in the form of smart metering implementation are expected to bring benefits such as:

- exchange of information between system users and, among others, more accurate forecasting of distributed generation,
- better management of electricity consumption,
- personalisation of offers tailored to the needs of a given customer, or the implementation of new services for final customers (e.g. billing for consumption in accordance with a dynamic tariff),
- lowering the market entry barrier for new service providers in the electricity sector.

An important point is that, pursuant to Article 11x para.2 of the Energy Law Act, an ordinance was issued by the Minister of Climate and Environment of 22 March 2022 on the metering system<sup>56)</sup>. This ordinance defined, among others, the requirements to be met by electricity metering systems, metering data and other information recorded by the remote reading meter, commands received by the remote reading meter, as well as the conditions for their transmission, communication standards, etc.

According to the work schedule arising from several Acts<sup>57)</sup>, suppliers are obliged to provide the TSO with information on metering points within 39 months from the date of entry into force of the Act – the detailed scope of information is specified in the TNC.

The roll-out set out in the Energy Law Act requires DSOs to install, by 31 December 2028, remote reading meters connected to a remote reading system at energy consumption points representing at least 80% of the total number of energy consumption points of final customers, including at least 80% of the total number of energy consumption points of final customers in households, having a metering and billing system without current or voltage transformers, connected to a network with a rated voltage of no more than 1 kV. The roll-out indicating the path to the target has set an intermediate target of installing meters in at least 15% of energy points of consumption (EPC) by 31 December 2023.

Therefore, the President of URE conducted an in-depth study of the status of smart metering equipment at the end of December 2023.

The number of smart metering systems (understood as metering systems that enable the automatic collection, storage and transfer of detailed data on electricity consumption) in each tariff group is as follows.



Figure 23. Number of smart meters (by tariff group) – comparison

Source: URE on the basis of a survey.

The figures indicated apply to all remote reading meters, regardless of whether they meet the stricter standards set by the Metering System Ordinance.

Overall, across all consumer groups, the proportion of smart metering systems in relation to the total number of these devices was just over 29% at the end of 2023, with consumers in tariff groups A and B being almost 100% equipped with remote reading meters (RRM).

<sup>&</sup>lt;sup>56)</sup> JoL of 2022 item 788, hereinafter: the Metering System Ordinance.

<sup>&</sup>lt;sup>57)</sup> That is: the Act of 20 May 2021, the Act of 7 July 2023 amending the Act on the Preparation and Implementation of Strategic Transmission Network Investments and Certain Other Acts (Journal of Laws of 2023, item 1506) and the Act of 28 July 2023.

 Table 18. Survey results – status of customers equipped with remote reading meters by tariff group, as at 31 December 2023

Toxif aroun	DSO TOTAL			
Tarii group	Number of ECPs	Number of ECPs with RRMs		
A	1 032	1 027	99.52%	
В	53 016	52 614	99.24%	
С	1 615 787	889 719	55.06%	
G	17 390 151	4 591 984	26.41%	
including households	16 510 389	4 452 488	26.97%	
Total	19 059 986	5 535 344	29.04%	

Source: URE on the basis of CSIRE survey.

**Table 19.** Survey results – status of customers' equipment with remote reading meters (RRMs) by tariff group, broken down into meters meeting the minimum requirements of the Ordinance\* and meters (RRMs) meeting the requirements of the Energy Law Act\*\*, as at 31 December 2023

	DSO TOTAL			
Tariff group	Number of RRMs meeting requirements of the Ordinance	Number of RRMs meeting requirements of the Energy Law Act	Total	
A	20.74%	78.78%	99.52%	
В	0.80%	98.44%	99.24%	
C	17.92%	37.14%	55.06%	
G	12.35%	14.06%	26.41%	
including households	12.45%	14.52%	26.97%	
Total C and G	12.82%	16.02%	28.84%	
Total	12.79%	16.25%	29.04%	

\* Meters that meet at least the minimum technical and functional requirements and the minimum requirements for electricity supply quality indicators as laid down in Appendices 1 and 3 respectively of the Metering System Ordinance.

\*\* This includes meters (a) installed or upgraded by the date of entry into force of the provisions of the aforementioned Ordinance and (b) installed after the date of entry into force of the provisions of the aforementioned Ordinance, which were purchased or covered by a tender procedure initiated before that date.

Source: URE on the basis of CSIRE survey.

### Suspension of energy supplies

In 2023, electricity supply was suspended to 195,155 customers (based on the number of energy consumption points), representing 1.03% of the total number of customers. Approximately 70.5% of the energy supply suspensions involved household customers.

The reason for almost all of these occurrences (96.3% in total, and 95.06% in the household group) was the failure to pay on time for the electricity consumed. According to the legislation adopted in 2022, an energy company whose customer (households only) is in arrears with payment for services shall inform the consumer of available alternatives, such as prepayment, energy audit, electricity advisory services or debt management, before suspending supply.

### Prepayment meters

With a prepaid metering and billing system, the supply of electricity is started after a portion of the energy has been paid in advance. The customer (usually a household) decides on the use of electricity and also pays a fixed charge, regardless of whether electricity is consumed by the customer. An application for the installation of a prepayment metering system can be made by a vulnerable energy consumer and the operator is then obliged to install such a meter at its own expense. In addition, a prepayment meter can be installed at the initiative of the energy company in a situation where the consumer: has been in default of payment for electricity consumed or services rendered for a period of at least one month within 12 consecutive months, does not have a legal title to the property, facility or premises to which the electricity is supplied and where the consumer uses the property, facility or premises in a manner which makes it impossible to regularly check the status of the metering and billing system. In such a case, the costs of installing a prepayment metering system shall also be borne by the operator, and if the customer does not agree to the installation of a prepayment meter, the DSO may suspend the supply of electricity or terminate the contract.

Furthermore, the installation of a prepaid metering and billing system at the operator's expense is possible in a situation where the consumer applies for the initiation of proceedings before the Negotiation Coordinator acting at the President of URE in respect of the consideration of a dispute concerning the supply of electricity or applies for resolution by the President of URE of a dispute that is within the competence of that body.

According to data from the CSIRE survey, there were 175,079 prepayment meters installed in Poland's electricity system at the end of 2023.

### Ensuring access to data on energy consumption by consumers

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 tariff group which these customers used is available, as well as about energy efficiency improvement measures and energy-efficient technical equipment.

In addition, an energy 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, among others, the following, in a billing attached to the invoice:

- the volume 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 authorised representative of the electricity company or a reading performed and reported by a customer,
- 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 settlement 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.

#### Vulnerable consumer protection

In Poland, the vulnerable consumer protection system is linked to the social welfare system. The financial support system provides for payment of energy allowances by municipalities to vulnerable consumers who were granted housing allowance (electricity consumer) or a lump sum for the purchase of fuel (gaseous fuels consumer) and who are, respectively, a party to a comprehensive contract or contract on supply of electricity or gaseous fuels, and reside in the place of supplying this energy or fuels.

Pursuant to Article 15 of the Shield Allowance Act of 17 December 2021, applications for energy allowance payments submitted in 2023 were left unprocessed, meaning that no energy allowance was granted to vulnerable energy consumers in 2023. The suspension of energy allowance payments was related to the introduction of more effective, comprehensive forms of support to protect Polish households, including vulnerable consumers, from the rising costs of electricity and gas supply and the rising costs of heating in 2022–2024.

### 3.2.2.2. Consumer protection and dispute settlement

### Dispute settlement

Pursuant to Article 8 of the Energy Law Act, the President of URE, upon a request of a party to the dispute, resolves disputes concerning refusal to conclude a grid connection contract, including those related to increasing connection capacity, sale contract, contract to provide transmission or distribution services for fuels or energy, contract to provide natural gas transport services, contract to provide storage services for gaseous fuels, contract referred to in Article 4c para. 3, contract to provide services for liquefaction of natural gas and a comprehensive contract, 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 or public transport road charging infrastructure, or a publicly accessible charging station referred to in Article 7 para. 1a, refusal to connect a microinstallation, failure to connect a microinstallation despite the expiry of the deadline referred to in Article 7 para. 8d<sup>7</sup> item 2, unjustified limitation of operation, disconnection of a microinstallation from the network or a refusal to include an amendment referred to in Article 7 para. 2a in the contract with respect to the date of the first supply to the grid. This is one of the exceptions giving the President of URE a prerogative to interfere with civil law relations of entities.

Since May 2017, the Coordinator for Negotiations has been operating with the President of URE. 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, aggregator or citizen energy communities or between renewable energy prosumers which are consumers, collective prosumers of renewable energy that are consumers, active customers that are consumers, aggregator or citizen energy communities and energy undertakings, arisen under the following contracts:

- 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 or distribution of heat,
- 4) on sales,
- 5) comprehensive contracts,
- 6) aggregation contracts,
- 7) on provision of electricity storage services.

In addition, there are Municipal and District Consumer Ombudsmen in Poland, to whom consumers can complain in individual cases, including the energy-related cases. The competences of Consumer Ombudsmen comprise, among others, providing free of charge consumer 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.

#### Protection of justified interests of consumers

The President of URE consistently reacts to irregularities signalled by consumers, however not all complaints reported by consumers fall within the remit of the President of URE, such as e.g. issues related to the contracting process, in particular provision of unreliable information on the offer, including fees, contract terms and conditions and related unfair practices.

Therefore, in order to minimise such practices signalled by customers and bearing in mind the provisions of Article 23 para. 2 item 14 of the Energy Law Act, the President of URE, as part of its cooperation with the President of UOKiK, forwarded consumers' letters concerning the above-mentioned topics to UOKiK.

In addition, in August 2023. President of URE informed the President of UOKiK of numerous complaints from energy consumers who had entered into contracts with one of the suppliers in 2022, under which they purchased energy at prices that remained unchanged for all or part of 2023, that is, contracts with a fixed price guarantee. As was apparent from the letters received, the supplier's practice towards consumers, including household consumers, was to "automatically" – in the event that the consumer does not take any action after being presented with a new offer (often electronically, by e-mail) – extending the contracts, with settlement based on an offer with a fixed price guarantee and a significantly increased, compared to the previous period, commercial fee. In the opinion of the President of URE, these actions may have constituted practices infringing collective consumer interests within the meaning of the Act on Competition and Consumer Protection.

At the same time, the President of URE cooperated with the Consumer Ombudsmen, each time providing detailed explanations in connection with questions addressed (mainly by telephone) to URE.

In addition, the President of URE also undertakes remedial measures aimed at preventing the occurrence of similar problems in the future by, among others, raising consumer awareness – in this respect, the main role is played by the Energy and Gaseous Fuel Customers' Information Point operating at URE, whose competences include supporting consumers, mainly by providing telephone and written information on their rights, but also on their obligations in relations with energy companies.

The provisions of the broadly understood energy law rarely differentiate between fuel and energy consumers, distinguishing household consumers from among them. An important distinction in this respect exists in the provisions of the Energy Law Act concerning the suspension of fuel and energy supplies (Article 6b para. 1 et seq. of the Energy Law Act).

The protection of the legitimate interests of household customers was pursued, among others, by providing consumers at risk of having their electricity supply suspended with information regarding their rights under the Energy Law Act. These explanations were provided both in written complaint proceedings as well as at meetings with consumers and by telephone. *Ad hoc* interventions were also undertaken with energy companies to establish the facts of the case, to settle the matter amicably, to enforce the companies' compliance with the procedures in force before the supply of fuels and energy was suspended, or to bring the positions of the parties closer together in order to avoid suspension or to achieve a rapid resumption of supply. In situations where the supply of gaseous fuels and electricity was suspended, dispute resolution proceedings were conducted to resolve the unjustified suspension of the supply of fuels and energy.

#### Processing complaints

Complaints against energy companies reported to URE by household consumers are processed by individual organisational units of URE. The range of issues raised by consumers in 2023 was very wide and the complaints were often multithreaded. The substantive scope of the issues raised in complaints from customers expanded in 2023 to include threads on the operation in that year of specific legal solutions to protect consumers of gas and energy fuels from dramatic price increases for these goods.

The President of URE undertook actions aimed at clarifying the issues covered by the submitted complaints, which concerned such areas as:

- connection to the grid: consumers' complaints in this category mainly concerned the performance of the grid connection contracts,
- metering: consumers reported problems with the operation of measuring systems, which directly
  affected the settlements and invoices,
- quality of supply: consumers complained about the failure to meet quality parameters; a majority
  of these complaints were filed by prosumers who complained about the incorrect value of
  the voltage in the grid and related problems with the operation of the PV micro-installations,
- unfair commercial practices: consumers reported the actions of electricity suppliers, these reports concerned misleading contracting and the practice of tacit consent by the consumer to offers, the cancellation of which entails a contractual penalty,
- contracts and sales: complaints reported by consumers in this category mainly concerned the performance of contracts, amendments to contracts, problems with contract termination and penalty charges. Consumers also reported irregularities related to the contracting process, in particular the problem of customer service agents (salespeople) failing to provide the consumer with full information on the costs involved and additional services included in a contract when making an offer,
- starting supply or resumption of supply after interruption: the complaints filed by consumers in this category mainly concerned resumption of supply after interruption and the fee for resumption of supply,
- suspension of supplies due to non- or late payment: in this category, consumers 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/bills issued and debt recovery: consumers reported problems related to the correctness of settlement and basis for invoice adjustment,
- price/tariff: consumers complained about wrong tariff group qualification and complained about utility prices and rates, a large number of complaints in this category concerned ambiguities around the interpretation and application of instruments affecting prices and tariffs for electricity, gaseous fuels and heat in 2023 and their changes,
- compensation: consumers asked for help in getting compensation from energy companies,
- supplier switching: consumers complained about problems with the entry into force of the new contract after the supplier switching and timeliness of settlements with the old supplier,
- customer service: in this category, complaints most often concerned the timeliness of response to complaints, delay in the execution of orders and instructions submitted by consumers or problems with establishing telephone contact with the energy company (complaints made by phone),
- microgeneration/prosumption: the notifications from prosumers mainly concerned problems related to grid connection, contract conclusion and settlement. Customers holding microinstallations also reported problems with electricity parameters.

**Table 20.** Complaints against energy companies (suppliers and distribution system operators) filed with URE\* by household customers

Complaint	Electricity	Gas
Connection to the grid	489	220
Metering	275	22
Quality of supply	424	13
Unfair commercial practices	51	4
Contracts and sales	1099	84
Starting supply or resumption of supply after interruption	29	3
Suspension of supplies due to non- or late payment	112	27
Invoicing/billing and debt recovery	2371	297
Price/ tariff	882	105
Compensation	58	4
Supplier switching	69	9

Complaint	Electricity	Gas
Customer service	533	56
Microgeneration/prosumption	1061	0
other	152	27

\* The data presented here include complaints reported to the URE organisational units and to the Negotiations Coordinator at the President of URE.

Source: URE own materials.

## *Obstacles and constraints to developing the consumption of self-generated electricity and citizen energy communities*

The most significant area of the energy market where self-consumption of electricity generated from renewable energy sources occurs is prosumer energy sector<sup>58)</sup>. Over the period 2018–2023, an increase in the total installed electrical capacity of prosumer installations was recorded from 0.35 GW to more than 11.3 GW, while the number of prosumers increased from 51,000 to more than 1,400 thousand over the period.

It should be noted that as early as in 2022, there was a significant change in the way electricity generated by prosumers is settled. Previously, the electricity produced from a photovoltaic installation was billed through its so-called balancing with the electricity consumed during the settlement period (net-metering) and the surplus energy produced could be billed within 12 months. In the net-metering system, the electricity grid acted as a kind of energy storage. Prosumers who reported connecting their micro-installation after 31 March 2022 were still billed under the old rules for a transitional period of three months. As of 1 July 2022, these prosumers have been subject to a new system, the net-billing, which consists in billing the surplus energy fed into the grid according to the average market price of energy from the previous calendar month and, as of 1 July 2024, using dynamic tariffs, that is, hourly prices. An important feature of the new billing system applied to prosumer energy is the increased role of self-consumption of generated electricity.

It should also be mentioned that in 2023, a new possibility of settlement was introduced for renewable energy prosumers generating energy for the common parts of a multi-apartment building (e.g. housing communities, housing cooperatives). The solution that had been developed – the institution of the 'tenant prosumer' – will enable the reduction of property maintenance costs and extends the existing possibilities based on the institutions of the collective prosumer and the virtual prosumer.

As a result of the rapid development of prosumer energy in recent years, a number of phenomena have occurred due to difficulties in the area of micro-installation capacity integration in the national electricity system. The current situation is caused by insufficient symmetry in the assessment of the development potential of prosumer installations in relation to the solutions introduced into the national legal order, which has consequently given rise to the need to amend the prosumer energy regulations, significantly modifying the nature of this instrument. The underlying issue is the possibility of increasing the flexibility of the electricity system and improving functionality in terms of control, network management, as well as the automation of processes related to the operation of electricity networks.

Another organisational form allowing the use of generated electricity for own consumption, as provided for in the RES Act, is the energy cooperative. Although the definition of an energy cooperative was introduced in the RES Act already in 2016, and the provisions currently regulating energy cooperatives were introduced in 2019, an increase in popularity of this legal form of conducting activity has been noted since 2023. Prior to 2023, only two energy cooperatives were registered in the List of

<sup>&</sup>lt;sup>58)</sup> Prosumer – a consumer producing electricity exclusively from renewable energy sources for his/her own use in a microinstallation (a RES installation with a total installed capacity of no more than 50 kW), provided that, in the case of a final customer who is not a household consumer of electricity, this does not constitute the object of his/her main economic activity.

Energy Cooperatives maintained by the Director General of the National Support Centre for Agriculture (KOWR); in 2023 alone, a further 19 were entered into the List<sup>59</sup>.

From known experience of energy cooperatives, the main challenge is the creation of the cooperative itself and the associated responsibilities, such as:

- determination of the initial composition and generating capacity of the cooperative so as to meet the statutory requirements for registration and to balance energy production and consumption,
- development and adoption of rules for energy trading within the cooperative (bylaws),
- establishment of a development plan, including policy and rules for the admission of new members,
- negotiation of a contract between the cooperative and the DSO,
- development and implementation of an investment plan,
- management of the cooperative.

In 2023, amendments to the RES Act were introduced to facilitate the operation of energy cooperatives. The new solutions clarify the definition and purpose of energy cooperatives, the conditions for cooperation of energy cooperatives with energy suppliers and distribution system operators. In addition, they simplify reporting conditions and settlement rules.

The provisions of the RES also include a definition of an energy cluster, understood as an agreement concerning cooperation in the production, storage, balancing of demand, distribution or trade in electricity or fuels as defined in Article 3 item 3 of the Energy Law Act, or in the production, storage, balancing of demand, distribution or trade in heat, in order to provide economic, social or environmental benefits to its parties or to increase the flexibility of the electricity system to which it is a party at least:

- a) a local government unit, or
- b) a joint stock/limited company established pursuant to Article 9 para. 1 of the Act of 20 December 1996 on Municipal Economy<sup>60)</sup> by a local government unit, with its registered office in the area of activity of the energy cluster, or
- c) a joint-stock/limited company whose share in the share capital of a company referred to in point (b) is greater than 50% or exceeds 50% of the number of shares.

This type of cooperation in the area of dispersed energy is finding increasing recognition, contributing to its development at the local level. In 2023, legislation was passed clarifying, among others, the definition of an energy cluster, the principles of business cooperation within energy clusters, the subject and object scope of an energy cluster and the area of operation of an energy cluster. The new regulations also provide for specific administrative and legal improvements and a dedicated support system that will be available to entities entered in the new register of energy clusters kept by the President of URE. The regulation also provides for close cooperation between energy clusters and distribution network operators, with the aim of relieving the burden on the national electricity system.

The development of dispersed energy, including prosumer energy, is completely changing the nature of the distribution sector. So far, the activities of distribution system operators have been focused mainly on ensuring the reliability of energy supply, that is, primarily on technical aspects. EU law, however, creates a new regulatory environment that positions DSOs in the role of market facilitator and their efficiency will largely determine the continued functioning of the market. Distribution companies should support the development of all forms of communities, societies and clusters, as only a well-managed citizen energy industry will be able to support the national electricity system.

This is undoubtedly a major challenge for the sector – both technically, in terms of investment and organisation. It is therefore necessary to create system solutions that ensure that the connection of sources to the grid and the feed-in of energy is not limited by technical or commercial barriers. Market integration should include renewable energy generators, new energy service providers, energy storage and flexible off-take. Flexibility services will also play an increasingly important role, which, if designed

<sup>&</sup>lt;sup>59)</sup> As at 29 May 2024 there were 35 energy cooperatives in total entered to the specification of energy cooperatives kept by the Head of KOWR (<u>https://www.gov.pl/web/kowr/wykaz-spoldzielni-energetycznych</u>).

<sup>&</sup>lt;sup>60)</sup> JoL of 2021 item 679.

in the right way, will allow both consumers and new market actors, including flexumers (generators providing flexibility services to the distribution grid through e.g. energy storage) to participate in the energy transition.

In conclusion, it should be highlighted that the identification and analysis of barriers to the development of dispersed energy, including both the prosumer sector and clusters and energy cooperatives, makes it possible to distinguish four main areas where these barriers are located, namely the following: 1) economic and financial, where the following barriers can be identified:

- lack of regulations requiring DSOs to cooperate in the creation of energy communities;
- high cost of stabilising the power system containing RES installations, caused by the lack of regulations supporting local balancing solutions,
- 2) legislative-regulatory, where the following barriers can be identified:
  - not fully implemented legal regulations on dispersed energy, and existing legal regulations not fully responding to the needs of stakeholders or raising interpretation doubts;
  - complicated and lengthy procedures related to the preparation and implementation of the investment process in the RES sector;
  - lack of regulations sufficiently motivating the energy transition based on a broadly understood citizen energy and the introduction of such regulations that do not translate into actual business models;
  - uncertainty for investors due to regulatory instability,
- 3) socio-cultural, where the following barriers can be identified:
  - lack of widespread knowledge and education on energy management and modern technical solutions;
  - limited local organisational capital (e.g. insufficient specialised know-how on dispersed energy at the level of local self-government units, personnel shortages);
  - unawareness of the technical and economic benefits of RES installations or collective actions in energy management;
- 4) technical-technological, where the following barriers can be identified:
  - unsatisfactory technical condition of the energy infrastructure (in particular the distribution networks), requiring significant investment in modernisation;
  - insufficient level of monitoring of the condition and operation of electricity networks, lack of real-time energy balancing, too long data aggregation interval;
  - insufficient level of network controllability, low level of solutions increasing network flexibility (e.g. smart grid solutions), including systems increasing the possibility of connecting new sources and improving the quality of energy supply.

These barriers should first be addressed in the process of creating legal regulations aimed at promoting the use of electricity generated by its consumers.

# → 4. 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 approved by the President of URE.

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 the Detailed Rules for Shaping and Calculation of Tariffs and Settlements in the Gas Fuel Trade.

In the tariff approval administrative proceedings, the President of URE thoroughly analyses the costs which form the basis for calculating the rates of fees, ensuring that there are no crosssubsidies 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. Due to the structure of the Polish gas sector, comparative analyses are used to a limited extent.

Tariffs approved by the President of URE are published in the URE Bulletin within 14 days of the date of approval. Except for tariffs for transmission of gaseous fuels, to which the TAR NC applies, gas companies introduce tariffs for application not earlier than after 14 days and not later than 45 days of the date of their publication, while energy companies engaged in the transmission of gaseous fuels introduce the tariff for application within the deadline set by the President of URE in the decision to approve the tariff, not earlier than 14 days after its publication in the URE Bulletin. Tariffs for transmission of gaseous fuels are published not later than 30 days before the annual procedure of annual capacity auction.

The decision of the President of URE 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 URE, 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 nondiscrimination basis, if there are technical and economic conditions for connection and delivery of these fuels, and the contracting party meets the conditions of connection to network and off-take. A fee is charged for connection to the gas transmission network in the amount corresponding to the actual expenses incurred for the implementation of the connection.

Entities whose devices, installations and networks are connected to distribution networks (low, medium, higher and high-pressure), 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 URE. These rates shall be calculated on the basis of ¼ of the annual average investment expenditure for the construction of the sections serving to connect these entities, as defined in the development plan drawn up by the distribution system operator.

The key infrastructure companies in the gas sector include:

- OGP Gaz-System S.A. transmission system operator
  - on own network and a network of gas pipelines owned by SGT EuRoPol Gaz S.A.;
  - LNG regasification system,
- PSG Sp. z o.o. distribution system operator,
- Gas Storage Poland Sp. z o.o. storage system operator.

### Tariff of OGP Gaz-System S.A.

In 2023, the tariff of OGP Gaz-System S.A. approved by the decision of the President of URE of 3 June 2022, as amended by the decision of 15 December 2022, was applied. The amendment consisted in updating the fee rates for the provided transmission services, compression services and pressure reduction services of gaseous fuels due to an increase in the costs of purchasing gas and electricity for own needs and an increase in own costs, compared to the forecast values assumed for the tariff calculation.

By decision of 2 June 2023 the President of URE approved the tariff for the period from 1 January 2024 to 31 December 2024. At the same time, the balance of the regulatory account as at 31 December 2022 was reconciled by this decision, by setting the level of over-recovered revenues at the amount of PLN 135,311 thousand, of which the amount of PLN 102,228 thousand was included in the tariff

calculation for 2024. The remaining balance of the regulatory account in the amount of PLN 33,083 thousand will be included in the tariff calculation for subsequent periods.

The tariff calculation has taken into account the provisions of the decision of the President of URE of 31 March 2022, approving the *Method of determining reference prices No 2/OGP with respect to the own transmission network of the Gas Transmission Operator Gaz-System S.A. for the period: from 6 am, 1 January 2023 to 6 am, 1 January 2025*, constituting an attachment to this decision and *Information of the President of URE No. 7/2023 on the level of multipliers, seasonal factors and discounts referred to in Article 28(1)(a)-(c) of the TAR NC, taken into account in the calculation of tariffs for gaseous fuel transmission services for the period from 1 January 2024 to 31 December 2024<sup>61</sup>, issued on the basis of the TAR NC.* 

This tariff comprises transmission fee rates (fixed rates in gr/kWh/h per h) for annual firm transmission services of gaseous fuels (that is standard transmission capacity products) provided at the entry and exit points to/from the transmission system (for high-methane natural gas – group E and nitrogenous natural gas – group L, subgroup Lw), including for high-methane natural gas also at entry points and exits from/to storage facilities.

On the other hand, the reserve prices for standard capacity products for interruptible capacity <sup>62)</sup>, in accordance with the provisions of the above referenced Information No. 7/2023, will be calculated by multiplying the reserve price for standard capacity products for firm capacity by the difference between 100% and the ex-ante discount level:

- 6% for annual, quarterly, monthly, daily and intraday capacity products for E gas offered at interconnection points with EU member states and with third countries,
- 2% for annual, quarterly, monthly, daily and intraday capacity products for E and L gas offered at internal entry/exit points.

In this method, the reserve price for the interruptible capacity product (including the above discount) is used in settlements with the transmission system user regardless of the actual occurrence of capacity limitation at the point in question. In the event of an interruption, the user does not receive an additional discount/bonus.

The ex-ante discount will not be applied to virtual reverse flow services, to which a factor of 0.2 (discount of 80%) is applied pursuant to § 14 of the Gas Tariff Ordinance. Nevertheless, in connection with Article 16 of the TAR NC, this factor (and thus the 80% discount) may only be applied to interruptible capacity products.

In the case of provision of both firm and interruptible gaseous fuels transmission services in periods shorter than one year, correction factors determined in the tariff, appropriate for the given product for the scope of transmission capacity (quarterly, monthly, daily and intraday) are applied in settlements.

In addition, in the calculation of the tariff for 2024, similarly to the tariff for 2023, compression services and pressure reduction services were separated from the activity of gaseous fuel transmission. The basic purpose of separating these services was to eliminate excessive cross-subsidisation between groups of customers using and not using additional services. Until 2022, all the costs of pressure reduction services and part of the costs related to the compression services of gaseous fuels were borne by all users of the transmission system, regardless of the actual use of these services.

Compression services will be offered by the operator at the request of the user at selected entry points to the transmission system, in particular for the injection of gaseous fuel from local natural gas mines.

The monthly compression service charge will be the sum of two components:

- a fixed subscription fee determined on the basis of the fixed costs of the compression service for a given gas compressor station [PLN/month],
- a variable fee constituting the product of:

<sup>&</sup>lt;sup>61)</sup> <u>https://www.ure.gov.pl/pl/biznes/taryfy-zalozenia/mnozniki-wspolczynniki-sezonow/10658,Konsultacje-w-zakresie-rabatow-mnoznikow-i-wspolczynnikow-sezonowych-do-taryf-na.html</u>

 $<sup>^{62)}</sup>$  In accordance with the definition in Article 2(1)(3) of Regulation 715/2009, capacity means the maximum flow, expressed in normal cubic meters per time unit or in energy unit per time unit to which the network user is entitled in accordance with the provisions of the transmission contract.

- the volume of gas consumed to drive the compressors at a given compressor station for the part of the gas compression service provided [kWh];
- gas reference price (GRP) for the high-methane gas balancing area, defined as the price constituting the weighted average price of the gaseous fuel purchased by the operator in the gas month preceding the month in which the GRP will be published [PLN/kWh].

Gas pressure reduction services will be provided by the operator at the technological installations installed at the exit points from the transmission system to reduce the gas pressure to medium or low pressure, at the point of connection of the gas station with the installation of the customer connected to the transmission system or the connection of the distribution network.

Thanks to this service, cross-subsidisation of customers in need of gas pressure reduction service to medium or low pressure by:

- customers who have their own pressure reduction stations, and
- customers who do not need an additional pressure reduction service

will be limited.

The introduction of this service has resulted in the costs associated with, among others, the operation and repair of the reduction and measurement stations being borne by the users of these services. In the previous tariffs, these costs were included in the calculation of the fee rates for the transmission of gaseous fuels and thus borne jointly and severally by all users.

In the tariff for 2024, the share of revenue obtained from fixed fees, for both high-methane and nitrogenous gas, was 100%. The distribution of revenue between entry and exit points adopted in the tariff calculation corresponds to a proportion of 45/55. Rates at entry and exit points to/from storage facilities have been applied with an 80% discount, that is they amount to 20% of the transmission rates at entry and exit points to/from the high-methane natural gas transmission network other than storage facilities. At the entry point to the transmission system from the LNG terminal, a discount of 100% has been applied, resulting in no fees for gas introduction into the transmission system at this point.

By a decision of 13 December 2023, an amendment to the tariff for 2024 was approved, consisting in updating the fee rates for the provided transmission services, compression services and pressure reduction services for gaseous fuels due to a change in the cost of purchasing gaseous fuel storage services and updating the value of return on capital employed. The reason for the change in the cost of storage services was a change in the legislation, namely Article 45 para. 3c of the Energy Law Act introduced by the Act of 28 July 2023, which stipulates that "the costs of the activity of the gas transmission system operator referred to in para. 1 item 1 shall include the costs incurred in connection with the performance of the contract referred to in Article 4c para. 3". On the other hand, the change in the value of return on capital employed resulted from the "Methodology for determining the cost of employed capital ratio for gas transmission system operators or 2024-2028"<sup>63)</sup> published by the President of URE on 29 November 2023. The operator chose a fixed value for the cost of capital ratio (WACC=7.597%) for the entire period of the above methodology, with no possibility of changing it.

### Tariff PSG Sp. z o.o.

In 2023 the President of URE conducted four proceedings concerning the tariffs set by PSG Sp. z o.o., which is the country's largest operator providing gas distribution services.

On 2 January 2023, an amendment to the tariff approved in December 2022 was approved. This amendment consisted in adding to the tariff fee rates for the provision of distribution services, which the company was obliged to apply from 1 January to 31 December 2023. Indeed, Article 3 para. 7 of the Act of 15 December 2022 obliged the company to include in the tariff to be applied in 2023 –

<sup>&</sup>lt;sup>63)</sup> <u>https://www.ure.gov.pl/pl/biznes/taryfy-zalozenia/zalozenia-dla-kalkulacj-2/7834,Pismo-Prezesa-Urzedu-Regulacji-Energetyki-do-przedsiebiorstw-energetycznych.html</u>

the distribution fee rates included in the last tariff applied in 2022 for customers referred to in Article 62b para. 1 item 2 of the Energy Law Act.

In July 2023 the President of URE refused to approve a further amendment to the tariff for gas fuel distribution services, as, in the regulator's view, the company had failed to demonstrate in the course of the proceedings that circumstances had arisen that justified amending the final decision approving the tariff.

This was followed by a decision of 15 December 2023. The President of URE approved the tariff for the period until 31 December 2024. It was made effective from 1 January 2024 and resulted in an increase in average payments for distribution services for high-methane natural gas by 5.02%, for nitrogenous natural gas (Lw) by 5%, for nitrogenous natural gas (Ls) by 4.75% and for coke-oven gas by 21.18%.

At the same time, on 22 December 2023, the Act of 7 December 2023 was announced, which extended the 'freeze' of, among others, the tariff rates for gaseous fuel distribution services until 30 June 2024. With regard to gaseous fuels, the relevant regulations resulted from the amendments introduced by the Act of 15 December 2022.

Consequently, the company applied for an amendment to the tariff by supplementing its content with the rates of distribution fees that PSG Sp. z o.o. is obliged to apply to customers referred to in Article 62b para. 1 item 2 of the Energy Law Act, from 1 January to 30 June 2024, that is, the rates included in the last tariff applied in 2022 (pursuant to Article 3 para. 7 of the Act of 15 December 2022).

Thus, for the period from 1 January 2023 to 30 June 2024, the company shall apply to customers referred to in Article 62b para. 1 item 2 of the Energy Law Act, the fee rates for distribution services established in the amendment to the tariff for gas fuel distribution services approved on 17 August 2022.

The adjustment of the last tariff also consisted in adapting its content to the amended wording of the provisions on the shaping and calculation of tariffs for gaseous fuels – by a regulation of 23 November 2023. This is because the Minister of Climate and Environment amended the provisions of the gas tariff ordinance.

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

In 2023, two administrative proceedings were conducted regarding tariffs for storage services. On 16 June 2023 the President of URE approved the tariff for the period until 31 March 2024. The total working capacity of storage facilities (SFs), compared to the capacity adopted for the calculation of the previous tariff, increased by 97.1 million m<sup>3</sup> (an increase at SF Strachocina by 100 million m<sup>3</sup> and a decrease by 2.9 million m<sup>3</sup> at SF Kosakowo) and amounted to 3,327.7 million m<sup>3</sup>. As a result, there was an increase in the number of available bundled units by 5,409, that is, to a level of 180,429. The volume of working capacity in a bundled unit remained at 200 MWh. The characteristics of the bundled services take into account the temporary extension of the maximum time for the delivery of mandatory gas stocks stored in the storage facilities to the gas system – from 40 to 50 days (the temporary extension is valid until 30 September 2024 and results from Article 70d of the Act on Stocks, added through Article 2 para. 14 of the Act of 5 August 2022).

The average rate for a storage service decreased by 0.74%, with rates for interruptible services increasing by an average of 2.14% and those for firm services decreasing by 1.81%. The differentiation in the dynamics of charges for firm and interruptible services is a further step towards the implementation of EU guidelines requiring that the probability of interruption in the provision of these services be taken into account in the pricing of interruptible services.

On 15 December 2023 the President of URE approved the tariff amendment which was due, among others, to an increase – from 1 December 2023 onwards – in the cost of purchasing gaseous fuel transmission services due to the introduction of a new tariff of the gas transmission pipeline operator OGP Gaz-System S.A. for application from that date. The increase in average charges for storage services resulting from this change in the storage tariff amounted to 10.4%. In addition, the content of the tariff (terms used) was aligned with the approved Storage Code (SC), which, as of 6 December 2023, replaced the Storage Services Rules (SSR).

### OGP Gaz-System S.A. – tariff for LNG regasification services

As of 1 January 2023, in settlements for LNG regasification services and additional services provided by the operator of the Lech Kaczyński LNG Terminal in Świnoujście, Tariff No. 8 approved by decision of the President of URE of 16 December 2022 for the period from 1 January to 31 December 2023 was applied.

By decision of 15 December 2023 the President of URE approved Tariff No. 9 for LNG regasification services for the period from 1 January to 31 December 2024. The approval of this Tariff resulted in a 0.2% decrease in the average rate for regasification services compared to the average rate calculated under the tariff in force (for the value of the contractual capacity and the quantity of gas after regasification assumed for the calculation of the approved tariff), while the rate for LNG reloading onto tanker trucks decreased by 4.3%. These decreases were due to decreased planned costs of purchasing electricity included in the calculation of Tariff No. 9 in comparison to Tariff No. 8.

In Tariff No. 9, similarly as in the previous tariff, fee rates (fixed and variable) were determined for bundled regasification services of liquefied natural gas covering: unloading LNG from a tanker, in-process storage in tanks, regasification and delivery of gaseous fuel to the transmission system as well as fee rates for LNG reloading services on tank trucks. LNG regasification services may be provided as long-term services – for a period longer than one year and short-term services – for a period of at least one gas day. In addition, the tariff includes fee rates for unbundled services, that is: unbundled in-process LNG storage and unbundled regasification contractual capacity, which will be provided in addition to bundled services.

The calculation of the tariff was performed on the basis of the planned annual operating costs together with a justified return on equity, based on the so-called 'gas-in-kind' principle, according to which the operator does not include in its tariff the cost of purchasing gas consumed in the regasification process. This cost is borne directly by the party ordering the regasification service, accepting the fact that it receives less gas from the terminal (in MWh) than it injects into it (in MWh).

It should be highlighted that users of the LNG terminal in 2023 and in previous years, injecting regasified natural gas into the transmission system, did not incur a fixed fee for entering the system, due to the 100% discount arising from the transmission system operator's tariff.

## OGP Gaz-System S.A. – tariff for the transmission of gaseous fuels through the Polish section of the Yamal-Europe Transit Gas Pipeline System for 2023

The tariff for the transmission of gaseous fuels via the transmission network belonging to the SGT EuRoPol GAZ S.A. shall be established by OGP Gaz-System S.A., designated as the transmission system operator on that network<sup>64)</sup>. The costs of OGP Gaz-System S.A. as the operator of the Transit Gas Pipeline System (TGPS) shall include the costs planned to be incurred by the owner of the TGPS, including<sup>65)</sup>:

- general management,
- the depreciation of the assets of the TGPS Owner necessary to perform the TSO function on this gas network,
- public levies related to these assets,
- establishment of collateral for the TGPS operator,
- the return to which the Owner is entitled from the capital employed in such assets,

which together constitute the so-called remuneration for the owner-operator of the TGPS, constituting a justified cost for the calculation of the TGPS operator's tariff with respect to gas transmission using the TGPS.

<sup>&</sup>lt;sup>64)</sup> Article 47 para. 1aa of the Energy Law Act.

<sup>&</sup>lt;sup>65)</sup> Pursuant to Article 45 para. 1k of the Energy Law Act.

In 2023, the Tariff for the Transmission of Gaseous Fuels of the Polish Section of the Yamal – Europe Transit Gas Pipeline System No. 1/2023, approved by decision of the President of URE of 16 December 2022, was applied. An amendment to this tariff was, in turn, approved by a decision of 16 June 2023, consisting in making the content of the tariff consistent with the provisions of the TNC of the Polish section of the Yamal – Europe Transit Gas Pipeline System, approved by the President of URE by a decision of 11 May 2023.

By decision of 2 June 2023 the President of URE approved the Tariff for Transmission of Gaseous Fuels of the Polish Section of the Yamal – Europe Transit Gas Pipeline System No. 1/2024 for the period from 1 January 2024 to 1 January 2025.

For the tariff calculation, the provisions of the President of URE's decision of 31 March 2022 approving the "Methodology for determining reference prices No. 2/SGT on the transmission network owned by the energy company System GazoPol GAZ S.A. Transit Gas Pipelines EuRoPol GAZ S.A. with its registered office in Warsaw for the period: from 6:00 a.m. on 1 January 2023 to 6:00 a.m. on 1 January 2025", attached to this decision, and Information No. 7/2023 on the level of multipliers, seasonal coefficients and discounts referred to in Article 28(1)(a-c) of the TAR NC, taken into account in the calculation of tariffs for gaseous fuel transmission services for the period from 1 January 2024 to 31 December 2024, issued on the basis of the provisions of the TAR NC. The tariff calculation also takes into account the conditions for the Kondratki point, arising from the decision of the President of URE of 28 March 2023, in connection with the armed conflict in Ukraine and the introduction of sanctions on Belarus and the Russian Federation.

The tariff includes transmission fee rates (fixed rates in gr/kWh/h per h) for firm annual gas transmission services provided at points: Mallnow-entry, PWP-exit and Mallnow-exit. Due to the removal of the Kondratki entry point from the relevant points and discontinuation of gas imports to Poland from the eastern direction and gas transit from east to west, the transmission fee rate for the Kondratki-input point has not been established.

By contrast, the reserve prices of the standard interruptible capacity products<sup>66</sup> were calculated by multiplying the reserve prices of the standard firm capacity products concerned by the difference between 100% and the level of the ex-ante discount, which is 10% (in accordance with the President of URE's Information No. 11/2022 on the level of multipliers, seasonal coefficients and discounts referred to in Article 28(1)(a) to (c) of the Tariff Code, taken into account in the calculation of tariffs for gaseous fuel transmission services for the period from 1 January 2023 to 31 December 2023).

In the case of the provision of gas transmission services, both firm and interruptible, for periods shorter than one year, the multipliers for short-term services specific to the relevant transmission capacity product (quarterly, monthly, daily and intraday) specified in the tariff shall be applied in the settlements.

### Monitoring access conditions to storage, linepack and to other ancillary services

In Poland, the activity in the field of gas storage is conducted by Gas Storage Poland Sp. z o.o. This company is a natural gas storage system operator (SSO) and provides storage capacities in the following installations and installation groups:

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

 $<sup>^{66)}</sup>$  In accordance with the definition in Article 2(1)(3) of Regulation 715/2009, capacity means the maximum flow, expressed in normal cubic meters per time unit or in energy unit per time unit, to which the network user is entitled in accordance with the provisions of the transport contract.
# StorageCode

In 2023 the President of URE approved, for the first time, the Storage Code (SFC) for Gas Storage Poland, which replaced the previous Storage Services Rules (SSR) – a document determined and approved independently by Gas Storage Poland. The Code sets out detailed conditions for the use of natural gas storage facilities by system users and the conditions and manner of operation, exploitation and planning of storage facility expansion<sup>67)</sup>. In particular, the SC specifies:

- procedures for the conclusion of storage services contracts,
- procedures for access to and allocation of storage capacity,
- congestion management of the gas system,
- criteria for security of operation of facilities,
- the procedures to be followed in the event of a threat to security of gas supply,
- emergency procedures,
- conditions for cooperation between the storage system operator and other gas system operators,
- procedures for the communication of information between system operators and between storage system operators and customers,
- quality parameters for gaseous fuels and quality standards for gas system users,
- characteristics of the services for the injection of gaseous fuels into storage facilities or groups of storage facilities,
- characteristics of services for the offtake of gaseous fuels from storage facilities or groups of such facilities.

The Code became effective on 6 November 2023 at 6:00.

# Parameters of storage installations in 2023

Name and type of storage facility			Type of gas stored	Working capacity				Volume of gas withdrawn from the storage facility	Volume of gas injected into the storage facility	Minimum storage status	Maximum storage status	Status as at 6:00 am of 1 January 2024
				[million m <sup>3</sup> ]		[GV	Vh] <sup>3)</sup>	[GWh] <sup>2)</sup>	[GWh] <sup>2)</sup>	[GWh] <sup>2)</sup>	[GWh] <sup>2), 4)</sup>	[GWh] <sup>2)</sup>
GSF Kawerna <sup>1)</sup>	cUGS Mogilno	In salt caverns	gas, group E	877.72	580.92	9 780.7	6 741.4	5 322.9	5 282.5 9 527.0		9 718.4	9 424.8
	cUGS Kosakowo				296.80		3 309.3			7 321.3		
	UGS Brzeźnica	a depleted high- ethane gas field	natural		100.0	13 001.2	1 126.0			2 660 0		
GSF Sanok <sup>1)</sup>	UGS Husów		ethane	1 150 0	500.0		5 650.0					11 604 5
	UGS Strachocina		high-me	1 150.0	460.0		5 211.8	9072.3		3 009.8		11094.5
	UGS Swarzów	<u>, E</u> E			90.0		1 013.4					

#### Table 21. Storage working capacities

<sup>&</sup>lt;sup>67)</sup> Pursuant to Article 9g para. 3a of the Energy Law Act.

Name and type of storage facility			Working capacit	Volume of gas withdrawn from the storage facility	Volume of gas injected into the storage facility	Minimum storage status	Maximum storage status	Status as at 6:00 am of 1 January 2024	
			[million m <sup>3</sup> ]	[GWh] <sup>3)</sup>	[GWh] <sup>2)</sup>	[GWh] <sup>2)</sup>	[GWh] <sup>2)</sup>	[GWh] <sup>2), 4)</sup>	[GWh] <sup>2)</sup>
UGS Wierzchowice Storage Facility <sup>1)</sup> utrogenons gas field			1 300.00	14 729.0	7 893.0	8 091.3	6 711.3	14 725.4	14 646.5
Total			3 327.72	37 510.9	22 288.1	22 900.8	-	-	35 765.8

- <sup>1)</sup> Settlements of gaseous fuel storage services are carried out only for GSF Kawerna, GSF Sanok and UGS Wierzchowice Storage Facility.
- <sup>2)</sup> Settlement of gaseous fuel storage services is carried out in units of energy, in accordance with the provisions of the Gas Tariff Regulation.
- <sup>3)</sup> Working capacity of the storage facility [in GWh] determined after the projected heat of combustion.
- <sup>4)</sup> Maximum storage status taking into account the filling level of the facility determined by the actual heat of combustion.

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

Table 22. Maximum injection capacities and maximum withdrawal capacities to/from storage facilities

Storage facility group /Storage facility			Maxi injection	mum capacity		Maximum withdrawal capacity				
			from 00:00 of 1.01.2023 to 24:00 of 31.12.2023							
		[m <sup>3</sup> /h]		[MWh/h]		[m <sup>3</sup>	<sup>;</sup> /h]	[MW	/h/h]	
GSF cUGS Mogilno		500.000		F F 71 00		1 150 000		12 815 00		
Kawerna	uUGS Kosakowo	500 000		5 57 1.00		1150 000		12 015.00		
	UGS Husów									
GSF	UGS Strachocina	201 667	121 667*	1 275 17	4 007 02	179 750	478 000**	5 270 76	5 280 60	
Sanok	UGS Swarzów	564 007	434 007	4 323.42	4 907.92	478750		5 57 5.70	5 389.60	
	UGS Brzeźnica									
UGS Wierzchowice Storage Facility		400 000		4 480.00		600 000		6 600.00		

\* Increase of injection capacity of UGS Strachocina as of 15.06.2023.

\*\* Decrease of withdrawal capacity of UGS Swarzów as of 1.10.2023.

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

In 2023 Gas Storage Poland Sp. z o.o. did not have storage capacities exempted from third-party access, under decisions of the President of URE issued pursuant to Article 4i of the Energy Law Act (exemptions from the TPA principle for new infrastructure).

Storage facility	Type of storage	Number of units	Working capacity	Injection capacity	Withdrawal capacity	Start of offer	End of offer		
	service (SS)	[items]	[MWh]	[MWh/h]	[MWh/h]	period	period		
Storage capacity on a firm basis									
UGS Wierzchowice Storage Facility	Long-term in form of Bundled	973	194 600	80.759	210.168	15.04.2023 6:00 am	15.04.2024 6:00 am		
GSF Kawerna	Units, Flexible Units or Unbundled SS	6 559	1 311 800	859.229	1 718.458	15.04.2023 6:00 am	15.04.2024 6:00 am		
	Storage of	capacity or	n an interru	ptible basis					
UGS Wierzchowice Storage facility	Long-term in form of	429	85 800	36.894	55.770	15.04.2023 6:00 am	15.04.2024 6:00 am		
	Bundled Units,	3	600	0.240	0.351	15.04.2023 6:00 am	15.04.2024 6:00 am		
GSF Sanok	Flexible Units or Unbundled SS	5 486	1 097 200	482.768	614.432	15.04.2023 6:00 am	15.04.2024 6:00 am		
	Short-term in form of	1 283	256 600	191.167	440.069	01.07.2023 6:00 am	01.04.2024 6:00 am		
005 //	Bundled Units,	121	24 200	18.029	41.503	01.10.2023 6:00 am	01.11.2023 6:00 am		
GSF Kawerna	Flexible Units or	296	59 200	44.104	101.528	01.11.2023 6:00 am	01.04.2024 6:00 am		
	Unbundled SS	166	33 200	24.734	56.938	01.12.2023 6:00 am	01.04.2024 6:00 am		

$\cdot$
---------

Source: URE specification on the basis of data provided by Gas Storage Poland Sp. z o.o.

In 2023 Gas Storage Poland Sp. z o.o. did not offer storage capacity via an auction, as all storage capacity offered via application procedures was contracted.

In fulfilment of its disclosure obligations under, in particular, Articles 15(1), 17(2) and 19 of Regulation 715/2009, Gas Storage Poland Sp. z o.o. publishes a range of information on its website:

- detailed information on storage facility capacity allocation mechanisms, including the services it offers and the terms and conditions applied, together with the technical information necessary for storage facility users to gain effective access to the storage facility (information on services offered, calculator allowing a detailed insight into the services offered, description of storage facilities, planned and unplanned outages, rules for establishing and maintaining mandatory natural gas stocks, available unused storage capacities of the storage facility under the intra-day service published within minutes of occurrence of unused nominal injection capacities and nominal withdrawal capacities and information concerning the secondary market),
- figures for contracted and available storage capacity,
- information on the amount of gas in each storage facility, or group of storage facilities, gas volume injected and withdrawn, and available storage capacity, including for those facilities exempted from

third party access. This information is available in Polish and English on the website of Gas Storage Poland Sp. z o.o.<sup>68)</sup>

Gas Storage Poland Sp. z o.o. presents information in a standardised way through a unified site map in the form of a Transparency Template, which was developed within the framework of the GIE (GSE) and consulted with ACER.

The implementation of the obligation under Article 22 of Regulation 715/2009 is defined by the provisions of the Storage Services Rules (SSR) and since 6 November 2023 – of the SC, allowing secondary trading of storage capacity. In 2023, the company did not receive any offers of the disposal on the secondary market of the storage capacities ordered by the orderer of storage service.

# Monitoring of the fulfilment of tasks by the liquefaction system operator

The President of URE monitors the fulfilment of tasks by the Liquefied Natural Gas System Operator (LNG System Operator), primarily as part of the procedure for approving the LNG System Code and the annual examination of the operator's performance.

Pursuant to Article 9g para. 1 of the Energy Law Act, the operator of the natural gas liquefaction system is obliged to prepare an LNG Terminal Code. The LNG Terminal Code shall set out specific conditions for the use of the LNG facility by system users and the conditions and manner of operation, exploitation and planning for expansion of the LNG facility. In particular, the Code shall specify:

- procedures for the conclusion of contracts for the provision of regasification services,
- mechanisms for making available and allocating capacity of liquefied natural gas facilities,
- rules for the supply, off-take and storage of cargoes of liquefied natural gas,
- rules for the provision of loading or reloading services for liquefied natural gas using the terminal,
- rules for determining the length of the periods during which cargoes of a certain volume shall be subject to regasification,
- system congestion management,
- emergency procedures,
- safety criteria for the operation of liquefied natural gas facilities,
- cooperation of the liquefied natural gas system operator with operators of other gas systems,
- communication of information between system operators and between the liquefied natural gas system operator and the users of the system,
- quality parameters for gaseous fuels and the quality standards of service for users of that system.

The President of URE, by decision of 10 November 2023, set the effective date of the Code as 1 January 2024.

On the basis of the questionnaires, the activities of OGP Gaz-System S.A. with regard to the provision of liquefaction services and the fulfilment of the obligations of a natural gas liquefaction operator in 2023 were monitored, including in particular:

- 1. Procedures for offering services by the LNG System Operator, broken down into long-term and spot regasification services, as well as additional services, and the manner of informing about these procedures.
- 2. The Operator's requirements for network users to provide adequate guarantees of financial reliability.
- 3. Interest of natural gas market participants in the services of the LNG System Operator.
- 4. Purchase of natural gas by the LNG System Operator for its own use.
- 5. Scope and manner of fulfilment of the information obligations in relation to the function of the LNG System Operator as indicated in Articles 15(1), 17(2) and 19 of Regulation715/2009, including in particular:

<sup>&</sup>lt;sup>68)</sup> https://ipi.gasstoragepoland.pl/pl/strona-glowna/

- publication of information on non-discriminatory and transparent capacity-allocation mechanisms,
- publication of details of the services offered and the conditions applied, including the technical information necessary for LNG facility users to gain effective access to those facilities,
- publication of figures on contracted and available LNG facility capacities,
- publication of information on the determination, calculation methodology and structure of tariffs for LNG facilities.
- 6. Manner in which the LNG System Operator's record-keeping and documentation obligations are implemented<sup>69</sup>.
- 7. The LNG System Operator's actions to guarantee the free trading of capacity rights in a transparent and non-discriminatory manner<sup>70</sup>.
- 8. Whether the LNG System Operator is carrying out activities to develop a secondary market (so-called secondary trading).
- 9. Whether and what measures the LNG System Operator plans to take in relation to the requirements arising from Article 12 and Article 13 of Regulation No. 2022/2576.

Name and type of LNG facility	Maximum volume of LNG unloading	Maximum daily volume of gas injected into	Capacity for purposes [ [M\	commercial million m³] Wh]	LNG tank capacity	Volume of imported LNG	Maximum technical capacity
	the national network total offered reserved						
LNG terminal in Świnoujście – Facility for unloading, in-process storage and regasification of LNG	300 000 m <sup>3</sup> LNG 172.98 million Nm <sup>3</sup> 2 058 000 MWh	33 641 m <sup>3</sup> LNG/d 19 680 thousand m <sup>3</sup> /d 219 963 MWh/d	712 500 Nm <sup>3</sup> /h 0.001218 million Nm <sup>3</sup> /h 7 963,61 MWh/h	712 500 Nm <sup>3</sup> /h 0.001218 million Nm <sup>3</sup> /h 7 963,61 MWh/h	320 000 m <sup>3</sup> LNG 184.52 million Nm <sup>3</sup>	10 192 018 m <sup>3</sup> LNG/y 66.64 TWh/y	820 000 Nm³/h 0.009165140 TWh/h
LNG terminal in Świnoujście – Facility for loading LNG onto tanker trucks			3 660 000 MWh/year	3 660 000 MWh/year			180 m <sup>3</sup> LNG/h 0.0012348 TWh/h

Table 24. LNG terminal in numbers – 2023

Source: URE on the basis of data of OGP Gaz-System S.A.

OGP Gaz-System S.A. was publishing and reporting data arising from the company's disclosure obligations under Regulation 715/2009, Regulation No. 1227/2011 and Commission Implementing Regulation (EU) No. 1348/2014 in 2023.

In order to fulfil these obligations, the company:

- publishes the relevant data on the LNG Terminal's dedicated website under the tab "LNG Terminal",
- Gaz-System Operator of the LNG Terminal in Świnoujście, through OGP Gaz-System S.A. registered as RRM (Registered Reporting Mechanism), submits data to ACER,
- has implemented IT systems and validated the correctness of reporting to ACER via the RRM,
- participates in updating the IT systems in order to publish and archive the data made available,
- updates reporting instructions and rules.

<sup>&</sup>lt;sup>69)</sup> Article 20 of Regulation 715/2009.

<sup>&</sup>lt;sup>70)</sup> Article 22 of Regulation 715/2009.

#### Material scope of data publication

In accordance with the requirements indicated in Regulation 715/2009, the operator publishes the data included in the reports described above as well as data on the volumes of LNG unloaded and reloaded at the LNG Terminal. Quantitative data are published in a cycle consistent with the reports submitted, that is daily or immediately following a data unavailability event.

Quantitative current and archival data are available, among others, at: <u>https://www.Gaz-</u> <u>System.pl/pl/terminal-lng/terminal-lng-dane-techniczne.html</u>.

The organisation of data on the provision of LNG facilities and the fulfilment of the obligations set out in Article 19 is contained in, and made available at: <u>https://www.Gaz-System.pl/pl/terminallng/transparency-template-pl.html</u>. The above data are also made available at an international platform "LNG Terminals Transparency Template".

### 4.1.2. Balancing of the system

The balancing of the gas system is performed by the TSO as part of the gaseous fuels transmission services provided in three balancing zones. The National Transmission System comprises two zones: (i) balancing zone for high-methane gas (NTSHM) and (ii) balancing zone for nitrogenous gas (NTSN). The Polish part of the Yamal-Western Europe 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 Connection Point, through which natural gas can be transmitted. 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.

The balancing rules of the TSO have been regulated in the Transmission Network Code (TNC), which is subject to approval by the President of URE. The TNC contains a separate part concerning system balancing and congestion management. The Code specifies the platform on which the TSO is authorised to buy and sell gas. It is a market operated by TGE S.A. The TNC also regulates the method of determining the price for daily imbalance. The system users, including customers whose facilities, installations or networks are connected to the network of the gas transmission system operator 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, and so does the Mechanism to ensure cost neutrality of balancing activities.

The President of URE monitored the fulfilment of publication obligations in accordance with the requirements of the BAL NC and the TNC.

# 4.1.3. Cross-border issues

# Principles of access to cross-border infrastructure, including allocation of transmission capacity and congestion management

The principles of capacity allocation resulting from the provisions of Regulation 715/2009 and 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 TGPS TNC developed by the TSO and subsequently approved by the President of URE. 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.

The transmission system operator undertakes actions to eliminate the possibility of system congestion, including among others:

- at the stage of consideration of capacity allocation requests or approval of capacity allocation forecasts, the TSO shall analyse the possibility of performance of new contracts so that they do not result in a decrease of the security of supply and the quality of gaseous fuel supplied to the existing system users,
- in case of capacity for transmission services, the TSO offers the available capacity in accordance with the provisions of the TNC,
- if firm transmission services cannot be provided, the TSO shall make interruptible transmission services available, if possible,
- it plans the work on the system so as not to cause congestion, and if congestion is necessary in connection with the work carried out, it endeavours to minimise their effects.

In 2023 the President of URE conducted monitoring to confirm the correct implementation of the provisions on system congestion management.

The TSO makes maximum capacity at relevant points of the system available to market participants. It offers unused capacity on the primary market on a firm basis and, in the case of contractual congestion, on an interruptible basis and also enables network users to resell or make available under another legal title unused contracted capacity on the secondary market. In accordance with Article 18 of Regulation 715/2009 and point 3 of Annex I thereto, the TSO shall publish the information necessary for the user to use the services offered by the TSO.

Within the contractual congestion management on interconnection points, the TSO has implemented procedures which are consistent with the Guidelines in Annex I (point 2.2.) to Regulation 715/2009. They are aimed at preventing and alleviating existing contractual congestion at interconnection points with neighbouring EU Member States:

- Oversubscription and buy-back scheme (OS&BB),
- Long-term use-it-or-lose-it mechanism (LT UIOLI),
- Surrender of contracted capacity mechanism,
- Firm day-ahead use-it-or-lose-it mechanism (FDA UIOLI).

Capacity resulting from the oversubscription procedure at specific NTS and TGPS points should be published on an ongoing basis on the TSO's website when contractual congestion exists at these points. In 2023, there were no circumstances resulting in allocation of capacity under the OS&BB. In addition, the TSO did not identify the need to apply a procedure based on the long-term UIOLI to long-term capacity allocations. Also, no need was identified for FDA UIOLI. The user has the possibility to surrender allocated capacity on a firm basis at physical entry or exit points on interconnections with the transmission systems of adjacent countries and at the Point of Interconnection. In 2023, there were no surrenders of contracted capacity.

According to the TNC and TNC TGPS – the TSO allows capacity to be traded on the secondary market on auction platforms: GSA and RBP. In 2023, 14 bids ended in resale transactions, with a total volume of 14,017,968 MWh.

Interruptible capacities were offered by the transmission system operator in accordance with the guidelines of the Code defining the principles of capacity allocation. On the basis of Council Regulation (EU) No. 2022/2576 of 19 December 2022 enhancing solidarity through better coordination of gas purchasing, reliable price benchmarks and exchange of gas across borders<sup>71</sup>, the President of URE issued a decision of 31 March 2023 on the introduction of the mechanism referred to in Article 14(7)(c) of the aforementioned Regulation for the management of underutilised pipeline capacity at

<sup>&</sup>lt;sup>71)</sup> EU OJ L 2022.335.1, hereinafter: Regulation 2022/2576.

interconnection points. This mechanism means that unused capacity is offered back to the market by the TSO through daily and within-day interruptible products at interconnection points between:

- a) the National Transmission System (NTS) and the neighbouring transmission systems (entry-exit systems) of the NTS,
- b) the Transit Gas Pipeline System (TGPS) and adjacent transmission systems (entry-exit systems) of the TGPS.

The President of URE made the aforementioned decision after a thorough examination of the situation on the Polish market with regard to the rules for capacity allocation at interconnection points, including the analysis submitted by the TSO, pursuant to Article 14(7) of Regulation 2022/2576, of the potential effects of introducing the mechanism proposed under Article 14(1) to (6) of Regulation 2022/2576, where a default new mechanism for allocation of underutilised firm capacity was indicated. In the assessment of the President of URE, in the realities of the Polish gas market, among the solutions proposed under Article 14 of the aforementioned Regulation, the alternative mechanism referred to in Article 14(7)(c) makes it possible in an optimal way to achieve the objective of Article 14 of Regulation 2022/2576, which is more efficient use of transmission capacity and acceleration of the introduction of unused long-term transmission capacity to trading.

In making the aforementioned decision, the President of URE also took into consideration, pursuant to Article 14(8) of Regulation 2022/2576, the opinion of the regulators of the neighbouring Member States, none of which objected to the plan to introduce the mechanism indicated in Article 14(7) in Poland.

The mechanism introduced shall be in force until 31 December 2024.

#### **Cooperation of national regulators**

Due to the completion of the construction of interconnections of the national natural gas transmission system with the systems of neighbouring EU Member States, namely Denmark, Slovakia and Lithuania, no additional arrangements in this regard were made with the national regulators of other EU Member States in 2023. Cross-border cooperation in the reporting period was carried out at the level of the ACER permanent working groups and the Council of European Energy Regulators (CEER), of which URE is a member.

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

Energy undertakings involved in the transmission or distribution of gaseous fuels, pursuant to Article 16 para. 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. 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.

In the process of agreeing the development plans, the consistency of the envisaged measures with the Ten-Year Network Development Plan (TYNDP) is also verified. This document is intended to guide and ensure consistency in the pursuit of energy objectives at the EU level in terms of security of supply, energy prices as well as sustainability.

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. An important regulatory change that came into force on 1 September 2022 and had impact on the implementation of tasks of the President of URE in 2023 is the new Article 16<sup>1</sup> of the Energy Law Act. Under this provision, also the SSO became obliged to prepare a development plan for meeting the current and future demand for storage capacity for a period of 10 years. Relevant actions undertaken with regard to this plan were continued in 2023.

In 2023 the obligation to submit draft development plans for agreement with the President of URE applied to 13 operators:

- OGP Gaz-System S.A.,
- PSG Sp. z o.o. and G.EN. Operator Sp. z o.o.<sup>72)</sup> as companies that were subject to the obligation of legal unbundling due to exceeding the limits referred to in Article 16 para. 13 of the Energy Law Act, as well as
- 10 distribution system operators not subject to legal unbundling.

#### Transmission system operator (OGP Gaz-System S.A.)

The Development Plan of OGP Gaz-System S.A. consists of two parts:

- Part A, which concerns the development of the transmission infrastructure owned by it, and
- Part B, which concerns the development of the transmission infrastructure owned by SGT EuRoPol GAZ S.A., on which OGP Gaz-System S.A. performs the function of operator in the Independent System Operator (ISO) formula<sup>73)</sup>.

Pursuant to Article 16, para. 2 of the Energy Law Act, Part A of this Development Plan is subject to an update every two years, whereas Part B of this Plan, pursuant to Article 16, para. 3 of the Energy Law Act, is subject to an annual update.

In 2023, the TSO's development plan entitled the National Ten-Year Transmission System Development Plan. Development Plan for Meeting Current and Future Demand for Gaseous Fuels for 2022-2031. Warsaw, October 2021 (hereinafter: NTSDP), agreed on 29 October 2021 by the President of URE, was in force. An extract from the agreed NTSDP is available on the TSO website<sup>74)</sup>.

By letter dated 31 March 2023, the company submitted for agreement with the President of URE another development plan entitled the *National Ten-Year Transmission System Development Plan. Development Plan for Meeting Current and Future Demand for Gaseous Fuels for 2024 – 2033; Warsaw, March 2023.* By letter dated 8 February 2024, the President of URE, acting in consultation with the minister responsible for energy, deemed the aforementioned draft development plan to be agreed.

Information on the extent to which the investments assumed in the plan of OGP Gaz-System S.A. have been implemented in relation to the reporting year is presented below.

<sup>&</sup>lt;sup>72)</sup> Due to an amendment to Article 9d para. 7 of the Energy Law Act of 7 September 2023 (JoL of 2023 item 1681), G.EN. Operator Sp. z o.o. is no longer subject to a legal unbundling obligation.

<sup>&</sup>lt;sup>73)</sup> In conjunction with Article 1 item 26 section a) of the Act of 20 May 2021 amending the Energy Law Act and certain other acts (Journal of Laws 2021, item 1093).

<sup>&</sup>lt;sup>74</sup><u>https://www.Gaz-System.pl/pl/system-przesylowy/rozwoj-systemu-przesylowego/krajowe-plany-rozwoju.html</u>

### Figure 24. Structure of investment expenditures incurred in 2023



### Source: OGP Gaz-System S.A.

In 2023 OGP Gaz-System S.A. carried out investments in the transmission system in two basic areas: a) development area: construction of new system facilities and modernisation of the existing ones,

- aimed at increasing technical capabilities of the transmission system,
- b) safety area: modernisation and restoration tasks due to technical or operational needs. The degree of financial implementation of the investment by OGP Gaz-System S.A. amounted to
- 87.7% in relation to the level of expenditure agreed for 2023. In that year OGP Gaz-System S.A. completed the construction and commissioned for operation:
- Gustorzyn-Wronów gas pipeline, section I Gustorzyn-Leśniewice with a length of 54.1 km and a diameter
- of DN 1000 mm,
- Gustorzyn-Wronów gas pipeline, section III Rawa Mazowiecka-Wronów with a length of 154.1 km and a diameter of DN 1000 mm,
- Kędzierzyn Compressor Station portable compressor set (5AS) with a capacity of 13 MW and maximum allowable working pressure,
- connection to the transmission grid of the Dolna Odra power station with a length of approx. 63 km and a diameter of 700 m.

# Figure 25. Key/strategic investments as at 31 December 2023



Source: OGP Gaz-System S.A.

Table 25. Key/strategic investments as	at 31	December	2023
--	-------	----------	------

No.	SWZI portfolio break- down	Name	No. on the map	Task name	Basic data	Branch	Project phase
1		MME	11	GUSTORZYN – WRONÓW GAS PIPELINE Stage I Gustorzyn – Leśniewice	DN1000 L=54.1 km MOP 8.4 MPa	Gdańsk	Completed
2	0	-EAST PROGRAI	12	GUSTORZYN – WRONÓW GAS PIPELINE Stage II Leśniewice – Rawa Mazowiecka	DN1000 L=100 km MOP 8.4 MPa	Rembelszczyzna	Phase 3b – Preparation and implementation /Construction stage
3	R PORTFOLI	CENTRE	13	GUSTORZYN – WRONÓW GAS PIPELINE Stage III: Rawa Mazowiecka – Wronów	DN1000 L=154 km MOP 8.4 MPa	Tarnów	Completed
4	E CORRIDO		14	WRONÓW – ROZWADÓW GAS PIPELINE	DN1000 L=107 km MOP 8.4 MPa	Tarnów	Phase 3a – Preparation and implementation /Design stage
5	0		15	ROZWADÓW – STRACHOCINA GAS PIPELINE	DN1000 L=140 km MOP 8.4 MPa	Tarnów	Phase 3a – Preparation and implementation /Design stage
6			16	TG HOŁOWCZYCE NEW COMPRESSION AGGREGATE (NASH)	Compression aggr. = 1 item Power= up to 13 MW	Rembelszczyzna	Phase 3a – Preparation and implementation /Design stage
7			21	EXPANSION OF TG KĘDZIERZYN Portable compression set	Compression aggr. = 1 item Power=about 13 MW	Świerklany	Completed
8	0110		22	OŚWIĘCIM – TWORZEŃ GAS PIPELINE TOGETHER WITH SSRP OŚWIĘCIM	DN700/500 L=44/0.55 km MOP 8.4 MPa	Świerklany	Phase 3b – Preparation and implementation /Construction stage
9	AL2GAS PORTFC	ЛМЕ	23	RACIBÓRZ – OŚWIĘCIM GAS PIPELINE Stage I: Racibórz-Rybnik	DN700 L= 39 km MOP 8.4 MPa	Świerklany	Phase 3b – Preparation and implementation /Construction stage
10	COA	'BNIK PROGRAN	24	POLAND – CZECHIA GAS PIPELINE Stage I : Kędzierzyn-Racibórz	DN1000 L= 37 km MOP 8.4 MPa	Świerklany	Phase 3b – Preparation and implementation /Construction stage
11		RY	25	CONNECTION PGE ELEKTROWNIA RYBNIK	DN500 L=4.5 km MOP 8.4 MPa	Świerklany	Phase 3a – Preparation and implementation /Design stage
12	PORTFOLIO	BRAMME	26	SKOCZÓW – KOMOROWICE – OŚWIĘCIM GAS PIPELINE Stage II: Wilamowice – Oświęcim	DN500 L=19.6 km MOP 8.4 MPa	Świerklany	Phase 3a – Preparation and implementation /Design stage
13	COAL2GAS	SKO PROC	27	SKOCZÓW – KOMOROWICE – OŚWIĘCIM GAS PIPELINE Stage III: Komorowice – Wilamowice	DN500 L=10.8 km MOP 8.4 MPa	Świerklany	Phase 3a – Preparation and implementation /Design stage

No.	SWZI portfolio break- down	Name	No. on the map	Task name	Basic data	Branch	Project phase
14			28a	SKOCZÓW – KOMOROWICE – OŚWIĘCIM GAS PIPELINE Stage IV a: from ZZU Komorowice (without ZZU) to Stare Bielsko	DN500 L=3.5 km MOP 8.4 MPa	Świerklany	Phase 3a – Preparation and implementation /Design stage
15	S PORTFOLIO	JGRAMME	28b	SKOCZÓW – KOMOROWICE – OŚWIĘCIM GAS PIPELINE Stage IV b: from Stare Bielsko to ZZU Wapienica (without ZZU)	DN500 MOP 8.4 MPa L=4 km	Świerklany	Phase 3a – Preparation and implementation /Design stage
16	COAL2GA	SKO PRO	29	SKOCZÓW – KOMOROWICE – OŚWIĘCIM GAS PIPELINE Stage V: Pogórze – Wapienica	DN500 L=14.6 km MOP 8.4 MPa	Świerklany	Phase 3a – Preparation and implementation /Design stage
17	DLIO	CTIONS	31	CONNECTION OF DOLNA ODRA POWER PLANT	DN700 L=63 km MOP 8.4 MPa	Poznań	Completed
18	CONNEC	SCONNEG KEY KEY		CONNECTION OF EC KOZIENICE IN SWIERŻE GÓRNE	DN700 L=20 km MOP 8.4 MPa	Rembelszczyzna	Phase 3a – Preparation and implementation /Design stage
19		$\mathbf{X}$	41	WOLA KARCZEWSKA – KARCZEW GAS PIPELINE	DN500 L=11.5 km MOP 8.4 MPa	Rembelszczyzna	Phase 3a – Preparation and implementation /Design stage
20	0	$\mathbf{X}$	42	KARCZEW – GASSY GAS PIPELINE	DN400 L=2.6 km MOP 8.4 MPa	Rembelszczyzna	Phase 3a – Preparation and implementation /Design stage
21		$\mathbf{X}$	43	STANISŁAWÓW (MIŃSK MAZOWIECKI) – SG WOLA KARCZEWSKA GAS PIPELINE	DN1000 L=31.6 km MOP 8.4 MPa	Rembelszczyzna	Phase 3a – Preparation and implementation /Design stage
22	NKZV	$\mathbf{X}$	44	MORY – REGUŁY GAS PIPELINE	DN400 L=5.1 km MOP 8.4 MPa	Rembelszczyzna	Phase 3a – Preparation and implementation /Design stage
23			45	REMBELSZCZYZNA – MORY GAS PIPELINE	DN700 L=29 km MOP 8.4 MPa	Rembelszczyzna	Phase 3b – Preparation and implementation /Construction stage
24	O.		51	KOTOWICE – HM LEGNICA GAS PIPELINE Northern section (KOTOWICE – KRZECZYN)	DN300 L=40 km MOP 8.4 MPa	Wrocław	Phase 3a – Preparation and implementation /Design stage
25	W PORTFOI	52		KOTOWICE – HM LEGNICA GAS PIPELINE Southern section (KRZECZYN – HM LEGNICA)	DN300 L=25 km MOP 8.4 MPa	Wrocław	Phase 3a – Preparation and implementation /Design stage
26	GAS L		53	NOWE TŁOKI – SULECHÓW GAS PIPELINE	DN300/150/100 L=43/23.6/9.4 km MOP 8.4 MPa	Wrocław	Phase 3b – Preparation and implementation /Construction stage

No.	SWZI portfolio break- down	Name	No. on the map	Task name	Basic data	Branch	Project phase				
27	OI.	МІТН ТGSP E	61	SSRP DŁUGA GOŚLINA	DN500 MOP=8.4 MPa Q=250 th m³/h	Poznań	Phase 3a – Preparation and implementation /Design stage				
28	PS PORTFOL	ON OF NTS \ ROGRAMM	62	LWÓWEK NODE (ZZU ZĘBOWO – WP LWÓWEK)	DN1000 MOP=8.4 MPa Q(two-direct)= 1600 th m <sup>3</sup> /h	Poznań	Phase 3a – Preparation and implementation /Design stage				
29	TG	CONNECTI	63	TG LWÓWEK	Compression aggreg. = 3 items Power=24 MW	Poznań	Phase 3a – Preparation and implementation /Design stage				
30		'GSP	64	SSRP WŁOCŁAWEK	Q(two-direct)= 1000 th m³/h	Gdańsk	Phase 3a – Preparation and implementation /Design stage				
31	RTFOLIO	NTS WITH T AMME	NTS WITH T AMME	NTS WITH <sup>-</sup> AMME	NTS WITH AMME	F NTS WITH RAMME	65	SSRP WYDARTOWO	Q(two-direct)= 1200 th m <sup>3</sup> /h	Gdańsk	Phase 3a – Preparation and implementation /Design stage
32	TGPS PO	NECTION OF PROGR	66	SSRP CIECHANÓW-PAWŁOWO	DN700 MOP 8.4 MPa Q=250 th m³/h	Rembelszczyzna	Phase 3a – Preparation and implementation /Design stage				
33		CON	67	SSRP ZAMBRÓW	Q=1000 th m <sup>3</sup> /h	Rembelszczyzna	Phase 3a – Preparation and implementation /Design stage				
34	MOR PORTFOLIO	OTHER KEY	71	WĘŻERÓW- PRZEWÓZ GAS PIPELINE TOGETHER WITH SSRP PRZEWÓZ	DN700 L=45 km MOP 8.4 MPa	Tarnów	Phase 3a – Preparation and implementation /Design stage				

Source: OGP Gaz-System S.A.

The Renovation Plan for 2023 comprised 292 tasks, including 160 planned for completion in 2023, of which 155 (97%) were completed.

- The material effect of the renovations carried out was:
- elimination of 39 gas pipeline shallowings,
- replacement of 1,817 m of gas pipelines,
- replacement of 13 fittings,
- removal of 7 leaks on gas pipelines,
- repair of 8 corrosion protection stations, 8 gas facility appliances,
- execution of 121 general construction works,
- decommissioning of 3 gas stations.

The financial implementation of the Renovation Plan in 2023 amounted to PLN 73.56 million, which is 101.2% of the plan. The repair tasks not completed (137) will continue in the following years, according to the 2024-2026 Renovation Plan.

With regard to Part B of the Development Plan for 2024-2033, the Gas Pipeline Operator presented investments on the transmission network owned by the energy company SGT EuRoPol GAZ S.A., on which it acts as an operator under the ISO formula (hereinafter: TGPS infrastructure).

It needs to be explained that by decision of 17 November 2010 the President of URE ex officio appointed OGP Gaz-System S.A. as the operator of the gas transmission system on the Yamal – Western Europe gas pipeline section located on the territory of the Republic of Poland, owned by SGT EuRoPol GAZ S.A., for the period until 31 December 2025, and subsequently – by virtue of the Act of 24 February 2022 amending the Energy Law Act<sup>75</sup>), this period was extended until 6 December 2068. In addition, pursuant to Article 9 para. 1 of the aforementioned Act, SGT EuRoPol GAZ S.A.'s licence for the transmission of gaseous fuels expired on 1 January 2023. In the context of the draft development plan, it is also of significance that the current agreement between OGP Gaz-System S.A. and SGT EuRoPol GAZ S.A. for the conferral of operator responsibilities on the Polish section of the Yamal – Western Europe Transit Gas Pipeline System covers the period from 1 January 2023 to 6 December 2068<sup>76</sup>). This agreement accommodates the changes in the directions of gas transport through the TGPS infrastructure and the entities commissioning the services. As a result, the scope of the entrusted assets changed in accordance with the change in the use of the TGPS infrastructure after 1 January 2023. In particular, infrastructure currently redundant for gas transmission, including in particular TGPS gas compressor stations (TGPS assets not subject to entrustment), was excluded from the scope of entrustment. The aforementioned change in the extent of the entrustment agreement results in a reduction of the assets managed by OGP Gaz-System S.A., and thus a reduction in the number of investment tasks necessary to be included in the development plan and implemented by this operator.

The investment tasks in the TGPS infrastructure in Part B of the Development Plan for the period 2024-2033 are of a modernisation and restoration nature and serve to ensure security, continuity, reliability and optimisation of gas transmission in accordance with the available transmission capacities. The envisaged scope of investments of the plan in question includes three named tasks to separate the entrusted assets (hereinafter: TGPS Assets) from the assets of the TGPS that are not subject to entrustment. In addition, it takes into account collectively the tasks related to the modernisation of: (i) gas stations and metering systems, (ii) communication systems, (iii) IT systems and (iv) TGPS facilities. This plan assumes that the existing capacity of the TGPS Assets in the west-east direction will be maintained, and that it will be adapted to operate in its new form after separation under the entrustment agreement.

#### Gaseous fuel storage system operator (Gas Storage Poland Sp. z o.o.)

Pursuant to Article 16<sup>1</sup> para. 8 of the Energy Law Act<sup>77</sup> the President of URE shall agree with the Storage System Operator a development plan for meeting the current and future demand for storage facility capacity for a period of 10 years, acting in consultation with the Minister responsible for energy.

This plan shall be updated every 2 years.

- Pursuant to Article 16<sup>1</sup> para. 2 of the Energy Law Act, the SSO's development plan takes into account:
- 1) the local spatial development plan,
- 2) the energy policy of the state,
- 3) the preventive measures plan prepared in accordance with Article 15fa para. 2,
- 4) the development plan prepared by the gas transmission system operator referred to in Article 16 para. 2.
   The SSO's development plan also includes, pursuant to Article 16<sup>1</sup> para. 3 of the Energy Law Act,
- in particular:
- 1) investments in the modernisation, expansion or construction of storage facilities,
- 2) the anticipated manner of financing the investments,
- 3) anticipated revenues necessary to complete the investment,
- 4) the planned schedule for the completion of the investment.

<sup>&</sup>lt;sup>75)</sup> JoL of 2022 item 631.

<sup>&</sup>lt;sup>76)</sup> Agreement on the conferral of duties of the transmission system operator on the section of the Yamal – Western Europe Transit Gas Pipeline System located on the territory of the Republic of Poland, attached to the decision of the President of URE of 29 August 2022.

<sup>&</sup>lt;sup>77</sup> Provision introduced on 21 December 2022 pursuant to Article 37 para. 5 of the Act of 15 December 2022.

Currently, the only SSO in Poland is Gas Storage Poland Sp. z o.o., which submitted for agreement the "Draft development plan for meeting the current and future demand for storage facility capacity for 2023-2032" by letter dated 30 September 2022. By letter of 23 May 2023 the President of URE, acting in consultation with the Minister responsible for energy, refused to agree on the submitted draft development plan.

### Works carried out by OGP Gaz-System S.A. on the construction of interconnectors

In the last few years, several significant investment projects of fundamental importance for the security of natural gas supply to Poland were implemented, concerning the establishment of new cross-border connections or the expansion of the functionality of existing connections, like the connections on the border with Germany (Mallnow, Lasów) and with the Czech Republic (Cieszyn), which opened up additional possibilities for gas supply to Poland from alternative directions. In 2022, the construction of connections with Lithuania (Santaka), Slovakia (Veľké Kapušany-Strachocina) and Denmark (the Baltic Pipe gas pipeline) were completed, and so was the first stage of the expansion of the LNG terminal in Świnoujście, allowing it to increase its nominal regasification capacity from 5 billion m<sup>3</sup>/year to approx. 6.2 billion m<sup>3</sup>/year. In 2023 investment projects aimed at increasing LNG import capacity were continued. Work was in progress on the foundation of a new FSRU terminal in Zatoka Gdańska, as well as on further increasing the regasification capacity of the terminal in Świnoujście to 8.3 billion m<sup>3</sup>/year. Also of importance in this context is the work carried out within the national transmission system, such as the programme for the construction of the North-South Corridor, which allows for the appropriate distribution of natural gas within the territory of Poland and the preparation for interconnections. The purpose of the work in progress is also to enable operation of an integrated and competitive natural gas market in Central Europe and the Baltic Sea region.

The process of expanding cross-border connections is supported to a large extent by EU programmes related to projects of common interest (PCI). The status of PCI is assigned by means of an agreement between the company planning to undertake the project and the Member State (or companies and Member States), with the participation of the EU institutions (in particular the European Commission). Key cross-border infrastructure projects linking the energy systems of EU Member States that are intended to help the EU achieve its energy policy and climate objectives – affordable, secure and sustainable energy for all citizens and the long-term decarbonisation of the economy in accordance with the Paris Agreement – may be recognized as PCIs.

It should be noted that the process of the European Commission's support for gas projects has changed. From the sixth PCI list onwards, support is possible under different rules: the possibility of co-financing projects based on the extraction of energy from fossil fuels, namely oil and natural gas, has been significantly reduced, and EU support has been redirected to offshore energy networks, hydrogen infrastructure and so-called smart grids. Gas projects will be able to retain EU support but only until 2029 and under the condition that they are adapted for the transmission or storage of hydrogen or biomethane. The TEN-E Regulation currently in force provides for the possibility of granting a PCI status to investments enabling the emergence of integrated European hydrogen infrastructure through the implementation of hydrogen or hydrogen carried in other chemical substances (e.g. ammonia). The changes to the PCI status process are compatible with the decarbonisation targets for the EU economy defined in the 2030 horizon and take into account the conclusions of the European Green Deal.

In view of the above, in 2022 OGP Gaz-System S.A. submitted an application for inclusion of three new projects in the sixth PCI list (the first PCI list according to the new TEN-E Regulation):

- the Nordic-Baltic Hydrogen Corridor,
- the national hydrogen backbone network,
- the hydrogen storage facility in Damaslawek.

On 28 November 2023 the European Commission published a list of investments that had been granted the status of projects of common interest in the energy sector. The Nordic-Baltic Hydrogen Corridor project<sup>78)</sup> was included in the list. Its purpose is to enable the transfer of hydrogen from Finland via the Baltic States and Poland to Germany. To this end, the gas transmission system operators: Gaz-System (Poland), Gasgrid Finland (Finland), Elering (Estonia), Conexus Baltic Grid (Latvia), Amber Grid (Lithuania) and ONTRAS (Germany) signed a cooperation agreement and initiated work on a preliminary feasibility study. The Nordic-Baltic Hydrogen Corridor is designed to strengthen the region's energy security, reduce dependence on imported fossil energy and create a fast track for decarbonisation in significant sectors of the economy, including e.g. industry, transport, electricity and district heating to meet the REPowerEU 2030 targets. In the first phase of the project, a preliminary feasibility study will be performed, on the basis of which a decision will be taken to proceed with the development of the project and further activities such as the design, construction and commissioning of the transmission network.

PCI projects can benefit from the best practices arising from the TEN-E regulation, which means, among others, that they can benefit from an accelerated process for obtaining permits.

Under certain conditions, PCI status also makes it possible to apply for co-financing from the Connecting Europe Facility (CEF).

The implementation of projects with PCI status and those applying for support under this procedure is subject to ongoing monitoring by the President of URE as part of the reconciliation of draft development plans and annual validation surveys in the course of ACER work.

#### FSRU Terminal at Zatoka Gdańska<sup>79)</sup>

The new LNG Terminal is an installation planned to be located in the Gdańsk region – specifically a floating storage regasification unit (FSRU) – capable of unloading LNG, in-process storage and regasification of LNG and the provision of additional services. As part of this investment project, the expansion of the national transmission system is also planned, which will allow efficient gas distribution from the Gdańsk region to customers both in Poland and in the region. A construction of the terminal capable of regasification at 6.1 billion m<sup>3</sup> of gas per year, with the possibility to increase the regasification capacity depending on market developments and the growing demand for natural gas in the country and the region.

The following extent of the FSRU Project is currently planned:

#### In the onshore part:

- DN 1000 Gustorzyn Kolnik gas pipeline with a length of 214 km,
- DN 1000 Kolnik Gdańsk (Bogatka) gas pipeline with a length of 29 km,
- FSRU DN 1000 connection gas pipeline onshore part with a length of 1.2 km.

#### In the offshore part:

- siting of the FSRU and preparing it for operation,
- construction of a jetty with unloading infrastructure,
- construction of the connecting pipeline FSRU DN 1000 underwater part with a length of 5.5 km.
   In 2023, design work continued, relevant administrative decisions were obtained and negotiations

were conducted to acquire a regasification unit.

 An application for an environmental decision with an Environmental Impact Assessment report was submitted in Q1 2023. A geological works project for the offshore section was submitted to the Ministry of Climate and Environment. Geophysical, environmental and marine meteorological studies were conducted. A non-binding market study was carried out for the demand for additional regasification capacity for the FSRU 1 terminal,

<sup>&</sup>lt;sup>78)</sup> Detailed information on the sixth PCI list under discussion is available on the European Commission's website at: <u>https://ec.europa.eu/commission/presscorner/detail/en/ip\_23\_6047</u>

<sup>&</sup>lt;sup>79)</sup> https://www.Gaz-System.pl/nasze-inwestycje/krajowy-system-przesylowy/program-fsru/

- Phase II of the Open Season procedure for FSRU 1 was launched in Q2 2023 and a participant in the procedure was invited to submit a bid by 7 July 2023. Discussions with 16 potential suppliers of the FSRU unit were completed. Preparations for sending out invitations to submit proposals for the charter of the unit began. The Multi-Annual Programme related to the construction of the shelter breakwater was approved, to be completed by the end of 2027,
- in Q3 2023, the binding phase of the Open Season procedure for FSRU 1 was carried out, resulting in the signing of the Regasification Agreement and FSRU Regasification Order with Orlen S.A.,
- in Q4 2023, framework agreements for the implementation of the FSRU Programme were signed with the Maritime Office in Gdynia and the Port of Gdańsk Authority. On 14 December 2023, negotiations were completed to acquire a regasification unit.

The connection of the new FSRU in Zatoka Gdańska is planned for the gas year 2027/2028.

OGP Gaz-System S.A. is also carrying out a number of investments to further develop its current capacity. The most important example of such investments is the expansion of the LNG terminal in Świnoujście.

# Expansion of the LNG terminal in Świnoujście<sup>80)</sup>

The objective of the LNG Terminal expansion is to increase the regasification capacity to some 8.3 billion m<sup>3</sup> of natural gas annually and to introduce new functionalities of this installation. The terminal expansion includes four tasks: increasing the regasification capacity of the technological installation by additional SCV equipment (methane pumps, regasifiers); additional capacity by constructing a third liquefied natural gas tank; increasing the flexibility of deliveries to the terminal by constructing a second jetty and diversifying land transport by an LNG reloading installation with a railway siding.

As part of the first stage of the LNG Terminal Expansion Programme in 2022, the infrastructure was expanded with new SCV regasifiers and LNG pumps allowing for an increase in the nominal regasification capacity of the terminal to a level of approximately 6.2 billion m<sup>3</sup>/year.

The second stage of the terminal expansion assumes an increase in regasification capacity to a level of approximately 8.3 billion m<sup>3</sup>/year through the construction of a third LNG storage tank (approximately 180,000 m<sup>3</sup> gross) together with the required installations and equipment, and increased flexibility of supply to the terminal through the construction of a second jetty together with associated equipment and installations.

The ship berths will be connected to the existing LNG Terminal infrastructure in the onshore section. They will be adapted to receive tankers and other vessels (including bunkers) with the following parameters:

- Berth 1 vessels with tank capacities ranging from 7,500 m<sup>3</sup> LNG to approximately 220,000 m<sup>3</sup> LNG and an overall length ranging from 110 m to 320 m and a draught of up to 12.5 m,
- Berth 2 vessels with tank capacities ranging from 500 m<sup>3</sup> LNG to approximately 7,500 m<sup>3</sup> LNG and an overall length ranging from 50 m to 110 m and a draught of up to 7 m.

The Terminal facilities after expansion will enable:

- unloading of LNG from both berths onto vessels with a capacity of 12,000 m<sup>3</sup> LNG/h (Berth 1) and 1,000 m<sup>3</sup> LNG/h (Berth 2),
- loading LNG onto vessels with a capacity of 4,000 m<sup>3</sup> LNG/h (Berth 1) and 1,000 m<sup>3</sup> LNG/h (Berth 2),
- transhipment of LNG from vessels berthed at the ship berth at the existing jetty and at Berth 1 with a capacity of 10 000 m<sup>3</sup>/h,
- bunkering with a capacity of 50 m<sup>3</sup> LNG/h from Berth 2.
   In 2023 the LNG terminal expansion programme continued successively.

<sup>&</sup>lt;sup>80)</sup> <u>https://www.polskielng.pl/terminal-lng/program-rozbudowy-terminalu-lng/</u>

The following activities, among others, were completed:

- the installation of the inner tank as part of the Third Tank Project was completed,
- the hydrostatic testing of the Third Tank was successfully completed,
- power supply for the testing of the hydrostatic part of the Project was given and the target connection was made available. Electrical measurements were performed successfully,
- prefabrication and assembly of cryogenic piping continued,
- delivery of perlite for the Tank Project started,
- prefabrication of steel structures and piping for the Tank Project was completed,
- electrical switchgear deliveries were completed,
- mechanical assembly of small- and large-scale unloading arms on the Wharf Project was completed.
   The project is scheduled for completion in 2024.

The project is scheduled for completion in 2024.





Source: OGP Gaz-System S.A.

# Complaints against a transmission, storage, LNG or distribution system operator concerning their obligations under Directive 2009/73/EC

The President of URE is the body responsible for investigating complaints against energy companies. Any entity may also submit a complaint against the activity of energy companies to the President of URE. In such a situation, the President of URE assesses whether the activity of a given company violated the provisions of the applicable acts of common law, that is EU regulations, acts, national regulations or decisions issued by the President of URE, for example network codes.

# 4.1.4. Implementation of guidelines and network codes

#### TAR NC

In 2023, the President of URE performed its obligations arising from the TAR NC.

The financial stability of gas transmission system operators is to be strengthened by the so-called regulatory account introduced by the TAR NC. Thanks to its application, it will be possible to settle and include in the calculation of tariffs for gaseous fuels transmission services for subsequent years the difference between revenues planned before the beginning of the tariff year and revenues actually generated by the transmission system operator in that period, as part of the reconciliation of the regulatory account referred to in Article 20 of the TAR NC. 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. Until now, a reconciliation of the regulatory account for OGP Gaz-System S.A. was made as at 31 December 2019, 31 December 2020, 31 December 2021 and 31 December 2022, more extensive information on this matter has been included in the decisions approving the tariffs for gas transmission services available on <u>URE's website</u>.

In the calculation of tariffs for gaseous fuels transmission services in 2023 and 2024 performed with the use of the transmission network owned by OGP Gaz-System S.A. and the network owned by SGT EuRoPol Gaz S.A.<sup>81)</sup>, the provisions of the *Reference Price Methodology No. 2/OGP for the own transmission network of Operator Gazociągów Przesyłowych Gaz-System S.A. for the period: from 6:00 a.m. on 1 January 2023 to 6 a.m. on 1 January 2025<sup>82)</sup> and the <i>Reference Price Methodology No. 2/SGT for the transmission network owned by the energy company System Gazociągów Tranzytowych EuRoPol GAZ S.A. with its registered office in Warsaw for the period from 6:00 a.m. on 1 January 2023 to 6:00 a.m. on 1 January 2023<sup>83)</sup> were applied.* 

In the period 31 August – 31 October 2023, the operator held further separate consultations on the methods for determining reference prices for 2025-2026, covering the elements set out in Article 26(1) of the TAR NC, on the operator's own transmission network<sup>84)</sup> and on the transmission network owned by the energy company SGT EuRoPol GAZ S.A.<sup>85)</sup> The operator was appointed by the President of URE to carry out these consultations by the decision of 16 July 2018<sup>86)</sup>.

Following the conclusion of the aforementioned consultation, the operator published the responses received and a summary thereof. However, in accordance with the provisions of Article 27(3) of the TAR NC, ACER published and sent to URE and the operator the conclusions of the analyses of the consultation documents carried out in accordance with paragraph 2 of the aforementioned provision<sup>87,88</sup>.

In conjunction with Article 27(4) of the TAR NC, the procedures for approving reference price determination methods for 2025-2026 were continued in 2024.

<sup>&</sup>lt;sup>81</sup> OGP Gaz-System S.A. performs the function of a gas transmission system operator for the network owned by the energy company SGT EuRoPol GAZ S.A. pursuant to the decision of the President of URE of 17 November 2010 and calculates the tariff for this network, starting with the tariff for 2023.

<sup>&</sup>lt;sup>82</sup> <u>https://www.ure.gov.pl/pl/biznes/taryfy-zalozenia/metody-wyznaczania-cen-referen-1/10196,Decyzje-Prezesa-URE-w-sprawie-metod-wyznaczania-cen-referencyjnych-stosowanych-w.html</u>

<sup>&</sup>lt;sup>83)</sup> <u>https://www.ure.gov.pl/pl/biznes/taryfy-zalozenia/metody-wyznaczania-cen-referen-1/10196,Decyzje-Prezesa-URE-w-sprawie-metod-wyznaczania-cen-referencyjnych-stosowanych-w.html</u>

<sup>&</sup>lt;sup>84)</sup> <u>https://www.Gaz-System.pl/pl/dla-mediow/komunikaty-prasowe/2023/sierpien/31-08-2023-konsultacje-metodologii-dla-krajowego-systemu-przesylowego-na-okres-2025-2026.html</u>

<sup>&</sup>lt;sup>85)</sup> <u>https://www.Gaz-System.pl/pl/dla-mediow/komunikaty-prasowe/2023/sierpien/31-08-2023-konsultacje-metodologii-dla-systemu-gazociagow-tranzytowych-na-okres-2025-2026.html</u>

<sup>&</sup>lt;sup>86)</sup> Pursuant to Article 5 para. 1, Article 26 para. 1 and Article 27 para. 1 of the Tariff Code.

<sup>&</sup>lt;sup>87)</sup> https://www.acer.europa.eu/sites/default/files/documents/Publications/2023 analysis report Poland TGPS.pdf

<sup>&</sup>lt;sup>88)</sup> <u>https://www.acer.europa.eu/sites/default/files/documents/Publications/2024\_analysis\_report\_Poland.pdf</u>

In the period from 6 September to 6 November 2023 the President of URE consulted for the sixth time on the issues<sup>89)</sup> referred to in Article 28 of the TAR NC Regulation, concerning, among others, multipliers, seasonal coefficients, levels of discounts at entry points from the LNG terminal and discounts used to calculate base prices for standard interruptible capacity products. The consultations concerned the network of OGP Gaz-System S.A. and the transmission network owned by SGT EuRoPol GAZ S.A..

On 9 January 2024, the President of URE issued and published *Information No. 4/2024 on the level* of multipliers, seasonal coefficients and discounts referred to in Article 28(1)(a)-(c) of the TAR NC Regulation, taken into account in the calculation of tariffs for gas fuel transmission services for the period from 1 January 2025 to 31 December 2025. The provisions of the above Information will be taken into account in the calculation of tariffs for 2025 for the network of OGP Gaz-System S.A. and the transmission network owned by SGT EuRoPol GAZ S.A.

Pursuant to Article 28(2) of the TAR NC, the aforementioned consultation shall take place during each tariff period. As defined in Article 3(23) of the TAR NC, a tariff period means the time period during which a particular level of reference price is applicable, which minimum duration is one year and maximum duration is the duration of the regulatory period. As the tariffs for gas transmission services are approved for a period of 12 months, this consultation is carried out every year. On 20 February 2023 the President of URE issued and published information<sup>90)</sup> regarding the previous consultations referred to in Article 28(1)(a)-(c) of the TAR NC. The provisions of the above-mentioned information were taken into account in the calculation of tariffs for 2024.

#### **CAM NC Regulation**

In accordance with the CAM NC Regulation, the operator shall make the maximum technical capacity available at interconnection points. The TSO shall regularly perform an analysis of the technical capacity at the above-mentioned points in order to maximise the capacity allocated to market participants. In fulfilling the provisions of Article 6 of the CAM NC, the TSO shall agree the results of the above-mentioned analyses with the system operators cooperating in accordance with the Regulation.

The following table provides an overview of transmission capacities at individual interconnection points, including booked, unbooked, booked and unused capacities, as well as volumes of gas transported in 2023.

<sup>&</sup>lt;sup>89)</sup> <u>https://www.ure.gov.pl/pl/biznes/taryfy-zalozenia/mnozniki-wspolczynniki-sezonow/10658,Konsultacje-w-zakresie-rabatow-mnoznikow-i-wspolczynnikow-sezonowych-do-taryf-na.html</u>

<sup>&</sup>lt;sup>90)</sup> <u>https://www.ure.gov.pl/pl/biznes/taryfy-zalozenia/mnozniki-wspolczynniki-sezonow/10658,Konsultacje-w-zakresie-rabatow-mnoznikow-i-wspolczynnikow-sezonowych-do-taryf-na.html</u>

 Table 26. Interconnections with other transmission systems taking into account firm and interruptible capacity in 2023 (including in the TGPS system) [MWh/year]

System	System Operator's Interconnection		Supply	Total transmission capacity*		Booked transmission capacity		Unbooked transmission capacity		Unused transn capa	booked nission acity	Transmission completed
operator	country	point	direction	firm	interrupt ible	firm	interrupt ible	firm	interrupt ible	firm	interrupt ible	firm and interruptible
OSGT Gaz- System S.A.	Poland /TGPS	Interconnection Point (en)	Poland	101315733	29779906	9962702	0	91 353 031	29 779 906	5756081	0	4 206 621
OSGT Gaz- System S.A.	Poland	Interconnection Point (ex)	Poland /TGPS	0	90 867 239	0	144	0	90 867 095	0	14	130
ONTRAS	Germany	GCP Gaz-System /ONTRAS (en)	Poland	17 776 668	12 697 620	13 862 075	166 094	3914593	12 531 526	3 803 842	166 094	10 058 234
ONTRAS	Germany	GCP Gaz-System /ONTRAS (ex)	Germany	3684486	14 100 184	10 107	0	3674379	14 100 184	0	0	453 601
GasNet s.r.o.	Czech Republic	Branice Czech Republic	Poland	15 794	15 794	0	0	15 794	15 794	0	0	3 342
Net4Gas	Czech Republic	Cieszyn (en)	Poland	6593915	7 321 332	6480015	0	113900	7321332	4519098	0	1 960 918
Net4Gas	Czech Republic	Cieszyn (ex)	Czech Republic	0	6593915	0	0	0	6593915	0	0	38 064
GasNet, s.r.o.	Czech Republic	Zlate Hory	Poland	12 556	81 199	0	0	12 556	81 199	0	0	0
GasNet, s.r.o.	Czech Republic	Zlate Hory	Czech Republic	0	0	0	0	0	0	0	0	0
Eustream	Slovakia	Vyrava (en)	Poland	63 488 100	6348810	1247573	0	62 240 527	6348810	6348810	1247573	1 247 544
Eustream	Slovakia	Vyrava (ex)	Slovakia	52 743 960	5 274 396	81	0	52 743 879	5274396	26	0	55
LLC Gas TSO of Ukraine	Ukraine	GCP Gaz-System /UA TSO (en)	Poland	49 494 000	46 939 296	5883440	0	43 610 560	46 939 296	48 204	0	5 835 237
LLC Gas TSO of Ukraine	Ukraine	GCP Gaz-System /UA TSO (ex)	Ukraine	0	56 624 119	0	7512008	0	49 112 111	0	1 104 426	6 407 582
AB Amber Grid	Lithuania	Santaka (ex)	Poland	21 195 258	5 847 995	5 852 981	0	15 342 277	5847995	2612994	0	3 239 987
AB Amber Grid	Lithuania	Santaka (en)	Lithuania	7813920	18948756	5675961	171681	2 137 959	18777075	2417630	171681	3 258 331
Energinet	Denmark	FAXE (Baltic Pipe entry)	Poland	117480360	76 238 738	96471011	0	21 009 349	76 238 738	20 263 003	0	76 208 008
Energinet	Denmark	FAXE (Baltic Pipe exit)	Denmark	33 750 002	3 375 000	39 528	0	33 710 474	3 375 000	12539	0	26 989
GASCADE Gastransport Gmbh	Germany	Mallnow SGT (en)	Poland	101 315 733	21939280	9962726	0	91 353 007	21 939 280	5 756 105	0	4 206 621
GASCADE Gastransport Gmbh	Germany	Mallnow SGT (ex)	Germany	254299493	81 244 759	240	0	254299253	81 244 759	110	0	130

Source: URE's own analysis on the basis of data provided by OGP Gaz-System S.A.

In 2023 related capacity was offered at interconnection points – Cieszyn (connection to the Czech Republic), FAXE (connection to Denmark), Santaka (connection to Lithuania), Vyrava (connection to Slovakia), Mallnow and Mallnow reverse (connection to Germany), GCP Gaz-System Ontras (connection to Germany) and PWP (connection of the national transmission system to the transit system) – on the GSA and RBP auction platform.

In 2023, the process of ordering capacity on the GSA and RBP platform proceeded smoothly.

# Incremental capacity projects

On 28 April 2023 the President of URE issued a decision approving the proposal of OGP Gaz-System S.A. for the incremental capacity project for the border of the Poland-Ukraine bidding zones, attached as Annex No. 1 to the decision, and the General Terms and Conditions for Participation and Access to Capacity in the Binding Incremental Capacity Allocation Phase at the Poland-Ukraine Border, attached

as Annex No. 2 to the decision. The President of URE issued the aforementioned decision as a result of the submitted application of OGP Gaz-System S.A.

The substantive elements of the project proposal, as set out in Article 28(1) of the CAM NC, were determined in coordination with the Ukrainian energy regulator NEURC.

In the incremental capacity auction for the border between the Poland-Ukraine bidding zones held on 3 July 2023, OGP Gaz-System S.A. and the Ukrainian transmission system operator GTSOU (abbreviation for Gas Transmission System Operator of Ukraine) made available a common offer level for bundled incremental capacity at the GCP Gaz-System/UA TSO interconnection point. The offer level of 3,095,890 kWh/h/y was made available to the market from the gas year 2030/2031 on an annual capacity basis for a period of 15 years.

By decision of the President of URE, OGP Gaz-System S.A. was obliged to conduct an economic test for the offer level of 3,095,890 kWh/h incremental capacity project for the border of the Poland-Ukraine bidding zones in the part implemented by it, after obtaining binding commitments from network users on contracting incremental capacity.

In the annual incremental capacity auction on both sides of the interconnection point between Poland and Ukraine, held on 3 July 2023, no market participant booked incremental capacity and therefore the outcome of the economic test was negative on both sides of the interconnection point at the Polish-Ukrainian border. Therefore, the incremental capacity procedure at the Polish-Ukrainian border, initiated in 2021 (INCREMENTAL CYCLE 2021-2023), was terminated in accordance with Article 22(3) of the CAM NC n.

Applicant	Subject-matter of the decision	Legal basis
OGP Gaz-System S.A.	Approval of the proposal for an incremental capacity project at the Poland-Ukraine border entitled "Application for approval of an incremental capacity project under Article 28(1) CAM NC for the Poland-Ukraine bidding zone border"	Article 28(1) of the CAM NC <sup>91)</sup>
OGP Gaz-System S.A.	Commitment for OGP Gaz-System S.A. to conduct an economic test for the offer level of 3,095,890 kWh/h of the incremental capacity project for the border of the Poland-Ukraine bidding zones in the part implemented by it, after obtaining binding commitments from network users regarding the contracting of incremental capacity	Article 22(1) of the CAM NC

#### **BAL NC**

Within the high-methane natural gas balancing zone (NTSHM), in 2023 OGP Gaz-System S.A. undertook balancing activities on TGE S.A. as part of standard short-term products (under IDMg and DAMg), within which it purchased 206 GWh (39 balancing activities) and sold 551 GWh (114 balancing activities).

Within the TGPS balancing zone and the nitrogenous gas balancing zone (NTSN), the company did not undertake balancing activities in 2023. In accordance with the BAL NC regulation, the operator publishes information on the costs and number of balancing activities on the website.

In 2023 the President of URE approved gas trading in adjacent balancing zones and gas transmission to and from these balancing zones for the performance of balancing tasks.

This is justified by the limited hours of operation of the trading platform in balancing zones for which OGP Gaz-System S.A. acts as TSO and the lack of localised products available on the trading

<sup>&</sup>lt;sup>91)</sup> <u>https://www.ure.gov.pl/pl/paliwa-gazowe/europejski-rynek-gazu-1/decyzje/11073,Decyzja-Prezesa-Urzedu-</u> <u>Regulacji-Energetyki-z-28-kwietnia-2023-r.html</u>

platform. The TSO may undertake balancing activities in neighbouring balancing zones only if the tools available in the balancing zone (TGE S.A short-term markets) do not ensure that gas can be balanced in the transmission network. In 2023 the TSO did not undertake balancing activities in the neighbouring balancing zone.

In the reporting year, balancing services were applied at the Branice interconnection point on the Polish-Czech border. The rules for the use of balancing services are set out in Article 8 of the BAL NC and the contract for the provision of these services, which is concluded by the TSO after a nondiscriminatory tendering procedure. As part of balancing services at the Branice entry point, 3.3 GWh were supplied to the transmission system in 2023.

OGP Gaz-System S.A. continued to apply the mechanism to ensure cost neutrality introduced by the TSO on 1 June 2020 by virtue of the decision of the President of URE of 27 May 2020 approving the "Mechanism to ensure cost neutrality of balancing activities of Gas Transmission Operator Gaz-System S.A.". This document sets out the methodologies for calculating fees related to the cost neutrality of the operator's balancing activities.

OGP Gaz-System S.A. publishes on its website data on the total imbalance for all users at the start of each balancing period and the projected total imbalance for all users at the end of each gas day.

For NTS: (tab: For Clients>>Data transparency>>Standardised publications in accordance with 715/2009), link: <u>https://www.Gaz-System.pl/pl/dla-klientow/informacje-rynkowe/transparetnosc-danych.html</u>;

For TGPS: (tab: For Clients>>Data transparency>>Standardised publications in accordance with 715/2009), link: <u>https://www.Gaz-System.pl/pl/dla-klientow/informacje-rynkowe/transparetnosc-danych.html</u>

Forecast imbalance data are published on the basis of the approved nominations (and transport forecasts in the case of high-methane gas balancing zone E) for a given gas day (publication at 18:30 of the preceding gas day, updated after each approved renomination and change in the transport forecast).

The total actual imbalance data is published on an operational basis after the end of the gas day (14:00).

In addition, under the BAL NC, the TSO shall publish the following information:

- a) balancing services and the costs incurred for these services (Article 8(7) of the BAL NC)<sup>92)</sup>,
- b) costs, frequency and number of balancing activities conducted in accordance with Article 9(1) and Article 9(3) of the BAL NC<sup>93)</sup>,
- c) change in the marginal purchase price and marginal selling price<sup>94)</sup>,
- d) total charges referred to in Article 29(1) of the BAL NC and the total balancing neutrality charges<sup>95)</sup>,
- e) method for calculating the daily imbalance charge in accordance with Article 20(2) of the BAL NC<sup>96)</sup>.

#### INT NC

In 2023 OGP Gaz-System S.A. continued its cooperation with the Czech operator NET4GAS s.r.o., the German GASCADE Gastransport GmbH and Ontras Gastransport GmbH and the Ukrainian GTSOU,

<sup>&</sup>lt;sup>92)</sup> Information is published on the website: <u>https://www.Gaz-System.pl/pl/dla-klientow/uslugi-w-ksp/przesyl-gazu-ksp/bilansowanie-ksp/dzialania-bilansujace-i-srodki-tymczasowej.html</u>

<sup>&</sup>lt;sup>93)</sup> Information is published on the website: <u>https://www.Gaz-System.pl/pl/dla-klientow/uslugi-w-ksp/przesyl-gazu-ksp/bilansowanie-ksp/dzialania-bilansujace-i-srodki-tymczasowej.html</u>

<sup>&</sup>lt;sup>94)</sup> Information is published on the website: <u>https://www.Gaz-System.pl/pl/dla-klientow/uslugi-w-ksp/przesyl-gazu-ksp/bilansowanie-ksp/ceny-do-rozliczenia-niezbilansowania.html</u>

<sup>&</sup>lt;sup>95)</sup> Information is published on the website: <u>https://www.Gaz-System.pl/pl/dla-klientow/uslugi-w-ksp/przesyl-gazu-ksp/bilansowanie-ksp/mechanizm-zapewnienia-neutralnosci-kosztowej.html</u>

<sup>&</sup>lt;sup>96)</sup> The method for calculating daily imbalance charges is set out in the TNC. The document is published on the website: NTS TNC: <u>https://www.Gaz-System.pl/pl/dla-klientow/uslugi-w-ksp/iriesp-ksp.html</u>

GPTS TNC: https://www.Gaz-System.pl/pl/dla-klientow/uslugi-w-sgt/iriesp-sgt.html

Lithuanian AB Amber Grid, Slovakian Eustream a.s. and Danish Energinet SOV in accordance with the provisions of the inter-operator agreements.

OGP Gaz-System S.A. continued to comply with the following obligations under the INT NC:

- publication of the points in which the current operational balancing account (OBA) agreements apply<sup>97)</sup>,
- implementation of OBA agreements containing detailed arrangements on: nomination matching rules, rules for allocation of gas quantities, communication procedure in case of exceptional events,
- promoting common solutions for the electronic exchange of information related to the execution of transmission contracts, which is based on the electronic document interchange (EDI) standard, in the version developed for the gas industry called EDIG@S<sup>98)</sup>,
- promotion of common data exchange solutions based on the AS4 protocol<sup>99)</sup>,
- publication of daily data (in accordance with Article 16 of the INT NC) for each interconnection point regarding Wobbe index and calorific value<sup>100)</sup>.

All of the above information is also available in English.

# 4.2. Competition and market operation

# 4.2.1. Wholesale market

# Natural gas acquisition and flows

Gas purchases from abroad, in the amount of 159.7 TWh, were supplemented with gas from domestic sources in the amount of 38.4 TWh. Total gas supplies from abroad included imports and intra-Community acquisitions. The change in natural gas stocks was -2.4 TWh.

Through the Polish transmission system flowed 219.7 TWh of high-methane gas and 6.8 TWh of nitrogenous gas. The following table presents the most important directions of gas flow in the transmission system.

**Table 27.** Balance of trade flows\* of high-methane gas through the National Transmission System and the Transit Gas Pipeline System and nitrogenous gas through the National Transmission System in 2023 [TWh]

Gas type		High-methane gas	Nitrogenous gas
	Entry to the system in total	219.7	6.8
Out of which:	mines and denitrification plants	19.5	2.6
	storages	28.8	0.0
	non-EU supplies	5.8	0.0
	supplies from the EU	97.0	0.0
	LNG terminal	67.1	0.0
	other (entries from distribution)	1.5	4.2
	Exit from the system in total	219.7	6.8
Out of which:	mixing plants and denitrification plants	0.0	0.7
	storages	31.1	0.0
	to the distribution network	137.4	6.0

<sup>&</sup>lt;sup>97)</sup> https://www.Gaz-System.pl/pl/dla-klientow/informacje-rynkowe/wymiana-danych.html

<sup>98)</sup> https://www.Gaz-System.pl/pl/dla-klientow/informacje-rynkowe/wymiana-danych.html

<sup>&</sup>lt;sup>99)</sup> https://www.Gaz-System.pl/pl/dla-klientow/informacje-rynkowe/wymiana-danych.html

<sup>&</sup>lt;sup>100)</sup> <u>https://swi.Gaz-System.pl/swi/public/#!/sgt/wobbeDaily?lang=pl</u>

Gas type		High-methane gas	Nitrogenous gas
	to final customers on the transmission network	39.5	0.1
	supplies to the EU [MWh]	3.8	0.0
	supplies outside the EU	6.4	0.0
	operator's own needs (including change in operational balancing accounts)	1.5	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: URE on the basis of data of OGP Gaz-System S.A.

# Trade in natural gas

At the end of 2023, 178 entities held a licence to trade in gaseous fuels compared to 176 at the end of 2022. In contrast, 86 companies actively participated in natural gas trading. Gas trading companies from outside the GK Orlen acquired 71.2 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 28. Volumes of gas acquired and sold under wholesale trading by the surveyed trading companies in 2023 [TWh]

	Total	GK Orlen	Other trading companies
Gas acquisition (purchase and extraction)	408.8	337.6	71.2
Wholesale sales of gas	153.3	137.9	15.4

Source: Data of the Ministry of Climate and Environment and URE.

#### Natural gas exchange

The sale and purchase of gaseous fuels on the Polish wholesale market takes place primarily on the commodity exchange operated by TGE S.A. (Commodity Market – CM and as of 1 May 2020 – Organised Trading Facility – OTF). Exchange market participants are mainly gaseous fuel trading companies and the largest final customers which can act independently after concluding an appropriate agreement with TGE S.A., becoming members of CM or OTF, or through brokerage houses or through other entities having the status of a CM and OTF 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 members of CM and OTF.

In 2023 TGE S.A. operated the following gas markets: Intra-day Market (IDMg), Day-Ahead Market (DAMg) and Gas Forwards Market (GFM) of the Organised Trading Facility (OTF).

Subject of trade on the GFM OTF was the supply of gas in equal volumes at all hours of the delivery period in line with the instrument standard (weekly, monthly, quarterly and yearly).

The supply of gas in equal volumes at all hours of the delivery day is subject of trade on the DAMg. 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 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 two days preceding the delivery period.

Trading on IDMg is conducted in the continuous trading mode.

The figures below show the volume and price of gas delivered under contracts concluded on the Day-Ahead Market, Intra-day Market and Gas Forward Market (GFM OTF).



**Figure 27.** Volume and weighted average monthly price of gas supplied as a result of the performance of contracts executed on the DAMg in 2023

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

**Figure 28.** Volume and weighted average monthly price of gas supplied as a result of the performance of contracts executed on the IDMg in 2023



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

**Figure 29.** Volume and weighted average monthly price of gas supplied as a result of the performance of contracts executed on the Commodity Forward Instruments Market and Gas Forward Market (GFM) on OTF, performed in 2023



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

In 2023, as a result of the execution of contracts concluded on TGE S.A., 155,860,538 MWh of natural gas were delivered in the whole quotation period of a given contract type at the average price of 384.11 PLN/MWh (14,947,473 MWh on the DAMg at the average price of 215.25 PLN/MWh; 3,370,279 MWh on the IDMg at the average price of 211.66 PLN/MWh and 137,542,786 MWh on the GFM OTF at the average price of 406.69 PLN/MWh).

# Trading in high-methane natural gas in the virtual point on the OTC market

The President of URE also monitored transactions concluded at the virtual point on the Over-the-Counter (OTC) market. As a result of performance of contracts executed in the virtual point on the OTC market, regardless of the contract conclusion date, a total of 20.9 TWh of natural gas was delivered at an average price of 312.55 PLN/MWh. The prices in particular quarters are presented in the Table below.

**Table 29.** Comparison of average prices of natural gas under contracts of sales in the virtual point on OTC, sales via TGE S.A. and purchase from abroad, in particular quarters of 2023 [PLN/MWh]

	Quarter I	Quarter II	Quarter III	Quarter IV
Average prices from contracts on sales in the OTC virtual point with delivery in a specified period	389.83	324.77	247.19	289.74
Average prices from contracts on sales via TGE S.A. with delivery in a specified period	528.15	329.72	274.71	308.18

Source: URE.

# 4.2.2. Retail market

The retail gas market is understood as the market for sales to final customers, irrespective of the volume of fuel purchased. On the supply side, at the end of 2023, 121 suppliers had contracts

in place with the TSO allowing sales on the retail market (a decrease of 3 compared to 2022), and in the area of the distribution network (PSG Sp. z o.o.) the number of contracts amounted to 47 (a decrease of 10 compared to 2022). Suppliers, in order to operate on the retail market, concluded contracts with individual (transmission and distribution) system operators. The maximum number of contracts concluded by one supplier was 13, and in the network of the largest DSO – PSG Sp. z o.o. – 28 suppliers of high-methane natural gas were actively selling (at least one valid contract with a customer).

In 2023, 20 natural gas suppliers<sup>101)</sup> and 10 of the largest distribution system operators (DSOs) were included in the detailed assessment by the President of URE. The DSOs included in the study had 7,059,358 customers (7,274,722 gas consumption points) connected to the network for high-methane gas and 381,854 customers (395,845 gas consumption points) for nitrogenous gas. As at 31 December 2023, there were 50 distribution system operators in the natural gas market.

To viff another	Households (W 1- 4)		Other customers W (5 -13)		
Tariff groups	number	[%]	number	[%]	
Number of customers	7 035 513	99.66	23 845	0.34	
Number of measuring systems	7 232 821	99.42	41 901	0.58	

Table 30. Customers connected to the high-methane gas distribution network – by tariff group

Source: URE on the basis of survey data.

Table 31. Customers connected to the nitrogenous gas distribution network – by tariff group

Toriff groups	Households		Other customers		
Tariff groups	number	[%]	number	[%]	
Number of customers	371 077	97.18	10 777	2.82	
Number of measuring systems	376 481	95.11	19 364	4.89	

Source: URE on the basis of survey data.

The data obtained by the President of URE indicate that in 2023, 97.65% of customers purchased natural gas at prices arising from the tariff approved by the President of URE.

In the reporting year, total sales of high-methane and nitrogenous gas fuel to final customers amounted to 165,003,372 MWh, most of which – 56.59% – went to industrial customers and 32.88% to households. Total sales decreased by approximately 3.95% compared to 2022 (when it was 171,795,031 MWh), with an increase in sales in agriculture (276%), a decrease in services and trade (12.50%), in industry (3.70%) and in sales to household customers (3.4%). In contrast, the utilities sector saw an increase in sales of 8.2%.

Table 32. Structure of sales of high-methane and nitrogenous gas to final customers in 2023 [MWh]

Sales of high-methane and nitrogenous gas to final customers 2023 [MWh]	Alternative suppliers	GK Orlen	Total
Gas sales to final customers by trading companies operating in the country	15 376 112	149 627 260	165 003 372
including: industry	8 454 904	84 916 383	93 371 286
agriculture	870 115	317 286	1 187 401
trade and services	3 756 509	6 668 224	10 424 733
public utility	363 563	5 408 485	5 772 048
households	1 931 021	52 316 882	54 247 903
own use	1 252	1 787 063	1 788 315
Total	15 377 364	151 414 323	166 791 687

Source: URE on the basis of data from a survey.

<sup>&</sup>lt;sup>101)</sup> On 2 November 2022 PKN Orlen S.A. (currently Orlen S.A.) assumed all the rights and obligations of PGNiG S.A.

**Figure 30.** Share in the sales of high-methane and nitrogenous gas in 2023 (broken down by volume of gas sold)



Source: URE on the basis of data from a survey

The retail market for natural gas (high-methane and nitrogenous) is characterised by strong concentration. The share of GK Orlen entities in sales of gas to final customers connected to distribution networks amounted to 90.68% (90.4% for high-methane gas and 93.7% for nitrogenous gas) and increased by 1.68% year-on-year.

The Herfindahl-Hirschman index for the high-methane natural gas market in 2023 was 9,528 - by the number of customers and 7,525 - by the volume of gas sold<sup>102)</sup>.

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

#### Tariffs for gaseous fuels

On 21 December 2022, the provisions of the Act of 15 December 2022, which maintained the natural gas price freeze mechanism introduced in 2022 for customers covered by the tariff approved by the President of URE, came into force.

In 2023, suppliers of gaseous fuels continued to be obliged to submit tariffs for customers indicated in Article 62b of the Energy Law Act for approval by the President of URE, that is, among others, consumers in households and defined entities performing public utility tasks. The abolition of this obligation for the indicated customer groups was postponed until 2028.

In 2023 the President of URE approved 46 tariffs or tariff amendments for companies trading in gaseous fuels.

In the tariff approval proceedings, the President of URE is obliged in particular to examine whether the prices and fee rates set therein have been calculated in accordance with Article 45 of the Energy Law Act, that is, whether they ensure that only justified costs are covered, as well as whether they guarantee the protection of customers' interests against their unjustified level.

Tariffs established by energy companies for the sale of natural gas were subject to approval by the President of URE when gas was sold to customers in households and to customers performing important public utility tasks<sup>103</sup>.

<sup>&</sup>lt;sup>102)</sup> 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*, Polityka Energetyczna, Volume 12, Paper 2/2, 2009).

<sup>&</sup>lt;sup>103)</sup> Article 62b para. 1 item 2 of the Energy Law Act.

In connection with the Act of 15 December 2022, the gaseous fuel prices approved by the President of URE in tariffs/amended tariffs, were not applicable for eligible customers due to the freezing of gaseous fuel prices and fee rates. For eligible customers in 2023

- the gas price was frozen at 200.17 PLN/MWh<sup>104</sup>
- the subscription fee rate was frozen at the level applicable on 1 January 2022<sup>105</sup>,
- the rates for the provision of gaseous fuel distribution services were frozen in 2023 at the level of the distribution rates from the distribution system operator's tariff, applicable on 31 December 2022<sup>106)</sup>

However, the prices of gaseous fuels and the rates of charges in the approved tariffs (tariff amendments) applied to determine the amount of compensation paid to energy companies due to the above-mentioned freeze.

In 2023 the President of URE, in fulfilment of its duties under Article 14 para. 2 of the Act of 15 December 2022, called on 29 energy companies to amend their tariffs by reducing the prices of gaseous fuels. This call was a result of the situation in the gas market at the time (falling prices). As a result of the aforementioned actions, 23 entities submitted applications to amend tariffs by reducing the prices of gaseous fuels. The reduced prices in the approved amendments applied to the amount of compensation. Importantly, due to the provisions of the Act of 15 December 2022, the price from the amended tariff applies from the date of submission to the President of URE of the application for its amendment.

From the point of view of eligible customers, the tariff of PGNiG OD Sp. z o.o., which supplies gaseous fuels to more than 90% of these customers, is of crucial importance. Thus, it is worth noting that in 2023 the President of URE conducted three proceedings for this company. On 10 February 2023, the first amendment to the company's tariff was approved, along with an extension of its validity until 31 December 2023. Gas prices in the amended tariff decreased by 20.5% (from PLN 649.92/MWh to PLN 516.73/MWh). A second tariff amendment was approved on 13 December 2023 – gas prices were reduced by 6.2%.

Approved amendments to PGNiG OD Sp. z o.o.'s tariff for trading in gaseous fuels did not affect the net comprehensive payment of eligible customers<sup>107</sup>, but did affect the level of compensation paid, as the amount of compensation that is paid in connection with the price freeze for customers, is proportional to the difference between the price in the tariff and the frozen price.

On 15 December 2023, another amendment to the tariff for PGNiG OD Sp. z o.o. in the area of gas fuel trading was approved, for the period until 31 December 2024. The amount of gas prices in the tariff is lower by approximately 34% than the previously binding.

The Act of 7 December 2023 extended the "freeze" of, among others, gaseous fuel prices and tariffs until 30 June 2024, so that also in the period from 1 January 2024 to 30 June 2024, PGNiG OD Sp. z o.o.'s tariff for trading in gaseous fuels will not affect the net comprehensive payment of eligible customers.

#### Supplier switching

The President of URE systematically monitors the degree to which gaseous fuel consumers actually exercise their right to choose a supplier. The analysis of the data reveals an annual increase in the number of customers switching their supplier; however, from 2016 onwards, the dynamics of these changes has been decreasing year by year. The data presented below (in cumulative terms) illustrate the development of TPA in Poland over the past period.

<sup>&</sup>lt;sup>104)</sup> Article 3 para. 1 of the Act of 15 December 2022.

<sup>&</sup>lt;sup>105)</sup> Article 3 para. 6 of the Act of 15 December 2022.

<sup>&</sup>lt;sup>106)</sup> Article 3 para. 7 of the Act of 15 December 2022.

<sup>&</sup>lt;sup>107)</sup> Article 3 para. 1 and 6 of the Act of 15 December 2022.



#### Figure 31. Number of cases of natural gas supplier switching by final customers (cumulatively)

Source: URE on the basis of data presented by the DSO.

**Figure 32.** Number of gas supplier switches by number of consumers in real terms – comparison quarter-on-quarter in the years 2022–2023



Source: URE on the basis of data presented by the DSO.

At the end of 2023, the number of supplier switching (cumulative) was 298,722. This means that during 2023, 6,133 entities joined the group of customers who switched supplier. This number represents approximately 68.60% of the corresponding number from the previous year (8,940 customers) and less than 0.1% of the total number of customers.

#### Compliance Programmes

In 2023, three approved Compliance Programmes were in force – two of the distribution system operators and one of the gas storage system operator.

In January 2023, the Compliance Programme of a distribution system operator was approved, which, during 2022, ceased to meet the criteria set out in Article 9d para. 7 of the Energy Law Act and became obliged to legally separate its distribution activities from other activities. This operator's Compliance Programme came into force in April 2023. However, in September 2023, as a result of the amendment of the provision of Article 9d para. 7 item 3 of the Energy Law Act (made by the Act of 28 July 2023), this operator again started to fulfil the criteria set out in in this provision. Thus, it again met the conditions for exemption from the obligation to develop a Compliance Programme.

Operators complied with their obligation to publish the Programmes on their websites. Reports on the implementation of the Compliance Programmes for 2023 were submitted within the statutory deadline – by the end of March 2024 – and published on <u>URE's website</u>.

An analysis of the content of the reports, particularly the report submitted by the Compliance Officer of PSG Sp. z o.o., shows the increasing importance of the Programme and the role of the Compliance Officer. There are Compliance Programme Coordinators in all branches of PSG Sp. z o.o., monitoring compliance with the compliance rules and working closely with the Compliance Officer in dealing with local cases.

Compliance Officers undertook education and training activities on the Compliance Programmes, the obligations of employees and the companies' management regarding operator independence and non-discriminatory treatment of system users, and the consequences of possible violations, including possible sanctions. All newly hired employees were trained and made the required declarations, with a commitment to comply with the Compliance Programme.

Compliance Officers were also engaged in interpreting the provisions of the Compliance Programmes, advising, consulting, interpreting the provisions and handling notifications in cases requiring clarification. The Compliance Officers interpreted the provisions of the Programmes, presenting risks and recommendations on how to resolve individual cases with arguments for taking or abandoning a particular action. Questions covered initiatives taken by the company's various substantive areas, the permissible scope of implementation of holding regulations and activities performed as part of project work. In 2023, the Compliance Officer of PSG Sp. z o.o. gave an opinion on issues primarily in the areas of research and development, communications, purchasing, real estate, ICT, gas network development, implementation of holding regulations.

Compliance Officers were also involved in the assessment of some of the operator's planned activities, also in the context of group-wide undertakings. At PSG Sp. z o.o., some of the enquiries concerning tasks performed by the company's field units were addressed directly to the Compliance Programme Coordinators.

The activity of the Compliance Officers and the measures taken by them were of particular importance last year due to the capital changes that occurred on the gas market in Poland, namely the merger between PGNiG S.A. and Orlen S.A., which affected both the storage system operator and PSG Sp. z o.o. The Compliance Officers gave their opinion on issues relating to the relationship between the system operator and other GK Orlen companies.

Operators also took measures to ensure the security and protection of sensitive information. Any cooperation with third parties that involved the transmission of commercially sensitive information was performed under a confidentiality agreement.

According to the reports, Compliance Officers monitor compliance with the Compliance Programmes on an ongoing basis. In 2023, no violations of the principle of equal and non-discriminatory treatment of users or the occurrence of conflicts of interest as defined in the Compliance Programme were found at either the SSOs or the DSOs. Neither the Compliance Officers nor the President of URE did receive any complaints concerning violations of the Compliance Programme, nor were there any notifications of suspected conflicts of interest.

#### Suspension of supplies

In 2023, supplies were suspended for 43,587 high-methane natural gas customers (of which 43,411, or 99.60%, are W 1-4 tariff group customers) and 2,290 nitrogenous natural gas customers (of which 2,131, or 93.06%, are household customers). The reason for the majority of supply suspensions (73.6% of high-methane gas and 92.7% of nitrogenous gas) was a failure to make timely payment for the natural gas received.

#### Ensuring access to consumption data

Pursuant to the provisions of the Energy Law Act, suppliers of gaseous fuels are obliged to inform their customers of the quantities of gaseous fuels consumed by those customers in the previous year and of the place where information on the average consumption of gaseous fuels for the tariff group used by those customers is available, as well as of energy efficiency measures and energy-efficient technical equipment.

In addition, an electricity undertaking billing for the gaseous fuels collected or the services provided in relation to their supply shall provide the consumer, together with the billing appropriate to the type of settlement, with the following information:

- readings of the metering and billing system at the beginning and end of the settlement period, expressed in [m<sup>3</sup>] – for customers consuming gaseous fuels in amounts not greater than 110 [kWh/h],
- consumption of gaseous fuels in the settlement period, expressed in [m<sup>3</sup>],
- value of the conversion factor,
- consumption of gaseous fuels in the settlement period, expressed in [kWh],
- whether the indicated consumption is the actual consumption, forecasted consumption or consumption established in the event that it is not possible to read the indication of the metering and billing system – on the basis of average 24-hour consumption of gaseous fuel by the customer, established on the basis of correctly measured consumption of that fuel in a comparable period, multiplied by the number of days in the billing period,
- the amount of gaseous fuel remaining to be consumed or the amount that remains to be consumed from the previously paid fee – in the case of customers who have a prepaid metering and billing system installed,
- comparison of the consumption of gaseous fuels by a final customer, consuming gaseous fuels in the amount of no more than 110 [kWh/h], in the period which the settlement concerns, with the consumption of gaseous fuels in an analogous period in the previous year,
- the price of gaseous fuels, the rates of transmission or distribution fees and the rate of subscription fee currently applied in settlements for the supply of gaseous fuels to a final customer,
- place of publication of analyses of the average consumption of gaseous fuels by customers consuming gaseous fuels in amounts no greater than 110 [kWh/h], and information on energy efficiency improvement measures,
- tariff group.

#### 4.2.2.2. Consumer protection and dispute settlement

The competences of the President of URE 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 (Article 12) in conjunction with Article 7a para. 2 item 3 of the Act of 4 September 1997 on Branches of Government Administration<sup>108)</sup> in conjunction with Article 1 para. 2 item 1 of the Regulation of the Prime Minister of 27 October 2021 on the Detailed Scope of Activities of the Minister for Climate and Environment<sup>109)</sup>, in 2023 the minister competent for energy was the state body responsible for energy policy, including issues related to energy security and in

<sup>&</sup>lt;sup>108)</sup> JoL of 2017 item 888.

<sup>&</sup>lt;sup>109)</sup> JoL of 2021 item 1949.

particular covering the supervision of the security of gas supply. These competences were exercised in 2022 by the Minister of Climate and Environment.

These included the tasks of the competent authority within the meaning of Regulation 2017/1938<sup>110</sup>, that is the authority responsible for implementing the measures set out in the aforementioned Regulation to safeguard the security of natural gas supply.

Nevertheless, considering the concept of state fuel security defined in the Act on Stocks, in the case of natural gas, as a state enabling current coverage of customer demand for natural gas in a specified volume and period of time, to the extent ensuring proper functioning of the economy – security of natural gas supplies understood as ensuring customers' access to energy of a specified quality and at transparent, cost-based prices, is an area of energy security which is also monitored by the President of URE under statutory regulations.

Monitoring of the security of gaseous fuels supply, carried out in 2023, was focused on the areas of the market functioning which related in particular to the issues referring to:

#### licences

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 para. 2 of the Energy Law Act). In addition, in 2023, 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 URE also verifies whether the applicant has submitted a declaration undertaking to comply with the diversification obligation.

#### Diversification of natural gas supplies from abroad

In 2023, the President of URE 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 2022. The monitoring covered 27 entities. Due to the need to supplement the information and documentation provided, these activities were continued in 2024. On the other hand, the proper fulfilment of the 2023 diversification obligation by energy companies holding a licence for foreign trade in natural gas in 2023 will be monitored by the President of URE in 2024.

#### tariffs

An indirect method of monitoring the security of gaseous fuels supply is tariffing of infrastructure companies. In the course of the tariff process, the extent of financing of assets (transmission, distribution, storage and liquefied natural gas 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 modernisation of these assets determine their physical condition, that is operational security.

#### approval of plans for introducing natural gas consumption restrictions by operators

The Council of Ministers, at the request of the minister in charge of energy, may introduce by means of an ordinance, restrictions for a specified period of time, on the territory of the Republic of Poland or a part thereof, taking into account the importance of customers for the economy and functioning of the state, in particular the tasks performed by these customers and the period for which these restrictions will be introduced<sup>111</sup>. At this point, it should be emphasised that the introduction of restrictions on the natural gas consumption by the Council of Ministers may take place only in special situations, namely in the event of the declaration of a state of emergency referred to in Article 49a para. 2<sup>112</sup> of the Act on Stocks and when other measures aimed at restoring the state's gas security

<sup>&</sup>lt;sup>110)</sup> Regulation (EU) 2017/1938 of the European Parliament and of the Council of 25 October 2017 concerning measures to safeguard the security of gas supply and repealing Regulation (EU) 994/2010 (EO OJ L 280).

<sup>&</sup>lt;sup>111)</sup> Pursuant to Article 56 para. 1 of the Act on Stocks.

<sup>&</sup>lt;sup>112)</sup> The state of emergency referred to in Article 11(1)(c) of Regulation 2017/1938 shall be declared by the minister responsible for energy, by means of a regulation, upon receipt of information from the gas system operator or the gas interconnected system operator on the occurrence of one or more of the following situations:

would prove insufficient. The introduction of the aforementioned restrictions is intended to allow for the achievement of natural gas savings sufficient to ensure the state's gas security and to guarantee gas supplies to protected customers in the contracted quantities, despite the restrictions on natural gas consumption in force.

Gas transmission system operators, gas distribution system operators and gas interconnection system operators or energy enterprises acting as operators are obliged to develop a plan for introducing restrictions in the consumption of natural gas<sup>113)</sup> (restriction plan). Pursuant to Article 58 para. 17 of the Act on Stocks, the aforementioned operators update the plans for introducing restrictions annually and submit them, by 15 November of a given year, to the President of URE for approval by way of a decision.

The restriction plans developed by operators or energy companies acting as operators specify the maximum hourly and daily volumes of natural gas consumption by individual customers connected to their network, for individual supply limitation levels. Pursuant to Article 58 para. 3 of the Act on Stocks and § 6 para. 6 of the Ordinance of the Council of Ministers of 17 February 2021 on the Manner and Procedure for Introducing Restrictions on the Consumption of Natural Gas<sup>114</sup>, the entities developing plans for introducing restrictions inform customers of the maximum volumes of natural gas consumption in individual supply limitation levels established for them in the approved plan for introducing restrictions. These volumes, specified in the approved restriction plans, shall become an integral part of sales contracts, contracts for the provision of natural gas transmission or distribution services and comprehensive contracts, within the meaning of Article 5 para. 2 item 1 and 2 and para. 3 of the Energy Law Act.

In conjunction with Article 58 para. 17 of the Stock Act, in Q4 2023, the President of URE received 47 applications for approval of the plan to introduce restrictions on natural gas off-take for the 2023/2024 season, that is, from all obliged entities, with the exception of one gas system operator, which submitted a plan to introduce restrictions after the President of URE's call. Compared to 2022, the number of entities obliged to submit a plan to introduce restrictions on natural gas off-take decreased by one. The difference between the number of operators functioning in the country and the number of applications for approval of the plan for introducing restrictions on natural gas off-take is due to the fact that companies acting as operators of systems of gases other than natural gas (e.g. coke-oven gas) are not covered by the relevant obligation. In fact, the Act on Stocks applies to natural gas, while the Energy Law Act applies to other types of gaseous fuels. Plans for the introduction of restrictions on natural gas consumption were submitted for approval by the President of URE based on the applicable provisions of the Act on Stocks and the Restrictions Ordinance, as well as on the information dedicated to the aforementioned plans posted on the URE website, including a sample template for the restrictions plan. In 2023 the President of URE approved 26 gas restrictions plans for the 2023/2024 season. Proceedings on the remaining restrictions plans were continued in 2024. A total of 186,500 customers were included in the approved restrictions plans for the 2023/2024 season, which is 8.8% less than in the restrictions plans approved for the 2022/2023 season.

<sup>1)</sup> a threat to the gas security of the State,

<sup>2)</sup> disruptions in the supply of natural gas to the gas system,

<sup>3)</sup> sudden, unforeseen damage or destruction of equipment, installations or networks resulting in interruption of their use or loss of their properties endangering the safe operation of the gas system,

<sup>4)</sup> an unforeseen increase in natural gas consumption

<sup>-</sup> taking into account the need to ensure uninterrupted supply of natural gas to customers.

<sup>&</sup>lt;sup>113)</sup> Pursuant to Article 58 para. 1 of the Act on Stocks.

<sup>&</sup>lt;sup>114)</sup> JoL of 2021 item 549, hereinafter: "the Restrictions Ordinance".

**Figure 33**. Number of customers of each type of natural gas included in the restrictions plans approved for the 2022/2023 and 2023/2024 seasons



Number of customers included in restrictions plans

**2023/2024 2022/2023** 



The vast majority of customers (182,000 items; 97.6%) included in the currently approved plans, are only subject to restrictions when the last – 12th – supply limitation level is introduced. The remaining customers (4,500 items), are subject to restrictions in supply limitation levels 1 to 12, however, the full scope of restrictions with the obligation to reduce intermediate levels between supply limitation levels 2 and 10 only applies to the 694 largest natural gas customers. With reference to the above, in the case of customers other than protected customers, whose contractual capacity specified in the contract referred to in Article 5 para. 2 item 3 and 4 of the Energy Law Act is less than 5 500 kWh/h, pursuant to § 7 para. 10 of the Ordinance, the volume of natural gas off-take specified in supply limitation levels 3 to 9 is equal to the volume of off-take in the second supply limitation level, that is the average hourly and daily amount of natural gas off-taken by the customer at a given exit point from the gas system in the period from 1 July of the preceding year to 30 June of the year in which the plan was developed, excluding days for which the daily off-take at the exit point from the gas system was equal to 0 kWh/day.
**Figure 34**. Number of customers included in restrictions plans subject to restrictions in supply limitation levels 1 to 12, and only if supply limitation level 12 is introduced in 2022/2023 and 2023/2024



#### *Source: URE on the basis of data from restrictions plans.*

The contracted capacity of the customers (supply limitation level 1) included in the restrictions plans for the 2023/2024 season increased slightly compared to the 2022/2023 season, nevertheless the aggregate volumes of natural gas off-take in supply limitation levels 2 to 10 are lower in the plans approved for the current season. At this point, it should be mentioned that the reference period (off-take history) taken into consideration in the development of the restrictions plans approved for the 2023/2024 season included a period of sharp increases in natural gas prices due to the escalation of the aggression of the Russian Federation against Ukraine after 24 February 2022, which consequently translated into a reduction of its consumption by final customers and thus into the volumes of individual supply limitation levels in the restrictions plans, including, among others the average natural gas off-take (supply limitation level 2). As a result, supply limitation levels 3 to 9 also needed to be adjusted accordingly by reducing the maximum off-take volumes included in them.

**Figure 35.** Total maximum daily off-take volumes of natural gas E in [million m<sup>3</sup>/day] in the 2022/2023 and 2023/2024 seasons by customers other than protected customers, subject to restrictions in supply limitation levels 1 to 12





Source: URE on the basis of data from restrictions plans.

Similarly to previous years, in 2023 the President of URE responded to letters from customers included in the above-mentioned plans. The indicated customers, due to the nature of their business, generally requested: (i) to be protected (partially or fully) with regard to the application of possible restrictions on natural gas off-take, (ii) to change the volume of the approved maximum off-take capacities in a given supply limitation level, etc.

With reference to the above, it should be noted that the Restriction Ordinance presents a strictly defined and closed set of protected customers who are not subject to restrictions in off-take of natural gas in supply limitation levels 1 to 12 and in levels 1 to 11 (protected customers subject to restrictions only in supply limitation level 12), and the President of URE is not competent to expand this group of customers. In turn, the volumes of individual supply limitation levels are determined, in principle, on the basis of § 7 of the aforementioned Ordinance, which is largely based on the natural gas consumption history of the customer in question.

In 2023, there are no restrictions on the off-take of natural gas in the country or parts of it. The last time the procedure under the legislation in question was applied was in 2009.

### agreeing on the draft development plan for gas companies

Agreeing with the President of URE on the draft network development plan allows companies dealing with transmission or distribution of gaseous fuels to secure adequate financial resources for the planned investment tasks, including tasks related to maintaining an appropriate level of reliability and quality of the network services provided, which have a direct impact on the security of gas supply. Monitoring of the implementation of tasks resulting from development plans in 2023 highlighted further progress in efforts to diversify sources and directions of natural gas supply, that is activities contributing to market liberalisation and directly enhancing the level of security of natural gas supply to Poland. In this context, of particular importance is the expansion of import capacity in the field of liquefied natural gas, carried out as part of the project for the construction of a new FSRU terminal in Zatoka Gdańska, expansion of the existing regasification capacity of the LNG terminal in Świnoujście and a number of investment tasks conducted within the national transmission system, such as the programme for the construction of the North-South Corridor, enabling appropriate gas distribution within the territory of Poland and between the serviced cross-border connections. The participation of the Polish transmission operator in European initiatives related to the development of a common market for renewable fuels, such as the Nordic-Baltic Hydrogen Corridor, is also important in this context.

Monitoring by the President of URE of investment assumptions and the progress of the abovementioned cross-border interconnection projects contributes to the implementation of the strategic objectives set out in documents such as the "Energy Policy of Poland until 2040" and the "Preventive Action Plan". As indicated in the risk assessment contained in the aforementioned document: "The most severe consequences for the gas system would be the suspension of supplies from the eastern direction through all entry points. The risk of this scenario would increase in the event of the diversion of natural gas transmission from the Russian Federation via Belarus and Ukraine to the Nord Stream I and II pipelines". It should be noted that the above-described scenario materialised in practice in 2022 as a consequence of the armed aggression of the Russian Federation on the territory of Ukraine and significantly changed the hitherto existing directions of natural gas supply to Central and Eastern Europe. The year 2023 was a period of adjustment to the new conditions of the gas market, during which the main task of the regulator was to prevent the negative effects of the resulting international situation. However, the actions taken in the field of infrastructure development planning should be assessed in retrospect as appropriate, as, among others, the timely implementation of the construction of cross-border connections made it possible to avoid imbalances in the national transmission system. Construction of bi-directional interconnections: Poland-Lithuania (GIPL), Poland-Slovakia, and the Baltic Pipe gas pipeline ensured a higher level of diversification of supply sources, through access to gas sources located in the area of the Norwegian continental shelf and integration of the Polish gas system with the systems of other EU Member States. The completion of the aforementioned investments has also enabled countries such as Lithuania, Latvia and Estonia to have access to the European transmission system.

Further strengthening of the infrastructure for receiving liquefied natural gas (LNG) as part of the expansion of the Świnoujście terminal and the construction of a new floating FSRU terminal in Zatoka Gdańska, as well as the construction of the Poland-Czech Republic interconnector is an important part of the implementation of Poland's strategy in the area of increasing natural gas import capacity and contributes to enhancing the ability to eliminate the consequences of possible supply disruptions envisaged in the "Preventive Action Plan". The commissioning of these gas interconnectors also creates the conditions for the creation in Poland of a gas hub for Central and Eastern European and Baltic States. At the same time, these investments allowed to eliminate the dependence on natural gas supplies from the eastern direction (via Wysokoje, Tietierowka and Kondratki points), in favour of the growing volume of liquefied gas supplies and intra-Community trade.

Detailed information on the fulfilment by energy enterprises, transmission system operators and distribution system operators of obligations resulting from Article 16 para. 1 and para. 13 of the Energy Law Act is presented in Section 4.1.2.

## maintaining mandatory stocks of natural gas

Mandatory stocks of natural gas are maintained in the period from 1 October of a given year to 30 September of the following year. Thus, when describing issues related to the maintenance of mandatory stocks of natural gas in 2023, two sub-periods may be distinguished: from the beginning of the year until 30 September and from 1 October until the end of the year.

Two categories of entities (hereinafter jointly referred to as "obligated entities") are required to maintain mandatory stocks of natural gas (hereinafter also referred to as "gas storage obligation"):

- a) energy companies engaged in the business of trading natural gas with foreign countries, hereinafter referred to as "companies" and
- b) importers of natural gas, hereinafter referred to as "entities".

Companies licensed to trade natural gas with foreign countries qualify for the first category.

The second category generally comprises entities that bring in natural gas into the territory of the Republic of Poland as an intra-Community acquisition or imports for purposes other than trading in that gas. For example, entities bringing in natural gas are customers importing natural gas for their own use, including companies engaged in the transmission or distribution of natural gas, bringing in gas for purposes related to their own network activity.

In 2023 the Act on Stocks provided for the implementation of the gas storage obligation in three different formulas:

- a) under a storage contract with domestic SSO,
- b) under a storage contract with foreign SSOs,
- c) under what is known as a stock ticket contract with an energy company engaged in natural gas foreign trading or gaseous fuel trading (contractor).

A stock ticket contract consists in allowing obligated entities to outsource the obligation to create and maintain mandatory stocks to another energy company. It is possible to create stocks on gaseous fuel belonging to both the principal and the contractor. The stocks so created can be held both domestically and internationally.

In 2023, for both periods of the gas storage obligation, namely until 30 September 2023 and from 1 October 2023, the subject scope of the gas storage obligation was increased compared to the 2022 scope. However, this did not translate into an increase in the volume of mandatory stocks of natural gas held.

For the period starting on 1 October 2023, the President of URE verified and determined the volume of mandatory stocks of natural gas in a total amount of 12,095,104 MWh, which represents a decrease of approximately 24% in the approved volume of mandatory stocks compared to the volume of stocks approved for the previous annual period. At the same time, the number of obligated entities increased by two companies (15 entities obligated to hold mandatory stocks from 1 October 2022 vs. 17 entities obligated from 1 October 2023). This situation was due to the fact that, during the reference period taken into account for the determination of mandatory stocks for the 2023/2024 period, there was

a decrease in imports due to significant increases in gas prices as a consequence of the aggression of the Russian Federation against Ukraine.

The tasks of the President of URE under the Act on Stocks related to, among others, establishing or verifying the volume of mandatory stocks, granting or refusing consent to conclude a stock ticket contract, controlling obligated entities with regard to the correctness of fulfilment of the gas storage obligation, sanctioning irregularities. Monitoring of the fulfilment of the obligation to maintain mandatory stocks of natural gas therefore covers both activities preceding the commencement of the obligation execution and its fulfilment.

In 2023, no mandatory stocks were released.



Figure 36. Volume of approved mandatory stocks of natural gas

Source: URE's own analysis.

The President of URE's consent to the conclusion of so-called stock ticket contracts for the purpose
of fulfilling gas storage obligations

The year 2023 was the seventh year in which obligated entities had the possibility to fulfil their gas storage obligation by concluding the "stock ticket contract" referred to in Article 24b of the Act on Stocks. Pursuant to Article 24b para. 1 of the Act on Stocks, an energy company carrying out economic activity in the field of foreign trade in natural gas and an entity importing natural gas may commission, under a contract, the performance of tasks related to the maintenance of mandatory stocks of natural gas or to an energy company carrying out economic activity in the field of trade in gaseous fuels. The basic requirements for the content of such a contract are contained in Article 24b para. 3 of the Act on Stocks. In addition, the Act indicates that in the event that the mandatory stocks of natural gas, maintained in accordance with Article 24b para. 1, do not constitute the property of the energy company carrying out economic activity in the field of source in natural gas or of the antural gas to an energy company carrying out economic activity in the field of trade in gaseous fuels. The basic requirements for the content of such a contract are contained in Article 24b para. 3 of the Act on Stocks. In addition, the Act indicates that in the event that the mandatory stocks of natural gas, maintained in accordance with Article 24b para. 1, do not constitute the property of the energy company carrying out economic activity in the field of foreign trade in natural gas or of the natural gas importer commissioning the maintenance of these stocks, the contract should also contain provisions guaranteeing the commissioning party the right to purchase these stocks within its duration and specifying the method of determining the resale price of these stocks (Article 24b para. 4).

Pursuant to Article 24b para. 6 of the aforementioned Act, before concluding a stock ticket contract, an energy company performing economic activity in the field of foreign trade in natural gas and an entity importing natural gas (as entities obliged to fulfil the gas storage obligation) shall be obliged to submit a draft of the contract to the President of URE and obtain consent for its conclusion.

The President of URE, by way of a decision, shall either consent or refuse to consent to the conclusion of the contract referred to in para. 1 within 30 days from the date of receipt of a complete application for consent to the conclusion of the contract referred to in para. 1 (Article 24b para 7). The grounds for the refusal of the President of URE to consent to the conclusion of the aforementioned contract are stipulated in Article 24b para. 8 of the Act. This provision stipulates that the President of URE shall refuse to consent to the conclusion of a stock ticket contract if: (1) a draft of this contract does not contain the provisions referred to in Article 24b para. 3 of the Act on Stocks, (2) the location or technical parameters of the storage facilities and the gas networks to which these facilities are connected do not ensure the possibility of supplying the total quantity of mandatory natural gas stocks to the gas system within a period of no more than 50 days.

A major change to be mentioned with regard to the gas storage obligation for the 2023/2024 gas year is the maintenance by the legislator of the required extended period for the delivery of total volumes of mandatory stocks to the gas system from the previous 40 to 50. The above change was introduced by Article 70d of the Act of 5 August 2022 on Amending Certain Acts to strengthen the gas security of the state due to the situation on the gas market<sup>115)</sup>. This change was intended to enable operators to make better use of existing storage capacities, in view of possible disruptions of natural gas supply to the national system in the gas year 2022/2023.

In the case of the implementation of the gas storage obligation based on stock ticket contracts, in 2023, as in the preceding year, the efficient conduct of administrative proceedings was of particular importance, as the conclusion of the relevant contract is conditional on the President of URE's consent to its conclusion in the form of a decision, and this should be issued within 30 days of receipt of a complete application (Article 24a et seq. of the Act on Stocks).

Pursuant to the aforementioned provisions, after prior submission of draft stock ticket contracts by the companies and entities concerned, the President of URE issued approvals for the conclusion of stock ticket contracts (or annexes thereto), by way of decision, to nine obligated entities. None of the applications for consent to conclude a stock ticket contract for the 2023/2024 season submitted to the President of URE in 2023 was refused.

In the 2023/2024 season, all stock ticket contracts pertained to the maintenance of stock in the territory of the Republic of Poland.

In addition, for the period in question, that is, until 30 September 2024, the legislator also provided for the possibility of outsourcing the performance of tasks concerning the maintenance of mandatory stocks of natural gas to the Government Strategic Reserve Agency (hereinafter: GSRA) pursuant to Article 70c para. 1 of the Act on Stocks. Pursuant to this provision, GSRA acquires natural gas for the benefit of the State Treasury from a company or entity and assumes its rights and obligations under storage service contracts concluded with a storage system operator with respect to mandatory stocks. With regard to the 2023/2024 gas year, this mechanism was used by two entities.

# Monitoring the fulfilment of obligations related to the maintenance of mandatory stocks of natural gas

The statutory tool for monitoring obligations relating to the maintenance of mandatory stocks of natural gas are the provisions of Article 27 para. 2 item 1 and item 2 of the Act on Stocks.

Pursuant to Article 27 para. 2 item 1 of the Act on Stocks, energy companies performing economic activity in the field of foreign trade in natural gas and entities importing natural gas (jointly referred to as "obligated entities") were required to submit information on the actual volume of mandatory stocks of natural gas maintained and the place of their storage as at 15 September 2023 – by 20 September 2023.

On the other hand, pursuant to Article 27 para. 2 item 2 of the Act on Stocks, obligated entities shall, by 15 May 2022, provide the minister competent for energy and the President of URE with information on: (1) actions taken in the period from 1 January to 31 December of the preceding year (here: from 1 January 2022 to 31 December 2022) with a view to ensuring the state's fuel security with regard to foreign trade in natural gas or imports of natural gas, and (2) fulfilment of the obligation to maintain mandatory stocks of natural gas.

<sup>&</sup>lt;sup>115)</sup> JoL of 2022 item 1723.

The scope of the expected information, concerning actions taken to ensure the state's fuel security in the field of foreign trade in natural gas and the fulfilment of the gas storage obligation, and provided pursuant to Article 27 para. 2 item 2 of the Act on Stocks, was the same as that indicated in Information No. 30/2019 of 23 April 2019 on the disclosure obligation of energy companies performing economic activity in the field of foreign trade in natural gas and entities importing natural gas. The communication drew attention to the fact that the disclosure obligation is referred by the legislator to the concept of the state's fuel security (understood as a condition allowing for the current coverage of the customers' demand for crude oil, petroleum products and natural gas, in a specific amount and time, to the extent enabling the proper functioning of the economy – Article 2 para. 1 item 1 of the Act on Stocks) and therefore this obligation has a broader scope than only directly related to the imports of natural gas, foreign trade in natural gas stocks.

In addition, on the basis of a survey dedicated to selected companies, additional information was obtained on the performance by obligated entities of obligations relating to the maintenance of mandatory stocks of natural gas in the period from 1 October 2022 to 30 September 2023.

In the period in question – as in preceding years – compliance with the obligation to maintain mandatory stocks of natural gas was monitored using information from obligated entities, as well as information provided by these entities in applications to the President of URE in other matters or documents submitted in the performance of other obligations, e.g. providing information on the implementation of contracts for the purchase of natural gas from abroad pursuant to Article 49c of the Energy Law Act. The information also came from other entities, including operators of transmission, distribution and storage systems, other trading companies, as well as administrative bodies (e.g. customs authorities pursuant to Article 25 para. 11 of the Act on Stocks). In this way, the President of URE was acquiring information in 2022 on entities hitherto outside any records of the office and engaged in activities implying the indicated obligation (importing natural gas and not having the status of an enterprise trading in natural gas with foreign countries). In order to identify the entities obliged to fulfil the obligation in question, data was used from the resources of the office, the TSO and the Ministry of Finance (entities that declared importing natural gas in the aforementioned period).

The monitoring performed as described above showed that:

- a) 14 entities that were obligated to establish mandatory stocks (all but one of which had their mandatory stocks verified), including 12 energy companies trading in natural gas with foreign countries and two natural gas importers, complied with their gas storage obligation ending 30 September 2023,
- b) all entities obligated to establish mandatory stocks as at 1 October 2023 complied with the obligation to establish mandatory stocks (all those for which mandatory stocks were verified), including 15 energy companies trading in natural gas with foreign countries and 2 entities importing natural gas,
- c) in one case, failure to comply with the obligation to submit, by the required deadline of 15 May 2023, information on the determined volume of mandatory stocks of natural gas for the period from 1 October 2023 to 30 September 2024 to the President of URE for verification (Article 25 para. 3 of the Act on Stocks) was found, as a result of which a fine was imposed; in this case, the required information on the determined volume of mandatory natural gas stocks was received after the statutory deadline (before the decision on the penalty was issued).
- Aggregation of information provided to the President of URE by the gas transmission operator pursuant to Article 24 para. 3b, Article 24a para. 4 and Article 52a para. 1 of the Act on Stocks

Pursuant to Article 24 para. 3b of the Act on Stocks, in the event that it is established that the technical parameters of the storage facilities do not ensure the possibility of supplying mandatory stocks of natural gas to the gas system in a period of not more than 50 days, the gas transmission system operator or the gas combined system operator shall notify the President of URE of this fact within 7 days.

In the reporting year 2022, the aforementioned period for the delivery of natural gas to the gas system was extended to 50 days under Article 70d of the Act on amending certain acts to strengthen the gas security of the state due to the situation on the gas market<sup>116)</sup>. This regulation was effective for the entire year 2023. In 2023 the President of URE did not receive from the gas transmission system operator the information provided pursuant to Article 24 para. 3b of the Act on Stocks.

In turn, pursuant to Article 24a para. 4 of the Act on Stocks, the gas transmission system operator or the operator of the combined gas systems shall notify the President of URE of the fact of the use of the capacity reserved for the supply of the total quantity of mandatory stocks of natural gas maintained outside the territory of the Republic of Poland to the national transmission or distribution network for other purposes within 7 days of the establishment of that fact. In 2023, OGP Gaz-System S.A. did not inform the President of URE of the use by obligated entities of transmission capacity dedicated to the delivery of mandatory natural gas stocks maintained outside the territory of the Republic of Poland to the national transmission capacity dedicated to the national transmission network for other needs.

In turn, pursuant to Article 52a para. 1 of the Act on Stocks, the gas transmission system operator or the gas combined system operator shall, after the end of each gas day in which mandatory stocks of natural gas have been released, by 12:00 hours, provide the President of URE with information on:

- a) the date and quantity of mandatory natural gas stocks released during that gas day and the storage facilities from which they were released,
- b) the energy undertakings and entities referred to in Article 52 para. 7 item 1 from which the mandatory stocks of natural gas have been offtaken in that gas day.

In 2023 the President of URE did not receive from the gas transmission system operator the information provided pursuant to Article 52a para. 1 of the Act on Stocks, due to the absence of a need to release mandatory stocks.

## Security of natural gas supply

### Mandatory stocks

Mandatory stocks are an important element of ensuring gas security. Therefore, it should be noted that in the 2023/2024 period, the volume of mandatory stocks decreased compared to the volume of stocks approved at the beginning of the 2022/2023 gas year by approximately 24%. Given the above, it should be pointed out that the consumption of high-methane natural gas (E) in 2023 was at a level similar to that in 2022. It is also worth noting that OGP Gaz-System S.A.'s demand forecast from the Ten-Year National Development Plan of the Transmission System for Meeting Current and Future Gas Fuel Demand for 2024–2033 (the August 2023 version of the TYNDP) assumes an increase in 2024 compared with 2023 by 12% in the moderate forecast scenario and 10% in the conservative scenario. The data presented thus shows that, on the one hand, there was a substantial decrease in the volume of mandatory gas stocks in 2023/2024, while on the other hand, an increase in gas demand is assumed for this period. At the same time, while there has been a significant expansion of the transmission system in recent years, the pace of expansion of storage facilities has been slower, which may make it more difficult in future years to meet the storage obligation.

<sup>&</sup>lt;sup>116)</sup> JoL of 2022 item 1723.