

Weekly Alert

**Russian War Against
Ukraine: Energy Dimension**

This analytical product is made possible by the support of the American People through the United States Agency for International Development (USAID) within the framework of the Energy Sector Transparency project implemented by NGO DiXi Group. The contents are the sole responsibility of DiXi Group and do not necessarily reflect the views of USAID or the United States Government.

Russian War Against Ukraine: Energy Dimension
DiXi Group weekly review

(March 11 – 17)

#StopRussianAggression
#StandWithUkraine**Summary**

- As of March 18, 406 settlements remained without electricity due to hostilities and technological disruptions. The geography of outages expanded to the Sumy region, which has been experiencing constant shelling from the Russian border.
- On March 14, Ukrainian power engineers restored the operation of the 330 kV Zaporizhzhia TPP-Ferrosplavna power line, which connects the occupied Zaporizhzhia NPP (ZNPP) to the integrated power system of Ukraine (IPS) and ensures power supply for the plant's needs
- IAEA experts continue to report on explosions and other signs of military activity near the ZNPP site.
- One of the units at Khmelnytsky NPP was put offline for emergency repair due to technical malfunction.
- Electricity exports reduced by 54% to 35.3 GWh, imports increased by 5 times to 24.4 GWh. Base DAM index significantly increased to 2,891.7 UAH/MWh (+21.1%). At the same time, no deficit hours were observed.

- According to the Ministry of Energy, electricity consumption by the industry increased by 23% to 9.38 TWh in November-February 2023-2024. Electricity consumption by households also increased by almost 12%.
- In November-February 2023-2024, 53% of electricity was generated by NPPs, 32% - by TPPs/CHPs, 10% - by HPPs/PSHs, 5% - by RES facilities.
- In 2023 gas consumption was equal to 19.6 bcm (of which 3.4 bcm was consumed by industrial sector), while national gas production amounted to 18.9 bcm (of which 3.18 bcm were produced by private companies) - the Deputy Minister of Energy of Ukraine Mykola Kolisnyk
- The Antimonopoly Committee of Ukraine granted Ukrnafta concentration permit regarding the assets of the Glusco group, opening way for signing the acts of acceptance and transfer of assets with the ARMA
- The Ministry of Infrastructure presented a test version of the Geographic Information System for Regional Development (GIS), which will allow modeling community development scenarios and making data-driven planning.
- The government has simplified customs clearance and registration of humanitarian aid for energy needs. In addition, the Cabinet of Ministers approved the procedure for the export of electricity by the SE Guaranteed Buyer.
- The NEURC proposes to set the maximum price cap on the balancing market at UAH 8,250/MWh (110% of the maximum price cap on the DAM)
- Ukraine signed a Memorandum of Understanding between Ukraine and the European Union on transitional financing under the Ukraine Facility programme, as well as a corresponding loan agreement.

IMPACT OF THE WAR

Attacks

[According](#) to Ukrenergo, as of March 18, 406 settlements in Ukraine remained without electricity due to hostilities and technological disruptions. Hostile attacks and, accordingly, the interruption of electricity and gas supply took place:

Donetsk region. On [March 12](#), more than 9,000 consumers were cut off from electricity supply; on [March 13](#) - 10,000 consumers in 15 settlements, on [March 14](#) - about 5,000 consumers in 12 settlements. On [March 15](#), almost 8,000 household consumers and a mine with workers in it were left without electricity due to the disconnection of substation equipment (the facility was later powered by a generator). On [March 17](#), 6,935 consumers in 17 settlements were disconnected; in total, 43,800 consumers in 77 settlements were without electricity in the region.

Kharkiv region. On [March 12](#), a gas distribution pipeline was damaged in a frontline village, and 26 consumers were disconnected from gas supply. On [March 13](#), a 10 kV line was damaged, and 2,700 consumers lost power supply. On [March 15](#), a mechanic of the local branch of gas DSO was killed by an explosive device in a frontline town. On [March 16](#), a high-pressure gas distribution pipeline was damaged, leaving more than 600 consumers and a municipal facility without gas supply. On [March 17](#), due to the shelling an overhead line and two 110 kV substations were disconnected, leaving households without electricity. In total, 17,500 customers in the region were left without power supply.

Dnipropetrovsk region. On [March 12](#), an overhead line and a 150 kV substation were disconnected as a result of damage to the power grid, and a total of 1,200 metering points [were](#) cut off from electricity supply. On [March 13](#), one of the substations was disconnected, and a non-household consumer was left without electricity; in Kryvyi Rih, 430 consumers in apartment

buildings were [cut](#) off from gas supply after a missile strike. On [March 14](#), 70 customers were left without electricity; on [March 15](#), almost 500 customers were disconnected. On [March 17](#), a 35/6 kV substation was disconnected without cutting off power supply to consumers.

Kherson region. On [March 12](#), 150 consumers were disconnected from electricity supply in Kherson after the shelling. As of [March 17](#), 3,010 metering points in the regional capital remained without electricity, and more than 25,800 consumers in 45 settlements of the region were without power supply.

Sumy region. On [March 11](#), more than 500 customers in 8 settlements were cut off from electricity supply; on [March 12](#) - 1,700 customers in 11 settlements. On [March 13](#), as a result of a UAV attack, heat supply to 16 apartment buildings was suspended; 128 consumers were disconnected from gas supply. Due to shelling from the Russian border, 1,504 consumers in 6 settlements were left without electricity. On [March 14](#), a 330 kV line of Ukrenergo was disconnected as a result of shelling, and boiler room equipment was damaged. During the day, more than 900 customers in 3 settlements [were](#) cut off from power supply. On [March 17](#), 777 consumers in 9 settlements were left without electricity and 132 consumers in Okhtyrka district were left without gas. A total of 8,200 consumers in 88 settlements were disconnected from electricity supply in the region.

Chernihiv region. On [March 12](#), repeated shelling damaged overhead lines, disconnecting 1,500 consumers in 19 settlements. On [March 13](#), an underground medium-pressure gas pipeline was damaged in one of the settlements, leaving 96 consumers without gas. On [March 15](#), rocket attacks in two communities damaged 10 kV overhead lines, cutting off power supply to about 1,500 consumers; on [March 16](#), 10 kV lines were damaged again, disconnecting more than 2,000 consumers. As of [March 17](#), 23 settlements remained without electricity, affecting a total of 1,400 consumers.

Nuclear and Radiation Safety

On March 14, at 17:15, Ukrainian power engineers [restored](#) the operation of the 330 kV Zaporizhzhia TPP-Ferrosplavna power line, which was under repair due to damage by the Russian occupiers. This line, together with the 750 kV Zaporizhzhia NPP-Dniprovsk line, connects the plant to the integrated power system of Ukraine and supplies power for its own needs.

The second power unit of Khmelnytska NPP was [disconnected](#) from the grid due to a technical malfunction. An upward trend in the axial displacement of the rotor of the high-pressure cylinder of the turbine unit was recorded. Given the surplus in the electricity market, it was decided to shut down the turbine unit to find out and eliminate the cause of the deviation. As of now, 7 NPP units are operating at rated capacity.

IAEA experts stationed at the occupied ZNPP [continue](#) to report on explosions and other signs of military activity near the site. The IAEA also reports that it has conducted a new rotation of experts and continues to monitor the nuclear safety of the plant and conduct site visits. At the same time, the Russian military itself [released](#) footage from ZNPP, showing the deployment of armored vehicles inside the power unit and firing points.

The US Embassy in Ukraine has [stated](#) that Russia's disregard for nuclear safety at ZNPP seriously undermines its claims to be a responsible nuclear power and that ZNPP should be returned to Ukraine. It is also noted that the U.S. Department of Energy/National Nuclear Security Administration (DOE/NNSA) Ukraine Task Force is monitoring conditions at ZNPP using a variety of reliable sources and conducting its own analysis.

Countermeasures

The Ministry of Infrastructure is [preparing](#) an action plan for the updated State Strategy for Regional Development until 2027 (SRD). It is noted that in March 2024, the structure of the plan will be developed, in April-May, stakeholder proposals will be collected, processed and systematized, following which the document will be presented for discussion and submitted to the Cabinet of Ministers.

On March 13, the Ministry of Infrastructure [presented](#) a test version of the Geographic Information System for Regional Development (GIS). Deputy Minister of Communities, Territories and Infrastructure Development Oleksandra Azarkhina noted that the launch of the GIS system will enable the creation of a single digital cycle of strategic planning, implementation and control of regional development. The development of basic GIS functions will be completed in May and presented in June 2024. The next version of the system will allow modeling community development scenarios and making data-driven planning based on the entered data, as well as assessing the effectiveness of the State Fund for Regional Development (SFRD) and compiling an investment index for individual communities and regions.

On March 15, Mustafa Nayem, head of the State Agency for Restoration and Infrastructure Development, [emphasized that](#) the restoration and protection of critical infrastructure, including power substations, is one of the agency's priorities. According to Nayem, special first-level protection from debris has already been installed for 103 substations, and similar second-level work has been done to protect nearly 22 facilities from drone strikes. A third-level protection project against missile strikes is in the process of development and implementation.

The Cabinet of Ministers has [amended](#) the Procedure for Receiving Humanitarian Aid to Meet Energy Needs. The amendments stipulate that the provisions of a number of resolutions on customs clearance and registration of humanitarian aid do not apply to such humanitarian aid. At the same time, the new clauses of the Procedure provide that humanitarian aid for energy needs is allowed to cross the customs border of Ukraine and its customs clearance is carried out by submitting a declaration of goods recognized as humanitarian aid at the checkpoint. A template declaration is provided for in the new Annex to the Procedure. The amendments also stipulate that the relevant goods are recognized as humanitarian aid on a declarative basis without a decision by specially authorized state bodies.

On March 16, the government resolution "On Prevention of Non-targeted Use of the Land Occupied by the Kakhovka Reservoir", developed by the State Service of Ukraine for Geodesy, Cartography and Cadastre, entered into force. The resolution stipulates that during the period of martial law and for five years after its termination or cancellation, it is prohibited to form, transfer ownership or use and change the purpose of land plots previously occupied by the Kakhovka Reservoir, except for the change of purpose aimed at restoring the Kakhovka Reservoir and constructing hydrotechnical facilities.

MARKETS PULSE

Electricity Sector

Power system operation

According to [Ukrenergo](#) and the [Ministry of Energy](#), electricity consumption was covered by domestic production, as well as by imports from Romania, Slovakia, Poland, Hungary, and Moldova.

On March 11, the power system experienced a surplus of electricity during the daytime. At the request of Ukrenergo, emergency support was activated from the Polish power system operator PSE, which bought surplus electricity in the total amount of 1.488 GWh from 10:30 to 14:00. On

March 15, Ukraine provided emergency support to Poland in the form of urgent purchase of electricity from 14:30 to 17:00 in the total amount of 1 GWh.

The Ministry of Energy [reported](#) that a successful large-scale repair campaign in the energy sector has allowed the Ukrainian industry to increase the pace of work. Thus, in November-February 2023-2024, despite the war challenges, the volume of electricity consumption by the industry amounted to about 9.38 TWh. This constitutes more than 23% increase compared to the same period in 2022-2023 (7.61 TWh). In particular, in November 2023, the growth was 25.7% compared to the same period of the previous year, in December - 37.6%, in January 2024 - 27.6%, and in February - 6.2%. The volume of electricity consumption by household consumers also increased by almost 12% (12.64 TWh vs. 11.3 TWh).

During the autumn-winter period, power generating companies produced more than 41.53 TWh of electricity, which is 16% higher than in the previous heating season. Of this amount, 53% was generated by NPPs, 32% by TPPs/CHPs, 10% by HPPs, and 5% by RES facilities..

The Minister of Energy Herman Galushchenko [noted](#) that the capacity of cross border electric networks allows Ukraine to export up to 550 MW and import up to 1700 MW of electricity, and Ukraine will continue to develop interconnectors and increase the cross border capacity with the EU to increase imports and exports.

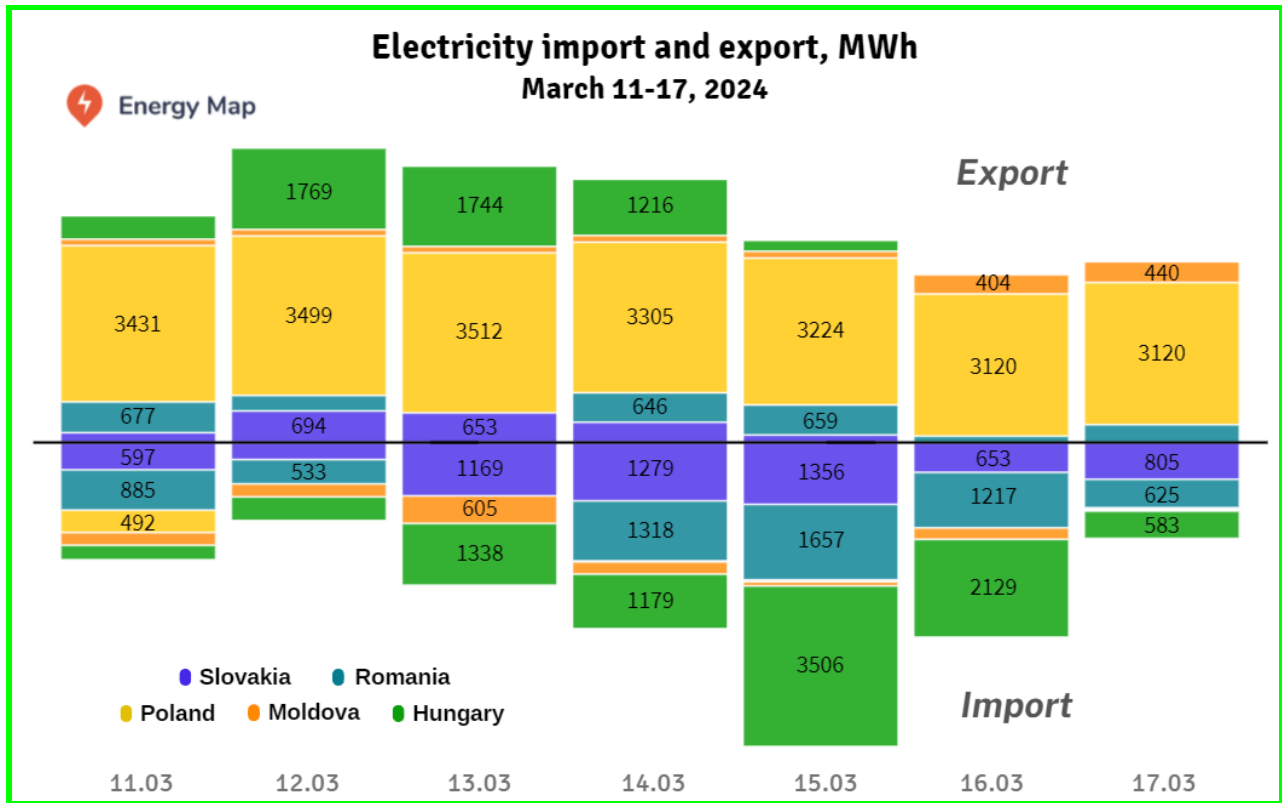
On March 11, due to **technological disruptions**, 6,800 customers in 29 settlements in the Donetsk region, more than 1,000 customers in the Sumy region, and about 1,000 customers in 2 settlements in the Zakarpattia region were disconnected. In addition, household consumers were cut off from electricity supply due to the disconnection of equipment at a 110 kV substation in the Lviv region. On March 12, more than 2,000 consumers in the Kirovohrad region, 1,800 in the Dnipropetrovsk region, about 600 in the Zaporizhzhia region, as well as equipment at a 110 kV substation and household consumers in the Odesa region lost power supply. On March 13, **one of the units at Khmelnytsky NPP was put offline for emergency repair**, while 7 NPPs units remain in operation. Ukrenergo's substation in the Odesa region suffered a technological disruption that resulted in equipment catching fire, but the substation and lines were later restored. For other technological reasons, almost 3,000 consumers in the Odesa region and 2,082 consumers in the Zaporizhzhia region were cut off from electricity supply. On March 14, equipment at a 110 kV substation in the Chernivtsi region was disconnected, resulting in a power outage for household consumers. On March 15, Ukrenergo's 330 kV line in the Kyiv region was shortly disconnected, and 270 consumers in the Dnipropetrovsk region were left without electricity. On March 16, 10,700 consumers in Mykolaiv were disconnected in an emergency, equipment at a 330 kV substation in the frontline area of the Kharkiv region was also disconnected, several substations and household consumers were cut off from power supply, but were quickly reconnected. On March 17, a CHP plant in the Ivano-Frankivsk region was shortly shut down, leaving the satellite city without heat supply. In Kyiv, two 110 kV substations, 58,000 consumers and water utility equipment were disconnected. In the Zapzorizhzhia region, Ukrenergo's 330 kV overhead line and 4,419 consumers in 13 settlements were cut off from power supply. In the Odesa region, 818 consumers were left without electricity due to a 10 kV network outage.

According to the [NEURC](#) and [ENTSO-E](#), during the week, commercial exports and imports of electricity were performed with 5 countries: Moldova, Romania, Poland, Slovakia, and Hungary. Exports decreased by 54% to 35.3 GWh; imports increased by 5 times to 24.4 GWh. Thus, weekly exports exceeded imports by 31%.

Commercial exports to Poland [amounted](#) to 23.2 GWh (-17%), with capacity ranging from 130 to 198 MW. Deliveries to Hungary were carried out on March 11-15, and amounted to 5.4 GWh (-76%), with a capacity range from 20 to 169 MW. Exports to Romania were carried out on all days except March 13, and amounted to 2.9 GWh (-71%), with a capacity range from 8 to 68 MW. Deliveries to Slovakia were carried out on March 11-15, and amounted to 2.2 GWh (-74%), with a capacity range of 5-68 MW at certain hours. A total of 1.6 GWh (-79%) was supplied to Moldova, with a capacity range of 13-45 MW.

Commercial imports from Hungary amounted to 9.5 GWh (an increase by 4.4 times), with capacity ranging from 3 to 410 MW at certain hours. Electricity supplies from Romania were performed on

all days except March 13, and amounted to 6.2 GWh (growth by 25.3 times), with a capacity range of 15-164 MW. Imports from Slovakia amounted to 6.2 GWh (growth by 5.2 times), with a capacity ranging from 2 to 164 MW. Imports from Moldova amounted to 1.8 GWh (growth by 4 times), with a capacity ranging from 1 to 133 MW. Deliveries from Poland were performed on March 11, 14-17, with a total volume of 0.6 GWh (growth by 29.5 times), with capacity ranging from 1 to 164 MW.



Source: [Energy Map](#)

Export capacity in the Ukraine-Poland direction on March 11-15 was booked by 1 company, the marginal price was set on March 13 and ranged from 0.06 to 0.21 EUR/MWh, and the total revenue amounted to 34 EUR, while Ukrenergo's revenue was about 700 UAH. Export capacity in the Ukraine-Hungary direction on March 11-16 was booked by 1-3 companies, the marginal price was set on March 11-15 and ranged from 0.01 to 14.85 EUR/MWh, and the total revenue amounted to 14,200 EUR, while Ukrainian TSO's revenue was about 298,000 UAH. Export capacity in Ukraine-Romania direction was booked by 2-4 companies on all days except for March 13, the marginal price ranged from 0.01 to 12.59 EUR/MWh, and the total revenue amounted to 4,400 EUR, Ukrenergo's revenue - about 92,000 UAH. 1-4 companies were competing for the Ukraine-Slovakia capacity, which was distributed among 1-3 of them. The marginal price was set on March 11-14 at 0.15-12.68 EUR/MWh, with total revenue of 5,600 EUR, and the Ukrainian TSO's revenue of about 118,000 UAH. Export capacity in the Ukraine-Moldova direction was booked by 1 to 3 companies, the marginal price was set on March 11-14 at 1.5-5.02 EUR/MWh, and total revenue amounted to 1,600 EUR, Ukrenergo's revenue - about 33,000 UAH.

2-4 companies [competed](#) for import capacity in the Hungary-Ukraine direction, and it was allocated between 2-3 companies. The marginal price was set on March 15 at 1.72 to 6.21 EUR/MWh; the total revenue was 18,200 EUR, and Ukrenergo's revenue amounted to about 385,000 UAH. Access to the Romania-Ukraine capacity on all days except March 13 was booked by 6-10 companies, the marginal price was set on March 11 and 14-17 and ranged from 0.03 to 19 EUR/MWh; the total revenue amounted to 37,300 EUR, and the Ukrainian TSO's revenue amounted to about 788,000 UAH. 6-10 companies competed for the Slovakia-Ukraine capacity, which was distributed among 5-8 companies. The marginal price was set at 0.01-16.16 EUR/MWh; the total revenue amounted to 30,600 EUR, and Ukrenergo's revenue amounted to about 645,000 UAH. Access to the Moldova-Ukraine capacity was booked by 4-7 companies, the marginal price ranged from 0.02 to

5.99 UAH/MWh, the total revenue amounted to 5,300 EUR, while Ukrenergo's revenue amounted to about 111,000 UAH. On all days except March 13, 1-4 companies competed for the Poland-Ukraine capacity, which was allocated among 1-2 companies. The marginal price was set on March 11 and 15-16 at 0.01-3 EUR/MWh; the total revenue amounted to 4,100 EUR, and the Ukrainian TSO's revenue amounted to about 87,000 UAH.

Market performance

Bilateral contracts market (BCM): For the second week in a row, trading dynamics at the Ukrainian Energy Exchange (UEEX) have been declining. On March 11-17, UEEX [held](#) 13 auctions for trading electricity (6 in commercial and 7 in specialized sections). Among the trades' initiators were Guaranteed Buyer, Ukrhydroenergo, Cherkaske Khimvolokno, Centrenergo, DTEK Zakhidenergo, universal service suppliers, distribution system operators, etc.. In total, 205.1 GWh were sold at UEEX with delivery in March (89.7% less week-on-week). The monthly Base BCM index for March remained at 2,409 UAH/MWh.

In particular, Guaranteed Buyer sold 126.8 GWh of block positions at prices ranging from 1,130.41 to 1,991.7 UAH/MWh. Ukrhydroenergo sold 37.3 GWh of base load at a weighted average price of 2,411.67 UAH/MWh with delivery on March 19-31. Cherkaske Khimvolokno sold 10 GWh of base load at a weighted average price of 2,300 UAH/MWh with delivery on March 18-31. Centrenergo offered base load with different delivery periods during March, April and for the second quarter of 2024, but the offered volumes were not sold. DTEK Zakhidenergo offered a base load with a delivery period for the second quarter, and the electricity was not sold. In the commercial sections, companies purchased/sold electricity under individual load profiles.

Day-ahead market (DAM): According to the [Energy Map](#) service, on March 11-17, DAM prices demonstrated high [volatility](#): the deviation of hourly prices from price caps ranged from 2.8% to 92.2%, with an average of 44%. The number of cases with significant price deviations (over 50%) from the upper price caps slightly decreased and was observed in 36.9% of the settlement periods (hours of the week). At the same time, no hours were recorded when prices were close (with a deviation under 1%) or at the level of price caps.

After several weeks of downward trend, the average hourly electricity price (Base DAM index) significantly increased to 2,891.7 UAH/MWh (+21.1%), while the weighted average daily price [ranged](#) from 2,338.6 to 3,639.4 UAH/MWh. At the same time, the ratio between the Base DAM indices in the markets of Eastern European countries (Poland, Hungary, Romania, Slovakia) and Ukraine decreased and [ranged](#) from 0.79 to 1.19.

The total volume of electricity sales on the DAM of Ukraine decreased moderately and [amounted](#) to 457 GWh (-1.1% week-on-week). The daily trading volume varied in the range of 55.6-71.4 GWh. The DAM remained in surplus: the ratio between the total daily volume of sale and purchase bids ranged from 1.48 to 1.71. At the same time, total supply decreased by 2.7% to 738.9 GWh, as well as demand decreased by 0.6% to 462.3 GWh. No deficit hours were observed during the week. Suppliers [prevailed](#) in the purchase structure (88.4-93.3%), the share of system operators was 6.7-9.2%, and producers accounted for the rest (0.1-3.8%).

Policy and regulation

On March 11, a trilateral agreement [was signed](#) between the NEURC, Grexel, and the USAID Energy Security Project to implement an IT solution to launch an electronic register of guarantees of origin for electricity produced from renewable sources. The agreement guarantees full compliance of the software product with European rules and standards, in particular the rules of the Association of Issuing Bodies and the CEN 16325 standard on guarantees of origin. This will allow Ukraine to have a system of guarantees of origin in the shortest possible time, which will be further integrated into the pan-European AIB-hub platform for international trade in guarantees.

On March 12, the Cabinet of Ministers [approved](#) the procedure for the export of electricity by the SE Guaranteed Buyer. In particular, the procedure defines:

- requirements for setting the minimum price of electricity sold by the Guaranteed Buyer for export;
- specifics of holding an auction to determine the counterparty under the export contract;
- specifics of the Guaranteed Buyer's participation in auctions for the allocation of the cross-border transmission capacity;
- the amount of profit from electricity exports by the Guaranteed Buyer.

In addition, the government supplemented the Resolution "On Imposing Public Service Obligations (PSO) on Electricity Market Participants Engaged in Electricity Export Operations to Ensure Public Interest in the Functioning of the Electricity Market During Martial Law" with a provision according to which the Guaranteed Buyer is not subject to PSO requirements when exercising exports.

In accordance with the Procedure for Registration of Wholesale Energy Market Participants approved by the NEURC, starting from April 1, 2024, only registered participants may conduct operations with wholesale energy products. As of [March 6](#), the NEURC registered 1,982 participants of the wholesale energy markets. At the same time, according to the Regulator, more than 2,500 entities intend to register.

On March 13, the Regulator [published](#) a draft resolution amending the current procedures for setting tariffs for electricity transmission and dispatch control. It also provides for amendments to the reporting form No. 1-NEURC-Electricity Transmission (Quarterly) "Report on Financial Results and Implementation of the Tariff Structure by Type of Activity" and the Instructions for its completion. In addition, in order to ensure a unified approach to the provision of information by market participants on the amount of net income, the NEURC developed Reporting Form No. 1-NEURC-income (quarterly) "Report on the amount of net income" and the Instruction for its completion.

On March 14, the Regulator [published](#) a draft resolution "On Approval of Amendments to the Procedure for Developing and Submitting for Approval of Distribution System Development Plans and Investment Programs of Distribution System Operators". The act is designed to ensure:

- streamlined procedure for the formation and submission to the NEURC of distribution system development plans and relevant investment programs of the DSOs, as well as changes thereto and reports on their implementation;
- necessary detail in the explanatory note on the relevance of the measures proposed by the DSO for implementation;
- availability of a detailed list of justifications for the measures proposed by the DSO for implementation;
- settlement of certain issues related to the implementation of investment program measures.

On March 15, the NEURC [published](#) a draft resolution to revise and set the maximum price cap on the balancing market at UAH 8,250/MWh (110% of the maximum price cap on the DAM). This decision is intended to ensure the stability of the electricity market and prevent the flow of volumes between different market segments.

Gas

Gas system operation

On March 10-16, the volume of gas transit through the territory of Ukraine amounted to 41.6-43.2 mcm per day, i.e. 38-40% of the capacity contracted by Gazprom (109 mcm per day). In the reporting week the average daily transit was 42.4 mcm (almost corresponds to the indicator of the previous week).

At the same time, gas exports from Ukraine continued. In the circumstances of the ban on the exports of Ukrainian-produced gas, exports are the gas volumes withdrawn from the storage

facilities by non-residents, who previously injected it for storage in the "customs warehouse" mode. The volume of such exports on March 10-16 was 7.8 mcm (+4% WoW), which were transported through the Drozdowicze/Hermanowice interconnection point with Poland.

In parallel, in March, active physical imports from Hungary began: in the reporting week, it amounted to 43.7 mcm (+9% WoW). Probably, these imports are partially or entirely transited through Ukraine and transported to Moldova. In particular, this is [reported by](#) specialized media.

Commercial exports through the VIP Ukraine-Poland were performed at 8.2 mcm (close to physical volumes). It is also likely that part of the volumes exiting the Ukrainian system to Moldova is the transmission of gas stored by foreign companies in Ukrainian storages. This assumption is due to the fact that the volumes of gas transported from the system in the "customs warehouse" mode exceeded the indicators of commercial exports to Poland and amounted to 24.9 mcm (+6%).

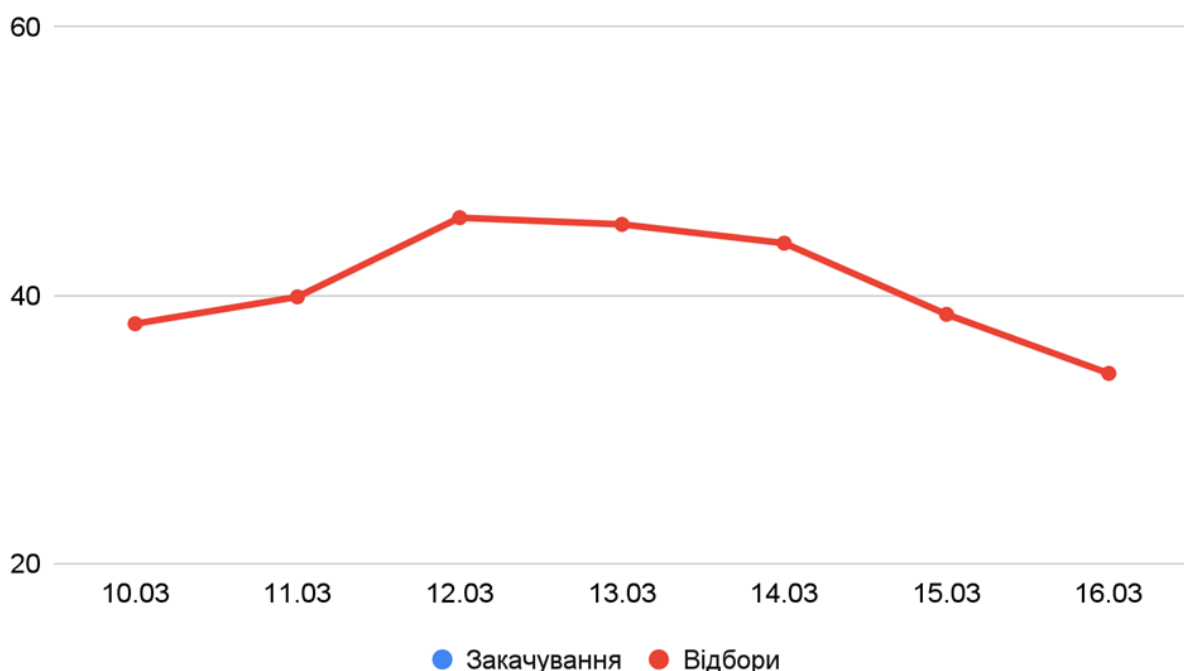
Commercial flows into the Ukrainian system from Hungary corresponded to the physical indicators (43.8 mcm). In particular, 11.5 mcm arrived in the "customs warehouse" mode and 18.5 mcm in the short-haul mode (service of the TSO, which provides a discount in the transmission tariff for transit over short distances).

Underground storage facilities

According to the [AGSI platform](#), as of March 16, 3.74 bcm of gas was accumulated in the Ukrainian storage facilities (-0.93% as compared to March 9). It corresponds to 12.39% of the total working capacity, i.e. without 4.662 bcm of "long-term storage" buffer gas. Withdrawals from storage in the reporting week amounted to 285.6 mcm; the average daily withdrawal amounted to 40.8 mcm (+8%).

At the round table "The second year of the ban on natural gas exports from Ukraine: consequences and prospects", organized by the Parliament's Committee on energy, housing and communal services, representatives of Ukrtransgaz [stated](#) that as of March 2024, private gas production companies stored 1.5 bcm of natural gas in Ukrainian underground storages.

Natural gas withdrawals and injections into/from Ukrainian storage facilities, mcm



Source: [AGSI](#) (all indicators calculated by dividing the primary indicators in MWh by the conversion factor of 10.595 kWh/cm)

Gas market performance

In the [trading sessions](#) of March 11-15, seven companies (four buyers and three sellers) submitted bids for purchasing gas at the Ukrainian Energy Exchange (UEEX). In the reporting period, UEEX received bids for 231.5 mcm of gas (+8% WoW) with a total starting cost of 2.59 billion UAH (+8%). The weighted average starting price of bids was 11.19 UAH/cm (excluding VAT, almost without changes).

In the monitoring period, 33.6 mcm (+64% WoW) at a weighted average price of 11.14 UAH/cm (without VAT) (-0.6%) were purchased. 57% of the resource was bought by GTSOU, 44% was purchased by GSC Naftogaz Trading LLC.

91% of gas was sold with transfer at a virtual trading point, 9% - with transfer in storages. 54% was sold with delivery in March 2024, 46% - in April 2024.

Policy and regulation

The NEURC approved differences between the actual cost of natural gas distribution services and the tariff revenue provided for by the tariffs for natural gas distribution. The corresponding differences are approved for each DSO for the following periods:

- until December 31, 2019, when the Ukrtransgaz was gas TSO;
- from January 1, 2020 to October 31, 2021, when GTS Operator of Ukraine LLC became gas TSO;
- from November 1, 2021 to February 28, 2022;

The calculation of such differences is provided for in Article 4(2) of the Law of Ukraine "On measures aimed at overcoming the crisis and ensuring financial stability in the natural gas market". Calculations are necessary for carrying out the procedure of mutual settlements in the natural gas market to repay the debts of gas distribution system operators to the TSO under gas transmission contracts and to gas suppliers for covering the volumes of technical losses of gas by DSOs.

Other

At the round table "The second year of the ban on natural gas exports from Ukraine: consequences and prospects", organized by the Parliament's Committee on energy, housing and communal services, Deputy Minister of Energy of Ukraine Mykola Kolisnyk [mentioned](#) the indicators of the gas balance in 2023: gas consumption was equal to 19.6 bcm (of which 3.4 bcm was consumed by industrial sector), national gas production amounted to 18.9 bcm (of which 3.18 bcm were produced by private companies).

The National Anti-Corruption Bureau of Ukraine [reported on](#) the exposure of a corruption scheme related to the production of natural gas at the Ukgazvydobuvannya fields. In 2019-2020, Ukgazvydobuvannya JSC held a competition and signed an agreement with the winning company on the provision of services to increase natural gas production at the company's fields. According to the agreement, the contractor had to ensure production of 'basic' and 'increased' volume of gas. At the same time, the cost of 'basic' production of 1 cm of gas should be 3-4 times lower than the cost of 'increased' production, both volumes should be fixed. However, the officials of JSC "Ukgazvydobuvannya" reduced the share of 'basic' gas production, which led to an increase in the share of 'increased' production, for which the company had to pay a much higher price. Thus, during 2020-2023, the state enterprise illegally overpaid the contractor 211 million UAH.

Oil and Motor Fuels

On March 13, the average price of domestically produced LPG at the Ukrainian Energy Exchange (UEEX) [increased by](#) 964 UAH/t to 42,718 UAH/t. A total of 6,700 tons of gas were auctioned, which is 23% more than last week. Only 1 Ukrnafta lot remained unpurchased.

At the same time, as [reported by](#) the specialized media, the Energy Customs Service has suspended the import clearance of some LPG shipments originating from EU countries. To register consignments with a EUR.1 certificate, customs officials began to demand documents confirming the origin of the gas. Energy Customs [notes](#) that in the case of receiving information about LPG produced by simple mixing, the components of which originate from the Russian Federation, it will be prohibited for import into Ukraine, and information about suppliers will be submitted to law enforcement agencies.

The Asset Recovery and Management Agency (ARMA) reported on the decision of the Commercial Court of the city of Kyiv confirming the legality of ARMA's actions regarding the unilateral termination of the corporate rights and property management agreement with Naftogaz Oil Trading LLC due to improper management of Glusco filling station chain. In May 2022, the filling station chain, which was associated with Viktor Medvedchuk's coterie, was transferred by the Cabinet of Ministers to the management of Naftogaz of Ukraine. Subsequently, ARMA established the facts of the systematic provision of unreliable information about income from asset management by Naftogaz Oil Trading LLC. Therefore, in September 2023, ARMA transferred the filling station chain to the management of Ukrnafta.

Moreover, on March 14, the Antimonopoly Committee of Ukraine [granted](#) Ukrnafta concentration permit regarding the assets of the Glusco group. Now Ukrnafta has the legal grounds for signing the acts of acceptance and transfer of assets from ARMA, after which it will be able to start the actual management of the filling station chain.

International Cooperation

On March 12, the United States House of Representatives Subcommittee on Europe [held](#) a hearing on sanctions against Rosatom and ending the global nuclear energy industry's dependence on Russia. Congressmen agreed that the United States, allies, and partners must have a dedicated strategy to provide confidence, expand and diversify supply chains in the field of civilian nuclear energy, and counter the destructive actions of Russia, Iran, and other hostile states.

The Minister of Finance of Ukraine Serhii Marchenko met with the Ambassador Extraordinary and Plenipotentiary of the Republic of Austria to Ukraine Arad Benkö. The meeting was also attended by the Deputy Minister of Finance Olha Zykova. The parties [discussed](#) the current state of the Ukrainian financial system, the government's implementation of key reforms on the way to EU accession and the attraction of Austrian investments. It is worth emphasizing that in 2023, Austria allocated 10 million EUR to the Ukraine Energy Support Fund and provided about 275 tons of energy equipment for restoration works. In June 2023, the Development Bank of Austria (Oesterreichische Entwicklungsbank AG, OeEB) joined the EBRD's initiative to establish a "Ukrainian Investment Platform" to increase the scale, efficiency and quality of Ukraine's recovery efforts.

On March 12, Ukraine [signed](#) a Memorandum of Understanding between Ukraine and the European Union on transitional financing under the Ukraine Facility programme, as well as a corresponding loan agreement. The documents were signed by the First Deputy Prime Minister and the Minister of Economy of Ukraine Yuliia Svyrydenko, the Minister of Finance of Ukraine Serhii Marchenko, and the Governor of the National Bank of Ukraine Andrii Pyshnyi. Thus, in the near future Ukraine will be able to receive 6 billion EUR to cover the current expenses of the state budget until the programme is fully launched.

A meeting of the Ukrainian-Polish Intergovernmental Commission on Economic Cooperation [was held](#) in Lviv. The Ukrainian delegation was headed by the Deputy Prime Minister Iryna Vereshchuk while the Polish delegation was headed by the Minister of Economic Development and Technology Krzysztof Getman. The participants discussed, among other things, cooperation in the energy sector and confirmed the strategic importance of the Adamowo (PL) - Brody (UA) oil pipeline project for strengthening the energy security of Ukraine and Poland, as well as other countries in the region.

The report was prepared on the basis of carefully checked and analyzed reports from more than 100 official sources: ministries, state agencies, network operators and energy companies. The information was collected from official websites and social media pages, and in some cases, media reports. For subscription, comments and other questions, please write to author@dixigroup.org

SUPPORT UKRAINIAN ENERGY SECTOR



Ukraine urgently needs emergency energy equipment to restore energy supply in the regions affected by war. More than 12,000 items are on the list of requested emergency energy equipment. If your company, association or country is ready to help, please [contact the Energy Community Secretariat's Ukraine Support Task Force](#).

[Energy Community Homepage \(energy-community.org\)](http://energy-community.org)

SUPPORT UKRAINIAN ARMY

To financially support the Armed Forces of Ukraine, please follow the [link](#) (the National Bank of Ukraine special account).