



# Russian War Against Ukraine: Energy Dimension

DiXi Group alert

(status as of 12:00, June 7)

#StopRussianAggression

#StandWithUkraine

## Summary

- **App. 657,200 consumers all over Ukraine did not have electricity supply, and 163,700 consumers remained without gas supply.**
- The IAEA expert mission under the Assistance Action Plan completed its work at the Chernobyl NPP site. According to the statement, **experts have identified a list of needs arising from the occupation by Russian troops.** The final report of the mission will identify aspects of technical support that will contribute to the safety and security of ChNPP facilities.
- **The IAEA Director General Rafael Grossi said the Agency was preparing an expert mission to the Zaporizhzhia NPP** due to suspension of the online data transmission about the situation with nuclear materials. At the same time, Energoatom considers this message as another attempt to get to the ZNPP site by any means and thus to legitimize the presence of the occupiers, which would actually approve all their actions. Energoatom noted that the Ukrainian side did not invite Grossi to visit ZNPP and has previously refused such a visit, emphasizing it will be possible only after regaining full control of the station.
- The Ministry of Energy obliged electricity market participants, until the end of martial law period, **to purchase each decade at least 10% of consumers' use volumes on the day-ahead market (DAM).** In case of non-compliance, the market participant is obliged to purchase the appropriate volume of electricity on DAM in the next decade or to receive the "default" status. Suppliers negatively assess this initiative as one

that again increases manual regulation, distorts the market, worsens their economic conditions and may lead to higher electricity prices for non-household consumers.

- The State Agency on Energy Efficiency announced **the creation of the National Energy Efficiency Monitoring System**, which will ensure collecting, processing and storing information on energy use for further monitoring and assessment of consumption efficiency.

## Nuclear and Radiation Safety:

### ***Chornobyl NPP Exclusion Zone***

On June 3, the IAEA expert mission under the Assistance Action Plan [completed](#) its work at the Chornobyl NPP site. The IAEA experts studied the state of physical protection systems in the Exclusion Zone, the processes of radioactive waste and spent fuel management, and the state of radiation protection of personnel. According to the statement, experts have identified a list of needs arising from the occupation by Russian troops. The final report of the mission will identify aspects of technical support that will contribute to the safety and security of ChNPP facilities.

### ***Zaporizhzhia NPP***

On June 6, the IAEA Director General Rafael Grossi [said](#) the Agency was preparing an expert mission to the Zaporizhzhia NPP due to suspension of the online data transmission to the IAEA. At the same time, Energoatom considers this message as another attempt to get to the ZNPP site by any means and thus to legitimize the presence of the occupiers, which would actually approve all their actions.

In addition, the "loss of connection" between ZNPP and the IAEA [was caused](#) by deliberate actions of the occupiers, who cut off the connection of the Ukrainian operator Vodafone (subject to data transmission contract with the IAEA) in Energodar. All data collection points and servers under the control of the Agency were closed and sealed. The information is stored on the server and will be transmitted to the IAEA as soon as the connection is turned on.

In addition, Energoatom noted that the Ukrainian side did not invite Grossi to visit ZNPP and has previously refused such a visit, emphasizing it will be possible only after the country regains full control of the station.

## Electricity Sector:

### ***Power system operation***

Ukraine [continued](#) commercial exports of electricity to Poland via the Dobrotvirska TPP - Zamosc transmission line at the stable schedule of 210 MW hourly. Also, according to [Ukrenergo](#), as of June 6, exports to Moldova reached 142 MW, while for June 7-8 Energoatom and Ukrhydroenergo [booked](#) 150 MW and 200 MW of cross-border capacity to Moldova, respectively. Also, technical [cross-border](#) flows continued between the energy systems of Ukraine and Eastern Europe countries (Slovakia, Hungary, Poland, Romania, and Moldova).

Ukrenergo continued to [rebuild](#) damaged infrastructure. A 330 kV overhead line was put into operation in the eastern region. On the other line of the same voltage, repairs continued (7 cable damages fixed, 30 pieces of equipment replaced). Cable repairs also continued on three more 330 kV and 750 kV lines in the south-eastern and central regions. In addition, cell equipment was restored

at a 750 kV substation in the central region. In the northern region, a new power cable for disconnectors and switches has been laid at a 330 kV substation.

## **Electricity market performance**

**Day-ahead market (DAM):** As of June 7, the weighted average settlement price almost [did not change](#) and amounted to 2,248.72 UAH/MWh (+0.3% vs the previous day). Exchange prices in the Eastern European markets rose simultaneously, which led to an increase in their gap with Ukraine. Prices in Slovakia, Romania and Hungary were 3.2 times [higher](#) than the DAM Base price index of Ukraine, while the price spread with the Polish market was at 2.9 times.

The total volume of trading [increased](#) to 12,515.5 MWh (+9.7% vs the previous day). At the same time, a further reduction in supply to 94,141.9 MWh (+9.8%) kept the market surplus at the previous level: the gap with the volume of purchase bids was 7.5 times. [The structure of purchase](#) did not change: the main part (55%) was occupied by suppliers, 43.4% by system operators, 0.5% by producers and traders.

**Intraday market (IDM):** On June 6, the weighted average price of electricity continued to [increase](#) slowly and amounted to 2,640.73 UAH/MWh (+4.6% vs the previous day). Meanwhile, the total volume of trading, due to the low base of comparison, showed a significant decrease - up to 389.2 MWh (-56.7% vs the previous day), however it still remains relatively small. At the same time, the increase in supply to 42,130.6 MWh (+14.1%) led to a significant raise in market surplus - the gap with the volume of purchase bids increased from 41 to 108 times. In [the structure of purchase](#), the dominant part (98%) was occupied by suppliers, 2% by system operators.

## **Disruption and resumption of supply**

[According](#) to the Ministry of Energy, as of June 6, due to hostilities, a total of 657,200 consumers in 737 settlements were disconnected from electricity supply. During the day, electricity supply was resumed to app. 17,300 consumers.

Large-scale power supply disruptions and, consequently, active recovery works were taking place:

- in the **Donetsk region**, [according](#) to the local DSO, during the day, its specialists restored electricity supply to more than 7,000 households in 8 settlements of Pokrovsk, Bakhmut and Kramatorsk districts. A total of 318 settlements were left without electricity ([according](#) to the Ministry of Energy - 356,000 consumers), most of them in the Slovyansk, Avdiivka, Maryinka, Toretsk, Bakhmut and Velyka Novosilka districts;
- in the **Luhansk region**, [according](#) to the Ministry of Energy, 128,200 consumers were left without electricity supply;
- in the **Kharkiv region**, [according](#) to the Ministry of Energy, 76,000 consumers remained without electricity supply;
- in the **Zaporizhzhia region**, [according](#) to the local DSO, as of 07:00 on June 7, 28,464 consumers in 86 settlements were left without electricity supply. During the day, DSO specialists resumed supplies to 10,006 households in the Orikhiv district, as well as repaired damage to a transformer substation, replaced outdoor lighting supports and resumed supply to 800 consumers in the city of Zaporizhzhia. At the same time, as a result of hostilities, damage was recorded to the Polohy power grids, with 3 settlements left without supply (a total of 1,256 households);
- in the **Mykolaiv region**, [according](#) to the Regional Military Administration, as of June 7, 379 power supply facilities were partially or completely damaged, including 8 in the last 24 hours. 91 settlements (2 of them partially) of the Bashtanka and Mykolaiv districts remained without electricity;

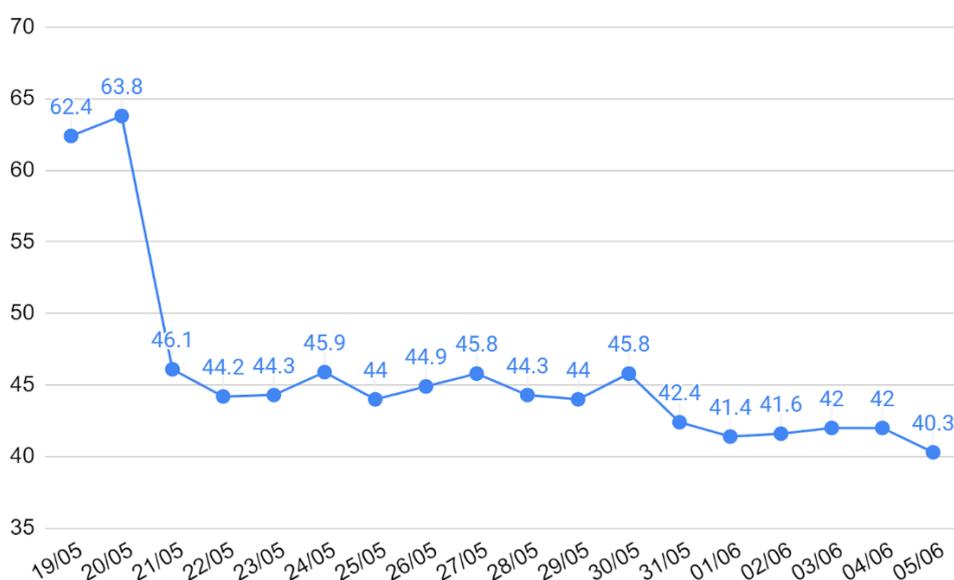
- in the **Kherson region**, [according](#) to the Regional Military Administration, as of 12:00 on June 6, among the communities with contact established, the power supply was partially provided to Muzykivka, Kochubeivka, and Novovorontsovka communities, at least 10 settlements were offline. There was no electricity supply to 22 settlements of the Vysokopillia community. Residents of the village of Starytsia (Borozenske community), managed to restore electricity supply on their own;
- in the **Dnipropetrovsk region**, [according](#) to the local DSO, during the week, its specialists restored electricity supply to 6,223 consumers in 20 settlements. As of June 6, all lines affected by the shelling have been restored, there are no new outages;
- in the **Chernihiv region**, [according](#) to the Regional Military Administration, as of 06:00 on June 7, 2,164 consumers in 6 settlement did not receive electricity supply service;
- in the **Sumy region**, [according](#) to the Regional Military Administration, at night the enemy opened fire on the town of Seredyna-Buda, damaging a power line. In the city of Okhtyrka, public utilities [dismantled](#) structures on the territory of CHP; electricity supply was also restored in the city of Trostyanets;
- there was no up-to-date consolidated information on power supply in the **Odesa region** at the time of the review preparation.

## Gas Sector:

As of June 5, the gas transit through the territory of Ukraine decreased by 1.7 mcm compared to the previous day and amounted to 40.3 mcm. These volumes were only 37% of the capacity contracted by Gazprom (109 mcm per day). There were no transit flows via the Sokhranivka interconnection point.

Physical imports of gas from the EU were reported from the Hermanowice interconnection point (virtual interconnection point "Ukraine-Poland") at 2.5 mcm. At the same time, part of these volumes may be a transit from Poland to Hungary via Ukraine, as on June 5, on Ukraine's gas system exit via the Berehove interconnection point (virtual interconnection point "Bereg") 1.8 mcm of gas was shipped.

**Gas transit through Ukraine (at Sokhranivka and Sudzha interconnection points), mcm**



GTSOU [reported](#) on its activity to reduce methane emissions. In particular, the TSO cut the fugitive emissions share in total methane emissions from 42% (2019) to 28% (2021) by optimizing the detection of leaks and purchasing equipment for their prompt elimination. GTSOU also joined several international initiatives to reduce methane emissions, including the Oil and Gas Methane Partnership (OGMP 2.0).

### ***Disruption and resumption of supply***

The **Donetsk, Luhansk, Zaporizhzhia, Chernihiv, Mykolaiv and Kharkiv regions** had the most challenging situation in gas supply. [According](#) to the Cabinet of Ministers, as of June 6, 163,700 consumers were left with no gas supply. Supply to 200 consumers was restored during the day.

In the **Donetsk region**, the situation didn't change: almost the whole region remained without gas supply due to the main gas pipeline damage. Only 1,900 consumers in 2 settlements [had](#) gas supply.

In the **Luhansk region**, there were no changes in gas supply: it was completely suspended due to hostilities which were deeply destroying the region's critical infrastructure.

The **Kharkiv** Regional Military Administration [reported](#) damage to a medium-pressure gas pipeline in the Derhachi district that supplied gas to 7,600 households in 5 settlements. The DSO will try to start restoration works.

In the **Kherson region**, [as of 12:00 on June 6](#), there was no information regarding any significant change as compared to the previous day: 1 community (Vysokopillia) has completely remained without gas supply and 3 communities (Velyka Oleksandrivka, Novovorontsovka, Stanislav) partially. However, there is no mobile connection in these communities, so there is no up-to-date information on gas supply. LPG reserves were running out in 4 communities (Tyahyn, Hornostaivka, Velyka Lepetykha and Rubanivka); in the Novoraysk community, LPG supply had run out.

In the **Mykolaiv region**, as of June 7, the situation almost did not change as compared to the previous day: 590 gas infrastructure facilities were [destroyed or damaged](#) for the whole period of the war (no change vs the previous day), and 6,656 (+83) consumers were left without gas supply.

Operational information on gas supply in the **Zaporizhzhia, Sumy and Chernihiv regions** was not available at the time of the review preparation.

## Countermeasures of Ukrainian Companies and Public Authorities

The Ambassador of Ukraine to the EU Vsevolod Chentsov [stated](#) that Ukraine considers the sixth package of sanctions on Russia as a very powerful step, which has become a trigger for the refusal from Russian oil already now. Although the transition will take six to eight months, a number of EU member states and private companies have already begun contracting new sources of supply. [According to Chentsov](#), the next package of sanctions should include a complete embargo on pipeline-shipped Russian oil and gas; measures to block the Russian fleet; a ban on EU-flagged vessels entering Russian ports; disconnection of new Russian and Belarusian banks from SWIFT; introduction of cyber sanctions on cryptocurrency operations.

The Ministry of Energy [issued](#) the Order No.187 of May 26, 2022, which obliges electricity market participants - from June 1 until the end of martial law period - to purchase each decade at least 10% of consumers' use volumes on the day-ahead market (DAM). Ukrenergo as the settlements administrator, based on the results of each decade, is obliged to check the compliance of each

market participant with the set rule. In case of non-compliance, the market participant is obliged to purchase the appropriate volume of electricity on DAM in the next decade or to receive the "default" status.

According [to media](#) reports, the document reads "Entered into the Single State Registry of Legal Acts", but the registry states it has not yet "entered into force". At the same time, suppliers negatively assess this initiative as one that again increases manual regulation, distorts the market, worsens the economic conditions of suppliers and may lead to higher electricity prices for non-household consumers.

Meanwhile, Energoprod Servis LLC [appealed](#) to the Kyiv District Administrative Court against the decision of the National Energy and Utilities Regulatory Commission of February 25, 2022, No.332 in part of paragraph 1.10., which determines the list of licensees to whom the "default" status does not apply during the war. The court hearing on the administrative case No.640/7129/22 is scheduled for June 20, 2022.

The Prime Minister Denys Shmyhal [instructed](#) the relevant ministries to develop a draft grant program to support small and medium-sized businesses. Using the program, the government hopes to "boost" the economy, stimulate the creation of new jobs and meet the demand of Ukrainians for high-quality products.

The State Agency on Energy Efficiency and Energy Saving of Ukraine (SAEE) [announced](#) the creation of the National Energy Efficiency Monitoring System, which will ensure the monitoring of:

- implementation of the National Energy Efficiency Action Plan, strategy for thermal modernization of buildings;
- the state of implementation of energy management systems of national and local authorities, enterprises, institutions, organizations;
- implementation of state target energy efficiency programs and assessment of their efficiency;
- availability of local energy plans and reports on their implementation;
- comparison of energy efficiency of facilities (benchmarking).

The centralized information system is expected to collect, process and store information on energy use for further monitoring and assessment of consumption efficiency.

**Sources:**

*The alerts are developed based on collected, verified, and analyzed information reports of over 100 official sources: ministries, state agencies, network operators, and energy companies. Information was collected only from official websites and official social media accounts.*

For subscriptions, comments and other questions, please email to: [author@dixigroup.org](mailto:author@dixigroup.org)

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Prior to transferring funds, please [email to the Energy Community Secretariat](#)

## **SUPPORT UKRAINIAN ARMY**

To financially support Heroic Ukrainian Army, please follow the [link](#) (The National Bank of Ukraine)