



Russian War Against Ukraine: Energy Dimension

DiXi Group alert

(status as of 12:00, May 15)

Stop russian nuclear terrorism!

Stop the atrocities!

Introduce full embargo on russian oil and gas imports now!

#StopRussianAggression

#StandWithUkraine

Summary

- **App. 704,900 consumers (including 19,700 due to the bad weather conditions) all over Ukraine did not have electricity supply, over 228,600 consumers remained without gas supply.**
- **Donetskoblغاز warned about a possible gas supply termination in the whole Donetsk region** and the area around due to the occupiers who disconnected the transit and inner main gas pipelines (used to be operated by the Gas Transmission System Operator of Ukraine). While the DSO and GTSOU are looking for solutions together with the military administration, **residents of the region are recommended to look for an alternative to gas supply** (in particular, electricity).
- The Minister of Energy Herman Halushchenko informed that **unauthorized gas withdrawals by the occupiers from the transit flow were the last factor for GTSOU declaring force majeure on gas transmission via the Sokhranivka** interconnection point. The volumes were presumably rerouted for consumption by the Luhansk TPP and other industrial facilities on the uncontrolled territories.
- **The Ministry of Energy looks forward to the EU joint gas procurement platform being deployed** and letting Ukraine purchase gas at more affordable prices. According to the Minister Herman Halushchenko, more active gas imports to Ukraine will start in summer.

- Energoatom submitted **proposals on improvement of physical security and safety of the current and future NPPs** to the National Security and Defense Council of Ukraine. They included establishment of perimeters, anti-tank and air defense, and strengthening military defense.
- The Ministry of Economy reviewed calculations of the average cost of petroleum and diesel fuel. The marginal **retail prices will change respectively: for petroleum, they will increase to 39.86 UAH per liter, for diesel - slightly decrease to 42.31 UAH per liter.**

Attacks:

Donetsk region In the last 24 hours, 11 settlements of the Donetsk region, including Mariupol, Avdiivka and Toretsk, were shelled from aircraft, multiple rocket launch systems "Grad", tanks and heavy artillery, with 3 civilians killed and 10 injured, as the National Police [reported](#). The shelling damaged at least 36 residential facilities, including residential and industrial facilities, a traction power plant, and a medical facility.

The Russian occupiers [continued the siege](#) of the defenders of Mariupol on the territory of the Azovstal Iron & Steel Works, where the Russian occupiers for the first time used phosphorus bombs. Their combustion temperature is 2000-2500 degrees Celsius, it is almost impossible to stop burning. Adviser to the President of Turkey Ibrahim Kalin [stated](#) that Turkey had offered Moscow and Kyiv to evacuate civilians and wounded soldiers from the Azovstal Iron & Steel Works facilities by sea. Ukraine and Russia had not yet commented on the initiative. The humanitarian situation in Mariupol remained difficult, and the [occupiers' attempts](#) to restore power supply to parts of the city had resulted in a series of fires due to short circuits in the destroyed apartments.

Luhansk region [According to](#) the Luhansk Regional Military Administration Head Serhii Haidai, the enemy fired 11 attacks at Severodonetsk during one day. A total of 11 multi-apartment buildings in the city were destroyed in the recent 24 hours, as well as a technical school and the Azot chemical plant. The cities of Popasna and Hirske were subject to massive shelling and have being actually wiped off the face of the earth. In addition, over the last 24 hours, 11 more settlements of the region were attacked, in particular 9 houses were destroyed in the town of Komyshevakha, and three people were injured in the town of Vrubivka. Haidai also [reported](#) about the forced mobilization by occupiers in Popasna.

Kharkiv region [According to](#) the Kharkiv Regional Military Administration Head Oleh Syniehubov, last night the occupiers did not fire on the city of Kharkiv, concentrating on other settlements in the region. The city of Chuhuiv (two injured people) and the Zolochiv community suffered again, but the Izyum area remained the hottest spot. Syniehubov called on the residents of the liberated settlements not to return to their homes yet, as there is still a risk of artillery shelling and mines.

Sumy region

On the night of May 14, the Russians [shelled](#) the village of Shpylivka (Sumy district) and the Shostka district. The local infrastructure was severely damaged, but with no casualties.

Mykolaiv region

[According to](#) the Mykolaiv Regional Military Administration, as of May 15, 2,383 housing facilities, 31 medical facilities, 138 educational institutions and 482 life support systems were destroyed during the Russian aggression. Last night the aggressor [attacked](#) the city of Mykolaiv, as a result 5 people were injured, a sports complex and a football field of children's sports school, a kindergarten, a station of water purification, and more than 10 houses were damaged. The [humanitarian situation](#) was deteriorating in the occupied territories of the region, collaborators were unable to provide settlements with sufficient food and fuel supplies.

Kherson region

The Operational Command "South" [reported](#) that the enemy had launched a missile strike on the Kherson region, and attempts to destroy industrial infrastructure continued, but without casualties among civilians. The occupiers were trying to gain stronghold in the captured territories, in particular, built fortifications using reinforced concrete structures. The Russians had also [started a "census"](#) in the occupied city of Henichesk, and new cases of hostage-taking civilians had been recorded.

Zaporizhzhia region

[According to](#) the Zaporizhzhia Regional Military Administration, as of May 15, 889 households were completely or partially destroyed, including several houses damaged in the shelling of the city of Huliaipole. The water supply system of the region was destroyed, and parts of Vasylivka and Polohy districts remained without water. Also, due to hostilities, sewage treatment plants that receive sewage from the city of Vasylivka and the town of Stepanohirsk in the Vasylivka district were damaged.

Lviv region

The Lviv Regional Military Administration Head Andrii Sadovyi [reported](#) about the consequences of the missile attack on the region on the morning of May 15. Four missiles hit a military facility in the Yavoriv district ([according to](#) the Lviv Regional Military Administration, close to the border with Poland), killing no one, but the facility itself was completely destroyed. 2 missiles were shot down by the Ukrainian air defense forces.

Nuclear and Radiation Safety:

As of 08:00 on May 15, all operating NPPs of Ukraine were functioning normally; radiation, fire and environmental conditions at station sites and adjacent areas were within current standards.

According to the results of the meeting with the Minister of Energy Herman Halushchenko, the Acting President of Energoatom Petro Kotin, and the U.S. Chargé d'Affaires Kristina Kvien [agreed](#) on the need to strengthen the IAEA's involvement in the deoccupation of ZNPP, countering Russia's nuclear terrorism and strengthening Ukraine's and the global nuclear security.

Meanwhile, Energoatom submitted [proposals](#) to the National Security and Defense Council of Ukraine to improve the physical security and safety of existing and future nuclear power plants. Among them are the establishment of perimeters, anti-tank and air defense, strengthening military defense with the representatives of the Armed Forces, not the National Guard. It was also reported

that projects for the construction of new power units using Westinghouse technology will include a double protection of reactor confinement and a protection of critical equipment from projectiles and explosions.

Chornobyl NPP Exclusion Zone

Restoration works were underway in the Exclusion Zone to normalize the functioning of the facilities and ensure their proper safety. The State Nuclear Regulatory Inspectorate of Ukraine [conducts](#) a detailed assessment of the ability of licensees to perform activities in the field of nuclear energy use and radioactive waste management in the Exclusion Zone in compliance with legislation, norms and rules on nuclear and radiation safety and licensing conditions.

Zaporizhzhia NPP

The situation at the Zaporizhzhia NPP and in the satellite city of Energodar remains unchanged. For the 73rd day in a row, they are under the control of Russian terrorists, who are constantly exerting physical, psychological and informational pressure on the employees of the plant and the city's residents. ZNPP power units are serviced by Ukrainian personnel with proper rotation, but the plant's nuclear and radiation safety are under constant threat.

As of May 15, the radiation background on the territory of the ZNPP industrial site and the sanitary protection zone of the plant remained within the [standards](#); gamma background in the Zaporizhzhia region is also [stable](#) (7-14 µR/h) and does not pose a threat to life and public health.

The presence of Russian terrorists at nuclear facilities poses extremely high threats to nuclear and radiation safety on a global scale! Ukraine demands to recognize the actions of Russia and Rosatom as nuclear terrorism, which aims to intentionally violate the security of nuclear power plants, international law and basic human rights with the aim of genocide, ecocide and encroachment on the country's sovereignty.

We call on international partners to increase pressure on the IAEA, whose actions may prevent acts of nuclear terrorism by Russia. At the same time, it is critical to minimize Russia's influence on IAEA policies and activities, in particular by removing all Russians from key positions in the Agency's Secretariat and restricting their access to information about Ukraine's nuclear power plants.

We also emphasize the need to impose tough sanctions on the management, staff, products, international projects of Rosatom and, in general, the nuclear industry of the aggressor country!

Electricity Sector:

Power system operation

For almost 2 months, Ukraine's power system has been [stably](#) operating in trial synchronous mode with the network of Continental Europe (ENTSO-E). Commercial exports of electricity to Poland via the Dobrotvirskaya TPP - Zamosc transmission line [remained](#) at the stable schedule with a maximum level of 210 MW during the day. Exports to Moldova [fluctuated](#) during the day and were performed at an average level of about 100 MW.

In addition, there are unidirectional (with Romania) or bidirectional (with Hungary and Moldova) technical [cross-border](#) flows between the energy systems. The current capacity of cross-border networks between the power systems of Ukraine and ENTSO-E is about 2 GW, however, the trial mode of synchronous operation does not provide for full-fledged commercial exports/imports of electricity.

Ukrenergo [continued](#) to rebuild damaged energy infrastructure. In particular, the repair of reactor equipment was completed at one of the high-voltage substations, and the demining areas were being inspected along the line departing from the substation. On another 330 kV line, the replacement of reinforced concrete supports was underway. At one of the substations in the northern region, the inspection of the restored protections has been completed, and the repair of damaged cable sections continued. In the eastern region, restoration work has begun on one of the 330 kV lines - the destroyed pylons were dismantled, traverses and posts were restored, and cable breaks were eliminated.

[According](#) to the Minister of Energy Herman Halushchenko, the level of payments for electricity in the first months of the war dropped by 30% for households, by 40-50% for industry. Decline in payment discipline, coupled with a 32-35% reduction in total electricity consumption, has led to a significant financial imbalance in the market, estimated at around 250 million EUR per month. One of the most effective ways to solve this problem is to increase electricity exports to the EU.

Electricity market performance

Day-ahead market (DAM): As of May 15, the DAM weighted average settlement price [increased](#) and amounted to 2,289.51 UAH/MWh (+1.2% vs the previous trading day). At the same time, the exchange prices on the Eastern European markets showed declining dynamics, which led to a reduction in their gap with Ukraine. The prices in Slovakia, Hungary and Romania were 2-2.1 times [higher](#) than the Base DAM price index of Ukraine, while the spread to Poland is consistently lower at 1.6 times.

The total volume of trading on DAM [decreased](#) rapidly, reaching 6,550.3 MWh (-29.3% vs the previous day), which became a new historical minimum for the entire period of the DAM operation from July 1, 2019. At the same time, the opposite dynamics of a significant increase in supply to 95,526.6 MWh (+6.4% vs the previous day) led to a further raise in market surplus - the gap with the volume of purchase bids increased from 9.7 to 14.6 times. The [structure of electricity](#) purchase on DAM has changed slightly: 67.3% belonged to suppliers, 32.6% to system operators, the rest - to producers.

Intraday market (IDM): On May 14, the weighted average price of electricity on IDM continued to [increase](#) slightly and amounted to 2,893.49 UAH/MWh (+2.2% vs the previous day). At the same time, the total volume of trading rapidly dropped - 224.5 MWh (-39.5% vs the previous day). At the same time, slower increase in supply - up to 39,340.1 MWh (+11.3%) led to a significant increase in market surplus - the gap with the volume of purchase bids jumped from 95 to 179 times.

Disruption and resumption of supply

[According](#) to the Ministry of Energy, as of May 14, 925 settlements were disconnected from electricity, a total of app. 704,900 consumers. During the day, electricity supply was resumed to app. 143,600 consumers (including 88,500 who were disconnected due to bad weather conditions).

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

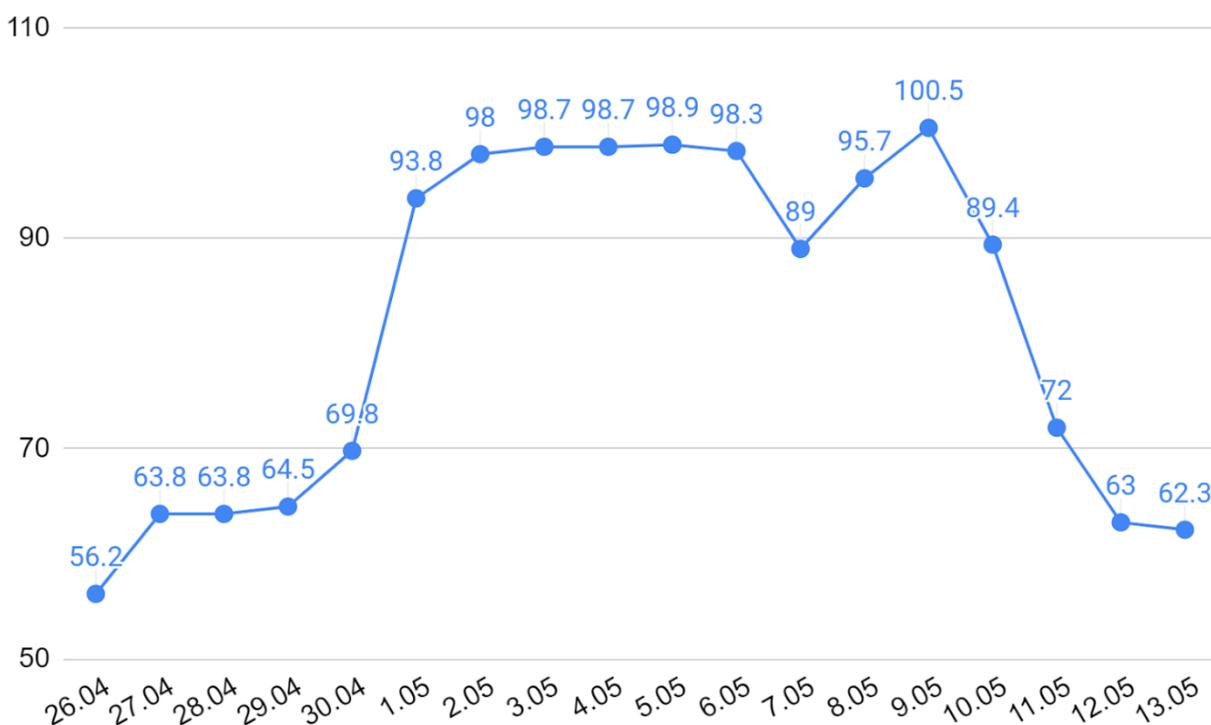
- in the **Donetsk region**, according to DTEK, 261 settlements remained without electricity ([according](#) to the Cabinet of Ministers, 306,200 consumers); supplies to 5,744 consumers in 13 settlements were resumed during the day;
- in the **Luhansk region**, [according](#) to the Cabinet of Ministers, 128,000 consumers were left without electricity supply;
- in the **Kharkiv region**, [according](#) to the Cabinet of Ministers, 154,000 consumers were still with no electricity supply; supplies to 12,000 consumers were resumed during the day;

- in the **Kyiv region**, [according](#) to the Cabinet of Ministers, supply to 15,400 consumers, which were disconnected due the bad weather conditions, was resumed during the day; in **Kyiv**, there were 41,000 such consumers;
- in the **Zaporizhzhia region**, as of 07:00 on May 15, 21,660 consumers in 70 settlements were left [without](#) electricity supply; supply for 101 consumers was resumed during the day;
- in the **Mykolaiv region**, [according](#) to the Cabinet of Ministers, supply to 700 consumers was resumed during the day;
- in the **Chernihiv region**, [according](#) to the Cabinet of Ministers, supply to 44,000 consumers, was resumed during the day;
- in the **Odesa region**, [according](#) to the Cabinet of Ministers, supply to 8,300 consumers, was resumed during the day;
- in the **Sumy region**, [according](#) to the Regional Military Administration, due the bad weather conditions, 4,225 consumers in 35 settlements were left without electricity supply;
- there was no up-to-date information on power supply in the **Kherson and Dnipropetrovsk regions** at the time of the review preparation.

Gas Sector:

As of May 13, the transit of Russian gas through the territory of Ukraine almost did not change compared to the previous day and amounted to 62.3 mcm. These volumes account for much less than the capacity contracted by Gazprom (109 mcm per day). Transit flows suspended 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 0.34 mcm.

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



Source: [GTSOU](#)

[According](#) to the Minister of Energy Herman Halushchenko, more active gas imports to Ukraine will begin in summer, as the main obstacle to increasing supplies is the price. That is why the Ministry

of Energy looks forward to the EU joint gas procurement platform being deployed and letting Ukraine purchase gas at more affordable prices.

The Minister also commented on the situation with transit. Halushchenko said that, before announcing force majeure on gas transmission through the Sokhranivka interconnection point, GTSOU consulted with international lawyers, who confirmed the legality of such actions. Unauthorized gas withdrawals by the occupiers from the transit flow were the last factor for GTSOU declaring force majeure on gas transmission via the Sokhranivka interconnection point; according to the Minister, these volumes were probably directed for the consumption of Luhansk TPP and other industrial facilities in uncontrolled areas.

Disruption and resumption of supply

The **Donetsk, Luhansk, Zaporizhia, Kharkiv, Kyiv, Kherson and Mykolaiv regions** had the most challenging situation in gas supply. [According](#) to the Cabinet of Ministers, as of May 14, 228,600 consumers were left with no gas supply. Gas supply to 4,354 consumers was restored during the day.

In the **Donetsk region**, the local DSO [warned](#) about a possible gas supply termination in the whole Donetsk region and the area around due to the occupiers who disconnected the transit and inner main gas pipelines (used to be operated by the Gas Transmission System Operator of Ukraine). While the DSO and GTSOU are looking for solutions together with the military administration, residents of the region are recommended to look for an alternative to gas supply (in particular, electricity).

У **Донецькій області** місцевий оператор ГПМ [попередив](#) про можливе припинення газопостачання в усій області через перекриття окупантами транзитного та внутрішнього магістрального газопроводу. Хоча оператор ГПМ та “Оператор ГТС України” шукають шляхи вирішення проблеми, мешканцям області рекомендують шукати альтернативу газопостачанню (зокрема, через використання електроенергії).

In the **Kyiv region**, as of the morning of May 15, gas supply was [restored](#) in 120 settlements (119 completely and 1 partially) to 143,739 consumer facilities. The repairs continued only in the city of Irpin (gas supply was restored to 87% of consumers already).

In the **Zaporizhia region**, the situation has [not changed](#) - 69,975 consumers in 88 settlements remained without gas supply. Last night, due to shelling, low-pressure gas distribution pipelines in the city of Polohy and the village of Verkhnya Tersa were damaged.

In the **Kherson region**, as 17:00 of May 14, the Vysokopillia community, partially the Velyka Oleksandrivka, Novovorontsovka and Stanislav communities [remained](#) without gas supply. Many communities had problems with LPG supply.

In the **Mykolaiv region**, as of May 15, due to Russian aggression, 147 gas infrastructure facilities were [damaged](#), and 3,858 consumers left without gas supply.

In the **Kharkiv region**, Kharkivgaz specialists [repaired](#) a high-pressure gas pipeline and restored supplies to 14,500 consumers, including in the Zolochiv and Solonytsivka communities, in the villages of Peresichne and Vilshana.

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

Countermeasures of Ukrainian Companies and Public Authorities

The Adviser to the President of Ukraine Oleh Ustenko [stated](#) that the European Commission's proposal on an embargo on Russian crude oil is welcomed. However, according to Ustenko, Ukraine does not have time even for a six-month transition period: while the oil embargo will start working, every day Russia would continue to finance the war and kill Ukrainians.

The Ministry of Economy of Ukraine [has published](#) a calculation of average cost of petroleum and diesel fuel, which serves as the basis for the marginal retail price at filling stations. The average cost of petroleum increased from 31.19 UAH to 33.36 UAH per liter, of diesel fuel - decreased from 35.63 UAH to 35.31 UAH per liter. Taking into account the marginal trade margins, the maximum retail price for "ordinary" petroleum should not exceed 39.86 UAH per liter, for "ordinary" diesel fuel - 42.31 UAH per liter. Premium fuel brands can be sold with an additional 5% surcharge.

The Minister of Energy of Ukraine Herman Halushchenko [stated](#) that, since the beginning of the large-scale Russian invasion, consumption of oil products in Ukraine has dropped by 72%, and demand for May is estimated at about 100,000 tons for petroleum and 250,000 tons for diesel fuel. According to Halushchenko, in May, imports of fuel by road increased 15 times, by river and rail - 5 times, as compared to March.

Halushchenko also said Ukraine is fulfilling its obligations as a gas transit country even during the war. After the Russian intervention in the gas system of Ukraine performance at the Novopskov compressor station, under the terms of the contract, the Ukrainian side offered Gazprom to transfer transit routes to other interconnection points due to force majeure. According to Halushchenko, on May 9, the occupiers began illegally taking gas from a transit pipeline, presumably for needs of the Luhansk TPP, located on the territories where Ukraine has lost control.

In addition, Herman Halushchenko stated that the Ukrainian government is negotiating with the governments of the EU on increasing electricity exports, which will help address the issue of electricity market liquidity.

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.

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