



Russian War Against Ukraine: Energy Dimension

DiXi Group alert

(status as of 12:00, May 18)

Stop russian nuclear terrorism!

Stop the atrocities!

Introduce full embargo on russian oil and gas imports now!

#StopRussianAggression

#StandWithUkraine

Summary

- **App. 633,500 consumers all over Ukraine did not have electricity supply, 196,000 consumers remained without gas supply.**
- **Russian troops deliberately destroy Ukrainian nature**, intentionally setting forests on fire and prohibiting rescuers and residents to extinguish them on the occupied territories.
- **Forest fires intensified close to and directly in the Exclusion Zone**, and firefighting was complicated by strong winds and lack of special equipment as much was stolen during the occupation. The radiation background remained within the standards.
- **The Kharkiv CHP-5 resumed electricity production**, increasing the resilience in the northern subsystem of Ukraine's Integrated Power System. It can also provide auxiliary services (frequency control and active power reserve).
- **The government temporarily suspended price regulation for motor fuels**, so that operators can provide the market with the necessary supply volumes. According to the government's expectations, the **maximum retail prices for diesel fuel shall not exceed 58 UAH/liter, and the prices for petroleum will not exceed 52 UAH/liter**. According to the Minister of Economy Yulia Svyrydenko, as soon as fuel traders start abusing their position, sanctions will be applied to them.

- As of May 16, the transit of Russian gas through the territory of Ukraine amounted to 55.1 mcm, **these volumes are twice less than the capacity contracted by Gazprom.**

Attacks:

Donetsk region In the last 24 hours, 12 settlements of the Donetsk region, including Mariupol, Bakhmut, Avdiivka and Toretsk, were shelled from aircraft, Tochka-U missile system, tanks and heavy artillery, with killed and injured civilians, as the National Police [reported](#). The shelling damaged at least 52 residential facilities, including homes, schools, industries, farms and critical infrastructure facilities. In addition, air strikes [damaged](#) the region's important Knauf building materials plant in the city of Soledar.

The Ukrainian military and political leadership was not commenting on the evacuation of Ukrainian defenders from the Azovstal Iron & Steel Works and their exchange for Russian POWs. [According to](#) the Institute for the Study of War (U.S.), Russia could agree to such evacuation to declare Mariupol captured as soon as possible. [According to](#) the Main Intelligence Directorate of the Ministry of Defense of Ukraine, on May 18-21, the occupiers plan to demonstrate to the media the destruction of Mariupol and accuse Ukraine of destroying the city and mass killing of civilians. It is reported that Russian propagandists had already brought to the city fragments of Ukrainian munitions collected from the occupied areas of the Donetsk region, and were preparing to bring "local eyewitnesses". The Russian Defense Ministry was trying to involve media representatives from France, the United States, Germany, Japan, Greece, China, Belarus, India, Venezuela, Bulgaria and the UAE to join the "press tour".

Luhansk region During the day, the Russian troops opened fire 15 times on residential facilities in the region, [reported](#) the Luhansk Regional Military Administration Head Serhii Haidai. As a result of the shelling, 12 multi-apartment buildings and trade pavilions were destroyed. In the villages of the Popasna community, the enemy fired missiles and bombs from Su-35 fighters, and the damage reported includes destroyed houses in the settlements of Zolotarivka, Komyshuvakha, Vrubivka, and Hirske. In [Severodonetsk](#), the Russians opened fire on the Azot chemical industry facility and a hospital.

Kharkiv region As the Russian troops were pushed away in the Kharkiv region, there was no shelling on the city of Kharkiv on May 17, but the enemy continued to attack settlements in the region, [reported](#) the Kharkiv Regional Military Administration Head Oleh Syniehubov. [According to](#) the General Staff of the Armed Forces of Ukraine, the enemy focused on defending its positions and preventing further advance of the Ukrainian troops. The aggressor was carrying out artillery strikes on the settlements of Tsyrukun, Ruski Tyshky, Cherkaski Tyshky and Pytomnyk; in addition, the village of Pechenihi was attacked and 1 civilian was injured.

Sumy region On the morning of May 17, the enemy fired on the positions of the Ukrainian troops and civilian infrastructure from the territory of Russia, as [reported](#) the Sumy Regional Military Administration Head Dmytro Zhyvytskyi. About 70 explosions were recorded in the direction of the village of Boyaro-Lezhachi, 6 near the village of Sopych, and 5 near the town of Esman, the shelling of the city of Seredyna-Buda continued. Fires caused by shelling broke out

along the border. On the morning of May 18, the enemy [fired on](#) the village of Dmytrivka (Okhtyrka district), a private house was destroyed, but no one was injured.

Chernihiv region

On May 17, two cases of enemy fire in the border areas of Chernihiv region were recorded, as the State Border Guard Service of Ukraine [reported](#). The Horodnya district came under mortar fire, where two dozen mortar mines fired from the Russian territory exploded. In addition, 2 Russian attacks on the border territory of their country were recorded.

Odesa region

On the morning of May 18, another missile strike was launched on the Odesa region from the Black Sea, as the Operational Command "South" [reported](#). According to preliminary information, there was no significant damage or casualties reported. On the night of May 17, the Russian occupiers once again [launched](#) a missile strike on the railway bridge over the Dniester estuary close to the town of Zatoka. Due to significant damage, the operation of the bridge was impossible, and repair works would require a long time and high cost.

Mykolaiv region

On the morning of May 18, the Russian troops launched a missile strike on the city of Mykolaiv, as a result of which destruction and fire were recorded in the residential sector, and at least one person was injured, as the State Emergency Service of Ukraine [reported](#). [According to](#) the Operational Command "South", a Russian intelligence network was discovered and neutralized in the city, which was to ensure the penetration of enemy's sabotage and reconnaissance groups. [According to](#) the Mykolaiv Regional Military Administration, as of May 18, since the beginning of the Russian invasion, 3,483 residential facilities were partially or completely damaged in the region, in particular 2,461 facilities of housing stock, 283 electricity, 142 gas, 53 heat and 16 water supply facilities.

Kherson region

The enemy continued to put pressure on the residents of the occupied territories, agitating to support living in a quasi-formation "Kherson People's Republic" or "province" within Russia, as the Operational Command "South" [reported](#). The Russian Deputy Prime Minister Marat Khusnullin had visited the occupied region and [said](#) it would be included in the "Russian family". The invaders were introducing a system of permits to limit the ability for civilians to leave the region, and the information and psychological operations of the occupiers were aimed at suppressing the local resistance. The occupiers continued to rob businesses and facilities in the region, including the [removal](#) of stolen art and antiques from museums and private collections to annexed Crimea.

Zaporizhzhia region

[According to](#) the Zaporizhzhia Regional Military Administration, as of May 18, 1,082 households in the region were completely destroyed or partially damaged. As a result of the shelling in the city of Huliaipole and the village of Preobrazhenka (Polohy district), low and medium pressure gas pipelines were damaged; in the city of [Orikhiv](#), outbuildings were on fire. In the village of Kyrylivka, the coast of the Azov Sea was mined and multiple rocket launch systems "Grad" deployed on the territory of recreation centers. The occupiers continued to [detain](#) Ukrainian citizens; as of the evening of May 17, 117 people were held hostage (another 163 were released from captivity).

Dnipropetrovsk region

The Russian troops launched two missiles on the city of Dnipro, one of which hit and destroyed a transport infrastructure facility, the other one was shot down by the Ukrainian air defense forces, but the wreckage fell on a private yard and injured a person, [reported](#) the Dnipropetrovsk Regional Military Administration Head Valentyn Reznichenko.

Forest resources

The Russian troops were deliberately deteriorating the environment and destroying Ukrainian nature, as the NGO "Ukrainian Environmental Protection Group" [reported](#). In particular, the deliberate burning of forests and the ban on rescuers and residents to extinguish fires in forests and other ecosystems were reported. The first cases of arson were recorded on March 12-14 in the Chernobyl NPP Exclusion Zone, where 15,000 hectares of forests (including those radioactively contaminated) were destroyed by fire. No less large-scale fires were taking place in the Kherson region (the Black Sea Biosphere Reserve and the Sviatoslav White Coast National Nature Reserve) and in the Donetsk region (the Svyati Hory National Nature Reserve). Due to the increase in average daily temperatures, a growth in the number of fires was expected.

Nuclear and Radiation Safety:

As of 08:00 on May 18, all operating NPPs of Ukraine were operating normally; radiation, fire and environmental conditions at station sites and adjacent areas were within standards.

At an online high-level meeting with the European Commission and the EU member states operating nuclear power plants with VVER-type reactors, the State Nuclear Regulatory Inspectorate (SNRIU) [presented](#) Ukraine's experience in diversifying nuclear fuel supplies, namely the implementation and operation of Westinghouse nuclear fuel, which partially replaced the fuel of Russian TVEL. In addition, the SNRIU conducts a state expertise of nuclear and radiation safety for "Conceptual technical solution for the implementation of VVER-440 fuel assemblies manufactured by Westinghouse at the Rivne NPP Units 1 and 2".

Chornobyl NPP Exclusion Zone

On May 17, forest [fire](#) erupted near the village of Strakholissia close to the Exclusion Zone. 26 specialists of the State Emergency Service of Ukraine and 6 units of special equipment were involved in extinguishing the fire, which was complicated by strong winds. As of 09:35 on May 18, the fire was extinguished on the area of 45 hectares.

Also in the Exclusion Zone, in the Opachychi Forestry (near the Zelenyi Mys checkpoint) a [large-scale fire](#) continued, which was complicated by strong winds and limited technical resources of rescuers, as much of the firefighting equipment was destroyed or stolen by the occupiers during their retreat from the Kyiv region. According to the monitoring system of Ecotsentr SSE, the radiation background remains within the controlled standards.

To [remind](#), anti-accident drills have been resumed at the ChNPP site, with practical actions of the operational personnel and interaction during a fire at the facility with the fire and rescue unit and the military unit of the National Guard of Ukraine trained.

Zaporizhzhia NPP

For the 76th day in a row, the Zaporizhzhia NPP and the satellite city of Energodar have been under the control of Russian terrorists, who are constantly exerting physical, psychological and informational pressure on the station's employees and 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 18, the radiation background on the territory of the ZNPP industrial site and the sanitary protection zone of the station remained within the [standards](#); gamma background in the Zaporizhzhia region was also [stable](#) (7-13 µR/h) and did 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

Over 2 months, Ukraine's power system has been stably operating in trial synchronous mode with the Continental Europe network (ENTSO-E). Since May 17, the Kharkiv CHP-5 [resumed](#) electricity production, which increased the resilience in the northern subsystem of Ukraine's Integrated Power System (IPS). In addition, the Kharkiv CHP-5 has the opportunity to use the flexible capacity of its unit 1 and resume the provision of auxiliary services (frequency control and active power reserve) in the IPS.

Commercial exports of electricity to Poland via the Dobrotvirska 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, the maximum volume reached 150 MW. In addition, there are technical [cross-border](#) flows between the energy systems of Ukraine and Eastern European countries (Romania, Hungary and Moldova).

The current cross-border capacity between the power system of Ukraine and ENTSO-E is about 2 GW, and potentially can be increased to 4-5 GW. However, the trial mode of synchronous operation does not provide for full-fledged commercial exports/imports of electricity. To speed up the resolution of this issue, the Ukrainian party [held a meeting](#) with the ENTSO-E Chair of the Board Joachim Vanzetta, with no results yet reported.

Ukrenergo [continued](#) to restore the damaged energy infrastructure. In particular, power supply of one of the 330 kV substations in the southern region of Ukraine has been restored. Repairs of 330 kV and 750 kV lines in the north of Ukraine were underway. The TSO crew together with sappers inspected the lines' sections, damaged supports were dismantled, and new ones were assembled

and installed. In the central region, at the 750 kV substation, repaired equipment was tested before commissioning. In the liberated areas of the eastern region, accompanied by the military, two 330 kV lines were being inspected. At the same time, high-voltage equipment was being restored at two 330 kV substations, with switches and disconnectors being repaired.

Electricity market performance

Day-ahead market (DAM): As for May 18, the DAM weighted average settlement price [virtually has not changed](#) and amounted to 2,347.27 UAH/MWh (-0.1% vs the previous trading day). At the same time, the declining dynamics of exchange prices in the Eastern European markets led to a decrease in the gap with Ukraine. The prices in Slovakia and Hungary were 2.9 times [higher](#) than the DAM Base price index of Ukraine, while the spread to Romania and Poland stood at 2.4 times.

The total volume of trading on DAM continued to [decreased](#) considerably to 13,421.4 MWh (-16.2% vs the previous day), although still remained low. At the same time, the declining dynamics of supply to 70,925 MWh (-17.7% vs the previous day) led to stabilizing the DAM market surplus - the gap with the volume of purchase bids stood at 5.3 times. The [structure of electricity purchase](#) on DAM has changed slightly: 75.4% belonged to suppliers, 24.4% to system operators, 0.2% to producers and traders.

Intraday market (IDM): On May 17, the weighted average price of electricity on IDM [decreased](#) slightly and amounted to 2,715.5 UAH/MWh (-3.4% vs the previous day). At the same time, the total volume of trading increased to 550.1 MWh (+323% vs the previous day). Meanwhile, the opposite dynamics of declining supply - up to 35,104.7 MWh (-1.4%) led to continued significant reduction in market surplus: the gap with the volume of purchase bids decreased from 264 to 68 times. In the [structure of purchase](#), the dominant part (99%) was occupied by suppliers, 1% by network operators.

Disruption and resumption of supply

[According](#) to the Ministry of Energy, as of May 17, 781 settlements were disconnected from electricity, a total of app. 633,500 consumers. During the day, electricity supply was resumed to app. 24,400 consumers

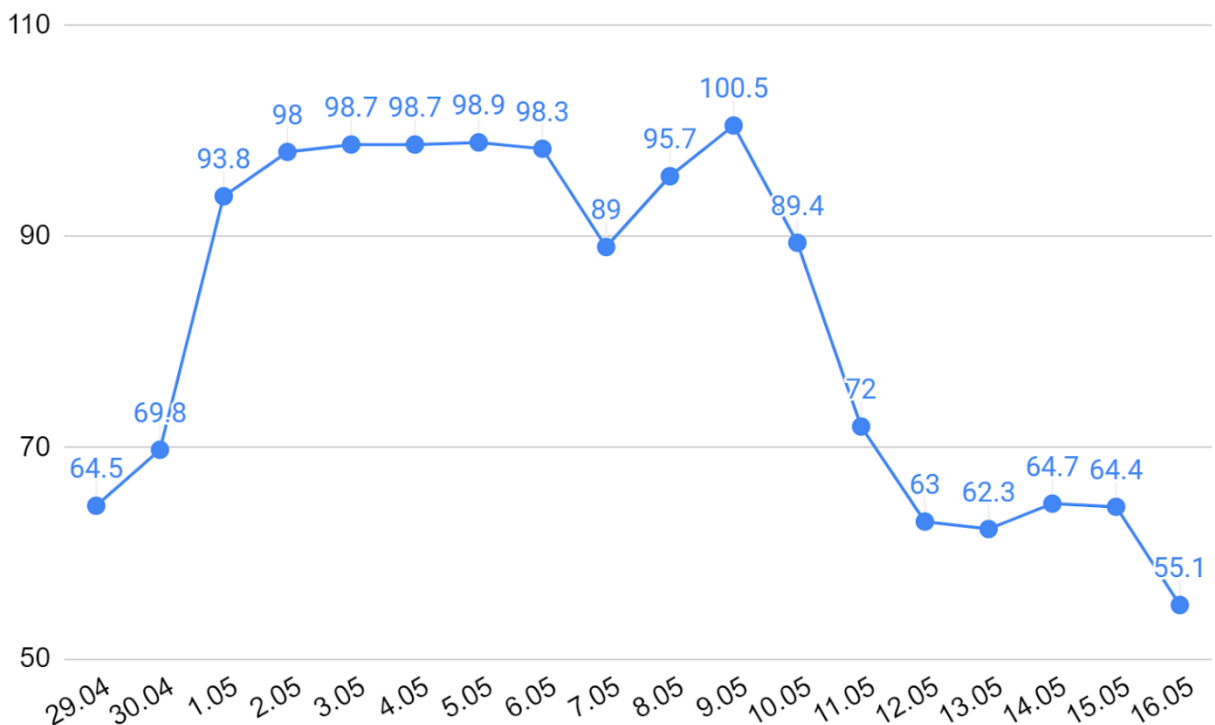
Large-scale power supply disruptions and, consequently, active recovery works were taking place:

- in the **Donetsk region**, according to DTEK, supply to 4,600 consumers in 11 settlements was resumed during the day, while 281 settlements ([according](#) to the Cabinet of Ministers, 325,900 consumers in total) were left without electricity supply;
- in the **Luhansk region**, [according](#) to the Region Military Administration, 42 settlements (incl. 1 partially) were disconnected and 117,510 consumers were left without electricity supply; 818 transformer substations were disconnected;
- in the **Kharkiv region**, [according](#) to the Cabinet of Ministers, 73,200 consumers were still with no electricity supply; while supply to 2,700 consumers was resumed during the day;
- in the **Kyiv region**, [according](#) to the Cabinet of Ministers, supply to 5,700 consumers was resumed during the day;
- in the **Zaporizhzhia region**, as of 07:00 on May 18, 21,118 consumers in 68 settlements were [left without electricity supply](#); supply for 26 consumers was resumed during the day;
- in the **Mykolaiv region**, [according](#) to the Regional Military Administration, 89 settlements (incl. 4 partially) were left without electricity supply;
- in the **Kherson region**, [according](#) to the Cabinet of Ministers, supply to 3,700 consumers was resumed during the day;
- in the **Sumy region**, [according](#) to the Cabinet of Ministers, supply to 1,300 consumers, was resumed during the day;
- there was no up-to-date aggregated information on power supply in the **Dnipropetrovsk, Chernihiv and Odesa regions** at the time of the review preparation.

Gas Sector:

As of May 16, the transit of Russian gas through the territory of Ukraine decreased by 11.3 mcm compared to the previous day and amounted to 55.1 mcm. These volumes are twice less than 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 0.67 mcm.

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



Source: [GTSOU](#)

Disruption and resumption of supply

The **Donetsk, Luhansk, Zaporizhia, Kharkiv, Kyiv, Chernihiv and Mykolaiv regions** had the most challenging situation in gas supply. [According](#) to the Cabinet of Ministers, as of May 17, 196,000 consumers were left with no gas supply. Gas supply to 10,700 consumers was restored during the day.

In the **Donetsk region**, the local DSO [reported](#) that networks for another 233 consumers were destroyed due to hostilities. However, operational repairs managed to prevent the interruption of gas supply to 150 consumers.

[According](#) to the **Luhansk** Regional Military Administration Head Serhii Haidai, 36,167 consumers remained with gas supply. However, some people may have already left the region due to active hostilities. Therefore, the actual number of consumers who can use gas may be even less.

In the **Kyiv region**, the local DSO employees [completed](#) restoration of gas distribution in 120 settlements to almost 150,000 consumer facilities. As consumers return to their homes, specialists promptly inspect and resume gas supply on request. If necessary, repairs are carried out on intra-

house networks. The DSO returned to a regular way of operation, and the increased number of emergency crews remained to work in the Bucha, Irpin, and Hostomel communities.

In the **Zaporizhia region**, as of the morning of May 18, 69,981 consumers in 88 settlements [remained](#) without gas supply. Last night, low and medium-pressure gas pipelines were damaged by shelling in the city of Huliaipole and the village of Preobrazhenka (Polohy district). At the same time, in the city of Orikhiv, the damage to a low-pressure gas pipeline, caused earlier that day by shelling, was eliminated.

In the **Kherson region**, as of 12:00 on May 17, 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 18, due to Russian aggression, 142 gas infrastructure facilities were [damaged](#), and 3,254 consumers were left without gas supply.

In the **Kharkiv region**, the local DSO [reported](#) that numerous repairs of gas pipelines were conducted in the last two days, and gas supply to 5,000 homes in Derhachi and Mala Danylivka was restored. In the Zolochiv community, 7 villages were reconnected; restoration works continued.

In the **Sumy region**, the local DSO [reported](#) gas supply has been restored to 3,832 households in the region since the beginning of the war.

Operational information on gas supply in the **Chernihiv region** was not available at the time of the review preparation.

Countermeasures of Ukrainian Companies and Public Authorities

The First Deputy Prime Minister - the Minister of Economy of Ukraine Yulia Svyrydenko [announced](#) that, after discussions with the representatives of oil products market, the Cabinet of Ministers temporarily suspended price regulation, so that operators can provide the market with the necessary supply. According to the government's expectations, the maximum retail prices for diesel fuel shall not exceed 58 UAH/liter, and the prices for petroleum will not exceed 52 UAH/liter. Svyrydenko also stated that, as soon as market operators start abusing their position, sanctions will be applied to them.

On May 17, the Energy Community Parliamentary Plenum [has met in Brussels](#). The main topic became Europe's energy security in the context of the Russian invasion of Ukraine. Parliamentarians of the Energy Community Contracting Parties and the European Parliament discussed how to strengthen Europe's energy security following Russia's invasion of Ukraine, support for the energy sector of Moldova and Ukraine and enhanced European energy market integration. The participants also exchanged views on accelerating the implementation of the European Green Deal.

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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