

INFORMATION DIGEST

NOVEMBER 29- DECEMBER 3, 2023



Status of the Ukrainian nuclear power plants and the nuclear industry of Ukraine

- According to SE NNEGC Energoatom, Currently, on November 29 - December 3, power units of Ukrainian nuclear power plants, which are located on the territory controlled by Ukraine, worked to meet the needs of the population and the country's economy.
- In the night, November 30, several explosions occurred near the Khmelnytsky NPP. This was stated by the IAEA Director General Raphael Grossi in his report. "The IAEA team monitoring the situation at the Khmelnytsky Nuclear Power Plant (NPP) reported that late yesterday evening, while in their premises, they heard several explosions nearby for 20 minutes," the statement said. The report notes that the plant was not damaged, but the incident shows that all of Ukraine's nuclear power plants remain at risk as the war is continuing.

Current situation on Zaporizhzhya NPP

- According to the SE NNEGC Energoatom in the evening of December 1 two power transmission lines "Zaporizhzhya NPP — Dniprovsk" and "Zaporizhzhya TPP — Ferosplavna", which fed the plant from the Ukrainian power system, were cut off and left without power. Due to a full blackout, the nuclear power plant switched to powering in-house needs from 20 diesel generators. Later, 8 of them continued operating.

As previously warned by Energoatom and the Ukrainian Regulator, incorrect, erroneous, and often deliberately risky operation of the equipment and operating modes of ZNPP reactor units, in particular at power unit 4, can lead to catastrophic consequences. This is especially dangerous with constant risks of power outages and blackouts at the power plant.

The greatest threat to safety in this state exists at power unit 4 and is caused by the fact that the occupationists continue to keep it in a hot shutdown state, contrary to the terms of the operating licence for the reactor facilities granted by Ukrainian nuclear and radiation safety regulatory body – SNRIU. NPP blackout accident leads to loss of power supply of the reactor coolant pumps which cool the core. Such a mode is difficult for the reactor facility, its duration is limited by the design, and an urgent moving of the unit to a cold shutdown state it required.

The prompt actions of Ukrainian specialists, who restored the power supply to the plant from the Ukrainian energy system, actually salvaged the situation.



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According to President of Energoatom Petro Kotin, last night ZNPP was on the verge of a nuclear and radiation accident. At the same time, a significant risk remains. Several technical measures should be carried out urgently at ZNPP to ensure the restoration of the design power supply for the plant's in-house needs.

"We understand that the occupationists are not interested in safety at ZNPP. For almost 2 years of occupation, they did not manage to build an ordinary auxiliary boiler for steam generating, which exists at any other nuclear plant. Instead, contrary to the norms and rules of nuclear and radiation safety, they continue to keep ZNPP power unit 4 in a hot shutdown state, operating the reactor plant and complex energy facility in the beyond-design mode of a usual boiler for steam generation. We understand that they will continue to create dangerous situations, by blackmailing the whole world with a nuclear and radiation accident," said Petro Kotin.

SE NNEGC Energoatom once again calls on the international community to make efforts as soon as possible to return the temporarily occupied Zaporizhzhia NPP to full control of Ukraine, because this is the only way to guarantee the safe operation of Europe's largest nuclear facility.

- IAEA Head Grossi on another blackout at ZNPP: It's a reminder of fragile nuclear safety situation at plant. "The latest outage of external power supply (at ZNPP - Ed.) is another reminder of the fragile nuclear safety and security situation at the plant, which can be affected by events far from the site itself," Grossi said. He added that the IAEA continues to do everything possible to prevent a nuclear accident. "I also call on all parties not to take any action that could endanger the plant," Grossi said. It is noted that this was the first complete external power outage at ZNPP since 22 May this year.

Current situation on Chornobyl NPP and in the Exclusion Zone

- On November 29 - December 3, 2023, the radiation situation at the ChNPP site was without changes. The monitored parameters of the equipment were within the boundaries set by the technological regulations. Operating personnel continues to ensure nuclear and radiation safety.
- The Chornobyl nuclear power plant presents a series of videos designed to destroy or confirm popular myths around the ChNPP. The first video premiered on December 1, 2023. Available now on the Chornobyl NPP Youtube channel by the link: <https://youtu.be/m7XDaUmxnVs> [with English subtitles].

War in Ukraine

- On December 3, 2023, is the 648 day of the resistance of Ukraine to the Russian military invasion.
- According to the General Staff of the Armed Forces of Ukraine, Armed Forces of Ukraine are holding defense in 6 directions in the eastern and southern parts of Ukraine.



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- In the east of the country Ukrainian Armed Forces in active defence in Bakhmut direction. russians are currently actively using aviation here when the weather permits. Before the assault, russian troops shells the positions of Ukrainian Army. The main fighting is taking place both to the south and north of the city of Bakhmut. The Ukrainian military are in active defence, but they are moving to offensive actions at the first opportunity.
- Also, russia has increased the activity of his own infantry in the Tavria direction, in particular, near the city Avdiivka, where heavy fighting is taking place. The activity of enemy aircraft decreased. Fighting continues in the cities of Maryinka and Novomykhailivka areas. The statement of the occupiers about the alleged advance in Mariinka is untrue.
- On November 30, russians launched a missile attack on Donetsk region. A missile hit a multi-story building in Novohrodivka. Rescuers recovered the bodies of two people from the rubble.
- The situation in the north directions remained unchanged. There were no signs of offensive groups forming. Certain units of the belarusian Armed Forces are performing tasks in the areas bordering Ukraine. On 2 December, civilians in Semenivka community were wounded as a result of shelling on the border of Chernihiv region. A family with a 4-year-old child was injured.
- In the south Defense forces continue to hold positions on the left bank of the Dnipro River in the Kherson region.
- On December 3, the russian army shelled one of the settlements in the Kherson district, probably with mortars. One person was killed. On 30 of November, Russian troops fired 91 times at Kherson region.
- On the night of December 3, 2023, russia attacked with 12 Shahed strike UAVs from the Primorsko-Akhtarsk area of the russian federation and an X-59 guided missile from the airspace of the Belgorod region. 10 of them were destroyed.
- On the night of December 2, 2023, russians attacked Ukraine with 11 Shahed UAVs from Cape Chauda (Crimea) and a guided missile from the airspace of the occupied Zaporizhzhia region. The Kh-59 missile and 10 of 11 "Shaheds" were destroyed. At the beginning of the night, russians launched several groups of attack drones in the direction of Odesa region: infrastructural object was hit, there was fire.
- Poland plans to transfer over 50 Krab self-propelled howitzers to Ukraine. Poland has already handed over 18 Krab self-propelled howitzers to Ukraine. Another 56 Krab howitzers are being prepared for delivery.

Sources: t.me/V_Zelenskiy_official, t.me/energoatom_ua, Centre for Strategic Communication, Ministry of Defense of Ukraine, the National Police of Ukraine [censor.net](https://www.censor.net), [Ukrainska Pravda](https://www.Ukrainska Pravda), [radiosvoboda.org](https://www.radiosvoboda.org), [eurointegration.com.ua](https://www.eurointegration.com.ua)



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UkrNS News

- The UkrNS separate subdivision in the satellite city of the South Ukraine NPP Yuzhnoukrainsk has launched a new educational project for schoolchildren "How a nuclear power plant works".

The goal of the project is to increase trust among schoolchildren in the use of nuclear energy, as well as inform young people about the main production processes taking place at nuclear power plants. Such projects are also implemented among schoolchildren for career guidance purposes - to encourage them to consider the possibility of higher education in nuclear fields.

Seventh grade students from Yuzhnoukrainsk schools and lyceums are the first to participate in the project. The authors of the project plan to scale up their idea and hold competitions among schoolchildren in a 30 km zone around other Ukrainian nuclear power plants.

The project is implemented in the format of dynamic mini-games, which are an interpretation of real production processes at nuclear power plants. In particular, these are such as "Construction of a nuclear power plant", "Installation of pipelines", "Loading of nuclear fuel", "Spin the turbine!", "Connection to the power system". Mini-models of nuclear power plant equipment were developed and manufactured especially for the competition.

During the event, the participating teams receive brief information from the presenters about each game, in particular about how the construction of a nuclear power plant occurs, about the methods of connecting and fastening the pipelines of a nuclear power plant, how nuclear fuel is loaded, about the operation of turbines, about the schemes and types of open switchgears at the nuclear power plant, and then quickly complete small practical tasks for each block of information.

For example, during the game "Loading Nuclear Fuel", participants use mock-ups to simulate the process of loading improvised fuel rods into an improvised reactor: with the help of coordinated team actions, participants control the contents of the cargo (fuel rods) and its release. Upon completion of the mini-games, teams also undergo a short test on the topics of the event. Teams gain points for completed tasks and test results.

The winners of the game receive prizes, and all participants receive souvenirs from the organizers. The first games have already received positive feedback from schoolchildren and great interest in the operation of nuclear power plants.



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DEAR COLLEAGUES

THE UKRAINIAN NUCLEAR SOCIETY IS ACTIVELY ENGAGED IN VOLUNTEER ACTIVITIES, HELPING OUR COLLEAGUES FROM NUCLEAR POWER PLANTS, REFUGEES FROM THE ZAPORIZHZHIA NPP, AS WELL AS OUR MEMBERS WHO JOINED THE ARMED FORCES TO DEFENDED OUR COUNTRY.



LINK TO SUPPORT

SUPPORT THE ANS-ENS UKRAINIAN NUCLEAR WORKERS HUMANITARIAN FUND



PRESENTATION ABOUT VOLUNTEER ACTIVITIES

WE ARE VERY GRATEFUL FOR ANY HELP AND SUPPORT!

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Support Ukraine's nuclear workers and their families impacted by war.

