

# INFORMATION DIGEST

JANUARY 11-15, 2024



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

- According to SE NNEGC Energoatom, on January 11-15, 2024 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. The IAEA teams at the Rivne, Khmelnytsky, South Ukraine nuclear power plants (NPPs) and the Chernobyl site continue to report that nuclear safety and security is maintained despite challenges related to the multiple missile attacks on Ukraine in the past week.
- The IAEA experts at the Khmelnytsky NPP were once again required to take shelter several times over the weekend of 6 and 7 January. The teams at the Rivne and South Ukraine NPPs were also required to take shelter last Saturday. At the Chernobyl site, the team reported hearing explosions in the distance throughout the past week.
- Also this week, the IAEA delivered radiocommunication systems to the Rivne and South Ukraine NPPs. The equipment was procured using funding from the United Kingdom. This was the 34th IAEA delivery of nuclear safety and security-related equipment to Ukraine that aims at ensuring diverse and reliable communication means are available at the sites when needed.

## Current situation on Zaporizhzhya NPP

- According to the SE NNEGC Energoatom on January 11-15, 2024, the Zaporizhzhya NPP received power for its in-house needs from the energy system of Ukraine. On January 11-15, 2023, the exposure dose rate of gamma radiation in the area where the Zaporizhzhya NPP complied with current standards.
- International Atomic Energy Agency (IAEA) experts at Ukraine's Zaporizhzhya Nuclear Power Plant (ZNPP) have not yet been given access to the reactor halls of units 1, 2 and 6, hindering their ability to monitor the nuclear safety and security situation at the plant, as well as the five concrete principles established at the United Nations Security Council, IAEA Director General Rafael Mariano Grossi said in his Statement on January 12.

Following a successful rotation of IAEA experts on January 11 – the fifteenth team of experts to arrive at the plant since the IAEA Support and Assistance Mission to the ZNPP (ISAMZ) was established in September 2022 – the new team repeated the request for access to the reactor hall of unit 6.

The ZNPP did not give permission for that access today, stating that the reactor



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hall is “sealed”. The ZNPP informed the team that it was not denying access and has instead proposed that the team access the area in about a week’s time.

In December 2023, the ISAMZ team was refused access to the reactor hall of units 1, 2 and 6 which was the first time that the IAEA experts have not been granted timely access to a reactor hall that was in cold shutdown. Until then, all ISAMZ teams had been able to access the reactor hall of any unit in cold shutdown, without the plant making any reference to the status of containment as being “sealed”.

“These restrictions on the experts’ timely access to the ZNPP are impeding the IAEA’s ability to assess the safety and security situation, including confirming the reported status of the reactor units, spent fuel ponds and associated safety equipment, independently and effectively,” Director General Grossi said.

Also, since 18 October last year, ISAMZ teams have been unable to access parts of the turbine hall of each unit. Most recently, access was again restricted at the turbine halls of units 1 and 2 on Wednesday, 10 January.

“The nuclear safety and security situation remains very precarious, and I reiterate my request for unhindered access so that the IAEA can assess the Seven Pillars for nuclear safety and security and monitor adherence to the five concrete principles to help ensure nuclear safety and security at the ZNPP in order to prevent a nuclear accident and ensure the integrity of the plant,” Director General Grossi added.

The new team of IAEA experts will observe the ongoing maintenance situation at the ZNPP. Following observation of deposits of boric acid on the valves, a pump and on the floors of several of the safety system rooms of unit 6 on 22 December, the IAEA team conducted a follow-up walkdown on 9 January to assess the status. Borated water is used in the primary coolant to help maintain nuclear safety functions. Although leaks may occur, prompt investigation, repair, and clean-up are crucial to prevent further damage and avoid any impact on safety.

During its walkdown, the team noted a significant reduction in boric acid deposits compared to the December 22 walkdown, with the leak also considerably diminished. However, some deposits persisted in three rooms of the unit 6 containment building, one at the same level and two showing significantly reduced levels.

The team was informed that the cause of the leak was due to micro-cracks in the boron tank due to ageing, and a blockage in the leak detection pipe. Whilst the blockage has been repaired, some smaller leaks persist as a result of the micro-cracks in the boron tank. The ZNPP stated that the leak rate is currently within technical specifications, and that the micro-cracks can be repaired after draining the tank, which will be addressed during scheduled maintenance. The IAEA team



will continue to monitor the situation.

Additionally, this week the IAEA experts at the ZNPP accessed the pumping stations for units 3 and 4 and the main control rooms of units 1 to 6. All nine mobile diesel boilers installed at the plant were utilised during the past week to provide additional heating needs during winter.

As the winter weather gets colder, IAEA experts reported that the ambient temperature at the ZNPP has dropped as low as  $-10^{\circ}\text{C}$  in the mornings. The team reported that this fall in temperature had no impact on the operation of the 11 wells providing cooling water for the sprinkler ponds used for reactor cooling and other nuclear safety and security functions. The flow level of water remained constant.

Five of the ZNPP's six reactors remain in cold shutdown, while unit 4 is in hot shutdown to produce steam and heat, including for the nearby town of Enerhodar, where most plant staff live.

The new ISAMZ team continues to pay close attention to the staffing situation at the plant, in particular the staff operating in the main control rooms and those responsible for maintenance of critical safety infrastructure and processes.

Today, the new team of experts conducted a walkdown of the site including the four new diesel boilers. They observed the new equipment and were informed that the installation has been completed and commissioning activities have commenced. These new diesel boilers are intended to generate steam to meet the ZNPP's needs. In daily reminders of the physical proximity of the conflict to the ZNPP, the IAEA experts there continue to hear loud explosions at varying distances to the plant.

### **Current situation on Chernobyl NPP and in the Exclusion Zone**

- On January 11-15, 2024, 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.

### **War in Ukraine**

- On January 15, 2024, is the 691 day of the resistance Ukraine to the russian military invasion.
- According the General Staff of the Armed Forces of Ukraine, the operational situation in the east remains difficult. russians continues offensive actions at the Kupiansk, Lyman and Bakhmut directions.
- russians actively attack with aircraft and continue assaults. Situation is hottest in Avdiivka and Marinka sectors. Approximately 40,000 occupiers operate in Avdiivka direction. Here russian military are trying to use equipment from deep because it is immediately destroyed on the front line. russian forces continue to actively use



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drones at the front.

- In the south russian troops deployed an additional 10,000 occupiers from new units in the Mariupol direction. Contract recruits will be at the front in a few weeks. Currently, they are transporting machinery and equipment.
- In the Zaporizhzhya sector, Ukrainian troops repel constant attacks. In the Kherson sector, the Defense Forces of Ukraine continue to expand their foothold. Despite significant losses, the occupants do not give up trying to drive our units from their positions. russian troops are trying to recruit both the marines and the landing forces, which indicates a desire to increase the effectiveness of assault operations.
- In the north of Ukraine, the russians maintains a military presence in the border areas, conducts active sabotage activities in order to prevent the transfer of our troops to threatening directions, increases the density of mine-explosive barriers along the state border in Belgorod region.
- During the day on 14 January, russian occupants attacked the Nikopol district of the Dnipro region [the cities in central Ukraine] with artillery and kamikaze drones. Nikopol and the Marhanets community were under attack.
- russians forces struck the city of Kherson from the occupied left bank. Mostly the central part of the city hit.
- On 13 January, the russian military attacked Ukraine with air strikes. Multi-apartment building, 23 private houses and four shops damaged as result of enemy missile debris in the city of Chernihiv.
- russia has carried out 626 chemical attacks since beginning of large-scale war. Up to 10 cases are recorded daily - Ukrainian Armed Forces Support Forces.
- The security agreement between Ukraine and the UK provides for an increase in military support to 2.5 billion pounds. Deputy Head of the Ukrainian Military Intelligence [DIU] Vadym Skibitskyi said. The deputy head of the DIU noted that the invaders are trying to keep a certain strategic reserve - about 30% of the reserves that they have. This was stated by British Defense Secretary Grant Shapps. As noted, he believes that 2024 should be a "turning point" and for Ukraine a year when "the fate of the nation can be decided." He also detailed the points of the defense agreement between Ukraine and the UK and clarified that the country has already trained 60,000 military personnel of the Armed Forces of Ukraine since the beginning of the great war.

*Sources: [t.me/V\\_Zelenskiy\\_official](https://t.me/V_Zelenskiy_official), [t.me/energoatom\\_ua](https://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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***On January 2, Russia launched a massive missile attack on Ukraine, in particular, destroying a residential building in one of the central districts of the capital Kyiv.***

***Among the survivors is 62-year-old Oleg Gontarenko, who has been disabled since birth. The man's height is 1.05 meters. Oleg walks on crutches. But he traveled by car. These were his "legs". There was nothing left of the car after the attack.***

***Now Oleg needs help, because the things he needed and his car burned down. The apartment suffered the most damage - only some clothes and crutches were pulled out.***

***When a Russian missile flew into the yard, he was having breakfast in his room. This saved him, because the epicenter of the explosion was under the kitchen windows. Oleg sat under the rubble of a destroyed house for almost an hour. Everything around was on fire.***

***He couldn't get out on his own, although he tried several times to climb over the mountains of a mess of furniture, concrete, glass and things. Rescuers pulled him out. Now Oleg is in the hospital, but he has nowhere to return.***

***The man opened a collection for new housing and over these weeks the Ukrainians collected an amount for Oleg that was even higher than expected and the collection is still ongoing.***



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*Saving Oleg Gontarenko*

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.

SUPPORT THE ANS-ENS UKRAINIAN NUCLEAR WORKERS HUMANITARIAN FUND

WE ARE VERY GRATEFUL FOR ANY HELP AND SUPPORT!

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PRESENTATION ABOUT VOLUNTEER ACTIVITIES



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