

Russia is destabilising the energy system in Ukraine

Sławomir Matuszak

On 10 October, Russia launched massive missile and drone attacks across Ukraine. A total of 84 rockets (43 of which were shot down) and 24 drones (13 shot down) were launched. 19 people were killed and 105 were wounded. The main targets were critical infrastructure facilities (power plants, thermal power plants and substations) in 11 regions and the capital. Among those damaged were the Burshtyn (Ivano-Frankivsk region) and Trypil'ska (Kyiv region) power plants, as well as thermal power plants in Kyiv, Lviv and Kharkiv. As a result, there was a power outage in most localities both in the east of the country (Kharkiv, Sumy and Poltava regions) and in the western part of the country (Lviv, Ternopil and Ivano-Frankivsk regions). The attacks not only involved energy-related infrastructure—buildings and streets in the centre of Kyiv were also shelled. Ukrenergo (the grid operator) decided to impose emergency power outages (including in the capital), and the government urged people to limit their electricity consumption between 5 and 10 pm. Energy Minister Herman Halushchenko announced the suspension of electricity exports from 11 October in order to stabilise the voltage on Ukrainian grids. Russian attacks continued on 11 October, hitting, among others, the Ladyzhyn power plant (Vinnytsia region) and two power facilities in Lviv.

Commentary

- Although the Russians have hit critical infrastructure facilities before, the current attack is unprecedented in scale. For the first time since the outbreak of the war, it succeeded in destabilising the functioning of power grids across half the country, including in the far-flung regions of western Ukraine. Russia's goals are to create a humanitarian catastrophe – caused by a lack of electricity, water and communications – and to paralyse the Ukrainian army's facilities. It remains an open question whether Russian forces have the capacity to continue missile attacks with such intensity for an extended period of time.
- A detailed assessment of the scale of the damage is made difficult by the fact that the rocket fire has not ceased. Moreover, Ukraine's power plants and thermal power plants are usually very large facilities that are difficult to destroy completely, and damage to networks and substations can be repaired relatively quickly (repair work began as early as 10 October). Kyiv announced that most of the repairs could be done within a day. As recently as yesterday evening, the electricity supply was partially restored in the Kharkiv, Poltava, Odesa, Zaporizhzhia and Mykolaiv regions, as well as in Cherkasy and Khmelnytskyi. On the morning of 11 October, electricity transmission to 3,600 towns and villages was resumed, but still more than 300 remained without power. The pace of grid repairs so far indicates that it should be possible to resolve the failures fairly quickly, but

the main obstacle is the relentless attacks. According to the head of Ukrenergo, emergency power outages could last from several days to several weeks. In the Lviv region, for example, electricity was restored on 11 October, but a few hours later in Lviv itself, the power infrastructure was damaged again, depriving 30% of the city of access to electricity.

- The governments' appeals to reduce electricity consumption show that the system is unable to secure enough energy during peak consumption hours, which is most likely the reason for the decision to halt electricity exports. It will result in a tangible financial loss for Kyiv – revenues from this amounted to \$150 million in September, and the plan was to increase deliveries, so that Ukraine could ultimately expect profits from sales of up to \$2 billion a year. Withholding exports will also increase Moldova's dependence on electricity from the Moldovan GRES power plant in separatist Transnistria. This is owned by Russia's Inter RAO UES and has so far accounted for 70% of imported energy (the remaining 30% came from Ukraine).