

(status as of 12:00, February 2)

#StopRussianAggression #StandWithUkraine

Summary-

- Situation with power supply slightly improved, as one TPP unit was out into operation after emergency repair and production by hydropower plants increasing, as well as due to eather conditions. Generating capacities are sufficient to cover about 80% of consumers' needs, the expected deficit at the evening maximum load is about 19%.
- On February 2, due to the capacity deficit, the largest share of disconnected consumers was in the Volyn, Ternopil, Kirovohrad, and Chernivtsi regions. Due to hostilities, the most difficult situation with electricity supply was reported in the Donetsk, Kherson, and Kharkiv regions.
- Network restrictions apply only in the Odesa region, where Ukrenergo crews continued repairing substations and the high-voltage network. At the same time, the technical possibility was created to transmit electricity to two districts of Odesa.
- The Minister of Energy Herman Halushchenko reported that, as of February 1, Ukraine has a sufficient supply of energy resources to complete the heating season over 11 bcm of gas, about 1.2 million tons of coal.
- The CEO of Naftogaz Oleksii Chernyshov reported the signing of a grant agreement with the EBRD to purchase imported gas. Namely, 188.8 million EUR will be provided to the EBRD by the Norwegian government.
- The Ministry of Energy of Ukraine and the Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology of Austria signed a Memorandum on partnership in the field of energy transition and renewable energy sources.

- As of February 1, 144.37 million EUR were received as donations by the Ukraine Energy Support Fund, and 108 million EUR have already been disbursed, as reported by the Ministry of Energy.
- Detectives of the Economic Security Bureau (ESB) reported suspicion to the Acting First Deputy CEO of Ukrtatnafta. ESB is also investigating the facts of misappropriation and embezzlement of fuel and lubricants with an estimated value of 40 billion UAH by the former management of Ukrnafta and Ukrtatnafta.
- According to the media, the State Bureau of Investigation reported suspicion to the former Minister Ihor Nasalyk of signing agreements in favor of companies related to Dmytro Firtash resulting in 1.5 billion UAH losses to the state.

# Nuclear Safety

Energoatom <u>reported</u> that the self-proclaimed "management" of the Zaporizhzhia NPP is reducing the salaries of employees who signed contracts with the so-called Russian "operator" by almost a half (-45%). This is explained by the fact that the ZNPP is stopped and its units are not in operation. Earlier, the occupation administration announced the cancellation of employment history and vacation payments earned at the Ukrainian enterprise (Energoatom branch ZNPP).

# **Electricity Sector**

#### *Power system operation*

<u>According</u> to the Ministry of Energy, on February 2, the situation with power supply slightly improved as compared to the previous day. Due to the completion of repairs on some TPP units and weather conditions, the capacity deficit decreased. Thus, the expected deficit at the evening maximum load is about 19%.

<u>According</u> to Ukrenergo, electricity consumption has slightly decreased compared to the beginning of the week. Respectively, the deficit in the power system has also decreased, although still remains significant. Generating capacities are sufficient to cover about 80% of consumers' needs.

The loss of generation was compensated by one TPP unit being out into operation after emergency repair and increasing the electricity production by hydropower plants. Network restrictions apply only in the Odesa region. In addition, at two substations in the eastern and central regions, the repairs of transformer equipment, which was damaged by Russian missile attacks in the fall of 2022, was completed. Preparations for the commissioning of the equipment are underway and will allow additional units of TPPs to be launched.

Due to the reduction of the deficit, all distribution system operators were notified of increased consumption limits. As of the morning on February 2, the limits have not been exceeded. However, during the day, in case of non-compliance with the limits, emergency outages will be applied.

<u>According</u> to ENTSO-E, on February 2, commercial imports of electricity from Slovakia were performed at 378-427 MW (for different hours throughout the day). Capacity in the direction Slovakia->Ukraine for a total volume of 389-460 MW (for different hours) was <u>booked</u> by 3 companies: D.Trading (380-445 MW), ERU Trading (8 MW) and Avgusta (1-7 MW). In the absence of significant competition, the marginal price of access was "zero".

There was no demand at the daily capacity auction for the imports of electricity from Moldova (800 MW), capacity in other directions was not offered. At the same time, the Base DAM price indices of Eastern European countries (Poland, Slovakia, Romania, and Hungary) <u>exceeded</u> the similar index of Ukraine by 1.49-1.86 times.

## Disruption and resumption of supply

<u>According</u> to the Ministry of Energy, on February 2, due to the deficit of generating capacity, the largest share of disconnected consumers was in the Volyn, Ternopil, Kirovohrad, and Chernivtsi regions. Due to hostilities, the most difficult situation with electricity supply was reported in the Donetsk, Kherson, and Kharkiv regions.

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

- in the Kyiv region, <u>according</u> to the local DSO, on February 2, the electricity consumption limit was set at 755 MW (+4 MW as compared to February 1) during the day and 629 MW (+2 MW) for night hours, which is 53% of the demand, including households, industry, and critical infrastructure. <u>On February 1</u>, due to network overload, an accident occurred at a 10/0.4 kV transformer substation in the Bucha district. However, the specialists managed to restore power supply to consumers. The DSO reminded that, after restoring voltage following the outage, it is necessary to wait 15-20 minutes and not to turn on energy-consuming devices at the same time, as the equipment fails due to excessive load;
- in the city of Kyiv, according to the local DSO, on February 2, the volume of consumption restrictions is, on average, 1,057 MW (+7 MW) during the day and 684 MW (+1 MW) for night hours, which at the current air temperatures is 68% of the city's demand (hours of peak consumption). The set limit will allow outages under the stabilization schedules;
- in the Odesa region, according to the local DSO, on February 1, restoration works were completed on a high-voltage line, which was taken out for emergency repair on the evening of January 31, which created the technical possibility to transmit electricity from the high-voltage substation to the Kyivskyi and Prymorskyi districts of Odesa. Currently, Ukrenergo crews are continuing to repair substations and the high-voltage network. After the works are completed, the DSO will be able to restore full distribution of electricity in the city and return to the schedules of planned outages;
- in the Dnipropetrovsk region, <u>according</u> to the local DSO, on February 2, Ukrenergo set consumption restrictions at 1,280 MW (+28 MW) during the day and 1,248 (+3 MW) for night hours, which is 58% of the demand;
- in the Kherson region, according to the Regional Military Administration, as of January 31, 32 crews, i.e. 142 specialists and 55 units of equipment, were working to restore power supply. Specialists performed works on the damaged lines supplying the cities of Kherson and Beryslav, the towns and villages of Karyerne, Nova Kamyanka, Vysokopillia, Liubymivka, Arkhangelske, Pravdyne, Barvinok, and Zelenyi Hai. On February 1, power supply was restored to 399 households and 20 industrial facilities in the village of Novoberyslav and 128 consumer points in the village of Mykolaivka, which had been offline since the spring of 2022. In the village of Nova Kamyanka, the specialists restored another transformer substation, recovery continued. DTEK Renewables has restored the operation of 2/3 of the deoccupied Tryfonivska solar power plant inverters, which allows to increase generation. For rapid reconstruction, a construction site has been set up at the station, and local residents are involved in the activity. In order to increase the volume of electricity output, negotiations with the local DSO regarding the repair of equipment at the substation are ongoing;

- in the Mykolaiv region, <u>according</u> to the Regional Military Administration, as of February 2, 955 (+3 during the day) electricity supply facilities were partially or completely damaged, while 14 settlements of the Bashtanka and Mykolaiv districts remained completely offline, and 7 settlements - partially;
- in the Zaporizhzhia region, <u>according</u> to the local DSO, as of 07:00 on February 2, 24,015 consumers in 72 settlements remained offline (with the exception of the temporarily occupied territory). During the day, specialists restored power supply to 5,500 consumers in the city of Zaporizhzhia, which due to technological disruptions in the grids were left without electricity supply. In the morning, 4 single outages were reported;
- in the Kharkiv region, <u>according</u> to the local DSO, since January 4, restoration works in the village of Protopopivka (Balakliia community) continued, which during the war was a "grey zone" and offline for more than 10 months. Specialists have already replaced 4 out of 8 transformers, about 5 km of wire, and repaired 8 substations. In addition, due to the high level of landmines in the territory, the activity is complicated. App. 70% of the 530 individual metering points have been reconnected, and all work is planned will be completed in February;
- in the Donetsk region, <u>according</u> to the local DSO, in January, specialists managed to restore electricity supply to 201,116 households in 297 settlements. Due to constant shelling, 111 settlements remained offline, as specialists did not have access to carry out repair works there.

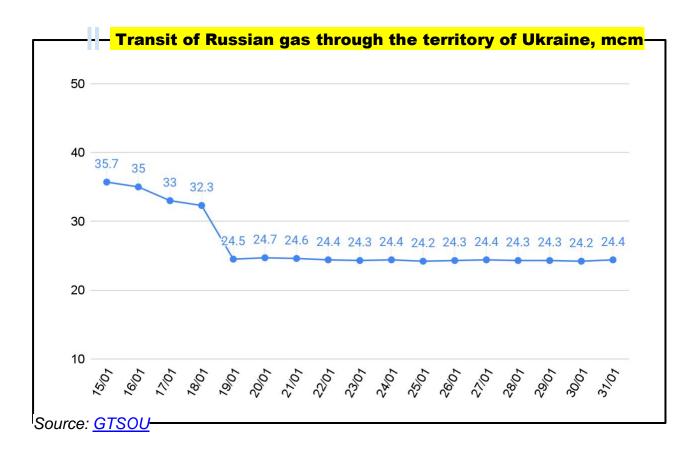
there was no up-to-date consolidated information on power supply in the Luhansk, Sumy and Chernihiv regions at the time of the review preparation.

## Oil & Gas Sector

Gas system performance

On January 31, the volume of gas transit through the territory of Ukraine amounted to 24.4 mcm. These volumes were only 22% of the capacity contracted by Gazprom (109 mcm per day). There were no transit flows via the Sokhranivka interconnection point.

The physical imports of gas from the EU countries were reported at 11.3 mcm - via the Beregdaroc interconnection point (VIP Bereg) at 1.3 mcm, via the Hermanowice interconnection point (VIP Ukraine-Poland) at 2.8 mcm, and the Budince interconnection point at 7.2 mcm. On January 31, on Ukraine's gas system exit, except for transit flows, no gas was transmitted.



### Functioning of the natural gas market

The CEO of Naftogaz Oleksii Chernyshov <u>reported</u> the signing of an agreement between the company and the European Bank for Reconstruction and Development (EBRD) on "about 200 million EUR" grant for the imported gas purchase. 188.8 million EUR of this aid will be <u>provided</u> to the EBRD by the Norwegian government. <u>According</u> to Chernyshov, the grant makes it possible to purchase the volumes of gas that cover all Ukraine's needs until the end of heating season.

#### Disruption and resumption of supply

As of February 1, the Ministry of Energy did not update information on the supply restoration and the number of consumers without gas supply.

The **Dnipropetrovsk**, **Donetsk**, **Luhansk**, **Zaporizhzhia**, **Kherson**, **Mykolaiv** and **Kharkiv regions** had the most challenging situation.

In the **Donetsk region**, despite the threat, the local DSO <u>was restoring</u> gas supply in the de-occupied Lyman community. The company's chairman of the board Vadym Batii expressed hope for full restoration of gas supply in the city of Lyman.

In the **Mykolaiv region**, according to the Regional Military Administration, as of the morning on February 2, 1,132 gas infrastructure facilities (no change as compared to February 1) were damaged during the war, as a result 5,397 consumers (+35) <u>remained</u> without gas supply. The local DSO <u>received</u> 4 tons of metal pipes as humanitarian aid from Denmark, which will be used to replace gas networks in the former Vitovskyi district.

In the **Zaporizhzhia region**, the local DSO <u>carried out</u> restoration works in the city of Zaporizhzhia individual housing, where gas networks and metering devices were damaged by shelling. Specialists installed a new gas pipeline and replaced damaged meters.

In the **Kherson district**, gas supply was <u>restored</u> to the first 12 consumers in one of the settlements in the Beryslav district. The local DSO replaced an underground gas pipeline and eliminated 1,600 damages in residential networks. Specialists are currently working on reconnecting households and public facilities to gas supply.

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

# Countermeasures of Ukrainian Companies and Public Authorities

The President of Ukraine Volodymyr Zelenskyi at a joint briefing with the President of the Republic of Austria Alexander Van der Bellen <u>emphasized</u> the need to strengthen sanctions on Russia and noted that some Austrian businesses continue to operate on the territory of the Russian Federation. In particular, he mentioned Raiffeisen Bank, "which not only works in Russia, but also makes decisions, such as tax holidays for those mobilized to the Russian army". Zelenskyi called on the Austrian side to make all possible efforts so that individual companies do not discredit Austrian society, and also invited Austrian business to invest in Ukraine.

The Ministry of Energy of Ukraine and the Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology of the Republic of Austria <u>signed</u> a Memorandum on partnership in the field of energy transition and renewable energy sources. The parties identified the exchange of experience in energy transition, acceleration of the deployment and use of renewable hydrogen, biogas, and biomethane as the partnership's priorities. In addition, the Ministry of Environmental Protection and Natural Resources <u>signed</u> with the Austrian colleagues a Memorandum of Understanding in the field of environment, which provides for the exchange of experience regarding the implementation of EU acquis.

In 2023, Ukraine's need for international financing is about 3 billion USD every month, despite the government efforts to increase tax and customs revenues, as well as to optimize budget expenditures, <u>reported</u> the Deputy Minister of Finance Olha Zykova. She noted that the Ukrainian government currently has confirmation of financing from the EU and the U.S. of about 30 billion USD for 2023. However, there is still a fiscal gap at 10 billion USD.

Meanwhile, Austria has agreed to provide guarantees of up to 102 million EUR to secure EU loans to Ukraine. Corresponding amendment to the law on the balance of payments stabilization was <u>adopted</u> by the National Council of Austria on February 1. According to the Austrian Finance Minister Magnus Brunner, the EU member states have agreed to provide additional collateral for loans in proportion to their share of the EU's gross national income. Also, the United States Agency for International Development (USAID) <u>announced</u> allocation of 135 million USD for restoring the economy of Ukraine and Moldova.

As of February 1, 2023, 144.37 million EUR were received as donations by the Ukraine Energy Support Fund, and 108 million EUR have already been disbursed, as <u>reported</u> by the Ministry of Energy. The Government of Japan <u>allocated</u> 170 million USD for the implementation of emergency recovery projects in Ukraine, in particular the reconstruction of critical infrastructure. The Deputy Prime Minister for Reconstruction Oleksandr Kubrakov clarified that this decision will be finalized by concluding a grant agreement with the Japan International Cooperation Agency (JICA).

The Deputy Prime Minister for Reconstruction - the Minister of Communities, Territories and Infrastructure Development Oleksandr Kubrakov <u>discussed</u> reconstruction and

developing critical infrastructure with the CEO of the U.S. International Development Finance Corporation (DFC) Scott Nathan. According to Kubrakov, Ukraine is interested in the DFC support in the following issues:

- search, purchase and delivery of energy equipment and systems;
- providing access to modern technologies for the protection of critical infrastructure;
- consulting services, as well as the supply of materials and technologies to Ukraine.

The Minister of Energy Herman Halushchenko <u>reported</u> that, as of February 1, 2023, Ukraine has a sufficient supply of energy resources to complete the heating season - more than 11 bcm of gas in storage facilities, about 1.2 million tons of coal in warehouses.

The National Energy and Utilities Regulatory Commission (NEURC) <u>announced</u> a meeting on February 7, where it plans to consider:

- <u>amendments</u> to the temporary procedure for determination by the guaranteed buyer of the electricity sales volumes on the DAM;
- <u>amendments</u> to the Rules of Retail Electricity Market, which regulate the electronic document flow between consumers and DSOs, suppliers;
- <u>the results</u> of <u>investigations</u> of violations in the electricity market by DTEK Dniproenergo JSC, DTEK Skhidenergo LLC, DTEK Zakhidenergo JSC, and NNEGC Energoatom SE;
- <u>carrying out</u> unscheduled on-site inspections of seven DSOs on compliance with outage schedules.

The Government Committee on National Security, Defense and Law Enforcement <u>supported</u> the draft 2023-2025 State Anti-Corruption Program and recommended that it be submitted to the Cabinet of Ministers for consideration after finalization. Also, the Asset Recovery and Management Agency (ARMA) <u>reported</u> that, since January 31, the Single State Register of assets subject to seizure in criminal proceedings has been put into operation.

Detectives of the Economic Security Bureau (ESB) <u>reported</u> suspicion to the Acting First Deputy CEO of Ukrtatnafta (over 43% of shares state-owned). The investigation revealed that, in January 2022, the company's officials declared the excise tax payable on March 2, 2022, but deliberately did not transfer 605.9 million UAH of tax to the state budget. ESB is also investigating the facts of misappropriation and embezzlement of fuel and lubricants with an estimated value of 40 billion UAH by the former management of two largest oil companies - Ukrnafta and Ukrtatnafta. To note, the day before the Security Service visited Ihor Kolomoiskyi with searches in the case of fraud at Ukrnafta and Ukrtatnafta.

<u>According</u> to the media, the State Bureau of Investigation reported suspicion to the former Minister of Energy and Coal Industry Ihor Nasalyk. As reported, Nasalyk is suspected of signing agreements in favor of companies related to the oligarch Dmytro Firtash resulting in 1.5 billion UAH losses to the state.

#### SUPPORT UKRAINIAN ENERGY SECTOR



Ukraine urgently needs emergency energy equipment to restore energy supply in the regions affected by war. More than 12,000 items are on the list of requested emergency energy equipment. If your company, association or country is ready to help, please contact the Energy Community Secretariat's Ukraine Support Task Force.

Energy Community Homepage (energy-community.org)

#### SUPPORT UKRAINIAN ARMY

To financially support the Armed Forces of Ukraine, please follow the <u>link</u> (the National Bank of Ukraine special account).