**Russian War Against Ukraine: Energy Dimension**

**DiXi Group weekly review**

(July 10 – 16)

#StopRussianAggression  
#StandWithUkraine

**Summary**

- The IAEA inspected the Zaporizhzhia NPP; however, the occupiers did not provide access to the roofs of power units #3 and #4. According to the State Nuclear Regulatory Inspectorate, the occupiers plan to set the 4th power unit into a hot shutdown state, which will provoke new risks for nuclear and radiation safety due to the long-term inactivity of the unit's equipment, the lack of proper maintenance and repair, and the insufficient number of qualified personnel at the ZNPP.

- American Nuclear Society considers the threat of a large-scale release of radiological material speculative. As of 09:00 on July 17, the water level in the cooling pond of the ZNPP is 16.43 m, while the situation remains stable.

- To ensure the stability of the power system, Ukraine continues electricity imports from neighboring countries (in particular, Slovakia, Poland, and Moldova), especially during the evening peak consumption, while electricity exporting is stopped.

- The Regulator approved the Procedure for the distribution of revenues from capacity allocation and congestion management between the transmission system operators of Ukraine (Ukrenergo) and Slovakia (SEPS), which would open the potential recovery of electricity exports through the cross-border interconnector between Ukraine and Slovakia.
• Ukraine’s Minister of Energy, German Galushchenko, said that Ukraine expects continuous Russian attacks on energy facilities during the following winter. Thus, the need for critical energy equipment, especially high-voltage, and systems for ensuring the decentralization of power generation remains highly relevant.

• The financial program for Ukraine from the EU – Ukraine Facility – is aimed at transition to a green, digital, and inclusive economy and will include three main pillars: financial support via grants and loans; a special investment structure for the mobilization of public and private investments for ensuring recovery in Ukraine; technical assistance (expert support for reforms, municipalities, civil society, etc.).

• In the first reading, the Parliament approved the draft law on Amendments to Certain Legislative Acts on Stimulating the Development of the Oil and Gas Extractive Industry. The document aims to improve the regulation of concluding the production sharing agreements (PSAs) by eliminating legislative gaps and barriers and increasing the industry's transparency.

• The Cabinet of Ministers approved the action plan for implementing Ukraine's climate policy within the Global Methane Pledge, global initiative for reducing methane emissions. Among the tasks are reduction of methane leaks and emissions in the oil and gas sector; approving requirements for TSO and DSOs regarding regular practices for detecting and eliminating leaks from gas networks; development of biomethane production from agricultural waste; designing technical regulations for natural gas and a draft law on the use of biomethane as a motor fuel; implementation of coal deposit methane capture and utilization technologies.

• Parliament approved in the first reading the revised draft law on the optimization of the ownership structure of Ukraine’s gas transportation system operator, which provides for the corporate reform of GTS Operator of Ukraine LLC and the transition to the model of a single company in gas transportation system management.

• The Cabinet of Ministers approved the annual report of Naftogaz for 2022, including separate and consolidated financial statements and the independent auditor’s conclusions. At the same time, Naftogaz does not plan to increase household gas prices. The fixed tariff will remain at UAH 7.96 per cubic meter.

• As part of the e-Recovery program, Ukrainians submitted about 25,000 applications to repair damaged housing, while over 1,400 applicants have already received financial assistance.

IMPACT OF THE WAR

Attacks

Shelling of energy infrastructure. On July 10, the occupiers hit an infrastructure facility in Mykolaiv with a ballistic missile, and 12 settlements in the Donetsk region were cut off from electricity supply due to shelling. On July 11, as a result of the fall of drone debris during another massive strike in the Kyiv region, power lines were damaged and 102 consumers lost power supply. In the Donetsk region, 8 settlements were left without electricity due to shelling. Another large-scale attack took place on July 12, which resulted in damage and technological disruptions in Cherkasy region: several power lines were briefly disconnected without cutting off power to consumers. The shelling caused power outages in 8 settlements in Zaporizhzhia and 6 in Kherson regions. On July 13, 17 settlements in Donetsk and 4 in Kherson regions lost power due to shelling. On July 14, during another massive strike by the Russian Federation, windows were smashed in the boiler room of a thermal power plant, but no personnel or equipment were injured. Power cutoffs were also recorded in Dnipropetrovsk, Donetsk, Chernihiv and Kharkiv regions. On July 15, 26 settlements in Donetsk region and 11 in Chernihiv region lost power as a result of shelling. On July 16, an infrastructure facility in Zaporizhzhia was damaged, and part of one of the city's districts lost power.
According to Ukrenergo, Russian massive missile and drone attacks damaged all thermal power plants and some hydroelectric power plants, as well as high-voltage networks, including 40 220-750 kV power lines that were damaged or occupied. According to the Ministry of Energy, as of July 14, a total of 410 settlements in the frontline and border regions were cut off from electricity supply due to the fighting, including 28,000 consumers in Dnipro, 22,000 in Kharkiv, and 13,000 in Kherson.

Cyberattacks. According to Ukrenergo, there have been active attempts to create fake pages on social media, including Telegram channels. The government’s Computer Emergency Response Team (CERT-UA), which operates under the State Special Communications Service, warned of possible new attacks on government agencies.

**Nuclear and Radiation Safety**

The IAEA reported that it had inspected the territory of the plant, but the occupiers still do not allow them access to the roofs of power units 3 and 4. The occupiers also plan to transfer power unit 4 to the "hot shutdown" state and power unit 5 to the "cold shutdown" state.

The SNRIU stated that the transfer of Zaporizhzhya NPP Unit 4 to the hot shutdown state will create new significant risks to nuclear and radiation safety. These risks are caused by the long downtime of Unit 4 equipment, the lack of proper routine maintenance and repair of safety-critical equipment, and the insufficient number of qualified personnel at ZNPP.

The American Nuclear Society has called for caution in the statements in unverified reports on the condition and operation of ZNPP, and the threat of a large-scale release of radiological material is currently speculative, but this does not mean "complete clarity" on the safety risks at the plant. At the same time, although keeping the ZNPP reactor in a long-term "hot shutdown" mode is not a cause for concern in itself, the company agreed with the SNRIU’s order of 8 June to transfer Unit 5 to a "cold shutdown" state, given the current circumstances.

US State Department spokesman Matthew Miller said that the International Atomic Energy Agency should have full access to all parts of the plant, and Russia should facilitate this access on site. He also warned that the Russian leadership will be held accountable if Russia creates a nuclear disaster at the Zaporizhzhya nuclear power plant. Jens Stoltenberg also said before the NATO summit in Vilnius that Russia should withdraw its military forces from Zaporizhzhia NPP.

Energoatom reports that the water level in the ZNPP cooling pond as of 09:00 on July 17 is 16.43 meters, the situation remains stable and under control.

The Minister of Energy of Ukraine German Galushchenko and the Presidential Envoy of France Pierre Elbrun held a joint meeting where the parties focused on the need to ensure nuclear and radiation safety on the continent, emphasizing the threats posed by Russia’s occupation of Zaporizhzhya NPP. In addition, German Galushchenko said that the Russian terrorist attack on the Kakhovka HPP proved that the aggressor state does not know the "red lines", and its next crime, which carries the potential of not only local but also global nuclear and radiation hazards, may be an incident at the occupied Zaporizhzhia NPP. The minister also stressed that the occupiers limit the capabilities of the IAEA mission and allow them to see only what they decide.

Andriy Yusov, a representative of the Defence Intelligence of Ukraine, said that the risk of a terrorist attack at the temporarily occupied Zaporizhzhia NPP remains as long as Russian troops are there.

Norway and the United Kingdom announced assistance to the Chornobyl zone in excess of €5 million. Representatives of the countries made the announcement at a meeting of the Assembly of Depositary Accounts of the International Cooperation Account for Chornobyl.

**Countermeasures**

On July 17-18, Minister of Foreign Affairs of Ukraine Dmytro Kuleba will pay a working visit to the UN Headquarters in New York to participate in a ministerial meeting of the UN Security Council on
Russia's aggression against Ukraine and a high-level event to mark the 25th anniversary of the Rome Statute of the International Criminal Court.

Ukraine's Finance Minister Sergii Marchenko delivered a speech at a meeting of the G7 financial bloc, attended by finance ministers and central bank governors of the G7 member states, the IMF, the World Bank and the European Commission. Among other things, Marchenko called for faster progress in financing the reconstruction with frozen Russian funds. Also at the meeting, Ukraine's Energy Minister German Galushchenko briefed the participants on the repair campaign at Ukraine's energy facilities and said that Ukraine expects hostile attacks on energy facilities to continue over the coming winter, so the need for energy equipment, especially high-voltage equipment, as well as systems that can ensure decentralised generation, remains urgent.

On July 13, Minister of Finance of Ukraine Sergii Marchenko met with the French President's Special Envoy for Ukraine's recovery and reconstruction Pierre Elbrun. Marchenko thanked France for an additional EUR 40 million for the restoration of critical infrastructure and said that in total, Ukraine has received commitments from donors to provide up to USD 42.5 billion in macro-financial support in 2023 to finance Ukraine's state budget deficit. The minister also said that there is a certain mismatch between the projects our partners want to invest in and our needs. That is why the Ukrainian side and international donors are currently agreeing on a list of urgent recovery projects and available resources.

Yulia Svyrydenko, First Vice Prime Minister of Ukraine and Minister of Economy, noted that supporting the national producer is a matter of ensuring economic stability and military security of the country. Svyrydenko emphasised that orders from state-owned enterprises should be awarded to domestic producers as much as possible and called on large state customers to publish procurement plans in advance so that businesses can prepare and offer their products to fully meet their needs.

At the meeting with the business community, Yulia Svyrydenko noted that the Ministry of Economy, together with Ukrainian business, associations and experts, will create more than 10 sectoral working groups to discuss and develop specific and comprehensive measures for development in key sectors of the Ukrainian economy. These developments will form the basis of the Ukraine Plan for the EU's Ukraine Facility (UF). In addition, according to Yulia Svyrydenko, the dialogue with business will allow drafting sectoral development programmes for the UF and proposals from business for sectoral development strategies for 10 years in three stages. In addition, one of the main priorities in the reconstruction is to attract investments through the mechanism of public-private partnership.

Ukraine's Finance Minister Sergii Marchenko said that the EU's Ukraine Facility programme will facilitate the transition to a green, digital and inclusive economy and will include three main components:

- Financial support in the form of grants and loans. This will provide stable and predictable funding to support Ukraine's financial stability, while providing a solid basis for protecting the EU budget;
- A dedicated investment facility designed to attract and mobilise public and private investment for Ukraine's recovery. This will complement existing support instruments for Ukraine, such as budget guarantees, financial instruments or blended finance;
- Technical assistance. This includes expert support for reforms, support to municipalities, civil society, and other forms of bilateral assistance. This component could also support other initiatives aimed at responding to Russian aggression against Ukraine, including ensuring compliance with international law regarding crimes committed by Russia on the territory of Ukraine.

Prime Minister Denys Shmyhal said that under the eRestoration (eVidnovlennya) programme, Ukrainians have submitted almost 25,000 applications for repairs to damaged homes, and more than 1,400 applicants have already received financial assistance.
MARKETS PULSE

Electricity Sector

Power system operation

According to Ukrenergo and the Ministry of Energy, during the week, demand was covered by own production and imports from Slovakia and Moldova. The most intense time period for the power system is 16:00-23:00, when the productivity of solar power plants decreases. Therefore, additional power units, which are limited in their amount, are connected to the energy grid in order to supply the growing demand. Besides that, hydropower production is currently limited after the tide.

On July 11, the network infrastructure repair of one of the TPPs was completed, which made it possible to connect a power unit with a capacity of 240 MW to the power system. On July 12, Ukrenergo restored the equipment at one of the substations in the central region, which was hit by Russian missiles twice. On the same day, at the Kurakhiv TPP, where the roof collapsed on July 7, one power unit was restored. On July 14, the 240 MW thermal generation power unit came out of repair. On July 16, at one of the NPPs, a power unit was taken out of repair 3 days ahead of schedule, which added a 1,000 MW capacity to the power system.

On July 10, due to bad weather, 12 settlements in the Chernihiv region and 4 in the Sumy region were cut off. On July 11, 34 settlements in the Sumy, Kirovohrad, Kyiv, Cherkasy, and Chernihiv regions remained without electricity. On July 14, 140 settlements in the Kyiv, Poltava, Lviv, Chernihiv, Odesa, and Chernivtsi regions were cut off due to bad weather and technological disruptions caused by it.

On July 13, as a result of technological violations, some consumers in Kirovohrad, Dnipropetrovsk, and Chernihiv regions were left without electricity. On June 14, an emergency situation occurred on the 220 kV line of the transmission system operator in the Lviv region, which was turned off by the protection action. The line was successfully repaired in manual mode.

On July 12, the NEURC agreed on the Procedure for the Distribution of Revenues From the Management of Restrictions Between the Transmission System Operators of Ukraine Ukrenergo and Slovakia's SEPS, which opened the possibility for the restoration of electricity exports through the transborder crossing in the direction of Ukraine - Slovakia.

According to the NEURC and ENTSO-E, during the week at peak hours (mainly 16:00-23:00), Ukraine performed commercial electricity imports from Slovakia, totaling 14.14 GWh (+83% as compared to the previous week), the capacity fluctuated from 6 to 350 MW. The imports from Moldova performed on July 10-12 amounted to 0.41 GWh, with capacity fluctuating from 1 to 170 MW. No data was available on deliveries from Moldova during July 13-16 at the time of the review preparation. On July 16, Ukraine imported electricity for the first time through the upgraded line from Poland—Khmelnitsk NPP-Rzeszów. Deliveries were carried out on a stable schedule of 200 MW in the period from 19:00 to 23:00 (total of 0.8 GWh). Electricity was not exported.
10 to 20 companies booked capacity for imports in the Slovakia-Ukraine direction at daily auctions; the main players: DE Trading, D.Trading, ERU Trading, TEP and TES. The marginal price was set for different hours of the day; it varied from 0.01 to 890.19 UAH/MWh, so the total revenues of Ukrenergo from the auctions reached 2.77 million UAH. In the Moldova-Ukraine direction, 5 to 10 companies booked capacity, including: DE Trading, D.Trading, CPG Energy and Solipower. The crossing with Poland in the direction of Rzeszów-Khmelnytska NPP was bought by the companies Energy Wim and D.Trading. The limit price for both directions was not set. Capacity for exports was not booked.

**Electricity market performance**

**Bilateral contracts market (BCM):** The intensity of trading at the Ukrainian Energy Exchange (UEEX) significantly decreased, after a spike in late June related to the introduction of new price caps on DAM, IDM and BM. On July 10-16, 11 auctions for the purchase/sale of electricity were held at the UEEX (8 in commercial sections, 3 in specialized ones). Guaranteed Buyer, Centrenergo, universal service suppliers, distribution system operators, etc. were among those who initiated trades. A total of 193.7 GWh were sold at the UEEX with supply in July (-87.9% as compared to the previous week). At the same time, the monthly Base BCM index for July remained at 3,051.2 UAH /MWh (+7.1% as compared to June). Namely, Guaranteed Buyer sold 82.7 GWh in block positions of daytime hours at prices 1,750.0 – 2,892.5 UAH/MWh with delivery on July 17-31. Centerenergo sold 81.6 GWh of base load at an average price of 3,121.3 UAH/MWh and 2.2 GWh in block positions (12-24) at 3,766.0 UAH/MWh with delivery on July 15-31. In the commercial sections, the companies purchased electricity by the load of an individual profile.

**Day-ahead market (DAM):** According to the Energy Map service, after the introduction of new increased price caps from June 30, prices have become highly volatile. On July 10-16, deviation of hourly prices from the price caps ranged from 0% to 83.8% and averaged at 29.5%. The number of hours with prices being close (with a deviation of less than 1%) or directly at the level of price caps increased to 31.5% (as compared to 38.1% in the previous week). The average hourly price of electricity (Base DAM index) was 3,436.0 UAH/MWh (+2.9% week-on-week), while the weighted average daily price varied at 2,351.4 - 3,994.4 UAH/MWh. The ratio between the Base DAM indices in the countries of Eastern Europe (Poland, Hungary, Romania and Slovakia) and Ukraine ranged from 1.01 to 1.56 (with the exception of July 15, when the index
in Hungary, Romania and Slovakia were lower than the Ukrainian one by 42-53 %, and on July 16, as the index in Slovakia was lower by 25%).

The total volume of electricity sales at the DAM of Ukraine continued to grow slightly to 404.4 GWh (+2.7%). In particular, the daily volume of trading varied between 40.6 and 67.0 GWh. During the week, the DAM changed status from deficit (July 10) to surplus (July 11-16). The ratio between the total volume of sale and purchase bids was at 0.96-1.66. At the same time, the deficit decreased and was observed in 29.2% of hours (as compared to 43.5% in the previous week). The purchase structure was dominated by suppliers (86.2-91.0%), the share of system operators was 8.9-13.7%, the rest (up to 0.1%) belonged to producers and traders.

**Policy and regulation**

The regulator approved the Procedure for holding public consultations by the operator of the transmission system when developing the rules for the distribution of capacity of interstate crossings and determining the structure of the distribution of capacity. This was done in compliance with the recently adopted law on the implementation of EU Regulation 1227/2011 (REMIT). The procedure is important for the introduction of joint auctions of the TSO and optimization of the coordinated allocation of capacity of interstate crossings for the export and import of electricity. The order also regulates the procedure for making changes to the rules and distribution structure.

**Gas**

**Gas system performance**

On July 9-15, the volume of gas transit through the territory of Ukraine amounted to 39.6-42.6 mcm per day, i.e. only 36-39% of the capacity contracted by Gazprom (109 mcm per day). In the reporting week, the average daily transit was at 41.5 mcm. There were no transit flows via the Sokhranivka interconnection point.

Physical imports from the EU countries amounted to 97.9 mcm (on average, 14 mcm per day), which is 7% more than in the previous week. The imports were performed via the Beregdaroc interconnection point (VIP Bereg) at 49.2 mcm, via the Orlovka interconnection point (Ukraine-Romania) at 27 mcm and via the Hermanowice interconnection point (VIP Ukraine-Poland) at 21.7 mcm.

Commercial imports into the Ukrainian GTS amounted to 150.6 mcm were performed in the "customs warehouse" regime, and 88.5 mcm - in the short-haul mode (service of the TSO, which provides a discount in the transmission tariff for transit over short distances). The excess of commercial import flows over physical ones is likely due to the fact that part of the transit gas enters Ukraine in a virtual reverse mode and is pumped by traders into Ukrainian gas pipelines. So, for example, despite the fact that there were no physical imports from Moldova and Slovakia in the reporting week, commercial flows from Moldova amounted to 33 mcm, from Slovakia - 18.9 mcm. No gas was transmitted on Ukraine’s gas system exit, except for transit flows.
Transit of Russian gas through the territory of Ukraine, mcm

Source: Gas Transmission System Operator of Ukraine LLC

**Underground storage facilities**

According to the AGSI platform, as of July 15, 7.46 bcm of gas were accumulated in the Ukrainian storages (23.8% of the total working capacity, i.e. without 4.662 bcm of "long-term storage" buffer gas). On July 9-15, injections were performed at 369.8 mcm (+83 mcm as compared to the previous week). The average daily injection was at 37.7 mcm.

Natural gas withdrawals and injections into Ukrainian storages, mcm
In the trading sessions of July 10-14, 11 companies (8 buyers and 3 sellers) submitted bids for purchase and sale of natural gas at the Ukrainian Energy Exchange (UEEX). In the reporting period, UEEX received bids for 302.9 mcm of gas (-16% as compared to the previous week) with a total starting price of 3.3 billion UAH (-15%). The weighted average starting price of all bids was 10.91 UAH/cm (excluding VAT), which almost corresponds to the indicator of the previous week.

A total of 1.1 mcm was sold (-58% less week-on-week). 2 purchase bids were successful – 1 of the state-owned Naftogaz (0.1 mcm, 9% of all deals), and one from DDZ-Service LLC (1 mcm, 91%). The weighted average price of the purchased and sold resource was 12,280 UAH/tcm without VAT (+6%). All resources were sold with delivery or transfer in storages in July 2023. There is price differentiation by gas buyers: Naftogaz purchased the resource at a weighted average price of 10,920 UAH/tcm (without VAT), while DDZ-Service LLC - at 12,417 UAH/tcm.

The Cabinet of Ministers approved the annual report of Naftogaz of Ukraine for 2022, which includes separate and consolidated financial statements of Naftogaz for 2022 together with the conclusions of the independent auditor – PwC.

The Cabinet of Ministers also approved a plan of measures to implement Ukraine's climate policy within the framework of participation in the Global Methane Pledge, global initiative to reduce methane emissions. Among the planned tasks is the reduction of the volume of methane leaks and emissions in the oil and gas sector, in particular, through the introduction of effective accounting of the volume of methane leaks in accordance with the OGMP 2.0 initiative, the provision in investment programs at state enterprises of the oil and gas sector of the implementation of measures to modernize the sources of methane leaks, approval of requirements for operators GTS and GDN regarding regular practices of detection and elimination of leaks from gas networks (LDAR). Another task within the scope of the action plan is the development of the potential for biomethane production from agricultural waste, which is planned to be promoted through partial reimbursement of the cost of the relevant production facilities, the development of technical regulations for natural gas, the development of a draft law on the use of biomethane as a motor fuel, in particular for public transport and agricultural machinery. Another task is the implementation of technologies for capturing and utilizing methane from coal deposits within the framework of the program for the fair transformation of coal regions.

The Verkhovna Rada of Ukraine approved a draft law "On Amendments to Certain Legislative Acts on Stimulating the Development of the Oil and Gas Extractive Industry". According to the explanatory note, the document is aimed at "improving the regulatory regulation of the procedure for concluding agreements on product distribution by eliminating a number of legislative gaps and barriers, increasing the transparency of the industry."

For this purpose, the draft law proposes:

- to provide for the openness and publicity of the work of the Interdepartmental Commission for the organization of conclusion and implementation of agreements on the distribution of products by means of online broadcasting of its meetings;
- to increase the period between the publication of the announcement of the tender for the conclusion of a production sharing agreement and the deadline for submitting an application for participation in the tender from one to three months for onshore land, and six months for the shelf;
- to improve the criteria and the procedure for their application to determine the winner of the competition for the conclusion of an agreement on the distribution of products;
• to provide the opportunity to use international standards during the examination and assessment of mineral reserves;

• The Parliament approved the amended draft law "On optimization of the ownership structure of the operator of the GTS of Ukraine", which provides for the corporate reform of the GTSOU LLC and the transition to the model of a single company in the management of the gas transportation system in the first reading.

Other

Ukr Gazvydobuvannya, a part of the Naftogaz group, completed the drilling of a new exploration well with a depth of 6,600 m, which became the deepest in the company's history. Thus, its flow rate reached 150 mcm per day.

According to the press service of the company, Naftogaz does not plan to increase the price of natural gas for the population, which is offered by the gas supply “daughter” of Naftogaz. The "Fixed" tariff from Naftogaz of Ukraine remains unchanged and will be 7.96 UAH/cm.

According to the results of the first quarter of 2023, Naftogaz of Ukraine received a net profit of 7.7 bln UAH. At the same time, for the same period last year, the company received a net loss in the amount of 24.6 bln UAH. The consolidated financial statements of the Naftogaz group for 3 months of 2023 contain relevant data. The consolidated operating profit of the group in the 1st quarter of 2023 amounted to 3.4 bln UAH.

The CEO of Naftogaz, Oleksiy Chernyshov, announced the process of obtaining the official consent solicitation of investors for the restructuring of Naftogaz Eurobonds with maturities in July 2022 and November 2026 has begun. This is the final procedure necessary to complete the restructuring process. It will be recalled that earlier Naftogaz reached a preliminary agreement on the terms of restructuring with the bondholders, and also received the appropriate approval from the government. All restructuring procedures are expected to be completed by the end of July 2023.

International Cooperation

Ukraine and Denmark are starting to cooperate in the field of wind power generation. The first phase, as part of the implementation of a joint Memorandum of Understanding on Expanding Energy Partnership in Wind Generation, will include an accelerated study of Ukraine's offshore wind energy potential by the World Bank and the Danish Technical University (DTU Wind) by September 2023.

At the NATO Summit in Vilnius, with the participation of President of Ukraine Volodymyr Zelenskyi, the leaders of the Group of Seven (G7) countries agreed on a Joint Declaration of Support for Ukraine. This is an important step in shaping the future system of guaranteeing Ukraine's security until it becomes a full member of NATO. The Declaration is a general framework document. The next step is to conclude a system of bilateral security agreements between Ukraine and the guarantor countries within the framework of multilateral cooperation.

Under the coordination of the Ministry of Energy, the GTSOU received almost 68 tons of assistance from international partners. In particular, the companies provided mobile and stationary generators from Poland and the United Kingdom, sets of LED spotlights for lighting towers from Turkey and Canada, uninterruptible power supplies and external battery cabinets from Germany. The equipment is needed to carry out restoration work and ensure the stable operation of the company. In addition, since the beginning of the year, the GTS Operator has attracted more than UAH 500 million from partners to ensure stable operation and development. This includes equipment, materials, machinery, financing of works, etc.
American business is ready to join projects to restore and reconstruct the Ukrainian energy sector. These prospects for cooperation between Ukraine and the United States were discussed on July 14, 2023, during a video conference between Yulia Svyrydenko (the First Vice Prime Minister and Minister of Economy of Ukraine), Geoffrey Pyatt (the Advisor to the U.S. Secretary of Energy), German Galushchenko (the Minister of Energy of Ukraine), Volodymyr Kudrytskyi (CEO of Ukrenergo), representatives of the largest American energy companies, as well as U.S. Ambassador to Ukraine Bridget Brink and Ambassador of Ukraine to the United States Oksana Markarova. Over the next five years, Ukraine will focus on creating new generating capacities based on renewable energy, creating balancing capacities based on hydroelectric power plants, and developing shunting decentralized generation. Special attention will also be paid to energy storage projects and the development of nuclear generation. The heads of the American companies Baker Hughes, Bechtel, GE Vernona, Halliburton, Holtec, Invenergy, NuScale Power, and Schneider Electric USA assured that they are ready for close cooperation. Most of them confirmed their readiness to create new jobs in Ukraine and support the energy sector in its "green" transition.

The European Union is launching a four-year, €50 billion Ukraine Facility program, which is designed to help finance Ukraine's budget deficit. The program will also help Ukraine implement its European reform and change agenda. To ensure the effective operation of the program, the Government established an Interagency Working Group at its meeting on July 14, 2023 to prepare a corresponding action plan.

The Minister of Energy of Ukraine German Galushchenko met with the Special Envoy of the President of France for Ukraine's Relief and Reconstruction Pierre Elbrun. The parties discussed areas of cooperation in the energy sector in the medium and long term. The meeting also touched upon cooperation in the nuclear industry, in particular the development and implementation of modern small modular reactor technologies.

On July 14, 2023, Deputy Minister of Energy of Ukraine Yaroslav Demchenkov met with the Government Commissioner of the Czech Republic for the Reconstruction of Ukraine Tomáš Kopeční. The parties discussed areas of cooperation in relevant fields and attracting investments from the Czech private sector to decentralize local power generation and ensure the resilience and flexibility of the power system.

For subscriptions, comments and other questions, please email to: author@dixigroup.org

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**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 link (the National Bank of Ukraine special account).