

COVID-19: Security of energy supply monitoring

State of play in the Energy Community Contracting Parties as at 1 April 2020, 10:00 am

Networks and markets

Energy (electricity and natural gas) supply, market functioning and cross-border trade on the interconnections in the Energy Community (between the Contracting Parties and between the Contracting Parties and EU Member States) are uninterrupted. The balancing market is functional and availability of balancing reserves is ensured. There is no limitation to cross-border trade. The energy systems are in the normal state of operation.

No major changes in electricity production and consumption were reported in the majority of Energy Community Contracting Parties (with the exception of Albania, Bosnia and Herzegovina and Ukraine, partly due to seasonality) and are not expected for the time being. Set aside seasonality effects, the gas demand is typical for this period of year, whereas North Macedonia reported a drop in demand due to industry downturn.

Where existing in the Energy Community, natural gas production is stable.

Availability of generation capacities is ensured. Planned overhauls of thermal power plants Kosovo B and Pljevlja were postponed in order to ensure continuity of supply during the COVID-19 crisis.

Planned transmission network maintenance work is in the majority of cases restricted and priority is given to the maintenance of critical elements, unplanned outages and ensuring electricity supply to health care facilities (e.g. hospitals) and temporary quarantine centres. Ukraine's natural gas transmission system operators reported that maintenance works are on-going with additional precautionary measures being applied, whereas other Contracting Parties perform only patrolling along the main pipelines.

Preventive measures

Transmission system operators, distribution system operators, generation and supply companies are applying preventive measures to ensure the continuity of supply and protection of staff, including: special health, hygienic, sanitary and staff distancing measures, restrictions on meetings and travels, limiting the number of employees in office and ensuring special sitting arrangements and transport to the office, limiting entry to the office, closing of customer centres, closing or restricting usage of canteens, organisation of work from home and necessary IT systems and its security (such as putting in place a work-from-home policy, secure VPN connection, disk encryption, secure use of RDP, controlling the use of external devices such as USB storage and peripheral devices, full control of the connecting devices to all the business platforms and systems, access to sensitive data, etc.).

Special preventive measures related to the protection of critical staff (dispatchers and field workers) and control centres are applied by the transmission system operators across the Energy Community. This includes provision of medical supplies for critical staff (masks, hand sanitisers, etc.), transportation of critical staff including measures such as disinfection of corporate vehicles and limiting the number of persons in the car, as well as food and drink for dispatchers in accordance with the special safety measures, disinfection of control rooms after every shift, and special arrangement of shifts including reduced number of dispatchers in the shift, keeping reserve shifts in isolation, written or phone handover of the shifts, partial or total confinement of dispatchers in the control room, isolation of the control room, and a possibility to ensure dispatching from multiple

locations (a number of TSO back-up control centres were already activated). In some of the TSOs, mobilisation of retired dispatchers and former dispatchers that were reallocated to another position within the company has been activated as a measure to ensure reserve dispatchers.

Similar measures related to the dispatchers and field crews are largely applied by the generation, gas storage and distribution companies in the Energy Community.

Gas and electricity companies have established crisis teams which continuously monitor the situation and report to the authorities.

A number of critical issues have come to the Secretariat's attention:

Identified immediate issues

- Lack of preventive medical supplies (masks, hand sanitisers, gloves, disinfectants and other necessary materials) for critical staff in the energy companies;
- Organisation of work of critical staff and dispatch centres, in particular given the limited number of active dispatchers, and need for long periods of staff isolation (confinement);
- Technology gap between currently applied dispatching equipment (SCADA) and the skills of retired or former staff, now re-recruited;
- Decrease of electricity bill collection rate; and
- Meter reading limitations and delays where a remote meter reading is not possible.

Identified potential short-term problems

- Postponement of maintenance works could lead to the need for re-planning and possible NTC reduction in some periods;
- Procurement and transport of materials, equipment and services necessary for repair, maintenance and rehabilitation of critical equipment at generation, transmission and distribution level could be limited, in particular if procurement and transport is to be done from abroad or in case the prices of services or equipment soar;
- Increased risk of cyber intrusion to the IT/OT systems during the work from home regime; and
- Ensuring electricity import as a result of lack of liquidity of suppliers.

Identified potential long-term problems

- System security in the forthcoming summer and winter seasons could be endangered should maintenance not be done timely; In the gas sector this is not yet prominent, but will be looked into for the next heating season;
- Financial liquidity of energy companies in the whole supply chain could be at risk due to non-payment and decreased revenue due to the decrease of demand and electricity prices;
- Depreciation of national currency may lead to higher procurement costs;
- Number of vulnerable customers and their structure could be changed significantly;
- Postponement of new infrastructure construction or investment projects.

Overview per Contracting Party

Albania

Electricity supply (demand decreased by approx. 5-10%), market functioning and cross-border trade are uninterrupted. No restrictions on availability of hydro power plants are in place. Planned transmission network maintenance was cancelled and limited to unplanned outages only. An emergency plan, including risk assessment of TSO staff exposure to COVID-19, is in place. Cash flow durability and exchange rate risk is being assessed by the TSO. Back-up dispatch centre was activated.

Albania has no gas market.

Bosnia and Herzegovina

Electricity supply (demand decreased by approx. 10%), market functioning and cross-border trade are uninterrupted. Generation capacities are available. Coal stocks and level of water in hydro reservoirs are satisfactory. Back-up dispatch centre was activated. A lack of necessary medical supplies (masks, hand sanitisers, etc.) was reported by NOS BiH. Limited stocks of critical equipment and services and difficulties in their procurement were reported by generation and distribution companies. Preventive measures are applied in both entities and District Brcko.

Gas supply remains uninterrupted. The planned gas quantities are imported regularly, though gas demand has dropped in comparison to the previous years. Natural gas undertakings have established special teams for the supply of natural gas during the COVID-19 crises.

Georgia

No security of supply issues were reported. Sanitary and preventive measures are applied. A 14-day isolation period for critical staff in control rooms is applied. Critical maintenance and rehabilitation works are ongoing.

Gas supply throughout the country is currently unhindered. A sharp fall in demand, which is not related to seasonality, has not been observed. Thermal power plants the largest consumer enterprise - Rustavi Azot and gas stations are operating in normal mode.

The gas TSO has stocks of critical materials that allow a delay in triggering an emergency response. Patrolling of gas pipelines is on-going. Public procurement might be problematic in the future if prices of services/materials soar.

Kosovo*¹

Security of supply is ensured (demand unchanged, load curve flattened). Preventive measures and plans for ensuring service continuity were activated by the generation company KEK, distribution system operator KEDS and the transmission system operator KOSTT. The overhaul of unit B2 of TPP Kosovo B has been postponed due to the COVID-19 crisis. Maintenance of critical transmission network elements is uninterrupted. No risks with regard to the necessary materials and services in

¹ Throughout this document, this designation is without prejudice to positions on status, and is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo declaration of independence.

the next three months were identified by the DSO. Market opening for customers at 35kV was postponed. Major drop of electricity bill collection rate (from 95% to 25-30%) was reported to the Government by the supply company KESCO.

Kosovo* has no gas market.

Moldova

No security of supply issues were reported. Limited transmission network maintenance is taking place. Sanitary measures were applied and office staff was reduced to a minimum. Transport of dispatchers was ensured, but no changes in the organization of dispatching shifts were introduced yet.

From 17.03.2020 until 15.05.2020, a special regime for gas companies in supply, transport and distribution of natural gas is in force. No disruptions are expected. A crisis team is in place. Emergency staff is well equipped and all the corresponding arrangements are ensured.

Montenegro

Electricity supply, market functioning and cross-border trade are uninterrupted. No decrease of production and consumption is expected. Generation capacities are available. Planned overhaul of the thermal power plant Pljevlja was postponed. Activities to prepare a reserve dispatch centre were undertaken by the TSO. Planned maintenance was delayed to some extent and done on a priority basis – the highest priority is given to ensuring electricity supply to health facilities (e.g. hospitals) and temporary quarantine centres. No problems with the procurement of materials and equipment needed for maintenance are expected for now.

Montenegro has no gas market.

North Macedonia

Electricity supply, market functioning and cross-border trade are uninterrupted. Preventive measures and plans for ensuring service continuity were activated by the generation company ESM, Electricity Distribution and EVN Homes and the transmission system operator MEPSO. Plans to ensure continuous work of the National Dispatch Centre under diverse emergency scenarios were developed. Only previously scheduled and initiated field activities are performed by the TSO and DSO. A special arrangement for dispatchers' shifts in the TSO and DSO is applied. No disconnection of households and enterprises of vital importance will be done during the state of emergency.

Gas supply is uninterrupted. A crisis team is in place. Gas consumption decreased due to the economic downturn. Public tenders are organized according to the planned schedule.

Serbia

Electricity supply, market functioning and cross-border trade are uninterrupted. Preventive measures and plans for ensuring service continuity were activated by the power utility EPS and the transmission system operator EMS. A set of measures to protect and isolate a control room and dispatchers, including special shift arrangements, were defined by the Critical Situation Team, activated by EMS, and put in place.

The supply of natural gas is in regular mode and without problems. The only natural gas producer NIS ad and all other energy entities perform their activities in accordance with the regulations and protection measures. In the event of a situation affecting the normal functioning of the natural gas market, the gas emergency plan will be enforced.

Ukraine

Electricity supply, market functioning and cross-border trade on interconnections with EU Member States and Energy Community Contracting Parties are ensured. Due to the decrease of consumption, the import of electricity from Belarus and Russia was curtailed. A set of preventive measures to ensure continuity of service and protect dispatchers was defined by a special team for critical situations established by Ukrenergo. All planned maintenance works were delayed.

The gas system is working in the standard mode, without any limitations to cross-border trade. The production of gas is stable and demand is typical for the season. Maintenance work is taking place as planned, with protection measures in place. Supply of critical materials, equipment and services (warehousing, delivery) is also ongoing, with additional protection efforts. An emergency team is in place. The storage operator introduced measures similar to those of the TSO. All customers are normally supplied.