Emergency Synchronization of Ukraine-Moldova

SoS Coordination Group, 6 July 2022





Ukraine-Moldova

16 March 2022 - 11:13:42 CET



RG CE votes on the preconditions and process to allow a stepwise increase of the commercial exchanges between UA-MD and the rest of Continental Europe

7 June 2022

30 June 2022

First commercial exchanges takes place with Ukraine (UA/RO)

6 July 2022 SK/UA auction

27 February 2022

Ukrenergo requests RGCE to allow for emergency synchronisation with Continental Europe power system



Ukrenergo requests to consider the possibility of a stepwise increase in the volume of planned export of electricity from Ukraine to neighbouring power systems

27 June 2022

Pre-conditions are considered met

Maximum NTCs can be set to 100 MW

24 February 2022

Russia launches a military invasion of Ukraine

11 March 2022

RG CE votes on the emergency trial synchronisation of Ukrenergo/ Moldelectrica power system with that of Continental Europe



Commercial exchanges

Technical challenges

The participation of Ukrenergo and Modelectrica to the Financial Settlement of unintended deviations is absolutely needed

Moldelectrica join FSkar

Ukrenergo &

Coordinated Security Assessment

Observability Special Alarming System

Max.

NTC =

100 MW

Resync

is from the limit

procedure

The procedure to disconnect (desync) and resync Ukraine-Moldova is fine-tuned

Part 2 of Catalogues of Measures

Minimum **Damping** measures Ukrenergo and Moldelectrica participates to key operational processes (scheduling, etc) linked with market aspects

Exports from Ukraine will decrease the damping of the system. A minimum set of measures are mandatory to mitigate the entso risks

Neighbouring TSOs and Coordination Centers (Swissgrid and Amprion) can see in real time how close the system

Operational security of the area has changed since the synchronization and dayahead N-1 analysis is needed

Commercial exchanges

Market challenges

Trade can start, when conditions for the secure and stable operation are achieved, at a pace agreed by the concerned TSOs

New elements

- Core flow-based
- New flows
- Regulatory aspects

Short term (immediately)

- Bilateral agreements to govern trade details (time horizons, auction rules and nominations)
- Short term solution is subject to individual TSO/NRA decision.
- One auction per border is strongly preferred

Mid term (Q4/22-Q1/23)

- Harmonized auction rules
- Single auction per border or per profile
- Common solution subject to consensus

Regulatory topics to be managed by EnC, NRAs, MS and EC

- Level playing field
- •
- Approvals
- Use of allocation platform

EnC = Energy Community Secretariat

First results (30 June)

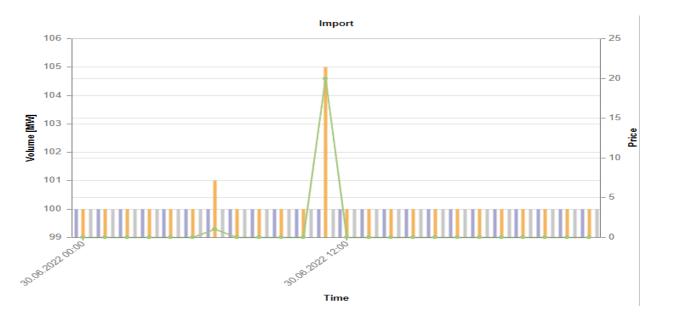
Form: Unilateral daily auction: each side of the border sells the capacity separately

RO side auction:

 Requested capacity exceeded the offered one (ie. market congestion) only in 2 hours.

Price: 0 in all but two hours.

Max price: 20 EUR



UA side:

- Market congestion in all hours
- 5 participants
- Min price: ca 47 EUR (for 3 hours)
- Max price: ca 195 EUR

Source: TP + UA website (press release)



Next steps

Short-term

- ➤ RG CE agreed to review the maximum NTCs regularly
- ➤ Increase/maintain/decrease will be based on the assessment of
 - ➤ Impact on the damping of interarea oscillations
 - Impact on operational security in the neighbouring grids

Longer term

- Other damping measures are progressively implemented
 - ➤ Incl. STATCOMs in 2023/2024
- ➤ 380/765kV interconnector between Poland and Ukraine is refurbished
- Further market integration (other mechanisms, other horizons...)