WEBINAR
Electricity wholesale market integration

Tuesday, 07.11.2023
11:00 - 12:00 CET
Online

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<td>11:00 – 11:05</td>
<td>Introductory Remarks</td>
<td>Patrick LUICKX, ACER</td>
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<td>Market integration (presentation)</td>
<td>Thomas QUERRIOUX, ACER</td>
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<td>Energy community (presentation)</td>
<td>Olena ANTONOVA, Energy Community</td>
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<td>Closing Remarks</td>
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Housekeeping rules

Questions shall be posed using the Slido tool within Microsoft Teams

Use direct link: https://app.sli.do/event/IDzATvkjLU3RF4h6H1PWVF

Keep your microphone muted unless the chair gives you the floor

Questions from other participants can be ‘liked’ to increase their visibility

Substance-related questions will be addressed during the relevant Q&A session; although they can be posed at any point

Slides from this webinar will be uploaded to ACER website
Introductory remarks

Patrick LUICKX- ACER
Market integration

Lars BRECKENFELDER - ACER
Thomas QUERRIOUX - ACER
The rise in energy prices due to the gas crunch was somewhat mitigated for consumers thanks to emergency measures.

The resilience offered by interconnected electricity markets was a vital force behind effectively managing the crisis and ensuring supply security.
Despite the crisis, some progress

June 2022: a decisive milestone with the go-live of Core Flow-based market coupling.

Day ahead and Intraday markets are now fully coupled with a Pan-European platform for the allocation of cross-border capacities.

4 Pan-European balancing allocation platforms (IGCC, TERRE, MARI PICASSO) have also been established.

➢ still need to be deployed across Europe.

The real challenge in market integration: ensuring cross-zonal capacity where and when needed.
Low TSO engagement and data limitations cast a shadow on the success of new balancing platforms

2022 was marked by large price increases for balancing services, mostly driven by the war in Ukraine.

Main achievements in 2022: go-live PICASSO and MARI (aFRR and mFRR). However low TSO participation, and regular price incidents.

Source: ACER calculation based on NRA data
Note 1: The market areas considered represent all market areas for which data was received. No data was received from Malta, Cyprus and Ireland.
Note 2: In the Nordics, two FCR products exist, FCR-D and FCR-N. For this comparison, only FCR-D was considered as it is more comparable to the FCR product procured in other countries.
Since the launch of the PICASSO platform, price incidents have been regularly observed regularly, long or short.

➢ *price incident in Austria where the prices stay around 10,000 EUR/MWh for almost 30 minutes.*

Possible mitigations of price incidents:

- activating a slower reserve (*mFRR*);
- cross-border contribution: access to assets in other Load Frequency Control blocks.

Source: Transnet data

Disclaimer: This case study has been made possible through the transparency provided by German transmission system operators within the Picasso framework. The study is not an assessment of compliance. While the findings and conclusions presented in this study pertain to the specific geographical area for which ACER collected sufficient information to conduct the analysis, it is important to note that these conclusions should not be assumed to be applicable exclusively to this geographic region. The results of this partial analysis should be interpreted with caution in any broader or similar settings.
Limited hedging options in the forward market boosted liquidity in spot markets.

Forward trading liquidity decreased - although hedging is the most straightforward way to address uncertainty during a crisis, the collateral requirements forced some market participants out of forward trading on organised marketplaces.

Day ahead and intraday liquidity remained stable despite reduced forward trading, as market participants out of forward trading had to rely on spot market trading or bilateral trading.

Evolution of brokered vs exchange trading in the EU – 2019-2022 (TWh)

Churn factors in a selection of European day ahead markets – 2019–2022

Source: Acer calculations based on REMIT and ENTSO-E data.
Note: In the context of this exercise, ACER has transitioned from Prospex to REMIT data as the data source for trade volumes. Consequently, it is advisable to refrain from direct comparisons with similar data from prior editions of the report.
The real challenge in market integration: ensuring cross-zonal capacity where and when needed.

Remedial actions are not always enough to guarantee the minimum cross-zonal capacity requirements.

Average value of forecasted loop flows in the bidding zone borders of the Core capacity calculation region - 9 June 2022–31 December 2022 (MWh)

Relative performance of the different EU Member States on the volume of remedial actions activated as a share of their total demand – 2022 (% of total demand)

Progress towards the 70% target will not happen without tackling trade-offs. Unilateral restrictions of capacity impact market welfare and prices. More structural actions are necessary if we want to reach 70%: Accelerate significantly grid investments to solve congestion and/or reconfigure the bidding zones.

Source: ACER calculations based on NRA, ENTSO-E and JAO data. Note: No complete dataset was available for the creation of this figure from Denmark, Finland and Ireland. Remedial actions may serve various purposes not exclusively tied to active power congestion or impacting trade with third countries.
In conclusion, ACER recommends…

- Continuing evolving the forward market;

- Considering employing slower reserves like mFRR following aFRR activations to manage price incidents effectively;

- Enhancing cross-border trade capacity to foster market integration, aligning with ACER’s guidance on cross-zonal capacities and the 70% margin for electricity trade; mitigating loop flows through various means, including Remedial Actions;

- Maintaining control over re-dispatching costs and minimising curtailing renewable energy sources, especially in areas with high concentrations of renewables like large offshore wind farms, to stay well below the 5% curtailment limit, aligning with energy transition goals.
Energy community

Olena ANTONOVA – Energy Community
The Energy Community brings together EU and its neighbours to create integrated pan European energy market since 2006

9 contracting parties: Albania, Bosnia and Herzegovina, Kosovo*, North Macedonia, Georgia, Moldova, Montenegro, Serbia, and Ukraine

The Energy Community Secretariat
- Monitors and reports on level of Acquis implementation
- Enforces the Acquis implementation

ECRB monitors, supports and coordinates on regulatory and market development aspects
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<td><strong>Energy Crisis</strong></td>
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<td>Price surge in electricity &amp; gas</td>
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<td>Individual country impacts differ</td>
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<td>No joint measures in place, but</td>
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<td>Similar set of measures introduced to tackle crisis</td>
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<td><strong>War of aggression against Ukraine</strong></td>
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<td>Another factor pushing prices increase</td>
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<td>In Ukraine: drop in demand &amp; collections, market sustainability and security of supply risks</td>
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<td>Special support by the Energy Community Secretariat</td>
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<td>Emergency synchronization with Continental Europe of Ukraine/Moldova control block</td>
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<td><strong>Clean Energy Package incl. the Electricity Integration Package</strong></td>
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<td>the Clean Energy Package incorporated into Energy Community Acquis</td>
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<td>November 2021: beginning of the process</td>
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<td>End of 2022: adoption of 2030 energy and climate targets and of the Electricity Integration Package</td>
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<td>End of 2023 - transposition deadline</td>
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The new Energy Community Electricity Package

2021

- Decision 2021/13/MC-EnC
- Directive (EU) 2019/944 (Electricity Directive)
- Regulation (EU) 2019/941 (Risk Preparedness)

Energy Community Acquis in force

2022

- Decision 2022/03/MC-EnC
- Procedural Act 2022/01/MC-EnC on Regional Market Integration
- Regulation (EU) 2019/943 (Electricity Regulation)
- Regulation (EU) 2019/942 (ACER Regulation)
- Regulation (EU) 2016/1719 (FCA)
- Regulation (EU) 2015/1222 (CACM)
- Regulation (EU) 2017/2195 (EB GL)
- Regulation (EU) 2017/1485 (SO GL)
- Regulation (EU) 2017/2196 (E&R NC)
Market Developments highlights

Bilateral & Day Ahead Markets
- DAM operational in Albania, Montenegro and North Macedonia since spring 2023;
- Georgia: with all market rules in place, go-live has been postponed;
- Moldova: market rules came into force in mid 2022, bilateral segment is operational
- Ukraine: market model sustained amid war, price caps methodology approved, special regime for market in case of emergency

NEMO Designation
- NEMO was designated in Albania, Kosovo*, North Macedonia and Serbia

Balancing mechanism
- Albania: balancing market started in spring 2023,
- Bosnia & Herzegovina: bilateral exchanges of balancing energy with operators of Serbia & Montenegro are applied
- Georgia: TSO responsible, rules in place, dry run regime
- Moldova: TSO responsible for calculations/billing, since mid 2022 market participants are financially liable
- Serbia: two imbalance netting projects were implemented
• Moldova: public consultation for amending the law on REMIT transposition for electricity – ongoing

• Ukraine: transposed REMIT in July 2023, NRA is developing and approving implementing regulations

• Other Energy Community markets: REMIT in compliance with the Energy Community Acquis is in place

• Wholesale market participants registers are available in NRAs’ and ECRB’s webpages.
Cross Border Capacity Allocation & Connection Codes highlights

- **Cross Border Capacity Allocation:**
  - Bosnia and Herzegovina: with Montenegro and Croatia allocation long- and short term- via regionally coordinated auction via CEE CAO, with Serbia on all timeframes and intraday on all borders – via bilateral coordination between TSOs,
  - Moldova: from October 2022 allocation on a daily basis with Romania in a coordinated procedure, and with UA unilateral allocation,
  - Montenegro: long- and short term- via CEE CAO (except Serbia),
  - North Macedonia: two borders – Greece & Kosovo* – coordinated auctions,
  - Ukraine: unilateral allocation in 2022 on all borders and good progress to preparation towards joint capacity allocation in course of 2023

- **Connection Codes:**
  - Transposition in place in all markets, except Ukraine, via different approaches incl. direct applicability according to provisions of the law in North Macedonia,
  - Ukraine – no formal transposition but key requirements are in grid codes.
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<th>Country</th>
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| Albania          | Feed-in tariff + PPA 15 years for up to 15 MW projects  
Two projects of 100 and 140 MWp auctioned to be in operation in 2023                                                                                                                                   |
| Bosnia and Herzegovina | ~40% RES share achieved in 2020  
Federation of Bosnia and Herzegovina: feed-in tariff, no balancing responsibility  
Republika Srpska: new law in 2022 enabling market premiums and full balancing responsibility for projects 500+kW                                                                                           |
| Georgia          | Capacity auction since 2022 for projects 500+kW with CfD, feed-in premium scheme suspended  
Public-private partnership law provides for support via PPA                                                                                                                                             |
| Kosovo*          | First auction for 100MW announced                                                                                                                                                                           |
| Montenegro       | Feed-in support. Trend of RES producers migration to the market w/o support                                                                                                                                 |
| Moldova          | Fixed price subject to auction for 1+MW for PV and 4+MW wind  
Fixed tariff subject to NRA's confirmation of eligibility within quotas approved by technology                                                                                                         |
| North Macedonia  | Preferential tariff since 2007  
Competitive auctions and premium tariff since 2018                                                                                                                                                       |
| Serbia           | Feed-in tariff expired in 2020  
From 2023 auctions for allocation of market premium for RES, quotas and prices differentiated by RES technology                                                                                      |
| Ukraine          | Feed in tariff  
Law on auctions adopted while implementation is pending  
Legislation amended to support migration between feed in scheme and market                                                                                                                                    |
Thank you for your attention!

https://www.energy-community.org

Olena Antonova, ECRB Electricity Expert,
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Q&A session

Connect to Slido

- Directly in MS Teams
- Through www.slido.com #ACERwebinar
- Scan QR code
- Use direct link:
  https://app.sli.do/event/jDzATvkjLU3RF4h6H1PWVF
Thank you.

In case of follow-up questions on the reports, please reach out to us: ewpmm@acer.europa.eu

The contents of this document do not necessarily reflect the position or opinion of the Agency.