Regionalisation of European electricity markets needs a more regional approach

RAP Webinar

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Market regionalisation moving apace
Supporting European electricity grid
Regionalisation brings benefits
Benefits of regionalisation

- Pool risk
- Access to cheapest resources
- Reduce capacity/investment needs
- Balance over wider areas
Pool risk

Access to cheapest resources

Integrate renewables

Balance over wider areas

Reduce capacity/investment needs
€ 12 – 45 billion per year by 2030
Market integration – potential savings

Total: up to €45 billion/p.a. by 2030

- Market integration
- Reduced capacity
- Shared balancing
- Demand response

Up to €45 billion per annum by 2030
Regionalisation brings challenges as well
Need to maximize market efficiency

Figure i: Ratio between available cross-border capacity and the benchmark capacity of HVAC interconnectors per region – 2016 (%)

Average HVDC Capacity offered

Source: ACER calculations based on data provided by NRAs through the Electricity Wholesale (EW) template (2017), ENTSO-E and Nordpool Spot.
Security of supply

Figure iii: Treatment of interconnectors in national generation adequacy assessments, in Europe – 2016

Source: ACER 2017
These tensions apparent in the ROC debate

- Commission has proposed the creation of ROCs to carry out near-real time tasks of regional relevance, with decision-making authority
- Most MS, TSOs & NRAs want to retain their existing competencies and manage regionalisation through increased “cooperation”
3 The ROCs journey
The ROCs journey

Source: Options for the future of Power System Regional Coordination, ENTSO-E
4 The Commission’s proposal
Comparison of RSCI / RSC / ROC activities

RSCIs (Voluntary)
• Regional security coordination services
• Overview of power flows at regional level

RSC functions +
• Short-term adequacy analyses
• Outage coordination
• Common grid model
• Coordinated capacity calculation
• Defence & restoration plan consistency assessment

RSCs (Network Codes)

ROC functions +
• Regional sizing of balancing reserves, plus procurement platforms
• Role in assessing external generation contribution to CMs
• If delegated, identifying regional crisis scenarios
• Coordination in crisis situations
• Training and certification

ROCs (Recast Elec. Reg.)

Source: European Commission DG ENER
Commission’s proposal – ROCs' powers

• Adopting recommendations
• Issuing decisions concerning a limited number of tasks:
  • Decisions will be binding on TSOs
  • TSOs could only decline to implement ROC decisions if system “safety” would be compromised
Commission's proposal – governance

Managing Board
(TSO Members)

NRA Groupings

ACER

ROCs
Improving the Commission’s proposal
## Improving the Commission’s proposal – technical tasks

<table>
<thead>
<tr>
<th>Sizing and procuring balancing reserves</th>
<th>Identifying contribution of external generation to domestic capacity markets</th>
<th>Role in identifying regional crisis scenarios</th>
<th>Training and certification</th>
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<tbody>
<tr>
<td>Role in regional adequacy assessment</td>
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<td>Take on larger role and coordinate TSO responses should they occur</td>
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Improving the Commission’s proposal – Governance

• Maintaining the ROCs decision-making authority
• Ensuring systematic reporting when TSOs do not follow ROCs recommendations and decisions
• Establishing ROCS as entities independent of any national interest and with a clear regional focus
• Ensuring European oversight of the ROCs and enhancing cooperation at regulatory level through ACER
Beyond ROCs

- **RSCIs/RSCs (current situation)**
- **ROCs (Services to TSO + limited decision-making authority)**
- **Enhanced regional coordination (ROCs+). Enhanced near real-time roles and decision-making authority**
- **Regional System Operator (RSO)? Operational oversight and management of market-sensitive assets**

Timeline:
- 2017
- 2020 – 2025
- 2025 – 2030
- 2030?
Questions?

Please send questions through the Questions pane
Conclusions

• Regionalisation will bring extensive benefits for all MS.
• Regional system operation, along with transparent, strong regulation and governance, are key to successful regionalisation.
• If ROCs and regionalisation are done well, all MS and European customers reap the benefits.
Additional Resources

- Regional Operational Centres: A review of the Commission’s proposal and recommendations for improvement (report)
- EU must take regionalisation of electricity markets a step further (blog)
- Resource adequacy, regionalisation, demand response
- If Europe wants integrated markets, it should take the leap to regional grids (blog)
About RAP

The Regulatory Assistance Project (RAP)® is an independent, non-partisan, non-governmental organization dedicated to accelerating the transition to a clean, reliable, and efficient energy future.

Learn more about our work at raponline.org

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