EUROPEAN NETWORK CODE IMPLEMENTATION PROJECTS: GUIDELINE ON ELECTRICITY BALANCING

Strommarkttreffen  
Berlin, 09.03.2018
Agenda

1. Clean Energy for all Europeans matches Network Codes
2. Network Codes
3. The Guideline for Electricity Balancing
4. Implementation process in the PICASSO project
5. Impact on the European balancing markets
The Network Codes are part of the strategy Clean Energy for all Europeans

- Global leadership in renewable energy
- Efficiency first
- Energy Performance in Buildings
- Energy Efficiency
- Governance
- Harmonisation
- Efficiency of European electricity market
- 8 legislative proposals
- More sustainable
- More competitive
- More stable
- Internal Market for Electricity
- Electricity Market Design
- Energy Efficiency
- Renewable Energy
- Integration
- Connection
- Market
- Operation
- Network Codes
The Network Codes realise the idea of a harmonised internal European electricity market

Value proposition
- The NC build the framework for a harmonised market and are the cornerstones for an internal electricity market
- The NC help to ensure system security and stability
- The NC are the sources for European consumer value proposition and increase prosperity
- The NC help to ensure the European pioneer status regarding to the renewable energy integration and an internal electricity market

European Stakeholder Committees
- The integration of stakeholders is a key factor of a successful and efficient implementation of the NC
- ACER and ENTSO-E co-organized three stakeholder committees
  - Market Stakeholder Committee
  - Balancing Stakeholder Group
  - Grid Connection Stakeholder Committee
  - System Operations Committee
Each of the three families of the Network Codes addresses different topics

**Markets**
- Capacity Allocation & Congestion Management
  - Electricity Balancing
    - Forward Capacity Allocation

**Operations**
- Emergency and Restoration
- System Operations

**Connection**
- High Voltage Direct Current Connections
- Requirements for Generators
- Demand Connection Code

Network Codes
The EBGL should help increase security of supply, limit emissions and diminish costs to consumers.

- Creating a market where countries can share the resources used by their transmission system operators to balance generation and demand.
- Allowing new players such as demand response and renewables to take part in these markets.
- Electricity Balancing is one of the key roles of Transmission System Operators where they act to ensure system frequency.
- Ensuring security of supply and has an important bearing on costs to customers.
- The potential for balancing resources to be effectively shared between countries can enhance security of supply and reduce cost, hence there is a strong rationale for developing cross border balancing markets.
There are different projects which aims towards an efficient and optimal implementation of the Network Codes.
The **Platform for the International Coordination of Automated Frequency Restoration and Stable System Operation**

- Design, implement and operate an aFRR Platform compliant with the approved versions of the GLEB, SO GL and CACM, as well as other regulations
- Enhancing economic and technical efficiency within the limits of system security
- Integrating the European aFRR markets while respecting the TSO-TSO model
- Common European market with harmonised market design
The design of the aFRR platform can be influenced and improved by all Stakeholder.

- **Founder**: July 2017
- **Accession**: End of December 2017
- **Preparing EBGL, EU Comitology**: End of December 2017
- **aFRR implementation framework**: End of December 2018
- **Implementation of aFRR Plattform**: End of December 2021

..be part of it!
## IMPACT ON THE EUROPEAN ELECTRICITY MARKET

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<thead>
<tr>
<th>Changes</th>
<th>Implication</th>
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<tr>
<td>Definition and implementation of a standard product</td>
<td>Possible increase of the efficiency of the European electricity market</td>
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<td>The bidding process and balancing energy gate closure time is going to</td>
<td>We might expect an increase in social welfare by the degree of market</td>
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<td>be adjusted</td>
<td>integration</td>
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<td>The balancing Energy Pricing Period is going to be harmonised</td>
<td>There might be an increase of the system security</td>
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<td>Entry of new market players and technologies</td>
<td>Impact on price level expected</td>
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<td>...</td>
<td>Could increase the competition, impact business models and emphasize</td>
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<td>Europe’s state of a pioneer</td>
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Thank you for your attention!