Nordic Balancing Market

7 Dec 2016, Martin Møller
Nordic Power Market - Denmark, Sweden, Norway & Finland

4 Countries – 12 price zones

Day-a-head

- GCT: 12-36 hours
- Sold Volume 2015: 355,000 GWh (98%)

Intraday

- GCT: 60 min
- Sold Volume 2015: 4,000 GWh (1%)

Balancing Market

- GCT: 45 min
- Activated Volume 2015*: 3,600 GWh (1%)

Note: *The volume is the total activated volumes from both mFRR, aFRR and FCR-N. The GCT of 45 min only applies for mFRR
The Nordic Balancing Market is based on cross zonal marginal pricing – price split in case of congestions

Example on how mFRR prices can change when an area gets congested
Nordic experience with cross border marginal pricing for mFRR

- Introduced in 2003 – before pricing was based on ad-hoc bilateral agreements between TSO’s

- Significant increase in cross border trade when the cross border marginal pricing was introduced

- Fair to all BSP’s – No complaints in 13 years on this issue

- No incentive for TSO’s to shoot first – one price per ISP
Economical benefits from a Nordic mFRR CMOL are large
Key principles for an efficient mFRR balancing energy market

• No discrimination - all shall be allowed to participate with voluntary bids
• Easy to submit bids and possible to update price close to real-time (respecting TSO and platform needs)
• Price shall always be attractive for all BSP’s (cross border marginal pricing)
• Consequence for not delivering according to requested is in general the imbalance price
• Imbalance price shall in general not be artificially increased significant higher than the balancing energy price (else BSP/BRP’s may withhold unnecessary flexibility to protect themselves for imbalances)
In Dec. 2015 the Pilot project 5 decided to refocus on the creation of a Nordic mFRR CoBA and on the CoBA-CoBA exchange principles.

- Drafting a dedicated mFRR CoBA agreement between DK, FI, NO and SE, and ensuring equal treatment of connections to and from all external Nordic borders

- Towards Germany, focus was on developing CoBA-CoBA exchange models. Difficult to establish a market for exchange of balancing energy, as voluntary balancing bids is still not allowed in Germany

- Towards Baltic, focus is on developing CoBA-CoBA exchange models as a first step, and merging of Nordic and Baltic CoBA as a possible next step

- Towards Poland, No ongoing actions

The project is however now re-focusing again, and is taking part in the discussions of creating a European mFRR reference Project as the CoBA's has been cancelled.
The RPM pilot – 5 is very active in the discussions for creating a European mFRR reference project

- The Nordic would like to join the boat, and take part in a mFRR project that can become the EU mFRR reference project.

- The RPM-Pilot would be happy to provide the learnings obtained from more than 10 years of experience for operating a mFRR energy platform across 4 countries.

- Hence the focus for the RPM Pilot-5 Project is now dedicated to a EU wide mFRR market and not on a Nordic CoBA