INTEGRATION OF MFRR MARKETS

Opportunity document for France and Germany

7th December 2016
OVERVIEW

- Cross border product
- Process
- Algorithm
- Settlement
CROSS BORDER PRODUCT

- A focus on the product exchanged cross-border: local prequalification rules are left to national responsibility;

<table>
<thead>
<tr>
<th>Financial product</th>
<th>Physical product exchanged cross border</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Graph" /></td>
<td><img src="image" alt="Graph" /></td>
</tr>
</tbody>
</table>

Example for scheduled activation

- This XB product can be either **direct or scheduled activated**: activation start can happen at any point in time. It has been agreed on the possibility for BSP to submit a bid that could only be scheduled activated;

- This XB product is always **scheduled deactivated**: deactivation is always based on an ISP boundary;

- The product lasts **between 15 and 30 minutes** (this refers to the length of the block settled): 15 minutes for scheduled activated products and between 16 and 30 minutes for direct activated products.
• BSPs can bid either with **direct or scheduled only activated bids**
  • Maximizes bids submitted to TSOs
• TSOs can express **direct or scheduled needs**
  • Direct needs allow TSOs to respect time to restore frequency targets (15 minutes)
  • Scheduled needs allows netting

• The objective would be to try to express scheduled needs as much as possible in order to **take the most of netting potentials**
A process compatible with 15 minutes MTU and 30 minutes lead time countries

Process is direct then scheduled.
• General principle:
  
  • *Clearing* algorithm for *scheduled* needs
  
  • *FCFS* algorithm for *direct* needs
  
  • Discussions around tolerance on needs optimizing the handling of indivisible bids
  
  • No links in time
  
  • Complex bids were not considered
Several pricing methods were studied: preference for “cross zonal marginal pricing”

It is compliant with future EB GL:

- Profits are shared in a “fair” way between countries;
- Sets a fair competition between BSPs;
- It generates congestion rent in case of congestion;
- It is compatible with local imbalance pricing if deemed important for some countries.

*Settlement based on rectangles* for pragmatic reasons:

- Complex discussions around direct activated bids settlement
  - BSPs should be incentivized to bid direct activated bids and not only scheduled activated bids, if they have the technical capability to do so.