Integration of European Day-ahead and Intraday markets

A special focus on France and Germany

OFATE Market forum
Market design et transition énergétique - vers la multiplication des marchés?
Paris, 19 June 2019

Pietro Rabassi
Director, Central European Markets, Nord Pool
Agenda

What is Nord Pool?
More competition in power markets: how do you get this? your benefits?
More Integrated European power markets: benefits for you, how?
Q&A and suggestions
What is Nord Pool?
Nord Pool created the world’s first international power markets (DA and ID) that became the EU Target model, in France and Germany, too.
And this year we celebrate the 20 years of the first ID market!
Back to 1999!

OM-Power Click
At the end of 2018...

524 TWh yearly

>380 Customers

18 European markets

World-wide consulting

Organisation 140 people 25 nationalities
More competition in power markets: your benefits, how do you get this?
How do you get real competition?

Shared Order Books (and liquidity) at all times between competing NEMOs
Real competition to the benefit of wholesale market participants and hence of end consumers
From a German order perspective (example)
After DE-AT split

08:00
 Freeze

13:45-15:00
 DK1-DE, DK2-DE, Baltic

18:00
 DK1-DE, DK2-DE, Baltic

22:00
 D-60

D-30
 D-20
 Delivery start

On Local OB

On Local OB

On XBID

On XBID

On XBID

On Local OB Cross-TSO areas

On Local OB Within-TSO areas
More integrated European power markets: benefits for you, how?
NODES – Fully-fledged market design

Flexibility Marketplace

Need flexibility

Flexibility provider

Buy flex

Sell flex

Buy flex

Sell flex

Buy flex

Sell flex

Flex contract

Dispatch
## Use cases

<table>
<thead>
<tr>
<th>High Voltage</th>
<th>Medium Voltage</th>
<th>Low Voltage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schwarzheide (Germany)</td>
<td>aggregation small scale generation units</td>
<td>PV</td>
</tr>
<tr>
<td><strong>Generation</strong> (congestion)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Load</strong> (congestion)</td>
<td>Engene (Norway)</td>
<td>E-Mobility</td>
</tr>
<tr>
<td>Disproportionately high costs if annual peak load is exceeded</td>
<td>Aggregation of assets for balancing purpose</td>
<td>Aggregated storage</td>
</tr>
<tr>
<td><strong>Balancing</strong> (TSO/DSO coordination)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Activation of assets in congested DSO areas</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
NODES – Invites you to test in your grid

www.NODESmarket.com
THANK YOU!
MERCI!
DANKE!
TAKK!
Dziękuję!
GRAZIE!
DANK JE!

pietro.rabassi@nordpoolgroup.com
Q&A and suggestions
Pietro is the Director for Central European Markets and responsible for expanding Nord Pool’s business across Europe and creating greater value for its customers.

The Central European markets currently cover seven countries—Austria, Belgium, France, Germany, Luxembourg, the Netherlands, Poland.

Pietro has a professional background in international business, and the public and academic sectors, particularly relevant to the energy and power trading environment and to his role at Nord Pool.

He has studied engineering at Politecnico di Milano in Italy and at Ecole Polytechnique in France and pursued postgraduate business and government studies at Harvard University in the USA.

Pietro has lived in 7 countries so far. You may address him in Norwegian in the longer run, but for now it is easier to choose among English, German, French, Italian or Greek (you can try some Spanish and Russian, too).