Baltic Electricity Market Forum

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Virtual meeting, 19.11.2020
Agenda

01 BALTIC UPDATE

NORD POOL UPDATE
What is happening in the life of Nord Pool

02 DAY-AHEAD & INTRADAY
What is new? What to expect?

03 CAPACITY OPTIMIZATION AREAS
Switch from LBI to LRI

04 INFORMATION FOR MEMBERS
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Annual meeting 2020
BALTIC UPDATE
BALTICS: 10 months 2019 vs 10 months 2020

<table>
<thead>
<tr>
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<th>2019</th>
<th>2020</th>
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<tbody>
<tr>
<td>Consumption</td>
<td>22.7</td>
<td>21.9</td>
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<tr>
<td>Production</td>
<td>13.2</td>
<td>12.1</td>
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Nord Pool market share 2020: 99.0%

LATVIA

Average prices (EUR/MWh): 46.98 32.13
Nord Pool market share 2020: 105%

ESTONIA

Average prices (EUR/MWh): 46.55 31.77
Nord Pool market share 2020: 87%

LITHUANIA

Average prices (EUR/MWh): 47.10 32.24
Nord Pool market share 2020: 100%
NORD POOL UPDATE
Nord Pool ownership from January 2020

Euronext is a pan-European exchange group operating regulated markets in Belgium, France, Ireland, the Netherlands, Norway, Portugal, and the United Kingdom.

Euronext also operates non-regulated activities in 16 countries across the world.

The Nordic TSOs and Lithuanian TSO hold 34% through a joint holding company.
At a glance

- Nord Pool offers day-ahead and intraday trading, clearing and settlement services
- Also regulatory compliance and market data services
- More than 360 customers from 20 countries trade on Nord Pool’s markets
- Operates in 16 European countries
- Service markets
- ~140 employees, 25 nationalities, offices in Oslo, Stockholm, Helsinki, Tallinn, London and Berlin

478 TWh
day-ahead

15.8 TWh
intraday

360
customers
Highlights from 2020

• Positive growth for Nord Pool Year on Year
  • Day-ahead: 787 TWh traded YoY (756 TWh, B+S)
  • Intraday: 22 TWh traded YoY (16 TWh, B+S)

• Intraday
  • Launched in Poland
  • Extended trading GCT in FI to 0 min before delivery
  • Back-up solution for XBID downtimes
  • Continues performance improvements

• New collateral model
  • In avg. 42% reduction in collateral calls so far

• 20 years of full Nordic market coupling!
• Nordic MNA go- live 3rd of June
Anonymous backtest examples

Looking at period Jan’19 – May’20.

All values have been hidden to ensure anonymity.

Difference between existing and new collateral requirement are especially large in periods with low spot price.
Nordic Multi-NEMO Arrangement

- Go-live was 3rd of June 2020
- Two active NEMO’s in the region, one NEMO hibernating
- Currently we have MNA’s in place for most of CWE
  - Next step is Poland in H1/2021 (maybe)

Nordic Multi-NEMO Day-Ahead Market Coupling Go-Live 3 June 2020

- Regional testing completed
- Important step towards further European market integration
- Larger share of power exchanged to benefit the Nordic market

The partners in the Nordic Multi-NEMO Market Coupling project plan to launch the Multi-NEMO Arrangement (MNA) in the Nordic region on 3 June 2020, after proving and regulatory approval, and final technical readiness. This marks the final stage of the implementation phase of the project after successful completion of extensive pan-European testing.

The launch will be followed by a two-week roll-back period maintaining the possibility of reverting to the pre-launch situation, should issues arise outside the market coupling process.
DAY-AHEAD & INTRADAY
PLANS FOR DAY-AHEAD PLATFORM

What Nord Pool plans to do

Day-ahead system is being renewed – the new platform today operates our CWE Day-ahead market

Improved look and feel of the trading UI – Day-ahead Web – but main design & functionality remains

Nordic/Baltics markets will be migrated to new platform during 2022*

Focus on API integration – simpler Auction API available

* Indicative timeline
SIDC backup solution

Flagging of self-trades across multiple legal entities

Automatic order deactivation for API users in case the connection is lost to limit the risk of unwanted exposure in the market during disconnection

Successfull launch of Intraday in Poland
Extended Intraday Trading Pilot

Status update

- Pilot has been extended to 31.3.2021
- Purpose is to see how trading behaves during winter season.
- 35 market participants have benefited of the opportunity
- So far 34,8 GWh of electricity has been traded during the extended trading period (30 min before delivery hour)
  - 72% during the last 15 min before delivery hour
- Clear use case during unplanned disturbances in power system
- No negative feedback from local TSO
CAPACITY OPTIMISATION AREAS
From LBI to LRI

3rd of November  0 capacities for LBI, close of portfolios
5th of November  ATC for LRI, open of portfolios

Electricity import (12 days) GWh
NORD POOL WEBINARS
ANNUAL MEETING 2020
Webinars:

25th November  
Nord Pool’s offering in Poland

30th November  
REMIT Fees and Market Surveillance

3rd December  
REMIT UMM platform

Annual meeting:

virtual meeting for all Nord Pool members and other stakeholders

2 days with different topics
BACKUP SLIDES
Nord Pool delivers day-ahead and intraday trading, clearing and settlement to customers.

**Products and Services**

**DAY-AHEAD**
Our day-ahead trading platform offers single hourly blocks, block orders, minimum acceptance ratio, linking, flexi orders and exclusive orders.

**INTRADAY**
Through the European Cross-Border Intraday Market (XBID) solution, customers can trade 16 intraday markets in one and get access to a large intraday liquidity pool.

**CASS**
Nord Pool offers an efficient in-house clearing solution to all customers, with access to all data and information they require.

**COMPLIANCE**
We have developed our compliance services and automated reporting tools to help our customers meet obligations under REMIT and Transparency regulation.

**DATA**
Premium market data services to accommodate transparent and efficient power trading.
Strong platform to match the needs of our customers

One counterpart across Europe
- Expanding with customers within Europe – offering the same user experience across all markets
- Offering including trading, clearing, compliance and data services to all customers

Best-in-class customer management
- Close collaboration with customers to solve the challenges they face on a day-to-day basis
- Unparalleled network with all relevant stakeholders
- Deep market and regulatory know-how, ensuring that customers are up-to-date on all relevant information

Competitive total cost of trading and clearing
- Cost-efficient clearing and settlement of exchange traded power through modern but simple banking solutions
- Adaptable fee structure strategy to accommodate for all kind of customers

Seamless trading platform and APIs
- Robust platform with few interruptions
- Efficient and tailored API capabilities offering maximum convenience to power traders

Centralised, in-house technology hub in Helsinki
- 50+ IT talents working with front-end software development, automation and self-service solutions
- Agile and cross-functional teams

Oslo HQ + business competence hub
- Industry and commercial expertise
- Customer service
- Operations
- Nord Pool Consulting

Mobile sales organisation covering Europe
- Meeting the customers “where they are” to fully understand and solve their problems
- Local language
- Personal and collaborative approach
About Multi-Nemo Arrangements

Why have the MNAs been introduced?
MNAs have been introduced as one step in enabling competition within the wholesale power exchange markets which have, until now, been predominately run by monopoly power exchanges either by law or de facto.

What are the benefits of these arrangements for market participants?
Market participants benefit through greater choice and have the potential to trade more markets with a single counterpart.

Will the day-ahead markets operate differently after go-live?
Market participants will not see any difference from how the day-ahead auction is run today – adaptation will be done in backend.
Multi-NEMO Arrangement

NEMO = Nominated Electricity Market Operator

* or, for the continuous Intraday market, XBID
MNA in the Nordics – pre-launch

Production

NEMOs, TSOs, NRAs

Transmission

Brokers, traders & retailers

Single Day-Ahead Coupling (SDAC)

Single Intraday Coupling (SIDC)

Consumer

Power-intensive industry

Enterprise
MNA in the Nordics – post-launch (today)

- Production
- Transmission
- Brokers, traders & retailers
- Consumers
- Enterprise
- Power-intensive industry

Multiple power exchanges (NEMOs)

Single Day-Ahead Coupling (SDAC)

Single Intraday Coupling (SIDC)