Long Term Transmissions Rights

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Q2. How do you view the functioning of the current financial market and the instruments it provides?

Do we need new LTTRs in Nordic Market?

The current Nordic approach to hedge long term risk exposure, with financially settled SYS and EPAD contracts ***satisfies our needs fairly well***

- price discovery/transparency is good
- liquidity is acceptable given the size of the different areas, but would preferably be higher
- some concern for decreasing SYS contract liquidity

⇨ SYS + EPAD is a well functioning set up and should continue to be the preferred choice for hedging

LTTRs can be a positive complement, but must not be seen as the ***main hedging solution*** and should be considered in the light how they can further overall liquidity in EPADs and SYS contracts

Irrespective of the allocation method chosen for interconnector capacity, it is of major importance for the efficiency of the system that existing connections have a high availability to the market and that they are used in an optimal way. The current practise of reducing capacity on the DK1-DE connection, in particular, but also DK2-SE4 and DK1-SE3, results in major inefficiencies.

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Q3 Could the introduction of LTTRs in the Nordic market bring additional hedging possibilities for you?

LTTRs – not an ideal hedge

	EPAD+SYS	LTTR+….
Timing	Continuous trading with market making	Auction
Firmness	Full	Not full, curtailment can result in considerable losses
Complexity	Low	High (options)

EPAD and SYS contracts give a more transparent hedge and is preferable!

Main drawbacks with LTTRs

1. Timing –
   - *the hedge tied to time of auction*
   - *less price discovery than continuous EPAD+SYS*
   - *risk for concentration of liquidity*
2. Firmness –
   - *the less firm the PTR the less significance its rationale as hedging instrument*
   - *more complex product, more risk averse players is affected the most.*
3. Predictability of auction schedules –
   - *since timing between exposure and possible hedge with PTRs differs it is of utmost importance that the market participants can rely on that there will be auctions.*
   - *cancelled yearly and monthly auctions on DK1-DE border is a very disturbing example of how inadequate the LTTR hedge can be.*

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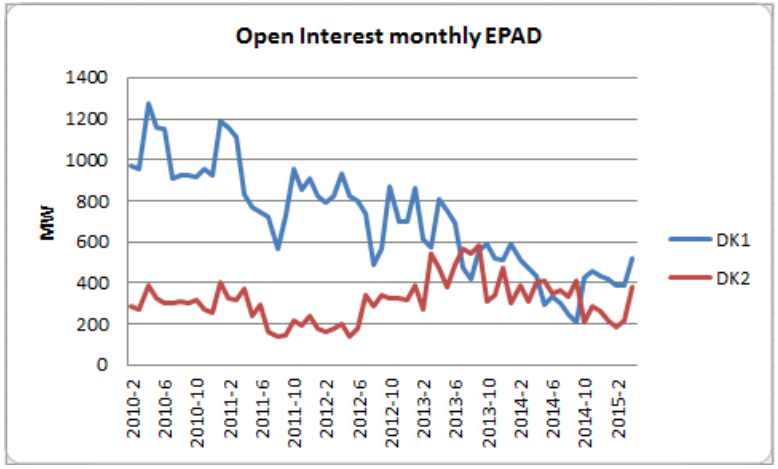
Q3. Could the introduction of LTTRs in the Nordic market bring additional hedging possibilities for you?

Danish PTRs experience

- Yearly and monthly PTR auctions held on CASC platform
- PTRs with (UIOSI) as good as FTRs
- Not resulted in higher open interest (liquidity) for CPH EPADs
- Cancelled auctions (-14 and -15) might have impacted open interest for ARH EPADs
- Overall satisfied with setup, but only to a smaller degree new hedging possibilities

PTRs is a complement but cannot replace EPADs



* Open interest for monthly EPAD (adjusted for missing quarterly OI) on Nasdaq OMX (source Reuters)

Q4. Explain how you view a hedge between two bidding zones – does it add value to the market? **and**

Q5. How would a potential introduction of LTTRs in the Nordics, in your view, affect the liquidity of the current financial market and why?

Trade offs between added value and overall liquidity

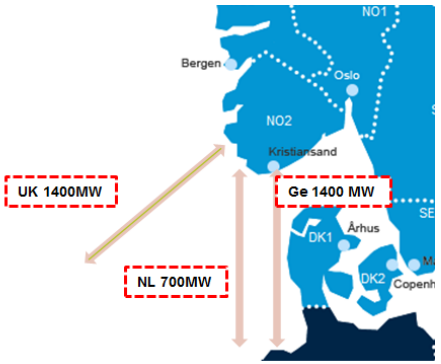
- LTTRs can definitely add value to specific market participants, but might be disruptive for the whole market.
- LTTRs mainly bring value to the whole market when you have at least one very liquid area, for instance Germany.
- LTTRs between two small markets might lead to lower liquidity in both markets due to internal hedging

⇨ LTTRs add value to the market if it increases or at least does not decrease the overall liquidity.

Some liquidity concerns

- Risk that LTTRs will transfer liquidity from Nordic contracts to "continental contracts".
  - *negative influence on the liquidity of the SYS **and** EPAD price contract.*
  - *New HVDC connections will increase this impact.*
  - *Nordic market splitted in many smaller areas, having a negative impact on participants not able to trade LTTRs*

Example NO2: LTTR hedging could drain SYS liquidity substantially in the future

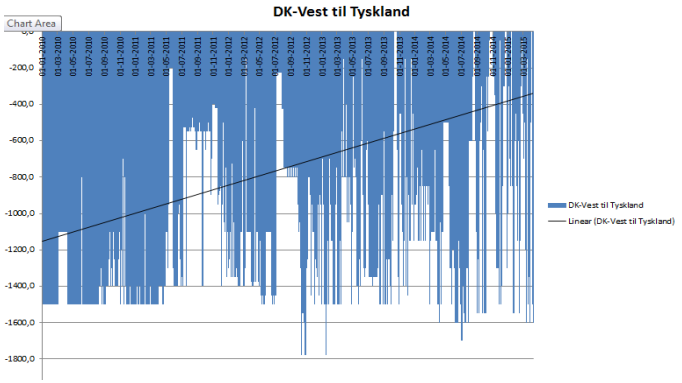


⇨ Full LTTR hedging poses a risk to SYS liquidity

Q8. If TSO's are to become involved in the forward markets in the Nordic region, what kind of involvement would you prefer on their side?
What is the most efficient ways for them to support the existing market functioning?

TSO's involvement in the market

- Capacity allocations
  - *transparent and predictable*
  - *as efficent (high) as possible*



- Price area divisions
  - *optimal from a grid point of view **and** from market considerations (balance between production and consumption).*
    - *Why the division of SE1/SE2?*
    - *Do we need a split between SE3/SE4, (when new capacity is installed with the Southwest link)?*
  - *Stable and predictable*
    - *Statnett's use of "floating" price areas*

- Why LTTRs? Why not Long Term Transmission Obligations (LTTO)? or TSO EPAD market making?

Q7. How can market participants, stakeholders and regulators promote the functioning of the current financial market and secure sufficient hedging possibilities for fundamental market participants?

Keep the Nordic model

- The Nordic market should not be forced to adopt to a new model just to comply with EU harmonization on back of (bad) conditions in other parts of the union.
- The most important for Nordic market is continued use of bank guarantees as means of collaterals for financial hedges in the Nordic market.
- Especially important that the regulators promotes the Nordic (financial) market model.

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Q6. Does the trading venue and model of trading (auctions or other) affect the appeal and arrangement of hedging?

Demands on LTTRs

- More frequent auctions, covering longer time horizons
- LTTRs should be traded on a secondary market
- LTTRs should be fully firm
  - *Full firmness would give sharp incentives for TSOs to allocate higher capacity to the day ahead market and plan maintenance work to periods when the market is least affected.*
  - *Cost recovery designed in a way that reflects the true costs to the system of curtailment is another important element to be applied in situations where full physical firmness cannot be obtained.*
  - *The higher the compensation payable to holders of reduced capacity, the less risk of reductions and thus the lower risk premium in bids for capacity.*
  - *Market participants should be able to assess the magnitude of curtailment risk through transparent principles for curtailment. Those principles should be explicitly stated by the TSOs.*

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