

## **NVE-RME call for reactions on the Thema reports on power price hedging opportunities in the Nordics and on NordLink, NorNed and North Sea Link**



### **EFET response – 14 September 2021**

The European Federation of Energy Traders (EFET<sup>1</sup>) thanks NVE-RME for the opportunity to provide reactions to the Thema reports on power price hedging in the Nordics and on the NordLink, NorNed and North Sea Link cables. Our response should be understood in the context of our contributions to Thema during the drafting of their reports<sup>2</sup>, as well as our long-standing position on hedging in the European power markets in general<sup>3</sup>, and in the Nordics in particular<sup>4</sup>.

We particularly welcome the attention that NVE-RME seems to attach to respecting its obligations under the Forward Capacity Allocation Regulation (FCA GL) – both in letter and spirit – soon to be applicable in Norway. We expressed at multiple occasions our disappointment with the EU Nordic NRAs' decision back in 2017 not to issue long-term transmission rights (LTTRs) at the borders of their bidding zones (where they do not exist), according to article 30.2 FCA GL<sup>5</sup>.

<sup>2</sup> See the EFET response to the Thema questionnaire on Nordic power price hedging, dated 19 November 2020 and available at:

<https://data.efet.org//Files/Documents/Downloads/EFET%20response%20to%20Thema%20questionnaire%20on%20Nordic%20hedging.pdf>.

<sup>3</sup> See the EFET paper calling for compulsory issuance by TSOs of forward transmission rights throughout Europe, dated 22 July 2014 and available at: [https://data.efet.org//Files/Documents/Downloads/EFET\\_Compulsory-forward-TRs-22-Jul-14.pdf](https://data.efet.org//Files/Documents/Downloads/EFET_Compulsory-forward-TRs-22-Jul-14.pdf).

<sup>4</sup> See the EFET reaction to the Energitilsynet consultation on the proposed decision of the Danish and Swedish NRAs on long-term hedging opportunities in Denmark and at its Northern borders, dated 25 April 2017 and available at: [https://data.efet.org//Files/Documents/Downloads/EFET\\_forward-rights-DK-SE-NO\\_25042017.pdf](https://data.efet.org//Files/Documents/Downloads/EFET_forward-rights-DK-SE-NO_25042017.pdf), the EFET memo on a reality check on the market impact of splitting bidding zones in Sweden, dated June 2016 and available at:

[https://data.efet.org//Files/Documents/Electricity%20Market/General%20market%20design%20and%20governance/EFET-memo\\_Swedish-zones-reform.pdf](https://data.efet.org//Files/Documents/Electricity%20Market/General%20market%20design%20and%20governance/EFET-memo_Swedish-zones-reform.pdf).

<sup>5</sup> This concerns the following borders in the Nordic, Hansa and Baltic CCRs: FI-EE, FI-SE1, FI-SE3, SE1-SE2, SE2-SE3, SE3-SE4, SE4-LT, DK1-SE3, DK2-SE4, LV-EE, LV-LT, PL-LT and PL-SE4.

<sup>1</sup> The European Federation of Energy Traders (EFET) promotes and facilitates European energy trading in open, transparent and liquid wholesale markets, unhindered by national borders or other undue obstacles. We build trust in power and gas markets across Europe, so that they may underpin a sustainable and secure energy supply and enable the transition to a carbon neutral economy. EFET currently represents more than 100 energy trading companies, active in over 27 European countries. For more information: [www.efet.org](http://www.efet.org)

We also note that, following the analysis and survey conducted back then according to article 30.3/30.4 FCA GL and already identifying a lack of hedging opportunities at some of these borders, a 2018 decision of the Danish, Swedish, Latvian and Lithuanian regulators to develop alternative hedging opportunities according to article 30.5<sup>6</sup> did not materialise in any concrete implementation at these borders. The commissioning of the Thema reports, and the depth into which they analyse power price hedging opportunities make us hope for an open and fact-based discussion on power price hedging in the region.

In this paper, we comment on several key points of the reports and lay out **our vision of forward markets in Europe, i.e. OTC and exchange-based markets for energy underpinned by firm transmission rights issued by the TSOs at every single bidding zone border, allowing liquidity and competition to develop throughout Europe**. We look forward to a fruitful debate with NVE-RME and other Nordic NRAs on power price hedging in the region and at its borders. In complement to the reflections in this paper, we remain at the disposal of the regulators for any clarifications, and we look forward to an open debate on the matter.

## I. General EFET position on power price hedging

EFET believes that a common European design model is essential to ensure liquidity and competition in the forward electricity market. Liquid and competitive forward markets ensure that market participants can appropriately manage a variety of risks they which they are exposed and contribute to achieving the three corners of the energy trilemma – affordability, sustainability and security of supply.

### *Affordability*

Participants in the electricity market are exposed to a number of risks. Chief among those is the power price risk, stemming from the discrepancy between, on the one hand, the spot and imbalance prices at which market participants buy and sell electricity and, on the other hand, the long-term commitments they have with final customers or by owning capacity assets. Forward market prices within each bidding zone gradually develop a range of products and tenors as a result of trading between generators, suppliers and intermediaries, all of whom wish to secure and/or close out their position in advance. Managing this power price risk through hedging is a key element in sourcing and providing electricity to customers competitively, as it allows market participants to avoid exposure to short-term price volatility and imbalance costs.

Power markets in Europe don't work in isolation. While some market participants may transact to hedge their risks only in bidding zone where they have clients or own physical assets, most do consider transactions across bidding zone borders as part of their hedging strategies. This may be linked to the fact that their positions span across these borders, or because of a lack of liquidity and competition in their home market makes hedging in another market essential or more efficient. When hedging positions across borders, market participants need to factor

<sup>6</sup> This concerns the DK1-SE3, DK2-SE4, LV-LT and SE4-LT borders.

in an additional uncertainty, namely the price spread between bidding zones. We detail below how, by issuing long-term transmission rights, TSOs (including operators of merchant transmission cables) help market participants cover this uncertainty most efficiently and contribute to the ability of power sector actors' ability to deliver electricity to end-consumers at the lowest price.

### *Sustainability*

As all European countries are transitioning towards energy decarbonisation, forward markets are essential for the integration and financing of intermittent renewable energy sources (RES) as well as other technologies that complement them.

Investors in renewable projects often outsource the market risks of their project, by means of long-term power purchase agreements (PPAs). In case of liquid forward markets that provide a price signal one to a few years ahead of real-time, market participants can bid for such PPAs at more competitive prices. Also, as experienced in the past 20 years, the growing penetration of RES and greater need to adjust positions on the market close to delivery as a result of their intermittency has not resulted in a drop of forward transactions. Indeed, as uncertainties about short-term prices and volumes rise with more intermittent generation in the system, all participants in the market – RES operator or other – need to cover these uncertainties ahead of real time.

In quite the same manner, a reliable forward power price based on liquid and competitive market is also essential for the uptake of technologies complementing RES in the energy transition journey, such as demand response, electrical storage or power-to-X.

### *Security of supply*

The risks which market participants try to address when trading in forward markets are not related to price volatility alone. Forward markets provide long-term price signals, and thereby contribute to a more stable environment for those wishing to invest in assets and technologies for power generation, demand response and storage.

Transactions in forwards and futures may give a price signal far enough ahead to help incentivise new investment. For this, forward markets need to be liquid, and the forward curve of a published reference price should go far enough in time (i.e. three years or more). Such liquid and forward-looking markets can then serve as a basis for the conclusion of PPAs that will support investment in different types of technologies.

As not all markets in Europe present high levels of liquidity and a multi-year forward-looking curve, investors may want to make use of another, more liquid market in another bidding zone to support investments in their home bidding zone. Once again, the availability of instruments allowing market participants to reduce their exposure to the price spread between these markets is essential to support investments, and in turn the security of supply of Europe.

## II. The case for long-term transmission rights

TSOs, as managers of cross-border capacity, are the only asset owners and/or operators with an in-built capability to offer primary, physical hedges against future congestion rents through the allocation of firm cross-border transmission capacity. TSOs, as owners or operators of cross-border transmission lines, are *long* in transmission while all market participants with a cross-border position are *short* in transmission. TSOs in this sense are *natural sellers* of firm transmission capacity rights that can help market participants hedge price spread uncertainty.

It is our firm view that all TSOs ought to auction this transmission capacity well ahead of real time, in the form of long-term transmission rights (LTTRs) to market participants. LTTRs are the main instrument to hedge price spread uncertainties for market participants wishing or needing to trade across bidding zones as part of their hedging strategy. This will, in turn, also facilitate competition, as it will allow producers and retailers to manage their portfolios across the whole of Europe over the appropriate 1 to 3-year time horizon for which supply contracts are typically concluded. In order to fill this purpose, LTTRs should be:

- financially firm
- for each bidding zone border in Europe, in both directions
- auctioned sufficiently in advance of real-time (month ahead, year ahead, and ideally multiple years ahead)
- auctioned in sufficient quantity (corresponding to the all the capacity deemed available by the TSOs at the time of the allocation)

In addition to providing added value to market participants, LTTRs are also beneficial for TSOs: When selling capacity rights at auctions, TSOs cash in income proportional to the degree of congestion between the two concerned bidding zones. The calculation of long-term transmission capacity and allocation of LTTRs also provide essential signals enabling TSOs to take more efficient network management and investment decisions at longer time horizons.

EFET does not believe there is any reason to consider a non-harmonised model for the issuance of LTTRs in any part of Europe. While the FCA GL nonetheless foresees a possibility otherwise, we are not aware of a successful example of "appropriate cross-border financial hedging" being offered "in liquid financial markets on both side of an interconnector" in any part of Europe, as the regulation requires for TSOs not to be obliged to issue LTTRs. LTTRs issued by TSOs provide an open and non-discriminatory access to hedging solutions against price risks, with no additional transaction costs. They allow all market participants to take part, without having to rely on the non-guaranteed liquidity of financial markets, a liquidity that is always in danger, as we have experienced with the contracts for differences in the Nordic region (EPADs)<sup>7</sup>.

The issuance of LTTRs is essential for the development of any wholesale trading or retail activity for non-local participants in all bidding zones (not just virtual ones), and for market participants to benefit from the liquidity of all European markets on a forward basis. In addition,

<sup>7</sup> For more details on the dwindling liquidity of EPADs in the Nordic region, see our Memo on the Swedish bidding zone split, dated June 2016 and available at: [https://data.efet.org//Files/Documents/Electricity%20Market/General%20market%20design%20and%20governance/EFET-memo\\_Swedish-zones-reform.pdf](https://data.efet.org//Files/Documents/Electricity%20Market/General%20market%20design%20and%20governance/EFET-memo_Swedish-zones-reform.pdf).

the issuance by all TSOs of forward transmission rights is all the more necessary that no evidence has been provided since the start of the liberalisation process that the non-issuance of LTTRs would bring any benefit to the internal energy market, nor that the issuance of LTTRs could in any measure be harmful to existing, alternative arrangements for forward hedging.

### **III. Comments on the Thema reports**

EFET wishes to congratulate Thema on the quality of their reports. The report on price hedging on NordLink, NorNed and North Sea Link, in particular, goes into a level of detail not matched in previous analyses conducted in application of article 30.3/4 FCA GL. While we generally agree with the content of the report, we present below several comments and observations:

#### *Limited consideration of OTC trading*

The Nordic forward market in electricity has long been dominated by exchange-based transactions. This traditional approach to forward markets transpires through the almost exclusive use of the term “*futures*” in the Thema reports, just as well as in the NordREG methodology establishing a methodology to assess price hedging opportunities which only considers local exchange-based transactions.

Concentrating only on futures without any or much attention to forward OTC transactions when looking at price hedging opportunities is ignoring two realities of the current market the Nordic region:

- the growing trend of Nordic market participants to hedge their positions – even if purely Nordic – on more liquid continental European markets (OTC and exchanges), as a result of dwindling liquidity on the Nordic exchange for futures (Nasdaq) and in contracts for price differences (EPADs);
- the increasing volume of transactions between the Nordic area and the rest of Europe, as a result of the tighter integration of European markets both from a system and markets viewpoint.

As a result, transactions involving Nordic market participants on the continental European forward market, be it to hedge strictly Nordic positions or to cover risks associated with cross-border positions, are increasingly common. Overlooking the role that OTC markets play in price risk hedging in the Nordic region bears the risk of developing a regulatory framework that does not fit the needs and practices of market participants.

#### *Omission of the Skagerrak cable*

We note that the report on price risk hedging opportunities on the cables linking Norway to the rest of Europe omits the Skagerrak cable, linking DK1 to NO2. There is no explanation in the report why the report does not include this cable.

We insist that the assessment on price risk hedging opportunities and the proposals to remedy any possible problem include all bidding zone borders in Europe. For the specific case of the Skagerrak cable, we don't believe that the fact that the cable is “internal” to the Nordic area justifies any different treatment from cables connecting Norway with non-Nordic countries.

### *Reference to the Nordic system price or to the NO2 price for LTTRs*

In their reflection on the possible issuance of LTTRs on cables linking Norway to the rest of Europe, Thema poses the interesting question of the reference price on the Norwegian side. Indeed, all cables linking Norway to the rest of Europe land in the NO2 bidding zone. And the lack of local price risk hedging instruments in NO2 (EPADs are not available in this zone) poses the question of the value added of LTTRs between NO2 and the rest of Europe for any other market participants than those located in NO2. In turn, Thema looks at the possibility for the LTTRs to use the Nordic system price as a reference, rather than the local NO2 bidding zone price.

To properly understand the problem faced by market participants, we must remember that, whether they trade across border to hedge a purely Nordic position (possibly even inside a single zone) or a cross-border position, market participants are always only exposed to the price of one single bidding zone. The bidding zone is the level at which market participants are settled for any imbalances, against the imbalance settlement price.

Hence, using the Nordic system price as a reference for LTTRs between Norway and the continent would not complete the price spread risk hedge that market participants are seeking, and the use of additional instruments to link the local bidding zone price to the system price would be needed. For market participants situated directly in NO2, no EPADs would be available for that, and for those situated in other zones, liquidity of EPADs is inconsistent. In any case, the use of LTTRs with a reference to the system price would continue to leave market participants reliant on the poor liquidity of EPADs, rather than providing them with the natural hedge that the TSOs have in their hands. It is important to note that for the TSOs as well an LTTR referenced to the system price will create a discrepancy between the local zonal price and the system price that they will need to manage at the time of settlement of LTTRs in day-ahead.

Zone-to-zone LTTRs, on the contrary, offer a perfect hedge against price spread risks for market participants, and don't induce a mismatch between the local zonal price and the system price that could have adverse consequences for the TSOs. The problem of unavailability of EPADs in NO2 should be remedied by ensuring that LTTRs are issued by the Norwegian TSO at the borders of NO2 with other bidding zones rather than seeking to attach LTTRs to a synthetic reference price. In turn, ensuring that LTTRs are issued by the Nordic TSOs at every single border in the region will ensure access to LTTRs on borders linking it with the rest of Europe.

Hence, future LTTRs issued for the borders between NO2 and the rest of Europe should use NO2 as a reference on the Norwegian side, and not the Nordic system price. To ensure that these LTTRs stimulate liquidity and competition besides NO2, this should be accompanied by the issuance of LTTRs at all Nordic bidding zone borders.

### *FTR obligations vs. FTR options*

EFET is of the opinion that Physical Transmission Rights (PTRs) based on "Use It or Sell It" (UIOSI) principle or Financial Transmission Rights (FTRs) as options (not obligations) are the long-term hedging products which should, at a minimum, be offered by TSOs between all

bidding zones across Europe. These products give the maximum flexibility for companies to compete across borders and avoid creating new barriers to entry to cross-border market participants. The introduction of pure transmission obligations should probably be developed by the industry itself and can only be considered after TSOs have established a healthy market for transmission rights as options.

If the functionality of anticipated netting was considered as part of the TSO activities, additional consultation and details would need to be considered. An important requirement would be to avoid splitting liquidity of the limited volume of available rights. Therefore this function could also be added as an option to existing LTTRs. Another simple option would be to limit TSO activity to optional rights based on the volume of available interconnection capacity volumes and to let the industry develop the adequate regime for obligatory rights as they require very different competencies and processes.

#### **IV. EFET recommendations**

EFET believes that, applied across Europe, adherence by TSOs to the following principles would promote an efficient market design and facilitate cross-border energy trading:

- **TSOs shall auction LTTRs in the form of PTRs with UIOSI or FTR options.** It is essential for market participants to be able to buy transmission capacity rights that allow them to hedge positions across borders and deliver power across borders for a fixed price.
- **TSOs shall auction the maximum of available capacity over appropriate timeframes.** Borrowing the model of the forward electricity commodity markets, TSOs can organise LTTR auctions regularly, on each occasion for a variety of maturities. They should allocate to market participants the maximum amount of capacity expected to be available for the considered period, as calculated at the time of allocation well in advance of real time. Auctioning should take place at least as of one year ahead but would ideally also be organised several years ahead.
- **Transmission rights must be firm.** TSOs, as natural sellers of firm transmission capacity rights, have the ability to manage the risks involved, enjoy a variety of operational and physical means to adjust those risks, and indeed are the only actors in the electricity sector that can do both. The transfer of the “firmness risk” from market participants to TSOs (in exchange for payment) will result in an overall efficiency and welfare gain.
- **Transmission rights need to be fungible in a secondary, traded market.** Liquid secondary markets for capacity would allow market participants to manage their transmission capacity portfolios, giving especially the possibility to “slice and dice” i.e. turn an annual or monthly right into hourly pieces, just as traders already do in the case of their wholesale electricity transactions. Secondary markets would also enable TSOs to buy back in the market any proportion of rights they turn out to have oversold in advance, for example in order to manage unexpected operational circumstances identified in advance.

We urge regulators across Europe, and NVE-RME in particular, to request TSOs to issue LTTRs for interconnections. This is a key element to ensure cross-border competition, rationalise price signals, provide transparency and in turn increase liquidity on the market and facilitate market entry.