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All TSOs of the Nordic synchronous area proposal for common settlement rules applicable to intended exchange of energy as a result of frequency containment process and ramping period and to all unintended exchange in accordance with Article 50(3) and 51(1) of Commission Regulation (EU) 2017/2195 of 23 November 2017

18 February 2020

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All TSOs of the Nordic Synchronous area, taking into account the following:

### Whereas

- (1) This document is a common proposal developed by Fingrid, Energinet, Statnett SF and Svenska Kraftnät (hereinafter referred to as “Nordic TSOs”) regarding the common settlement rules for intended exchange of energy as a result of frequency containment process (hereinafter referred as “FCP”) and ramping period within the Nordic synchronous area in accordance with Article 50(3) and for all unintended exchange of energy within the Nordic Synchronous area in accordance with Article 51(1) of Commission Regulation (EU) 2017/2195 of 23 November 2017 establishing a guideline on electricity balancing (hereinafter referred to as “EBGL”). This proposal is hereinafter referred to as the “Proposal”.
- (2) The Proposal takes into account the general principles and objectives set in the EBGL as well as Regulation (EC) No 714/2009 of the European Parliament and of the Council of 13 July 2009 on conditions for access to the network for cross-border exchanges in electricity as well as Regulation (EC) No 2017/1485 of 2 August 2017 establishing a guideline on electricity transmission system operation (hereinafter referred to as “SOGL”).
- (3) The Proposal takes into account the general principles adherent to settlement processes in accordance to Article 44 of the EBGL that require that the settlement processes shall inter alia:
  - (a) *provide incentives to TSOs to fulfil their obligations pursuant to Article 127, Article 153, Article 157 and Article 160 of the SOGL;*
  - (b) *avoid distorting incentives to BRPs, BSPs and TSOs*  
and;
  - (c) *ensure financial neutrality of all TSOs.*
- (4) The Proposal takes into account the specific requirement to the settlement of unintended exchanges in accordance to Article 51(3) of the EBGL that the settlement shall: *ensure a fair and equal distribution of costs and benefits between them.*
- (5) Article 50(3) and Article 51(1) of the EBGL defines the deadline for the submission of the Proposal to NRAs:

*By eighteen months after the entry into force of this Regulation, all TSOs intentionally exchanging energy within a synchronous area shall develop a proposal for common settlement rules applicable to intended exchanges of energy, as a result of one or both:*

  - (a) *the frequency containment process pursuant to Article 142 of Regulation (EU) 2017/1485;*
  - (b) *the ramping period pursuant to Article 136 of Regulation (EU) 2017/1485*

and;

*By eighteen months after the entry into force of this Regulation, all TSOs of a synchronous area shall develop a proposal for common settlement rules applicable to all unintended exchanges of energy. The proposal shall include the following requirements:*

- (a) *the price for unintended exchange of energy withdrawn from the synchronous area shall reflect the prices for activated upward balancing energy for frequency restoration process or reserve replacement process for this synchronous area;*
- (b) *the price for unintended exchanges of energy injected into the synchronous area shall reflect the prices for activated downward balancing energy for frequency restoration process or reserve replacement process for this synchronous area.*
- (6) The Proposal contributes to the objective of non-discrimination and transparency in balancing markets pursuant to Article 3(1)(a) and Articles 3(2)(a) and 3(2)(b) of the EBGL, since the same settlement rules will apply equally to all TSOs of the Nordic Synchronous area. The settlement rules will be publicly available. The Proposal does not have direct implication on TSOs outside the Nordic synchronous area.
- (7) In conclusion, the Proposal contributes to the general objectives of the EBGL.

### **Abbreviations**

The list of abbreviations used in this Proposal is the following:

- aFRR: automatic frequency restoration reserve
- EBGL: Commission Regulation (EU) 2017/2195 of 23 November 2017 establishing a guideline on electricity balancing
- FCP: frequency containment process
- ISP: imbalance settlement period
- mFRR: manual frequency restoration reserve
- RR: replacement reserve
- SOGL: Commission Regulation (EU) 2017/1485 of 2 August 2017 establishing a guideline on electricity transmission system operation
- TSO: transmission system operator
- CACM: Commission Regulation (EU) 2015/1222 of 24 July 2015 establishing a guideline on capacity allocation and congestion management
- FCA: Commission Regulation (EU) 2016/1719 of 26 September 2016 establishing a guideline on forward capacity allocation

**SUBMIT THE FOLLOWING PROPOSAL TO ALL RELEVANT REGULATORY AUTHORITIES:**

### **TITLE I General provisions**

#### **Article 1 Subject matter and scope**

- (1) This Proposal shall be considered as the common proposal of the Nordic TSOs applicable within the synchronous area Nordic for establishment of common settlement rules applicable to all intended exchange of energy as a result of FCP and the ramping period in accordance with Article 50(3) of the EBGL and all unintended exchange of energy in accordance with 51(1) of the EBGL.

- (2) The following settlement rules are out of scope of this Proposal:
- (a) the common settlement rules for all intended exchange of energy in accordance with Articles 50(1)(a), 50(1)(b), 50(1)(c) and 50(1)(d) of the EBGL;
  - (b) the common settlement rules for all intended exchanges between all asynchronously connected TSOs in accordance with Articles 50(4)(a) and 50(4)(b) of the EBGL;
  - (c) the common settlement rules for unintended exchange between all asynchronously connected TSOs in accordance with Article 51(2) of the EBGL.

## **Article 2**

### **Definitions and interpretation**

- (1) For the purposes of this Proposal, the terms used shall have the definitions given to them in Article 2 of the EBGL, Article 3 of the SOGL and Article 2 of the CACM.
- (2) In addition, in this Proposal the following terms shall apply:
- (a) 'unintended exchange of energy' means energy that equals the difference between metered exchange and the sum of intended exchanges following scheduled exchange as a result of commercial trade in accordance with CACM and FCA and exchanges according to Article 50(1)(a), 50(1)(b), 50(1)(c), 50(1)(d), Articles 50(3)(a) and 50(3)(b) of the EBGL or other predefined and agreed intended TSO-TSO exchange over a bidding zone border;
  - (b) 'bidding zone border' means a set of physical transmission lines linking adjacent bidding zones in the Nordic Synchronous area, where a bidding zone is equal to a LFC area;
  - (c) 'intended exchange of energy as a result of frequency containment process' means the energy that flows across a bidding zone border between two connected TSOs as a result of the frequency containment process in accordance to Article 142 of SOGL;
  - (d) 'intended exchange of energy as a result of the ramping period' means the intended exchange of energy as a result of the predefined ramping period in accordance with Article 136 of the SOGL;
  - (e) 'settlement period' means the time unit for which unintended exchange of energy, and intended exchange of energy as a result of the frequency containment process and the ramping period are calculated;
  - (f) 'settlement amount' means the claim the settlement parties have towards each other per settlement period as a result of the settlement rules in accordance with this Proposal;
  - (g) 'settlement parties' means the specific Nordic TSOs sharing a bidding zone border.
  - (h) 'dominating direction' means the direction of the net volume of activated balancing energy in a given uncongested area, where the latter may consist of one or several bidding zones. It is defined per market time unit.
- (3) In addition, unless the context requires otherwise:
- (a) the singular indicates the plural and vice versa;
  - (b) the table of contents and headings are inserted for convenience only and do not affect the interpretation of this Proposal;

- (c) any reference to legislation, regulations, directive, order, instrument, code or any other enactment shall include any modification, extension or re-enactment of it when in force.

## TITLE 2

### **Proposal for common settlement rules applicable to intended exchanges of energy as a result of FCP and the ramping period and all unintended exchanges of energy within the Nordic synchronous area**

#### Article 3

##### **General principles**

- (1) The settlement amount of intended exchange of energy as a result of FCP and unintended exchange of energy is calculated together as one settlement amount in accordance with Article (8) of this Proposal, and shall be defined per bidding zone border and per settlement period.
- (2) The settlement amount of intended exchange of energy as a result of the ramping period is calculated as a separate settlement amount in accordance with Article (9) of this Proposal, and shall be defined per bidding zone border and per settlement period.
- (3) The settlement amounts shall be settled between the settlement parties.
- (4) The settlement parties shall jointly foresee the accounting, settlement and invoicing in accordance with this Proposal.
- (5) The settlement parties shall accept the financial flows and are obliged to pay, or receive payments, accordingly.
- (6) Settlement according to this Proposal follows the sign convention in Table 1:

Table 1 Payment for TSO-TSO settlement pursuant to these settlement rules

	TSO-TSO settlement price: Positive	TSO-TSO settlement price: Negative
TSO settlement volume: Positive (TSO exports)	Payment to TSO	Payment from TSO
TSO settlement volume: Negative (TSO imports)	Payment from TSO	Payment to TSO

#### Article 4

##### **Volume determination of intended exchange of energy as a result of FCP and unintended exchange of energy**

- (1) For settlement purposes, the volume of intended exchange of energy as a result of FCP and unintended exchange of energy shall be defined as one volume representing the sum of exchange of FCP energy and unintended exchange of energy.
- (2) The volume shall be calculated for each bidding zone border and for each settlement period as the difference between measured energy exchange and the sum of energy volumes resulting from:
  - (a) scheduled exchange in accordance with article 49 and 61 of the CACM and nominated electricity exchange schedules in accordance with article 36 of the FCA (if applied on a bidding zone in the Nordic synchronous area pursuant to article 30 of the FCA);

- (b) the intended exchange of energy as a result of mFRR, aFRR or RR (if applied, following a regulatory approval in the Nordic Synchronous Area) in accordance with EBGL Article 50(1) when applied;
- (c) other agreed TSO-TSO exchange;
- (d) intended exchange of energy as a result of the ramping period in accordance with Article (5) of this Proposal, when applied.

#### **Article 5**

##### **Volume determination of intended exchange as a result of the ramping period**

- (1) The volume of intended exchange of energy as a result of the ramping period shall be calculated according to the predefined ramping period in accordance with SOGL Article 136, when applied in the Nordic Synchronous Area. The volume is equal to the integral of the power difference between the aggregated netted schedule on the bidding zone border with and without the ramp profile defined in accordance with the ramping period for each ISP. The ramping period is to be specified in the Nordic Synchronous Area Operational Agreement, according to article 136 in the SOGL.
- (2) The volume of intended exchange of energy as a result of the ramping period shall be calculated per bidding zone border and per settlement period.

#### **Article 6**

##### **Settlement price for intended exchange of energy as a result of FCP and unintended exchange of energy**

- (1) The intended exchange of energy as a result of FCP and unintended exchange of energy shall be settled at the same price per bidding zone border and per settlement period.
- (2) The settlement price shall be calculated per bidding zone border as the average of the balancing energy price in the dominating direction for the mFRR product in the Nordic synchronous area for the bidding zones that are sharing the bidding zone border. In case there is no activation of balancing energy from mFRR, and therefore no dominating direction, the settlement price is equal to the average of the day-ahead price for the bidding zones that are sharing the bidding zone border.
- (3) A proposal for amendment to the settlement price calculation will be submitted to the relevant regulatory authorities in sufficient time to be approved before the introduction of more than one FRR balancing price or an RR balancing price in the Nordic synchronous area.

#### **Article 7**

##### **Settlement price for intended exchange of energy as a result of the ramping period**

- (1) The price for intended exchange of energy as a result of the ramping period shall be calculated per bidding zone border as the average of the balancing energy price in the dominating direction for the mFRR product in the Nordic synchronous area for the bidding zones that are sharing the bidding zone border per settlement period. In case there is no activation of balancing energy from mFRR, and therefore no dominating direction, the settlement price is equal to the average of the day-ahead price for the bidding zones that are sharing the bidding zone border.
- (2) A proposal for amendment to the settlement price calculation will be submitted to the relevant regulatory authorities in sufficient time to be approved before the introduction of more than one FRR balancing price or an RR balancing price in the Nordic synchronous area.

## **Article 8**

### **Settlement amount due to intended exchange of energy as a result of FCP and unintended exchange of energy**

- (1) The settlement amount settled between the settlement parties exchanging energy as a result of FCP and unintended exchange of energy within the Nordic Synchronous area shall be calculated as the product of:
  - (a) the volume including the intended exchange of energy as a result of FCP and unintended exchange of energy defined in accordance with Article (4) of this Proposal;
  - (b) the price for the intended exchange of energy as a result of FCP and unintended exchange of energy defined in accordance with Article (6) of this Proposal.

## **Article 9**

### **Settlement amount due to intended exchange of energy as a result of the ramping period**

- (1) The settlement amount settled between the settlement parties exchanging energy as a result of the ramping period shall be calculated as the product of:
  - (a) the volume of ramping energy determined in accordance with Article (5) of this Proposal;
  - (b) the price for intended exchange of energy as a result of the ramping period in accordance with Article (7) of this Proposal.

## **Article 10**

### **Settlement period**

- (1) The settlement period for the settlement of intended exchange of energy as a result of FCP and the ramping period and unintended exchange of energy within the Nordic synchronous area shall be set equal to the imbalance settlement period determined in accordance with EBGL Article 18(6)(k).
- (2) In case different imbalance settlement periods are valid in the Nordic synchronous area, the shortest imbalance settlement period shall apply for the relevant settlement parties.
- (3) The settlement period for the settlement of intended exchange of energy as a result of FCP and the ramping period and unintended exchange of energy shall begin at 00:00 CET, or when relevant CEST, each day. The settlement periods shall be consecutive and not overlapping.

## **TITLE 3**

### **Final provisions**

## **Article 11**

### **Publication and implementation of the Proposal**

- (1) The relevant TSOs shall publish the Proposal without undue delay after all relevant NRAs have approved the proposed settlement rules or a decision has been taken by the Agency for the Cooperation of Energy Regulators in accordance with Article 5(7), Article 6(1) and Article 6(2) of the EBGL.
- (2) The Nordic TSOs shall implement the common settlement rules according to this proposal for each of its relevant borders within 12 months after the approval of this proposal, in accordance with Article 5(5) of the EBGL.



## **Article 12 Language**

The reference language for this proposal shall be English. For the avoidance of doubt, where TSOs need to translate this proposal into their national language(s), in the event of inconsistencies between the English version published by TSOs in accordance with Article 7 of the EBGL and any version in another language, the relevant TSOs shall, in accordance with national legislation, provide the relevant national regulatory authorities with an updated translation of the proposal.