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# ALL ASYNCHRONOUSLY CONNECTED TSOS, TAKING INTO ACCOUNT THE FOLLOWING: Whereas

- (1) This document is a common proposal developed by all asynchronously connected TSOs (hereafter referred to as "**the TSOs**") regarding the development of common settlement rules applicable to all unintended exchanges of energy (hereafter referred to as "**unintended exchanges of energy**") between asynchronously connected TSOs in accordance with Article 51(2) of Commission Regulation (EU) 2017/2195 of 23 November 2017 establishing a guideline on electricity balancing (hereafter referred to as "**EBGL**"). This proposal is hereafter referred to as "**these settlement rules**".
- (2) These settlement rules take 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 (hereafter referred to as "Electricity Regulation") as well as Regulation (EC) No 2017/1485 of 2 August 2017 establishing a guideline on electricity transmission system operation (hereafter referred to as "SOGL").
- (3) These settlement rules take into account the general principles adherent to settlement processes in accordance to Article 44(1) 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.
  - c. Ensure the financial neutrality of all TSOs.
- (4) These settlement rules take into account the requirement of Article 44(4) of the EBGL that injections or withdrawals must be settled either under TSO-BRP imbalance settlement or under TSO-TSO settlement, but not under both.
- (5) Articles 51(2), 51(3) and 51(4) of the EBGL define the deadline for the submission of these settlement rules to the relevant regulatory authorities and several specific requirements to its content:
  - 2. By eighteen months after the entry into force of this Regulation, all asynchronously connected TSOs shall develop a proposal for common settlement rules applicable to all unintended exchanges of energy between asynchronously connected TSOs 3. The proposals of common settlement rules of unintended exchanges of energy between TSOs shall ensure a fair and equal distribution of costs and benefits between them. 4. All TSOs shall establish a coordinated mechanism for adjustments to settlements between them.
- (6) These settlement rules contribute to the objective of proportionality and non-discrimination pursuant to Articles 3(2)(a) of the EBGL, since these settlement rules will apply to all asynchronously connected TSOs.
- (7) These settlement rules contribute to the objective of transparency pursuant to 3(2)(b) of the EBGL, since these settlement rules will be publicly available.



- (8) These settlement rules were developed taking into account the consistency with the settlement rules of intended exchanges of energy as a result of the frequency containment process and ramping restrictions between synchronous areas in accordance with Article 50(4) of the EBGL.
- (9) These settlement rules were developed taking into account the consistency with the settlement rules of intended exchanges of energy within a synchronous area in accordance with Article 50(3) of the EBGL and of unintended exchanges of energy within a synchronous area in accordance with Article 51(1) of the EBGL.
- (10) In conclusion, these settlement rules contribute to the general objectives of the EBGL.



#### **Abbreviations**

The list of abbreviations used in these settlement rules is the following:

- ACER: Agency for the Cooperation of Energy Regulators
- EBGL: Commission Regulation (EU) 2017/2195 of 23 November 2017 establishing a guideline on electricity balancing
- DK1: bidding zone Western Denmark
- Electricity Regulation: 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
- LFC area: load-frequency control area
- LFC block: load-frequency control block
- NO2: bidding zone Southern Norway
- SE3: bidding zone Stockholm
- SE4: bidding zone Malmö
- SOGL: Regulation (EC) No 2017/1485 of 2 August 2017 establishing a guideline on electricity transmission system operation
- TSO: Transmission System Operator

SUBMIT THE FOLLOWING SETTLEMENT RULES TO ALL RELEVANT REGULATORY AUTHORITIES:



## Article 1 Subject matter and scope

- (1) The common settlement rules for all unintended exchanges of energy as determined in these settlement rules are the common proposal of all asynchronously connected TSOs in accordance with Article 51(2) of the EBGL.
- (2) These settlement rules shall apply to all asynchronously connected TSOs exchanging energy in accordance with the relevant annex of these settlement rules.
- (3) The following other common settlement rules are out of scope of these settlement rules:
  - (a) the common settlement rules for all intended exchanges of energy in accordance with Article 50(1) of the EBGL;
  - (b) the common settlement rules for all intended exchanges of energy in accordance with Article 50(3) of the EBGL;
  - (c) the common settlement rules for all intended exchanges of energy between synchronous areas in accordance with Articles 50(4) of the EBGL;
  - (d) the common settlement rules for unintended exchange within a synchronous area in accordance with Article 51(1) of the EBGL.

## Article 2 Definitions and interpretation

- (1) For the purposes of these settlement rules, the terms used shall have the definitions given to them in Article 2 of the EBGL and Article 3 of the SOGL.
- (2) In addition, in these settlement rules the following terms shall apply:
  - (a) 'all asynchronously connected TSOs' refers to the TSOs submitting this proposal;
  - (b) 'the relevant asynchronously connected TSOs' refers to the TSOs exchanging energy in accordance with the relevant annexes of these settlement rules;
  - (c) 'accounting data' are data agreed between two TSOs concerning the physical energy exchanged over a physical line or considered via a virtual tie-line if applicable;
  - (d) 'TSO-TSO settlement period' means, in the context of these settlement rules, the time unit for which unintended exchanges of energy and intended exchanges of energy as a result of the frequency containment process and ramping restrictions are calculated.
- (3) Settlement according to these settlement rules follow 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



- (4) In these settlement rules, unless the context requires otherwise, prices for unintended exchanges of energy are indicated in EUR/MWh.
- (5) 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 these settlement rules;
  - (c) any reference to legislation, regulations, directive, order, instrument, code or any other enactment shall include any modification, extension or re-enactment of it then in force.

## Article 3 High-level design of the common settlement rules

- (1) The relevant asynchronously connected TSOs shall jointly foresee the accounting, settlement and invoicing in accordance with these settlement rules.
- (2) For each TSO-TSO settlement period in accordance with Article 4 of these settlement rules, all volumes of unintended exchange calculated for that TSO-TSO settlement period in accordance with Article 5 of these settlement rules shall be settled at the price calculated for that TSO-TSO settlement period in accordance with Article 6 of these settlement rules.
- (3) The relevant asynchronously connected TSOs shall accept the financial flows and are obliged to pay, or receive payments, accordingly.
- (4) After implementation of these common settlement rules, a reviewal mechanism shall start by end of 2022, in which all asynchronously connected TSOs will review these settlement rules. A review shall take place at least every three years after the first review. In the reviewal mechanism, the possibility for evolving to a harmonised price calculation method for all asynchronously connected TSOs shall be evaluated. In addition, the reviewal mechanism could affect, for example, technical details such as data collection. Any changes to these settlement rules shall be submitted to the relevant regulatory authorities for approval.

## Article 4 Settlement period

- (1) The TSO-TSO settlement period shall be set at 15 minutes, unless the relevant asynchronously connected TSOs jointly decide otherwise. The reviewal according to Article 3(4) shall harmonise the TSO-TSO settlement period.
- (2) The TSO-TSO settlement period of each day shall begin right after 00:00 of the time zone agreed by the relevant asynchronously connected TSOs. The TSO-TSO settlement periods shall be consecutive and not overlapping.

## Article 5 Volume determination per TSO-TSO settlement period

- (1) For the relevant asynchronously connected TSOs, the volume of intended exchange pursuant to Article 50(1) and Article 50(4) of the EBGL is determined as follows:
  - (a) The volume of intended exchange as the result of the reserve replacement process pursuant Article 50(1)(a) of the EBGL is contained in the aggregated netted external schedule.



- (b) The volume of intended exchange as the result of the frequency restoration process with manual activation pursuant to Article 50(1)(b) of the EBGL is equal to the volume as reported in the aggregated netted external schedule and/or the accounting data by the relevant asynchronously connected TSOs.
- (c) The volume of intended exchange as the result of the frequency restoration process with automatic activation pursuant to Article 50(1)(c) of the EBGL is equal to the volume as reported in the accounting data by the relevant asynchronously connected TSOs.
- (d) The volume of intended exchange as the result of the imbalance netting process pursuant to Article 50(1)(d) of the EBGL is equal to the volume as reported in the accounting data by the relevant asynchronously connected TSOs.
- (e) The volume of intended exchange as the result of the frequency containment process pursuant to Article 50(4)(a) of the EBGL is calculated per TSO-TSO settlement period in accordance with the settlement rules under Article 50(4)(a) of the EBGL.
- (f) The volume of intended exchange as the result of ramping restrictions pursuant to Article 50(4)(b) of the EBGL is calculated per TSO-TSO settlement period in accordance with the settlement rules under Article 50(4)(b) of the EBGL.
- (2) The volume of intended exchanges of energy between the relevant asynchronously connected TSOs as the result of bilateral or multilateral agreements that are not covered by the previous points is equal to the volume as reported in the accounting data by the relevant asynchronously connected TSOs. This volume may include the exchanges of energy as a result of the ramping restrictions for active power output pursuant to Article 137(3) of Regulation (EU) 2017/1485.
- (3) 'Unintended exchange of energy' equals the difference between the metering data and the sum of intended exchanges of energy between the relevant asynchronously connected TSOs according to the aggregated netted external schedule between the relevant asynchronously connected TSOs, intended exchange according to Article 50(1) and 50(4) of the EBGL, and intended exchange as a result of bilateral or multilateral agreements in accordance with Article 5(2) of these settlement rules.

## Article 6 Pricing rules for unintended exchange of energy between asynchronously connected TSOs

The price for unintended exchanges of energy in accordance with Article 51(2) of the EBGL shall be calculated by the relevant asynchronously connected TSOs according to the relevant annex of these settlement rules.

## Article 7 Publication and implementation of these settlement rules

- (1) All asynchronously connected TSOs shall publish these settlement rules without undue delay after all relevant regulatory athorities 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), 6(1) or 6(2) of the EBGL
- (2) The relevant asynchronously connected TSOs shall implement these settlement rules within 12 months after the approval of these settlement rules, in accordance with Article 5(5) of the EBGL.



## Article 8 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 regulatory authorities with an updated translation of the proposal.



### Annexes for unintended exchanges of energy

#### Annex 1 - TenneT NL/Statnett

Unintended exchanges of energy shall be generally settled at the average of the day-ahead price of the Netherlands and NO2 per TSO-TSO settlement period.

## **Annex 2 - Energinet/Statnett**

Unintended exchanges of energy shall be settled at the average of the regulating power price in the dominating direction of DK1 and NO2 per TSO-TSO settlement period.

### Annex 3 - Energinet/Svenska kraftnät

Unintended exchanges of energy shall be settled at the average of the regulating power price in the dominating direction of the Danish bidding zone DK1 and the Swedish bidding zone SE3 per TSO-TSO settlement period.

## **Annex 4 - Energinet/Energinet**

Unintended exchanges of energy shall be settled at the average of the regulating power price in the dominating direction of the Danish bidding zones DK1 and DK2 per TSO-TSO settlement period.

### Annex 5 - Energinet/50Hertz Transmission

Unintended exchanges of energy shall be settled at the average of the day-ahead price of DK1 and Germany per TSO-TSO settlement period.

#### Annex 6 - PSE/Svenska kraftnät

Unintended exchanges of energy shall be settled at the average of the Polish imbalance price and the imbalance price in the Swedish bidding zone SE4 per TSO-TSO settlement period.

#### Annex 7 - PSE/Litgrid

Unintended exchanges of energy shall be settled at the average of the Lithuanian imbalance price and the Polish imbalance price per TSO-TSO settlement period.

### Annex 8 - Litgrid/Svenska kraftnät

Unintended exchanges of energy shall be settled at the average of the Lithuanian imbalance price and the imbalance price in the Swedish bidding zone SE4 per TSO-TSO settlement period.

### Annex 9 - Elering/Fingrid

Unintended exchanges of energy shall be settled at the average of the Estonian imbalance price and the imbalance price in Finland per TSO-TSO settlement period.



### Annex 10 - TenneT DE/Statnett

Unintended exchanges of energy shall be settled at the average of the German imbalance price and the imbalance price in the Norwegian bidding zone NO2 per TSO-TSO settlement period.