
Amended Nordic synchronous area proposal for the methodology to determine limits on the amount of exchange of FRR/RR between synchronous areas defined in accordance with Article 176(1)/178(1) and the methodology to determine limits on the amount of sharing of FRR/RR between synchronous areas defined in accordance with Article 177(1)/179(1)

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

Whereas

- (1) This document is the common proposal developed by all Transmission System Operators within the Nordic synchronous area (hereafter referred to as “TSOs”) for the methodology to determine limits on the amount of exchange of FRR/RR between synchronous areas defined in accordance with Article 176(1)/178(1) and the methodology to determine limits on the amount of sharing of FRR/RR between synchronous areas defined in accordance with Article 177(1)/179(1) of the Commission Regulation (EU) 2017/1485 of 2 August 2017 establishing a guideline on electricity transmission system operation (hereafter referred to as “SO Regulation”). This proposal is hereafter referred to as “**Proposal**”.
- (2) The Proposal takes into account the general principles and goals set in SO Regulation 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 “**Regulation (EC) No 714/2009**”). The goal of the SO Regulation/Regulation (EC) No 714/2009 is the safeguarding of operational security, frequency quality and the efficient use of the interconnected system and resources. Article 118(1)(z) of the SO Regulation sets for this purpose requirements for the TSOs to “*jointly develop common proposals for: [...] the methodology to determine limits on the amount of exchange of FRR between synchronous areas defined in accordance with Article 176(1) and the methodology to determine limits on the amount of sharing of FRR between synchronous areas defined in accordance with Article 177(1);*”. Article 118(1)(aa) of the SO Regulation sets for this purpose requirements for the TSOs to “*jointly develop common proposals for: [...] the methodology to determine limits on the amount of exchange of RR between synchronous areas defined in accordance with Article 178(1) and the methodology to determine limits on the amount of sharing of RR between synchronous areas defined in accordance with Article 179(1)*”
- (3) Paragraph 1 of each of the Articles 176, 177, 178 and 179 of the SO Regulation specify that the methodologies to determine the mentioned limits shall take into account:
 - (a) *the operational impact between the synchronous areas;*
 - (b) *the stability of the FRP/RRP of the synchronous area;*
 - (c)/(d) *the ability of TSOs of the synchronous area to comply with the frequency quality target parameters defined in accordance with Article 127 and the FRCE target parameters defined in accordance with Article 128; and*
 - (d)/(e) *the operational security.*Paragraph 1 of Articles 177 and 179 of the SO Regulation adds:
 - (c) *the maximum reduction of FRR that can be taken into account in the FRR dimensioning in accordance with Article 157 as a result of the FRR sharing;*
- (4) The TSOs apply two types of Frequency Restoration Reserves (FRR). Manual FFR (mFRR) and Automatic FRR (aFRR). This proposal applies to both mFRR and aFRR. The TSOs currently do not apply Replacement Reserves (RR). For this reason, this proposal does not specify rules for exchange of RR.

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- (5) In regard to regulatory approval, Article 6(3) of the SO Regulation states:
“The proposals for the following terms and conditions or methodologies shall be subject to approval by all regulatory authorities of the concerned region, on which a Member State may provide an opinion to the concerned regulatory authority: [...] (d) methodologies, conditions and values included in the synchronous area operational agreements in Article 118 concerning: (ix) limits on the amount of exchange of FRR between synchronous areas defined in accordance with Article 176(1) and limits on the amount of sharing of FRR between synchronous areas defined in accordance with Article 177(1); (x) limits on the amount of exchange of RR between synchronous areas defined in accordance with Article 178(1) and limits on the amount of sharing of RR between synchronous areas defined in accordance with Article 179(1);
- (6) According to Article 6(6) of the SO Regulation the expected impact of the Proposal on the objectives of the SO Regulation has to be described and is presented below.
- (7) The Proposal generally contributes to and does not in any way hamper the achievement of the objectives of Article 4 of the SO Regulation. In particular, the Proposal serves the objectives to (1)(d) ensuring the conditions for maintaining operational security throughout the Union, and (1)(h) contributing to the efficient operation and development of the electricity transmission system and electricity sector in the Union. The Proposal contributes to these objectives by specifying the limits for exchange of FRR between synchronous areas. The proposed limits for the exchange of FRR intend to set efficient limits that balance the objective of ensuring the conditions for maintaining operational security and efficient operation of the electricity system.
- (8) In conclusion, the Proposal contributes to the general objectives of the SO Regulation to the benefit of all market participants and electricity end consumers.

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SUBMIT THE FOLLOWING AMENDED PROPOSAL TO ALL REGULATORY AUTHORITIES OF THE NORDIC SYNCHRONOUS AREA:

Article 1 - Subject matter and scope

1. The limits for the exchange and sharing of FRR between synchronous areas described in this Proposal are the common proposal of TSOs in accordance with article 176(1) and 177(1) of the SO Regulation. The Proposal applies solely to the Nordic synchronous area.

The Nordic synchronous area covers transmission systems of East-Denmark (DK2), Finland, Sweden and Norway.

This Proposal has been developed by Energinet, Fingrid Oyj, Kraftnät Åland AB, Svenska kraftnät and Statnett SF.

2. This Proposal is subject to approval in accordance with Article 6(3) of the SO Regulation.

Article 2 - Definitions and interpretation

1. For the purposes of the Proposal, the terms used shall have the meaning of the definitions included in Article 3 of the SO Regulation.
2. In this Proposal, unless the context requires otherwise:
 - a) the singular indicates the plural and vice versa;
 - b) the headings are inserted for convenience only and do not affect the interpretation of the Proposal; and
 - c) any reference to legislation, regulations, directives, orders, instruments, codes or any other enactment shall include any modification, extension or re-enactment of it when in force.

Article 3 – Limits for the exchange of aFRR and mFRR

1. The Nordic TSO involved in exchange of FRR is responsible for complying with article 176 of the SO Regulation;
2. The TSO who intends to exercise the right to implement an exchange of FRR with a TSO in another synchronous area shall make an assessment against article 176 and the criteria below. The TSO shall:
 - a. secure that dimensioning requirements in the Nordic LFC block are satisfied
 - i. In case of export of FRR capacity from a TSO to another TSO outside of the LFC block, equivalent FRR capacity equal to the export contract must be secured by the Nordic TSO in addition to the Nordic LFC block dimensioning volume requirement;
 - ii. In case of import of FRR capacity to a Nordic TSO from another TSO outside of the LFC block; procured volume may be counted for in the Nordic LFC block compliance monitoring for reserve availability as long as b) and c) below is fulfilled.
 - b. secure that the needed availability of grid capacity between source and sink has a probability of at least 99%;
 - c. secure that the needed availability of FRR from the reserve instructing TSO in the other synchronous area has a probability of at least 99%.
3. The assessment of FRR exchange arrangements with other synchronous areas shall be approved by all Nordic TSOs based on a proposal of the exchanging TSO. The approval process shall not be unreasonably withheld or delayed.

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Article 4 – Limits for sharing of aFRR and mFRR

1. The Nordic TSO involved in sharing of FRR is responsible for complying with Article 177 of the SO Regulation;
2. The TSO who intends to exercise the right to implement sharing of FRR with a TSO in another synchronous area shall make an assessment against article 177 and the criteria below. The TSO shall:
 - a. secure that dimensioning requirements in the Nordic LFC block are satisfied
 - i. Disturbances leading to activations of the shared reserves, shall be reported for common Nordic evaluations of Nordic consequences;
 - ii. The shared volume may be counted for in the LFC block compliance monitoring for reserve availability as long as b), c), d) and e) below is fulfilled.
 - b. secure that the needed availability of grid capacity between source and sink has a probability of at least 99%;
 - c. secure that the needed availability of FRR from the reserve instructing TSO in the other synchronous area has a probability of at least 99%;
 - d. secure that the reduction in positive FRR capacity for disturbances within the Nordic LFC block does not exceed 50% of the size of the positive reference incident in the relevant control area;
 - e. secure that the reduction in negative FRR capacity for disturbances within the Nordic LFC block does not exceed 50% of the size of the negative reference incident in the relevant control area.
3. The assessment of FRR sharing arrangements with other synchronous areas shall be approved by all Nordic TSOs based on a proposal of the sharing TSO. The approval process shall not be unreasonably withheld or delayed.

Article 5 – Publication and implementation

1. The relevant TSOs shall publish (in accordance with Article 8 of the SO Regulation) the Proposal without undue delay after the competent NRAs have approved the Proposal or a decision has been taken by the Agency for the Cooperation of Energy Regulators in accordance with Article 6 of the SO Regulation.
2. The TSOs shall implement the Proposal not later than when Nordic synchronous area operational agreement enters into force in accordance with Article 118 of the SO Regulation.

Article 6 - Language

The reference language for this Proposal shall be English. For the avoidance of doubt, where TSOs needs to translate this Proposal into national language(s), in the event of inconsistencies between the English version published by TSOs in Nordic Synchronous Area in accordance with Article 8(1) of the SO Regulation and any version in another language the relevant TSOs shall, in accordance with national legislation, provide the relevant national regulatory authority with an updated translation of the Proposal.