



Amended Nordic synchronous area proposal for coordination actions aiming to reduce FRCE as defined in Article 152(14) and measures to reduce FRCE by requiring changes in the active power production or consumption of power generating modules and demand units in accordance with Article 152(16) of the Commission Regulation (EU) 2017/1485 of 2 August 2017 establishing a guideline on electricity transmission system operation

13 May 2019

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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 coordination actions aiming to reduce FRCE as defined in Article 152(14) and measures to reduce FRCE by requiring changes in the active power production or consumption of power generating modules and demand units in accordance with Article 152(16) of Commission Regulation (EU) 2017/1485 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 119(1)(q) of the SO Regulation sets for this purpose requirements for the TSOs to “*jointly develop common proposals for: [...] coordination actions aiming to reduce the FRCE as defined in Article 152(14)*”. Article 119(1)(r) of the SO Regulation sets for this purpose requirements for the TSOs to “*jointly develop common proposals for: [...] measures to reduce the FRCE by requiring changes in the active power production or consumption of power generating modules and demand units in accordance with Article 152(16)*.”
- (3) This Proposal only covers the ‘normal’ and the ‘alert state’ (as defined in Article 18 of the SO Regulation). The ‘emergency state’, ‘blackout state’ and ‘restoration state’ are referred to in the commission regulation (EU) 2017/2196 of 24 November 2017 establishing a network code on electricity emergency and restoration. The measures included in this proposal are aimed to prevent for to limiting the risk of entering into the emergency state.
- (4) Article 152(14) of the SO Regulation requires that the TSOs shall implement coordinated actions for situations in which the violations are breached that are specified in Article 152(12) and (13). Consequently, the scope of this proposal only includes those measures that may be applied during the operational hour. Preparation measures to prevent for this situation are not included.
- (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: [...]
(e) methodologies and conditions included in the LFC block operational agreements in Article 119, concerning: [...]
(ii) coordination actions aiming to reduce FRCE as defined in Article 152(14);
(iii) measures to reduce FRCE by requiring changes in the active power production or consumption of power generating modules and demand units in accordance with Article 152(16);”
- (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.

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- (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 contributes to these objectives by specifying measures to reduce FRCE on top of the measures that are applied continuously to maintain the frequency quality in the Nordic synchronous area. The measures contribute to maintaining operational security and ensure the conditions for maintaining a frequency quality level in the Nordic synchronous area.
- (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 actions aiming to reduce FRCE described in this Proposal are the common proposal of TSOs in accordance with article 152(14) and (16) 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 this 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 – Coordinated actions to reduce the FRCE

1. In specific situations when market-based arrangements will not be sufficient to balance the LFC block, the TSOs shall implement the following coordinated actions to reduce the FRCE in accordance with article 152(14) of the SO Regulation:
 - a. Activate fast mFRR bids with a high volume out of price order;
 - b. Activate TSO owned or controlled reserve power plants;
 - c. Activate available generation and demand response that did not submit mFRR-bids. This activation is voluntary and is in accordance with the process in paragraph 3;
 - d. Agree with other TSOs on supportive power over HVDC links.
2. The LFC Block monitor - in cooperation with the synchronous area monitor - contacts the relevant TSOs and coordinates the measures under paragraph 1 between the Nordic TSOs when necessary;
3. The TSOs apply the following process for activating available generation and demand response that did not submit mFRR-bids:
 - a. If the system is in normal state and time allows for it, the TSOs will contact relevant mFRR-providers and ask if they are willing to forward additional bids in the regulating power market for upward or downward regulation dependant on the need;

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- b. If time does not allow for the procedure in a), TSOs will contact relevant mFRR-providers and ask if they are willing to activate available resources. In such situations, the activation price will normally be agreed post operation.
4. Specific situations referred to in paragraph 1 may include, but are not limited to situations in which system security is threatened due to scarcity of balancing resources in congested areas or to avoid expected large violations of FRCE. This may be in case of especially large gradients in changes in consumption or exchange or trips of generation units or importing HVDC cables.

Article 4 – Measures to reduce the FRCE by means of changes in the active power production or consumption of power generating modules and demand units within their area

1. If the system is in alert state and measures expressed in Article 3 will not be sufficient to limit the risk of entering into the emergency state, the TSOs are within their control area allowed to:
 - a. Request immediate changes in the active power production or consumption of power generating modules and demand units. The procedure of this request includes the following steps:
 - i. The TSO will contact the relevant power producer or consumer;
 - ii. The TSO will indicate that there is a risk of entering into the emergency state;
 - iii. The TSO will request a change in the active power production or consumption;
 - iv. The TSO will stress that the request shall be implemented without delay.
 - b. Perform manually activated load-shedding.

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 LFC block operational agreement enters into force in accordance with Article 119 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.