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**Nordic synchronous area methodology for the minimum activation period to be ensured by FCR providers in accordance with Article 156(10) of the Commission Regulation (EU) 2017/1485 of 2 August 2017 establishing a guideline on electricity transmission system operation**

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24 March 2021

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

### Whereas

- (1) This document is the common methodology developed by all Transmission System Operators within the Nordic synchronous area (hereafter referred to as “TSOs”) for the minimum activation period to be ensured by FCR providers in accordance with Article 156(10) of Commission Regulation (EU) 2017/1485 establishing a guideline on electricity transmission system operation (hereafter referred to as “SO Regulation”). This methodology is hereafter referred to as “Methodology”.
- (2) The Methodology 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)(r) of the SO Regulation sets for this purpose requirements for the TSOs to “*jointly develop common proposals for: [...] the minimum activation period to be ensured by FCR providers in accordance with Article 156(10);*”
- (3) Article 156(10) of the SO Regulation defines the scope of this Methodology. The article states that “*For the CE and Nordic synchronous areas, all TSOs shall develop a proposal concerning the minimum activation period to be ensured by FCR providers. The period determined shall not be greater than 30 or smaller than 15 minutes. The proposal shall take full account of the results of the cost-benefit analysis conducted pursuant to paragraph 11.*”.
- (4) Together with the TSOs of the CE synchronous area, the TSOs conducted a cost-benefit analysis pursuant to paragraph 11 of article 156 of the SO Regulation. The assumptions and methodology for this cost-benefit analysis have been approved by the Nordic NRAs on 16 April 2019. The TSOs published the results for public consultation from 27 February to 30 April 2020. The TSOs sent the results of their cost-benefit analysis to their NRAs in June 2020.
- (5) The Nordic Frequency Containment Process (FCP) applies two types of Frequency Containment Reserves (FCR). FCR for normal operation (FCR-N) is used for continuous imbalances to keep the frequency within the  $\pm 100\text{mHz}$  range, which typically takes place in the normal (system) state. FCR for disturbance situations (FCR-D) is used to mitigate the impact of incidental disturbances once the frequency is outside the  $\pm 100\text{mHz}$  range. FCR-D is used in both the normal and the alert state.
- (6) Article 156(9) stipulates that “*each FCR provider shall ensure that the FCR from its FCR providing units or groups with limited energy reservoirs are continuously available during normal state.*”. The TSOs conclude that this applies to both FCR-N and FCR-D.
- (7) Article 156(9) further states that “*as of triggering the alert state and during the alert state, each FCR provider shall ensure that its FCR providing units or groups with limited energy reservoirs are able to fully activate FCR continuously for a time period to be defined pursuant to paragraphs 10 and 11.*”. This means that the minimum activation time that is addressed in Article 156(10) of

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the SO Regulation is applicable in the alert system state and therefore the TSOs conclude that it only applies to FCR-D. Accordingly, this Methodology specifies the minimum activation time only for FCR-D.

- (8) 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: [...]*

*(v) for the CE and Nordic synchronous areas, the minimum activation period to be ensured by FCR providers in accordance with Article 156(10);”*

- (9) According to Article 6(6) of the SO Regulation the expected impact of the Methodology on the objectives of the SO Regulation has to be described and is presented below.
- (10) The Methodology 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 Methodology serves the objectives to (1)(a) determining common operational security requirements and principles; (1)(c) determining common load-frequency control processes and control structures, (1)(d) ensuring the conditions for maintaining operational security throughout the Union, (1)(e) ensuring the conditions for maintaining a frequency quality level of all synchronous areas 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 Methodology contributes to these objectives by specifying the *common Nordic* minimum activation period to be ensured by FCR-D providers with limited energy resources. FCR-D is one of the key reserves that is used in the common Nordic load-frequency control processes to reduce the risk for automatic Low Frequency Demand Disconnection (LFDD), automatic reduction of generation and for system blackouts due to under or over frequency. The Methodology carefully balances both the impact of the minimum activation period on the cost of FCR-D and outage risk and therefore ensures efficient operation of the electricity transmission system.
- (11) In conclusion, the Methodology 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 METHODOLOGY TO ALL REGULATORY AUTHORITIES OF THE NORDIC SYNCHRONOUS AREA:**

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

1. The minimum activation period to be ensured by FCR providers described in this Methodology are the common methodology of TSOs in accordance with article 156(10) of the SO Regulation. The Methodology applies solely to the Nordic synchronous area.

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

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

2. This Methodology 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 Methodology, the terms used shall have the meaning of the definitions included in Article 3 of the SO Regulation and in Article 2 of Commission Regulation (EU) 2017/2195.
2. For the purpose of this Methodology and in accordance with Article 156 (9) of the SO Regulation, the ‘minimum activation period to be ensured by FCR providers’ means the time for which each FCR provider shall ensure that its FCR providing units or groups with limited energy reservoirs are able to fully activate FCR continuously, as of triggering the alert state and during the alert state.
3. In this Methodology, 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 Methodology; 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 – Minimum activation period to be ensured by FCR providers**

1. The minimum activation period to be ensured by FCR-D providers is 15 minutes.

### **Article 4 – Publication and implementation**

1. The relevant TSOs shall publish (in accordance with Article 8 of the SO Regulation) the Methodology without undue delay after the competent NRAs have approved the Methodology 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. Energinet and Svenska kraftnät have already implemented a minimum activation period to be ensured by FCR providers in accordance with Article 3. Fingrid and Statnett shall implement the minimum activation period to be ensured by FCR providers in Article 3 within 12 months after this

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Methodology has been approved by all Nordic NRAs. Kraftnät Åland does not need to implement the Methodology since Kraftnät Åland does not contract FCR.

### **Article 5 - Language**

The reference language for this Methodology shall be English. For the avoidance of doubt, where TSOs need to translate this Methodology 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 Methodology.