

European Network of Transmission System Operators for Electricity

All Continental Europe TSOs' proposal for the definition of a minimum activation time period required for FCR providing units or groups with limited energy reservoirs to remain available during alert state in accordance with Article 156(11) of the Commission Regulation (EU) 2017/1485

Date: _____ 2021



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All Continental Europe TSOs, taking into account the following,

Whereas

- (1) This document is a common proposal (hereinafter referred to as "Proposal") jointly developed by all Transmission System Operators of the Continental Europe synchronous area (hereafter referred to as the "TSOs") to determine a time period (hereafter referred to as "Time Period") required for frequency containment reserve providing units or groups with limited energy reservoirs (hereafter referred to as "LER") to remain available during alert state, in accordance with Article 156(11) of Commission Regulation (EU) 2017/1485 of 2 August 2017 establishing a guideline on electricity transmission system operation (hereafter referred to as "SO Regulation").
- (2) The Proposal is made taking into account the general principles and objectives set in the 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 objectives of the SO Regulation are safeguarding operational security, frequency quality and the efficient use of the interconnected system and resources. It sets for this purpose requirements to FCR providers ensuring that their FCR providing units or groups with limited energy reservoirs are able to fully activate FCR continuously in alert state for a minimum time period to be defined pursuant to Article 156 (10) and (11) of the SO Regulation.
- (3) Article 156(9) of the SO Regulation provides that, in case no minimum activation period has been determined pursuant to Article 156 (10) and (11) of the SO Regulation, each FCR provider shall ensure that its FCR providing units or groups with limited energy reservoirs are able to fully activate FCR continuously for at least 15 minutes or, in case of frequency deviations that are smaller than a frequency deviation requiring full FCR activation, for an equivalent length of time, or for a period defined by each TSO, which shall not be greater than 30 or smaller than 15 minutes. Furthermore, it provides that, if a minimum activation period has been determined pursuant to Article 156(10) and (11) of the SO Regulation, each FCR provider shall ensure that its FCR providing units or groups with limited energy reservoirs shall be able to fully activate FCR continuously in alert state for that minimum activation period assessed.
- (4) Article 156(10) of the SO Regulation requires all Continental Europe and Nordic TSOs to develop a proposal concerning the minimum activation period to be ensured by FCR providers, and specifies that the period determined shall not be greater than 30 or smaller than 15 minutes. Such proposal shall take full account of the results of the cost-benefit analysis (herafter referred to as "CBA") conducted pursuant to Article 156(11) of the SO Regulation.
- (5) Article 156(11) of the SO Regulation requires the TSOs of the Continental Europe and Nordic synchronous areas to propose assumptions and methodology for a CBA to be conducted, in order to assess the minimum activation period required for FCR providing units or groups with limited energy reservoirs to remain available during alert state.

The CBA shall take into account at least:

(a) experiences gathered with different timeframes and shares of emerging technologies in different LFC blocks;



- (b) the impact of a defined minimum activation period on the total cost of FCR in the synchronous area;
- the impact of a defined minimum activation period on system stability risks, in particular (c) through prolonged or repeated frequency events;
- (d) the impact on system stability risks and total cost of FCR in case of increasing total volume of FCR:
- the impact of technological developments on costs of availability periods for FCR from its (e) FCR providing units or groups with limited energy reservoirs.

In performing the analyses, TSOs have also considered the following further elements:

- the full activation time of aFRR according to SO Regulation
- the FCR additional properties for LER (defined according to Art.154(2) SO GL)
- (6) TSOs have proposed a CBA methodology in accordance with Article 156(11) of the SO Regulation. Such methodology has been approved by all National Regulatory Authorities (hereinafter "NRAs") on 7 October 2020. TSOs have performed the CBA according to the approved methodology. The results of the CBA have been presented to all stakeholders by means of a public consultation.
- (7) Considering the results of the CBA and to give due consideration to all the comments received by stakeholders from the public consultation, TSOs have decided to perform further analyses with the purpose of defining the Time Period.

The proposed Time Period is aimed at:

- (a) Ensuring the system safety in all the foreseeable conditions;
- (b) Setting a level playing field amongst FCR providers, fostering a fair competition between different technology in FCR provision. The different contribution to the system safety provided by LER and non LER when facing long-lasting frequency deviations is an element which each TSO should take into account when defining the local FCR procurement and, if applicable, remuneration scheme of FCR providers;
- (c) minimize FCR costs, even considering the fact that a large amount of LER are already installed in the CE synchronous area;

and shall be closely coordinated with the FCR Dimensioning.

- (8) The analyses referred to in (7) have shown that:
 - Increasing amount of LER in the FCR provision entails a reduction of the system safety; (a)
 - (b) Given a specific amount of LER in the FCR provision, the longer their Time Period, the lower their impact to the system safety;
 - If all the currently prequalified LER would be awarded for the FCR provision, the minimum (c) safety condition would not be fulfilled;
 - Given a specific amount of LER in the provision, the safety conditions can be restored by (d) increasing the FCR in the system and this increase entails higher costs for TSOs;
- (9) According to Article 153(2)(c) of the SO Regulation, TSOs are currently discussing a review of the FCR dimensioning criteria aiming at defining a probabilistic dimensioning approach.



- (10) In order to ensure that the proposed Time Period is consistent with the safety of the system, TSOs agree that the FCR amount to be procured at CE level shall be dependent on the amount of LER which is expected in the FCR provision.
- (11) TSOs will periodically recalculate the FCR volume required to deal with the presence of LER in the FCR provision. As LER provide higher share in the FCR provision, the overall amount of FCR to be procured at CE synchronous area level must accordingly be increased.
- (12) TSOs agreed to consider the constraint of a minimum required FCR imposed by the presence of LER (as indicated in (10) and (11)) in the reviewed probabilistic dimensioning approach performed according to Article 153(2)(c) of the SO Regulation.
- (13) K-factors distribution may be impacted by the reviewed probabilistic dimensioning approach.
- (14) The FCR increase described in (10) represents an increase in the FCR costs to be borne by TSOs. This increase is due to the presence of LER in the FCR provision and to the fact that the contribution of LER to the system safety when facing long-lasting frequency deviation is inherently lower than the contribution provided by FCR providing units or groups FCR provider without limited energy reservoir.
- (15) In conclusion, the Proposal for a Time Period together with the proposed Review of the FCR Dimensioning contribute to pursue the general objectives of the SO Regulation of safeguarding operational security taking into account costs and benefits provided to all market participants and electricity end consumers.

SUBMIT THE FOLLOWING PROPOSAL FOR A TIME PERIOD TO ALL REGULATORY AUTHORITIES OF THE CE SYNCHRONOUS AREA:

Article 1 Subject matter and scope

This Proposal for a Time Period shall be considered as the common proposal of all Continental Europe TSOs in accordance with Article 156(11) of the SO Regulation.

Article 2 Definitions and interpretation

- 1. For the purposes of this Proposal, terms used in this document shall have the meaning of the definitions included in Article 3 of the SO Regulation, of Regulation (EC) 714/2009, Directive 2009/72/EC and Regulation (EU) 543/2013.
- 2. In addition, and unless the context requires otherwise, the following terms shall have the meaning below:a) 'LER' means 'FCR production units or groups with limited energy reservoirs';
 - b) 'Time Period', according to Article 156 (9) of SO Regulation, 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';



- c) 'Review of the FCR Dimensioning' means a review of how the FCR required at CE level is defined. This review must specifically include a dependency between the FCR dimensioning at CE synchronous area level and: the amount of LER expected to provide FCR, the Time Period for which the LER expected to provide FCR are prequalified.
- 3. In this Proposal, 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 for a Time Period; and
 - c) any reference to legislation, regulation, directive, order, instrument, code or any other enactment shall include any modification, extension or re-enactment of it then in force.

Article 3 Time Period for LER

- 1. The minimum activation period required for frequency containment reserve providing units or groups with limited energy reservoirs to remain available during alert state is 30 minutes.
- 2. The requirement in (1) shall apply to all LER whose prequalification takes place after the entry into force of this Proposal.
- 3. LER whose prequalification takes place before the entry into force of the Proposal shall be exempted from the requirement in (1) for an interim period of XXX¹ months.

Article 4 Publication and implementation of the Proposal

Each Continental Europe TSO shall publish the approved Proposal for a Time Period without undue delay after all NRAsapproval, in accordance with Article 8 of the SO Regulation.

Article 5

Language

The reference language for this Proposal for a Time Period shall be English. For the avoidance of doubt, where TSOs need to translate this Proposal for a Time Period into their national language(s), in the event of inconsistencies between the English version published by TSOs 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 authorities with an updated translation of the Proposal for a Time Period.

¹ The duration of the interim period will be defined after the consultation process.