All CE TSOs' proposal for the limits on the amount of exchange and sharing of FRR between synchronous areas in accordance with Article 176(1) and Article 177(1) of the Commission Regulation (EU) 2017/1485 of 2 August 2017 establishing a guideline on electricity transmission system operation

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All Transmission System Operators of synchronous area Continental Europe are taking into account the following;

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- This document is a common proposal developed by all Transmission System Operators of (1) synchronous area CE (hereafter referred to as "TSOs") regarding the development of the limits on the amount of exchange and sharing of FRR between synchronous areas involving Continental Europe (hereafter referred to as "FRR exchange and sharing limits between synchronous areas") in accordance with Articles 176(1) and 177(1) of Commission Regulation (EU) 2017/1485 establishing a guideline on electricity transmission system operation (hereafter referred to as "SO GL"). This proposal is hereafter referred to as "FRR limits on exchange and sharing between SA proposal".
- 18 (2) The FRR exchange and sharing limits between synchronous areas proposal takes into account the 19 general principles and goals set in the SO GL, as well as Regulation (EC) No 714/2009 of the 20 European Parliament and of the Council of 13 July 2009 on conditions for access to the network for 21 cross-border exchanges in electricity (hereafter referred to as "Regulation (EC) No 714/2009"). The 22 goal of the SO GL is the safeguarding of operational security, frequency quality and the efficient 23 use of the interconnected system and resources. For this purpose, it sets requirements for limits on 24 the amount of exchange as well as sharing of aFRR and mFRR between synchronous areas. 25
- (3) The FRR limits on exchange and sharing between synchronous areas proposal takes into account the load-frequency control structure of each synchronous area in accordance with Article 139 of SO GL. The operation of load-frequency control processes is based on operational areas, where every 29 area has their individual responsibilities with respect to the LFC structure. The superior structure is the synchronous area in which frequency is the same for the whole area.
 - (4) Article 176(1) and 177(1) of SO GL require all TSOs of each synchronous area to define a method to determine limits for the exchange and sharing of FRR with other synchronous areas in the synchronous area operational agreement. In particular:
 - In accordance with Article 176(1), the method to determine limits for the exchange of FRR shall take into account the operational impact between the synchronous areas; the stability of the FRP of the synchronous area; the ability 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 of SO GL; and the operational
 - In accordance with Article 177(1), the method for determining the limits for sharing of FRR shall take into account: the operational impact between the synchronous areas; the stability of the FRP of the synchronous area; the maximum reduction of FRR that can be taken into account in the FRR dimensioning rules in accordance with Article 157 as a result of the FRR sharing; the ability of the TSOs of the synchronous area to comply with the frequency quality target parameters defined in accordance with Article 127 and the ability of the LFC blocks to comply with the FRCE target parameters defined in accordance with Article 128; and the operational security.
 - (5) The scope of the FRR limits on exchange and sharing between synchronous areas proposal is to establish the limits on the amount of exchange and sharing of FRR between synchronous areas in



order to respect operational security. This proposal does not apply to exchange or sharing of FRR within a synchronous area.

(6) According to Article 6(2)(d)(ix) of the SO GL, it requires all TSOs to develop methodologies, conditions and values included in the synchronous area operational agreements in Article 118 concerning the definition of limits on the amount of exchange of FRR between synchronous areas in accordance with Article 176(1) SO GL and limits on the amount of sharing FRR between synchronous areas in accordance with Article 177(1) SO GL. The hereafter presented exchange and sharing between synchronous areas proposal shall define the requested methodologies, conditions and values.

(7) The FRR limits on exchange and sharing between synchronous areas proposal is to respond to the objective of SO GL pursuant to Article 4(1) to ensure the conditions for maintaining a frequency quality level of all synchronous areas throughout the Union, by permitting exchange and sharing between synchronous areas under certain limits in order to avoid detrimental effect on each synchronous area.

(8) In conclusion, the FRR limits on exchange and sharing between synchronous areas proposal contributes to the general objectives of the SO GL to the benefit of all market participants and electricity end consumers.

SUBMIT THE FOLLOWING FRR LIMITS ON EXCHANGE AND SHARING BETWEEN SYNCHRONOUS AREAS PROPOSAL TO ALL REGULATORY AUTHORITIES:

75 Article 1 76 Subject matter and scope

The FRR limits on exchange and sharing between synchronous areas as determined in this proposal shall be considered as the common proposal of all TSOs of CE in accordance with Article 176 and 177 of the SO

GL. This proposal does not apply to exchange and sharing of FRR within the synchronous area CE.

Article 2 Definitions and interpretation

1. For the purposes of the FRR limits on exchange and sharing between synchronous areas proposal, terms used in this document shall have the meaning of the definitions included in Article 3 of the SO GL, Article 2 of Regulation (EC) 714/2009, Article 2 of Directive 2009/72/EC and Article 2 of Commission Regulation (EU) 543/2013.

- 2. In this FRR limits on exchange and sharing between synchronous areas 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 FRR limits on exchange and sharing between synchronous areas proposal; and
- 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 Limits on the amount of exchange and sharing of FRR between synchronous

- 1. A reserve receiving TSO of a LFC block involved in the exchange of aFRR and mFRR between synchronous areas, where synchronous area of Continental Europe is the reserve receiving synchronous area, shall ensure that at least 50 % of its total combined FRR capacity resulting from the aFRR and mFRR dimensioning rules according to the Article 157 of the SO GL and before any reduction due to the sharing of aFRR and mFRR according to Article 157(2) of the SO GL remains located within its LFC block.
- 2. Each TSO of a LFC block shall have the right to perform sharing of aFRR and mFRR with a LFC block in an adjacent synchronous area. In particular:
 - a) where the synchronous area CE is the reserve receiving synchronous area, the sharing of aFRR and mFRR is possible within the limits set by the aFRR and mFRR dimensioning rules in Article 157(1), Article 157(2)(j, k) and Article 158 of the SO GL.
 - In case of sharing and pursuant to Article 157(2)(j, k) of the SO GL, the reduction of the positive (resp. negative) reserve capacity on FRR of a LFC block shall be limited to the difference, if positive, between the size of the positive (resp. negative) dimensioning incident and the reserve capacity on FRR required to cover the positive (resp. negative) LFC block imbalances during 99 % of the time, based on the historical records referred to Article 157(2)(a). Additionally, the reduction of the positive reserve capacity shall not exceed 30 % of the size of the positive dimensioning incident;
 - b) where synchronous area CE is the reserve connecting synchronous area, no limits shall apply.

Article 4 Publication and implementation of the FRR limits on exchange and sharing between synchronous areas proposal

- 1. The TSOs shall publish the FRR limits on exchange and sharing between synchronous areas proposal without undue delay after all 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(8) of the SO GL.
- 2. The TSOs shall implement the FRR limits on exchange and sharing between synchronous areas proposal provided one month after the regulatory authorities have approved the proposal in accordance with Article 6(3) SO GL or a decision has been taken by the Agency in accordance with Article 6(8) SO GL.

127 Article 5 128 Language

The reference language for this FRR limits on exchange and sharing between synchronous areas proposal shall be English. For the avoidance of doubt, where TSOs need to translate this FRR limits on exchange and sharing between synchronous areas proposal into their national language(s), in the event of inconsistencies between the English version published by TSOs in accordance with Article 8 of the SO GL 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 FRR limits on exchange and sharing between synchronous areas proposal.