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Swindon, 08/08/2013

Dear Christophe,

COMMENTS TO ACER ON THE LFC NETWORK CODE AND DRAFT BALANCING CODE

Thank you for the opportunity to provide comments on the draft Load Frequency Control and Reserves Code (LFCR Code) that was submitted to ACER by ENTSOE on 28 June 2013. This letter sets out the views of RWE Group including our power generation, trading, distribution system operator and retail supply businesses across the EU. This response, where relevant, also refers to the draft Balancing Code on which we are currently compiling our consultation response for ENTSOE. These two codes need to be considered in tandem by ACER and the Commission to ensure consistency.

Our main issues with the two codes, as they currently stand, are set out below. The attached Annex sets out some proposed changes to the LFC code and Balancing code to reflect these points.

1. **TSO-TSO model without CMO:** The draft codes, in particular LFCR, sets out a process for exchange of energy and reserve that is largely based on TSO-TSO relationships. This does not correspond to the model envisaged in the Framework Guidelines which is a "multilateral TSO-TSO model with common merit order list" (CMO model) for energy. Likewise, for Reserves the Framework Guideline envisages (i) exchange (of) surpluses of reserves through a bilateral reserve trading model and (ii) multilateral reserve trading involving TSOs and BSPs.

   Although the draft balancing network code details a CMO type process for both energy and reserve, it postpones the development of this for several years. In the meantime it also develops a TSO-BSP approach for reserves, which is welcome, as well as a possible secondary market. However the TSO-BSP approach is presented only as a transitional model and a number of obstacles are placed in its way. Our view is that, in the absence of the required multilateral models, the network codes must elaborate further a simple TSO-BSP model, for both energy and reserve, which ensures consistency with the basic EU freedoms to exchange goods and services across borders.

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2. **Too much reserve sharing/exchange and implied capacity reservations:** The scope for TSO-TSO exchange and sharing set out in the LFCR code is too high given that only "surpluses" are supposed to be exchanged in this way. Such a high degree of sharing\exchange calls in question the whole load control structure that is elaborated in the network code. If such high levels of sharing are permitted, it does not make sense to maintain separate control blocks and control areas. It also implies the need for transmission capacity reservation which should, in any case, be very limited. Reserve sharing and exchange should only be based on an estimate of likely available capacity after markets have closed and should only be done at the D-1 stage. The current sequential treatment has a strong risk of "salami slicing" of transmission capacity so that little is left for market participants.

3. **TSOs interference in commercial decision making:** The level of TSO discretion, in both draft codes, to intervene in commercial decisions is not acceptable or desirable given that they are supposed to be facilitating and reinforcing the internal market. These sections either should be removed or alternatively revised to ensure that market participants are always compensated for such interventions. If TSOs have several *carte blanches* of this type they are less likely to operate the reserve procurement in an efficient way and this could perversely make the system less secure.

4. **Loose definition of Replacement Reserve (RR) \ specific products:** The idea that TSOs can procure and activate resources "for hours" during the operation of the intraday market risks undermining the objectives of the CACM code and the target model. RR requires a clearer definition and well defined activation rules that should minimise the scope for activation during the market timeframe. Other than in exceptional circumstances, TSOs should not activate reserves or balancing energy before gate closure. Similarly TSOs should not ever be a balancing service provider to itself. This is not clear enough in the text and there are inconsistencies between the LFCR code and the balancing code in this respect.

5. **Overlap between codes:** The LFCR code advocates a need for real time communication channels for those units providing FCR, FRR, and RR (Art. 36, 39 and 41) even though real time communication channels are already set for them in the network code on operational security (NC OS, art. 20 & 26) which considers them as Significant Grid Users (art. 1 of NC OS). We believe that the drafting should be improved so as to ensure the effective and efficient implementation of the network code, i.e. to avoid misinterpretation that could lead to inefficient duplication of communication channels. The network code should explicitly refer to relevant requirements of NC OS.

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In addition to the points made above on the shared aspects of the LFCR and Balancing code, we have some initial views on specific areas of the Balancing code where we are currently compiling our detailed comments to ENTSOE.

- The code needs to confirm more clearly that both internal and cross-zonal intraday gate closure should be H-1 at the earliest. We would prefer a gate closure time of 15 minutes.

- The intention to bring all market participants under the definition of "balance responsible", including retail businesses and renewable generators, is welcome. Some clarification of this, for example in the recitals, would be useful. In addition, the basic requirements placed on BRPs must be set out more clearly in Article 14.

- Cross border integration is constrained due to the lack of a common timetable for the market and system operation and a lack of consistent set of incentives on market participants with respect to balancing. In particular, imbalance settlement periods and pricing methodologies need to be harmonised as soon as possible. We favour a single price for imbalance based on the cost of the marginal action taken (including the implied cost of any capacity element in balancing reserve procurement). Failure to set appropriate incentives will create missing money issues and further encourage uncoordinated national interventions.

- We have concerns that the COBA approach will lead to a confusing set of overlapping projects relating to different elements of balancing. This risks distorting the behaviour of market participants and the outcomes of integration in the market timeframe. A high level of harmonisation on basic market design features is needed before these integration projects are launched. Furthermore, it would be better to deal with, what are effectively pilot projects, under the AESAG\Florence framework rather than such a piecemeal approach to be hard-wired into a piece of European law.

- "Relevant areas" for balancing and imbalance purposes need to be consistent with bidding zones for the day-ahead and intraday market. Otherwise market participants' behaviour in the market timeframe will be distorted depending on what "relevant area" they are in from the perspective of the balancing code. In addition, the mention of "nodal prices" in the definition is not consistent at all with the approach taken in CACM.

- Central dispatch systems are not consistent with the target model and arguably not compliant with the Directive. These should be dealt with as strictly time limited exemptions, and only for those Member States which currently have such arrangements in place.

- Regarding transparency, RWE stresses the importance of providing continuously updated information at all stages of the balancing market participation. However there should not be undue administrative burdens, particularly on DSOs. In this context, Article 12 of the Draft Network Code is too ambitious. The information requirements in Article 12 (1) to (3) need to be limited to a more manageable level be aligned with the respective provisions in the Network Codes on System Operation.

- Integration of RES generation in intraday and balancing markets will make a decisive contribution to system stability and potential market barriers and burdens for alternative balancing power have to be reduced. However, Article 12 (4) provides that DSOs have to bear all costs resulting from curtailment of schedules and Balancing Reserves limited by their system. This provision goes too far and would impose high financial risks to the DSOs, since they are forced to connect any renewable generation unit to their grids, even when the n-1 criteria is not fulfilled. DSOs would then be responsible for costs from the curtailment of schedules. To avoid these risks, DSOs should have the right to restrict the amount of Balancing Service Providers connected to their grids in the prequalification stage. If not, this could hinder market entry of decentralised or renewable balancing generating units due to the costs for DSOs in case of curtailment of schedules.

We are currently working on our detailed consultation response on the Balancing code to reflect the points set out above.

Yours sincerely,

WILLIAM WEBSTER
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ANNEX SUGGESTED MODIFICATIONS TO THE CURRENT DRAFTS OF THE LFC AND BALANCING NETWORK CODES

1 EXTENDING THE SCOPE FOR TSO-BSP TRANSACTIONS

LFCR code:

Article	Current text	Suggested replacement text
2	**Exchange of Reserves** means a concept for a TSO to have the possibility to access Reserve Capacity connected to another LFC Area, LFC Block, or Synchronous Area to comply with the amount of required reserves resulting from its own reserve dimensioning process of either FCR, FRR or RR. These reserves are exclusively for this TSO, meaning that they are not taken into account by any other TSO to comply with the amount of required reserves resulting from their respective reserve dimensioning processes;	**Exchange of Balancing Reserves** means the process of procuring Balancing Reserves at least in the form of a Standard Product by a Requesting Transmission System Operator from a different Relevant Area than the one in which the procured Balancing Service Provider is connected. [i.e. the text in the draft Balancing code.]
54	1. The Exchange of FRR within a Synchronous Area is allowed in accordance with the provisions of this article and Article 52. 2. All TSOs in a Synchronous Area consisting of more than one LFC Block involved in the Exchange of FRR within the Synchronous Area shall ensure to respect the requirements and limits as defined in Table 6:	1. The Exchange of FRR within a Synchronous Area is allowed in accordance with the provisions of this article and Article 52. 2. All TSOs in a Synchronous Area consisting of more than one LFC Block involved in the Exchange of FRR within the Synchronous Area shall ensure to respect the requirements and limits as defined in Table 6: 3. TSOs shall either contract with BSPs directly or alternatively procure capacity in common with other TSOs via a multilateral procurement platform for the purposes of exchanging reserve.
56	1. The Exchange of RR within the Synchronous Area is allowed in accordance with the provisions of this Article and Article 52. 2. All TSOs in a Synchronous Area consisting of more than one LFC Block involved in the Exchange of RR within the Synchronous Area shall ensure to respect the requirements and limits for the Exchange of RR as defined in Table 7:	1. The Exchange of RR within the Synchronous Area is allowed in accordance with the provisions of this Article and Article 52. 2. All TSOs in a Synchronous Area consisting of more than one LFC Block involved in the Exchange of RR within the Synchronous Area shall ensure to respect the requirements and limits for the Exchange of RR as defined in Table 7: 3. TSOs shall either contract with BSPs directly or alternatively procure capacity in common with other TSOs via a multilateral procurement platform for the purposes of exchanging reserve.
62	New paragraph	1bis TSOs shall either contract with BSPs directly or alternatively procure capacity in common with other TSOs via a multilateral procurement platform for the purposes of exchanging reserve.
64	New paragraph	1bis TSOs shall either contract with BSPs directly or alternatively procure capacity in common with other TSOs via a multilateral procurement platform for the purposes of exchanging reserve.

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Balancing code:

Article	Current text	Suggested replacement text
2	**Balancing Service Provider** means a market participant providing Balancing Services to its Connection Transmission System Operator.	**Balancing Service Provider** means a market participant providing Balancing Services.
2	**TSO-TSO Model** means a model for the Exchange of Balancing Services with Transmission System Operators being the only entities involved in the Exchange of Balancing Services between areas. The TSO-TSO Model is the standard model for the Exchange of Balancing Services.	**TSO-TSO Model** means a model for the Exchange of Balancing Services with Transmission System Operators being the only entities involved in the Exchange of Balancing Services between areas and with the establishment of a common merit order and/or a common reserve procurement platform.
13	Balancing Service Providers are allowed to provide Standard Products or Specific Products for the Exchange of Balancing Energy and Balancing Reserves, only to the Connection Transmission System Operator.	Delete
24	For a period not exceeding six years after the entry into force of this Network Code, each Transmission System Operator and each Balancing Service Provider may, upon request, be exempted, from the application of the following provisions: Article 13(5), Article 22(11) and (11), Article 36(1), Article 37(1) and (2), Article 38(1) and (2), Article 49(3) and (5). In case the exemption is granted, they shall establish contractual arrangements in the form of a TSO-BSP Model, under the following conditions: (a) settlement between Transmission System Operators in accordance to SECTION 3 of CHAPTER 5 shall be applicable, ensuring a fair distribution of costs and benefits resulting from Exchange of Balancing Reserves; (b) a Cost-Benefit Analysis shall be performed by the contracting Transmission System Operator indicating Social Welfare implications of the application of a TSO-BSP Model for the procurement of Balancing Reserves for at least the Relevant Areas of the contracting and Connection Transmission System Operator; (c) an agreement between the contracting Transmission System Operator and the Connection Transmission System Operator about technical and contractual requirements and the settlement of Balancing Services shall be established; (d) the request for transitional exemptions is approved by both National Regulatory Authorities of the Relevant Areas of the contracting Transmission System Operator and the Connection Transmission System Operator; and (e) a compensation mechanism for the use of Cross Zonal Capacity for the Exchange of Balancing Reserves under this Article shall be developed. 2. Every request for exemption shall	Until such time as the CMO is in place for Balancing services as envisaged in Article 58 , each Transmission System Operator and each Balancing Service Provider may be exempted, from the application of the following provisions: Article 13(5), Article 22(11), Article 36(1), Article 37(1) and (2), Article 38(1) and (2), Article 49(3) and (5). In this event they may establish contractual arrangements in the form of a TSO-BSP Model, under the following conditions. (a) settlement between Transmission System Operators in accordance to SECTION 3 of CHAPTER 5 shall be applicable, ensuring a fair distribution of costs and benefits resulting from Exchange of Balancing Reserves; (b) an agreement between the contracting Transmission System Operator and the Connection Transmission System Operator about technical and contractual requirements and the settlement of Balancing Services shall be established.

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	contain: (a) the detailed reasons on the basis of which the exemption was granted or refused, including the financial information justifying the need for the exemption; and (b) the Cost-Benefit Analysis undertaken pursuant to Article 58.	
26(4)	4. The Exchange of Balancing Energy shall be based on a TSO-TSO Model.	4. Once the CMO is in place in line with Article 58, the Exchange of Balancing Energy shall be based on a TSO-TSO Model.

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2 CONTROLLING THE DEGREE OF SHARING AND EXCHANGE OF RESERVE / CAPACITY RESERVATION

LFCR code:

Article	Current text	Suggested replacement text
52(3)(b)	b) the amount of the FRR/RR Capacity subject to the Exchange of FRR/RR;	b) the amount of the FRR/RR Capacity subject to the Exchange of FRR/RR ensuring that this amount does not exceed the transmission capacity resulting from the application of Article 31 of the NC EB
53(3)(a)	a) the amount of FRR/RR Capacity subject to the Sharing of FRR/RR;	a) the amount of FRR/RR Capacity subject to the Sharing of FRR/RR ensuring that this cumulative amount of exchange and sharing of FRR/RR does not exceed the transmission capacity resulting from the application of Article 31 of the NC EB
61		2 bis The cumulative amount of exchange and sharing of FRR/RR between synchronous areas shall not exceed the transmission capacity resulting from the application of Article 31 of the NC EB
62(1)		(e) The cumulative amount of exchange and sharing of FRR/RR between synchronous areas shall not exceed the transmission capacity resulting from the application of Article 31 of the NC EB
63(1)	All TSOs of the Synchronous Area shall define in the Synchronous Area Operational Agreement a methodology to determine limits for the Sharing of FRR with their Synchronous Area	All TSOs of the Synchronous Area shall define in the Synchronous Area Operational Agreement a methodology to determine limits for the Sharing of FRR with their Synchronous Area in line with the requirements of Article 61
64(1)		(e) The cumulative amount of exchange and sharing of FRR/RR between synchronous areas shall not exceed the transmission capacity resulting from the application of Article 31 of the NC EB
65(1)	All TSOs of the Synchronous Area shall define in the Synchronous Area Operational Agreement a methodology to determine limits for the Sharing of RR with their Synchronous Area	All TSOs of the Synchronous Area shall define in the Synchronous Area Operational Agreement a methodology to determine limits for the Sharing of RR with their Synchronous Area in line with the requirements of Article 61

Balancing code:

Article	Current text	Suggested replacement text
23	In accordance with the general objectives of this Network Code set forth in Article 9, each Transmission System Operator shall have the right to decide for the Exchange or Sharing of Balancing Reserves, respecting the Network Code on Load-Frequency Control and Reserves and CHAPTER 4 of this Network Code. Each Transmission System Operator is entitled to combine the Exchange and	TSOs shall allow for exchange of balancing reserves and sharing of reserve pursuant to Network Code on Load-Frequency Control and Reserves

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	Sharing of Balancing Reserves.	
29(3)	3. Each Transmission System Operator shall be entitled to use Cross Zonal Capacity for the Exchange and Sharing of Balancing Reserves, in accordance with the methodology specified in Article 32 using the approaches specified in Article 31, where Cross Zonal Capacity is: (a) available after the Intraday Gate Closure Time; or (b) provided for Balancing Services, in accordance with this Chapter.	Each Transmission System Operator shall be entitled to use Cross Zonal Capacity for the Exchange and Sharing of Balancing Reserves, in accordance with the methodology specified in Article 32 using the approaches specified in Article 31, where (a) available after the Intraday Gate Closure Time; or (b) TSOs have re-purchased capacity, previously allocated pursuant to the FCA code, through an auction.
30	1. Cross Zonal Capacities allocated or reserved for the Exchange and Sharing of Balancing Reserves shall be priced in consistency with pricing methods for other purposes for similar timeframes. 2. Cross Zonal Capacity shall be priced in a manner which: (a) reflects Market Congestion; and (b) is based on actual bids for Balancing Reserves in the relevant timeframe. 3. For the Exchange of Balancing Energy additional charges for losses can be charged if the charge is consistent with other timeframes and approved by relevant National Regulatory Authorities. Any additional charges for the use of Cross Zonal Capacity for Exchanges of Balancing Energy are forbidden for Transmission System Operators. If a Transmission System Operator is submitting a proposal for regulatory approval regarding charges for such losses following Article 7, it shall at the same time submit all relevant information and documents related to the opening of this approval to the Agency. 4. The pricing mechanism for Cross Zonal Capacity allocated or reserved pursuant to Article 31(1)(b) and (c) shall provide an adequate compensation for Cross Zonal Capacity. No later than twelve months before its implementation, Transmission System Operators providing Cross Zonal Capacity for the Exchange and Sharing of Balancing Reserves shall develop the applicable pricing mechanism, including a congestion income distribution methodology consistent with the arrangements established under the Network Code Capacity	Delete

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	Allocation and Congestion Management.	
31	Each Transmission System Operator shall apply one or more of the following approaches for providing Cross Zonal Capacity for the Exchange and Sharing of Balancing Reserves, safeguarding operational security, avoiding undue discrimination between Transmission System Operators and market participants, and taking into account: (a) Probabilistic Approach, where no capacity from energy markets needs to be used for it; (b) Allocation of Cross Zonal Capacity through a market-based Co-optimisation Process, taking into account cost and benefits of Cross Zonal Capacity provided for the Exchange and Sharing of Balancing Reserves; or (c) Reservation of Cross Zonal Capacity, means the provision of Cross Zonal Capacity outside timeframes open for other market participants than Transmission System Operators, under methodologies agreed by all Transmission System Operators of a Coordinated Balancing Area. Cross Zonal Capacity shall be rereleased to the market at later timeframes if not used.	Each Transmission System Operator shall apply one or more of the following approaches for providing Cross Zonal Capacity for the Exchange and Sharing of Balancing Reserves, safeguarding operational security, avoiding undue discrimination between Transmission System Operators and market participants, and taking into account: (a) Probabilistic Approach, where no capacity from energy markets needs to be used for it; (b) Buyback of capacity in line with Article 29(3)(b)
32	No later than twelve months before its implementation, all Transmission System Operators providing Cross Zonal Capacity for the Exchange of Balancing Services shall develop capacity provision and pricing methodologies based on an approach defined in Article 31. The capacity provision methodologies shall meet the objectives defined in Article 9 and shall contain at least the following elements for each Cross Zonal Capacity provision methodology: (a) the relevant time frame; (b) a process description; and (c) the criteria for required Social Welfare improvements. 2. For reservations of Cross Zonal Capacity for a specific Delivery Period for timeframes shorter than a month ahead, relevant Transmission System Operators providing capacity for Exchange of Balancing Reserves shall develop a modification to the capacity provision methodology developed pursuant to paragraph 1 in order to allow an accelerated application of the methodology close to real time, including the criteria for its application. 3. If a Transmission System Operator is submitting a proposal for regulatory approval regarding the reservation of cross border capacity following Article 7, it shall at the same time submit all relevant information and documents related	Delete.

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	to the opening of this approval to the Agency.	
33	Allocated and reserved capacity for Exchange of Balancing Services and Sharing of Balancing Reserves shall be considered in the calculations of Cross Zonal Capacity for later Delivery Periods as previously Allocated Cross Zonal Capacity. 2. A Common Grid Model for calculations of Cross Zonal Capacity for Balancing shall be used, based on the grid model of the latest available Delivery Period. 3. All Transmission System Operators of a Coordinated Balancing Area shall ensure that the information of available Cross Zonal Capacity within the same Coordinated Balancing Area as well as between Coordinated Balancing Areas is reassessed sufficiently often for Balancing based on the latest available information on the usage of Cross Zonal Capacity. 4. The relevant information on the availability of Cross Zonal Capacity shall be provided and updated directly by the relevant Transmission System Operators in accordance with the relevant Cross Zonal Capacity provision methodologies as stipulated in Article 31.	Delete.

3 REMOVING SCOPE FOR AD HOC INTERVENTION WITHOUT REGULATORY OVERSIGHT

LFCR code:

Article	Current text	Suggested replacement text
4-5, 10-18	**A general review of all the items contained in Articles 4-5 and Articles 10-18 is required to ensure the appropriate level of regulatory scrutiny.**	
3	1. The requirements established in this Network Code and their applications are based on the principle of non-discrimination and transparency as well as the principle of optimisation between the highest overall efficiency and lowest total cost for all involved parties. 2. Notwithstanding the above, the application of the principle of non-discrimination and the principle of optimisation between the highest overall efficiency and lowest total costs while maintaining Operational Security as the highest priority for all involved parties shall be balanced with the aim of achieving the maximum transparency in issues of interest for the market and the assignment to the real originator of the costs. 3. The terms and conditions or actions necessary to ensure Operational Security or the methodologies to establish them shall be established by TSOs in accordance with the principles of transparency, proportionality and non-discrimination. The definition of these terms and conditions or actions necessary to ensure Operational Security shall be performed in compliance with and respecting the TSO's responsibility to ensure system security according to national legislation.	Delete
28(2)	In accordance with Article 9(14) of NC OS, all TSOs of an LFC Block shall have the right to define in the LFC Block Operational Agreement and apply the following measures to support the fulfilment of the FRCE Target Parameter of the LFC Block: a) definition of Ramping Periods and/or maximum Ramping Rates on Power Generating Modules and / or Demand Units; b) individual ramping starting times for Power Generating Modules and / or Demand Units within the LFC Block; and c) coordination of the ramping between Power Generating Modules, Demand Units and Active Power consumption within the LFC Block.	Delete As drafted the proposed LFC code goes well beyond the NC OS Art. 9(14) in making ramping restrictions part of a defined agreement between TSOs rather than individual actions aimed at "justified expected risks". Article 9(14) NC OS Is already excessive and needs redrafting or should provide for regulatory oversight.

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	3. The TSOs of a Synchronous Area shall coordinate the measures defined in Article 28(2) within the Synchronous Area.	
29(b)	b) decide on mitigation measures to ensure that the targets for the Synchronous Area or for the LFC Block can be met in the future.	Delete. It is fine for TSOs should make recommendations for improvements for specific aspects of this code for approval by regulators, but not for open-ended and unspecified "mitigation" measures.
42 (8), (9)	The TSOs of a Synchronous Areas GB and IRE shall define in the Synchronous Area Operational Agreement operational procedures for the case of exhausted FCR. For these procedures the TSOs of a Synchronous Area shall have the right to require changes in the Active Power production or consumption of Power Generating Modules and Demand Units. 9. The TSOs of a LFC Block shall define operational procedures for the case of exhausted FRR or RR in the LFC Block Operational Agreement. For these procedures the TSOs of a LFC Block shall have the right to require changes in the Active Power production or consumption of Power Generating Modules and Demand Units.	8. The TSOs of a Synchronous Areas GB and IRE shall define in the Synchronous Area Operational Agreement operational procedures for the case of exhausted FCR. For these procedures the TSOs of a Synchronous Area shall have the right to require changes in the Active Power production or consumption of Power Generating Modules and Demand Units in return for appropriate market based compensation. 9. The TSOs of a LFC Block shall define operational procedures for the case of exhausted FRR or RR in the LFC Block Operational Agreement. For these procedures the TSOs of a LFC Block shall have the right to require changes in the Active Power production or consumption of Power Generating Modules and Demand Units in return for appropriate market based compensation.
42(12)-(14)	12. In case of an Alert State due to there being insufficient Active Power Reserves according to [NC OS Article 8] to meet the requirements of the TSOs of those LFC Blocks, the TSOs shall in close cooperation with the other TSOs of the Synchronous Area and TSOs of other Synchronous Areas act to restore and replace necessary levels of Active Power Reserves. For this purpose the TSOs of a LFC Block shall have the right to require changes in the Active Power production or consumption of Power Generating Modules or Demand Units within its area with the aim to reduce or to eliminate the violation of Active Power Reserve requirements. 13. For the case the 1-minute average of the FRCE of a LFC Block is above the Level 2 FRCE Range for at least the Time to Restore Frequency and in case the FRCE is not expected to be reduced sufficiently by the actions defined in (16) the TSOs of a LFC Block shall have the right to require changes in the Active Power production or consumption of Power Generating Modules and Demand Units within its area with the aim to reduce the FRCE as defined in (17). 14. For the Synchronous Areas CE and NE, for the case the FRCE of a LFC Block exceeds 25 % of the Reference Incident of the Synchronous Area for more than 30 consecutive minutes and in case the FRCE	Delete. This is not suitable for the LFC code. TSOs should maintain frequency quality via procurement and use of reserve, not ad hoc actions.

	is not expected to be reduced sufficiently by the actions defined in (16) the TSOs of a LFC Block shall require changes in the Active Power production or consumption of Power Generating Modules and Demand Units within its area with the aim to reduce the FRCE as defined in (17).	
42(17)	The TSOs of a LFC Block shall define in the LFC Block Operational Agreement measures to reduce the FRCE by requiring changes in the Active Power production or consumption of Power Generating Modules and Demand Units within its area.	Delete. This is not suitable for the LFC code. TSOs should maintain frequency quality via procurement and use of reserve, not ad hoc actions.
46(4)	All TSOs of a LFC Block shall have sufficient FRR Capacity according to the FRR Dimensioning Rules at any time. For the case of a severe risk of insufficient FRR Capacity of a LFC Block an escalation procedure shall be defined in the LFC Block Operational Agreement by all TSOs of a LFC Block.	This needs to have oversight of regulators in Article 4(3).
48(7)	A TSO shall have sufficient RR Capacity according to the RR Dimensioning Rules at any time. For the case of a severe risk of insufficient RR Capacity of a LFC Block an escalation procedure shall be defined in the LFC Block Operational Agreement by all TSOs of a LFC Block.	This needs to have oversight of regulators in Article 4(3).

Balancing code:

Article	Current text	Suggested replacement text
2	**Balancing** means all actions and processes, on all timescales, through which Transmission System Operators ensure, in a continuous way, to maintain the system frequency within a predefined stability range as set forth in the Network Code on Load- Frequency Control and Reserves, and to comply with the amount of reserves needed per Frequency Containment Process, Frequency Restoration Process and Reserve Replacement Process with respect to the required quality, as set forth in the Network Code on Load-Frequency Control and Reserves.	**Balancing** means all actions and processes, after closure of the intraday market, through which Transmission System Operators maintain the system frequency within a predefined stability range as set forth in the Network Code on Load-Frequency Control and Reserves, and to comply with the amount of reserves needed per Frequency Containment Process, Frequency Restoration Process and Reserve Replacement Process with respect to the required quality, as set forth in the Network Code on Load- Frequency Control and Reserves.
3	1. The requirements established in this Network Code and their applications are based on the principle of non-discrimination and transparency as well as the principle of optimisation between the overall efficiency and total cost for all	Delete

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	involved parties. 2. Notwithstanding the above, the application of the non-discrimination principle and the principle of optimisation between the overall efficiency and total costs for all involved parties shall be balanced with the aim of achieving transparency in issues of interest for the market and the assignment to the real originator of the costs.	
11	Transmission System Operators shall not offer the Balancing Services themselves except, if there are insufficient bids with respect to dimensioning requirements contained in the Network Code on Load-Frequency Control and Reserves from Balancing Service Providers or if foreseen under national law. If a Transmission System Operator is submitting a proposal for regulatory approval regarding the provision of Balancing Services following Article 7, it shall at the same time submit all relevant information and documents related to the opening of this approval to the Agency.	Transmission System Operators shall not offer Balancing Services.
16(9)	Each Connection Transmission System Operator shall be entitled to oblige Balance Responsible Parties to provide a balanced Position in the Day-Ahead timeframe.	Delete. Unnecessary and undermines intraday market.
17(6)		(e) Specific products should be subject to regulatory approval (f) Specific products must minimise impact of trading in intraday markets.
22	Each Transmission System Operator shall use at least one of the following market based methods for the procurement of Frequency Containment Reserves, Frequency Restoration Reserves and Replacement Reserves: (a) a call for tender; (b) a call for tender with price caps; or (c) an obligation for Balancing Service Providers to provide reserves, linked to a liquid secondary market for the Transfer of Obligations.	Each Transmission System Operator shall procure Frequency Containment Reserves, Frequency Restoration Reserves and Replacement Reserves via a call for tender process.
25(3) - (7)	3. Notwithstanding paragraph 2, each Transmission System Operator shall be entitled to apply a different pricing method for any Balancing Energy Standard Product provided that the Transmission System Operator does not participate in a Coordinated Balancing Area for this Balancing Energy Standard Product. 4. After entry into force of the pricing method of Balancing Energy Standard Products as foreseen in paragraph 2, all Transmission System Operators shall be	Delete

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	entitled to propose a change to the pricing method of Balancing Energy Standard Products. 5. Subject to its National Regulatory Authority's approval, each Transmission System Operator shall be authorised to require information on unused generation capacity and other Balancing resources from Balancing Service Providers after Day-Ahead and Intraday Gate Closure Time. 6. Subject to its National Regulatory Authority's approval, each Transmission System Operator shall be authorised to require Balancing Service Providers to offer their unused generation capacity or other Balancing resources through bids in the Balancing Markets after Day-ahead and Intraday Gate Closure Time. 7. Each Transmission System Operator of a Central Dispatch System shall be entitled to propose amendments to the rules for submission, activation and updating Balancing Energy Bids pursuant to Article 13(4)	
48(3)	1. No later than three years after entry into force of this Network Code, all Transmission System Operators shall submit to all National Regulatory Authorities and the Agency a Cost-Benefit Analysis on harmonisation of the Imbalance Settlement Period within and between Synchronous Areas. This Cost-Benefit Analysis shall at least take into consideration: (a) the need of consistency between the Delivery Period and the Imbalance Settlement Period; and (b) the need of consistency between the Imbalance Settlement Period and the resolution of the metering devices available in each system. 2. No later than six months after receiving the Cost-Benefit Analysis, all National Regulatory Authorities shall submit their decision on the harmonisation of the Imbalance Settlement Period to all Transmission System Operators and, if applicable, a date for the implementation of this decision. In any case, this implementation date shall not be prior to the implementation date of the terms and conditions related to Balancing according to Article 16. 4. No later than three months before the implementation date according to paragraph 2, each Transmission System Operator shall be entitled to	1. No later than three years after entry into force of this Network Code, all Transmission System Operators shall submit to all National Regulatory Authorities and the Agency a proposal for harmonisation of the Imbalance Settlement Period within and between Synchronous Areas. 2. No later than six months after receiving the proposal, all National Regulatory Authorities shall submit their decision on the harmonisation of the Imbalance Settlement Period to all Transmission System Operators and, if applicable, a date for the implementation of this decision. In any case, this implementation date shall not be prior to the implementation date of the terms and conditions related to Balancing according to Article 16.

	submit a proposal of Imbalance Settlement Period to its National Regulatory Authority that deviates from this decision. In this case, the Transmission System Operator shall provide a detailed Cost-Benefit Analysis justifying this deviation.	

4 CLARIFYING THE NATURE OF THE REPLACEMENT RESERVE PRODUCTS

LFCR code:

Article	Current text	Suggested replacement text
2	Replacement Reserves (RR) means the reserves used to restore/support the required level of FRR to be prepared for additional system imbalances. This category includes operating reserves with activation time from Time to Restore Frequency up to hours;	Replacement Reserves (RR) means the reserves used to restore/support the required level of FRR to be prepared for additional system imbalances.
4(2)	e) RR technical requirements defined by the TSO pursuant to Article 49(3); and	Delete and move to 4(4)
4(4)	New paragraph to allow for agreement on all RR requirements across synchronous area	Each TSO of a Synchronous Area shall submit the following methodologies and conditions established by the TSOs of a Synchronous Area to its National Regulatory Authority or, when explicitly foreseen in national law, other relevant national authorities for approval: 4(4)(x) RR processes in accordance with the requirements of Article 35, Cross border RR processes pursuant to Article 38 RR dimensioning pursuant to Article 48. RR technical requirements purs uant to Article 49
31	2. The Process Activation Structure may include: a) a RRP according to Article 35;	2. System operators shall establish an RRP according to Article 35 whenever they procure or use RR;
35	1. The control target of the RRP is to fulfil one or several of the following goals: a) progressively restore the activated FRR; b) support FRR activation; and c) for the Synchronous Areas GB and IRE to progressively restore the activated FCR and FRR. 2. The Setpoint value for RR activation shall be determined by a TSO for its LFC Area.	1. The control target of the RRP is to fulfil one or several of the following goals: a) progressively restore the activated FRR; b) support FRR activation; and c) for the Synchronous Areas GB and IRE to progressively restore the activated FCR and FRR. 2. The Setpoint value for RR activation shall be determined by a TSO for its LFC Area. 3. Maintain the integrity of intraday markets by avoiding activation before intraday gate closure.
38	2. The Cross-Border RR Activation Process shall be implemented in such a way that it does not affect a) the stability of the FCP of the Synchronous Area or Synchronous Areas involved in the Cross-Border RR Activation Process;	2. The Cross-Border RR Activation Process shall be implemented in such a way that it does not affect a) the stability of the FCP of the Synchronous Area or Synchronous Areas involved in the Cross-Border RR Activation Process; b) the stability of the FRP and the RRP of each LFC Area operated by participating or Affected TSOs;

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	b) the stability of the FRP and the RRP of each LFC Area operated by participating or Affected TSOs; and c) Operational Security.	and c) Operational Security. d) intraday trading and capacity allocation
48	1. All TSOs of a LFC Block shall have the right to implement a Reserve Replacement Process.	1. Where relevant, all TSOs of a synchronous area shall implement a Reserve Replacement Process.

Balancing code:

Article	Current text	Suggested replacement text
13(4)	All Balancing Service Providers shall be entitled to submit and update their Balancing Energy Bids until the Balancing Energy Gate Closure Time. Balancing Energy Standard Products cannot be activated prior to the Balancing Energy Gate Closure Time.	All Balancing Service Providers shall be entitled to submit and update their Balancing Energy Bids until the Balancing Energy Gate Closure Time. Balancing Energy Standard Products cannot be activated prior to the Balancing Energy Gate Closure Time. Balancing Energy Specific Products may only be activated before Balancing Energy gate closure time in the event of an Alert State as defined in NC OS.
17(5)	New point (d)	(d) minimise impact on trading in intraday markets
17(6)	(b) the Specific Products defined shall not create significant inefficiencies and distortions in national market or in the Coordinated Balancing Area;	(b) the Specific Products defined shall not create significant inefficiencies and distortions in national intraday markets or in the Coordinated Balancing Area;
26	No later than specified in Article 58 for all relevant targets, all Transmission System Operators of a Coordinated Balancing Area shall establish an Activation Optimisation Function and define rules for its operation.	Within 12 months of the entry into force of the code, all Transmission System Operators shall establish detailed rules for the activation of Balancing Energy consistent with Article 13(4) and 17(5) and 17(6). No later than specified in Article 58 for all relevant targets, all Transmission System Operators of a Coordinated Balancing Area shall establish an Activation Optimisation Function and define rules for its operation.