

All interested parties,
stakeholders in GB and beyond,
and other regulatory bodies

Email: Leonardo.Costa@ofgem.gov.uk

Date: 21 November 2019

Dear colleagues,

Request for amendment to the level of demand loss determining a blackout state for Great Britain.

Request for amendments to the market suspension and restoration rules and to the settlement rules for market suspension.

On 17 May 2019, we¹ received the following proposals in accordance with Article 18(4) of Commission Regulation (EU) 2017/1485² establishing a guideline on electricity transmission system operation (the SOGL Regulation) and Article 36(1) and Article 39(1) of the Commission Regulation (EU) 2017/2196³ establishing a network code on emergency and restoration (the NCER Regulation):

- a) a proposal specifying the level of demand loss at which the transmission system shall be determined to be in the blackout state (the blackout state proposal);
- b) the rules for suspension and restoration of market activities (the market suspension and restoration rules); and
- c) the specific rules for imbalance settlement and settlement of balancing energy in case of suspension of market activities (settlement rules for market suspension).

¹ The Gas and Electricity Markets Authority. Ofgem is the Office of the Authority. The terms "Ofgem" and "the Authority," "we" and "us" are used interchangeably in this letter.

² Commission Regulation (EU) 2017/1485 of 2 August 2017 establishing a guideline on electricity transmission system operation. The SOGL Regulation came into force on 14 September 2017.

³ Commission Regulation (EU) 2017/2196 of 24 November 2017 establishing a network code on electricity emergency and restoration. The NCER Regulation came into force on 18 December 2017.

The proposals were submitted to us by the Electricity System Operator (ESO) as the relevant Transmission System Operator (TSO) for Great Britain (GB), in line with our decisions on the assignment of obligations.⁴

This letter sets out our decisions to request amendments to the blackout state proposal, the market suspension and restoration rules, and the settlement rules for market suspension, in accordance with Article 6(4) of the SOGL Regulation and Article 4(2) of the NCER Regulation respectively. We also outline the necessary next steps that must be taken.

Background

The Blackout State Proposal

Article 3(2)(22) of the SOGL Regulation defines blackout state as the system state in which the operation of part or all of the transmission system is terminated. Article 18(4) of the SOGL Regulation states that a transmission system shall be in blackout state when at least one of the following conditions is fulfilled:

- a) *"loss of more than 50% of demand in the concerned TSO's control area;*
- b) *total absence of voltage for at least three minutes in the concerned TSO's control area, leading to the triggering of restoration plans".*

Furthermore, in accordance with Article 18(4) of the SOGL Regulation, the ESO may develop a proposal specifying the level of demand loss at which the transmission system of Great Britain (GB) shall be determined to be in the blackout state.

The ESO has proposed that the definition of blackout state be aligned with the current definition of a "Total Shutdown" and remain defined as such within the Grid Code. The current definition of a Total Shutdown is detailed within OC 9.4.1 of the Grid Code⁵:

"A Total Shutdown is the situation existing when all generation has ceased and there is no electricity supply from External Interconnections. Therefore, the Total System has shutdown with the result that it is not possible for the Total System to begin to function again without The Company's directions relating to a Black Start."

⁴ See TSO decision letters for the NCER Regulation and for the SOGL Regulation at the following links here: <https://www.ofgem.gov.uk/publications-and-updates/decision-assignment-transmission-system-operator-obligations-under-emergency-restoration-regulation-within-gb> and <https://www.ofgem.gov.uk/publications-and-updates/decision-assignment-transmission-system-operator-obligations-under-guideline-electricity-transmission-system-operation-regulation-within-gb>

⁵ The complete Grid Code is accessible at: <https://www.nationalgrideso.com/codes/grid-code?code-documents>

Market Suspension and Restoration Rules

In accordance with Article 36(1) of the NCER Regulation, each TSO shall develop a proposal for rules concerning the suspension and restoration of market activities. In its proposal, the ESO stated that some sections of the Grid Code and the Balancing & Settlement Code (BSC) contained the market suspension and restoration rules that must be developed in accordance with Article 36(1) of the NCER regulation. The ESO therefore proposed that these rules serve as the official market suspension and restoration rules for GB.

A table mapping the requirements of the NCER Regulation against the provisions of the existing documents was provided in the annex to the cover letter submitted to the Authority.

Settlement Rules for Market Suspension

In accordance with Article 39(1) of the NCER Regulation, each TSO shall develop a proposal for rules for imbalance settlement and settlement of balancing capacity and balancing energy which shall be applicable for imbalance settlement periods during which the market activities were suspended. As with the market suspension and restoration rules, the ESO proposal states that the provisions that cover the settlement rules for market suspension already exist in the BSC. The ESO has proposed that the rules listed in Section G3 of the BSC, which apply to contingencies, should serve as the official settlement rules for market suspension in GB.

A table mapping the requirements of the NCER Regulation against the provisions of the existing documents was again provided in the annex to the cover letter that was submitted to the Authority.

Decision

We have reviewed the proposals submitted to us in line with the requirements of the NCER Regulation, the SOGL Regulation, the wider objectives of the Regulation (EC) No 714/2009⁶ and our statutory duties and obligations. We furthermore engaged with the ESO and the Balancing and Settlement Code Company (BSCCo)⁷ to clarify our understanding on the proposals.

⁶ Regulation (EC) No 714/2009 here: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:211:0015:0035:EN:PDF>

⁷ The Balancing and Settlement Code Company (BSCCo) is the administrator of the BSC.

We have concluded that the proposals cannot be approved in their current form and that they need to be amended in order to maintain consistency with the requirements of the SOGL Regulation and NCER Regulation and to improve clarity for relevant stakeholders.

The Blackout State Proposal

In accordance with Article 18(4) of the SOGL Regulation, the ESO is able to propose a specific level of demand loss at which the transmission system of GB is determined to be in blackout state. We note that the ESO has instead proposed an alignment of the definition of blackout state with the definition of the term Total Shutdown provided in the Grid Code.

The definition of blackout state, provided for in Article 3(2)(22) of the SOGL Regulation, cannot be amended however as the SOGL Regulation does not offer any mechanism to do so. The ESO may only propose a threshold of demand loss for GB at which the transmission system shall be deemed to be in the blackout state. This does not preclude the ESO from proposing a level of demand loss that is similar to that associated with the Total Shutdown definition in the Grid Code.

As a result, the blackout state proposal submitted by the ESO cannot be approved in its current form. In order to avoid confusion for stakeholders, we ask the ESO to ensure that any amended proposal in accordance with Article 18(4) refers only to the level of demand loss and makes no implication that would amend the definition of blackout state as prescribed by Article 3(2)(22) of the SOGL Regulation. This could for instance be achieved via an interim methodology with a clear timetable for the ESO to amend the Grid code to include the demand loss threshold for blackout state in GB.

We also note that, as part of its proposal, the ESO has linked the description of the emergency state under Article 18(3) of the SOGL Regulation with the definition of Total Shutdown under the Grid Code. As the SOGL Regulation provides no scope to alter the definition or change the thresholds of emergency state for GB, we ask the ESO to remove any mapping of Article 18(3).

The Market Suspension and Restoration Rules

We agree that the mapping of the requirements of the NCER Regulation with the already existing GB contingency arrangements in the BSC and the Grid Code provides a good starting point to demonstrate that the latter provisions constitute the required market suspension and restoration rules. Nevertheless, we believe that the submission in its

current state does not achieve compliance with all the required criteria and needs to be further amended.

We indeed note that Article 35(1) of the NCER Regulation opens the possibility for the ESO to suspend the market in four situations and that Article 36(4) of the NCER Regulation creates an obligation for the ESO to convert the situations referred to in Article 35(1) into objectively defined parameters, taking into consideration the factors listed in Article 36(4) where relevant. Our understanding is that while the ESO may choose not to suspend the market in all four situations, it still has the obligation to convert the situations into clear and objective parameters. This is irrespective of its future choice to suspend the market when faced with the situations.

The mapped provisions submitted by the ESO only provides rules for suspension in two of the four situations described in Article 35(1) of the NCER Regulation, specifically points (a) and (c). The current submission for market suspension and restoration rules is thus incomplete. To ensure compliance with the NCER Regulation, we request the ESO to convert the situations referred to in Articles 35(1)(b) and (d) into objectively defined parameters pursuant to Article 36(4). The ESO could, for instance, consider whether the existing process of suspension of cross-border trading in replacement reserve⁸ when there is a loss of tools and facilities in the central TERRE⁹ algorithm would be a market suspension situation pursuant to Article 35(d).

We also note that the mapping provided by the ESO for Article 36(4) of the NCER Regulation contains reference to "Paragraph X" of the ESO's System Restoration Plan.¹⁰ Upon consultation with the ESO, we understand that "Paragraph X" was intended to refer to Section 2.1.7 of the System Restoration Plan. We ask that the ESO removes the reference to "Paragraph X" and substitute it with the objective parameters required under Article 36(4).

We furthermore note that Article 36(5) of the NCER Regulation sets out a requirement that a time delay be respected for each parameter defined in Article 36(4) of the NCER Regulation. We believe that while in some provisions submitted by the ESO the time delay is implicitly part of the proposals, it is not clearly defined. We thus request the ESO to make the time delay for each of the identified parameters clear in its resubmission.

⁸ Replacement reserves means the active power reserves available to restore or support the required level of Frequency Restoration Reserve to be prepared for additional system imbalances, including generation reserves.

⁹ The Trans-European Replacement Reserves Exchange (TERRE) project is the implementation project of the European platform for the exchange of balancing energy from replacement reserves

¹⁰ The ESO's System Restoration Plan (Issue 2, August 2019) can be accessed here:

<https://www.nationalgrideso.com/document/151326/download>

We have consulted with the ESO and the BSCCo on the impact of market suspension on the balancing settlement. We understand that, when the ESO suspend the cross-border replacement reserves market in accordance with Article 35(2) of the NCER Regulation, the provisions of the Grid Code would be triggered but not the provisions of the BSC. It would thus not make it clear to market participants that the TERRE arrangements are suspended nor how the balancing settlement in this situation would work. We understand that, in practice, as the Grid Code would suspend the possibility for market participants to submit bids for the cross-border replacement reserve market during market suspension, it is unlikely that there would be any settlement to be done. We believe it is important to provide maximum clarity for stakeholders on the GB arrangements for TERRE during market suspension situation. We therefore request the ESO to work with the BSCCo to assess whether the different provisions in the Grid Code and the BSC lead to any practical implication to the settlement of TERRE bids when the market has been suspended. If this assessment concludes that there are practical implications, we request the ESO to address them in its resubmission. In the near future, we encourage the ESO to amend the BSC to bring it in line with the provisions in the Grid Code.

Article 36(3) of the NCER Regulation requires the market suspension and restoration rules to be compatible to the extent possible with a number of rules derived from other European Network Codes.¹¹ We note from the cover letter submitted to the Authority that the ESO has considered the harmonisation of the market suspension and restoration rules with the rules listed in Article 36(3). To allow us to make an informed decision, we ask the ESO to provide with its resubmission more details on the compatibility of the submitted market suspension rules with the rules listed in Article 36(3). We accept that the ESO will not need to provide further information regarding consideration of Article 36(3)(c) as this requirement does not form part of the GB market arrangements.

Finally, we note that Article 38 of the NCER Regulation requires the market suspension and restoration rules to contain a communication procedure providing, among others, that information is sent to the parties referred to in Article 35(5) of the NCER Regulation. With regards to Article 38(2), we accept that the mapped text in the Grid Code and BSC requires the ESO to contact relevant parties and to us this also means all the parties prescribed by the NCER Regulation. We do not deem this to be an issue affecting the integrity of the proposal, but we would suggest that this is an area which could be improved through a code modification procedure when possible in order to provide maximum clarity for stakeholders.

¹¹ This includes: Commission Regulation (EU) 2017/1485 of 2 August 2017 establishing a guideline on electricity transmission system operation (SOGI Regulation); Commission Regulation (EU) 2017/2195 of 23 November 2017 establishing a guideline on electricity balancing (EBGL Regulation); and Commission Regulation (EU) 2015/1222 of 24 July 2015 establishing a guideline on capacity allocation and congestion management (CACM Regulation).

The Settlement Rules for Market Suspension

The ESO has proposed that Section G3 of the BSC constitute the settlement rules for market suspension pursuant to Article 39(1) of the NCER Regulation. Section 3.2 of BSC G3 provides for a variation of rules which are to apply in relation to all settlement periods which fall in a market suspension period.

Section G3.2 of the BSC contains numerous cross-references to other sections of the BSC. To ensure that any modification to these sections are captured by the amendment process of the NCER Regulation, we request that the ESO updates the mapping to include those other sections. Those sections would then form part of the settlement rules for market suspension and be subject to the amendment process of the NCER Regulation. We encourage the ESO to consider whether current proposed modifications to the BSC could be used to ensure the settlement rules for market suspension also follow the NCER Regulation process.

Decision not to undertake an Impact Assessment

We have not undertaken an Impact Assessment for this proposal. This is because we consider that the proposal would not constitute a significant change to existing GB requirements and arrangements as the provisions are already part of the industry codes applicable in GB. There will be no significant impact on persons engaged in the generation, transmission, distribution or supply of electricity, or on GB consumers as a result of the ESO's proposals.

Furthermore, the changes that we have requested involve a reassessment of the mapping of GB codes against the requirements of the NCER Regulation. We do not expect the resubmitted proposals to contain changes that will fundamentally alter market arrangements in GB. Nevertheless, we will reassess our decision to not undertake an Impact Assessment once we see the content of the resubmission.

Next Steps

The ESO must make the necessary amendments to the blackout state proposal, the rules for market suspension proposal, and the settlement rules for market suspension proposal and re-submit the amended proposals to us within two months of this decision. In order for the resubmitted proposal to be in a condition to be approved by us, we would encourage the ESO to consider whether there is a need for it to develop an interim methodology to comply with any aspect of our request. If this is necessary, the interim methodology should

specify the timetable under which the ESO would incorporate the relevant provisions into the respective GB industry codes.

For the resubmission, we request the ESO to:

- 1) submit a blackout state proposal, which only specifies the level of demand loss at which the GB transmission system shall be deemed to be in the blackout state in accordance with Article 18(4) of the SOGL Regulation;
- 2) remove the mapping of Article 18(3) of the SOGL Regulation from the blackout state proposal;
- 3) convert the situations referred to in Article 35(1)(b) and (d) of the NCER Regulation into objectively defined parameters as requested by Article 36(4) of the NCER Regulation;
- 4) update all references to "Paragraph X" in the mapping submitted for the market suspension and restoration rules with the objective parameters required under Article 36(4) of the NCER Regulation;
- 5) submit any amendment necessary to the market suspension and restoration rules resulting from the assessment with the BSCCo of the discrepancy between the BSC and the Grid Code;
- 6) define a time delay, pursuant to Article 36(5) of the NCER Regulation, for the parameters converting the situations referred to in Article 35(1)(b) and (d) of the NCER Regulation;
- 7) provide further justification as to how the rules for market suspension are as compatible to the extent possible with the rules listed in Article 36(3) of the NCER Regulation in the accompanying cover letter; and
- 8) include in the mapping for the settlement rules for market suspension the sections which are cross-referred in BSC G3.

Additionally, we would also like the ESO to consider the addition of entities which the NCER Regulation obliges to be contacted in the event of market suspension into the Grid Code or BSC documents. We would also ask the ESO to amend the BSC to bring it in line with the Grid Code regarding the market suspension of TERRE.

If you have any queries regarding the information contained within this letter, please contact Chris Statham at Christopher.Statham@ofgem.gov.uk.

Yours faithfully,

Leonardo Costa

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