

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

Email: ESOperformance@ofgem.gov.uk

Date: 11 June 2021

Dear colleagues,

Decision to approve the market suspension and restoration rules and the settlement rules for market suspension.

Decision on the the level of demand loss determining a blackout state for Great Britain.

On 21 January 2020 we¹ received amended 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 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 ("blackout state proposal");
- b) the rules for suspension and restoration of market activities ("market suspension and restoration rules"); and

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. Accessible at: <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32017R1485&from=EN>

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. Accessible at: <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32017R2196&from=en>

- c) the specific rules for imbalance settlement and settlement of balancing energy in case of suspension of market activities (“settlement rules for market suspension”).

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 decision to request amendments to the original submissions published on 21 November 2019.⁴

This letter sets out our decision to approve the market suspension and restoration rules and the settlement rules for market suspension in accordance with Article 4(2) of the NCER Regulation. This letter also sets out our decision to agree that there is no change required to the GB system in line with the blackout state proposal.

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 GB shall be determined to be in the blackout state.

Initially, the ESO proposed that the definition of blackout state should be aligned with the current definition of a “Total Shutdown”, and remain defined as such within the Grid Code. Following our request for amendments on 21 November 2019, the ESO’s amended submission proposed that the transmission system in GB would be deemed to be in the blackout state if the final stage of Low-Frequency Demand Disconnection (“LFDD”) had been enacted.

⁴ Decision of 21 November 2019 available here: https://www.ofgem.gov.uk/system/files/docs/2019/11/rfa_to_blackout_state_proposal_and_market_suspension_rules.pdf

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 and 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.

In response to our decision to request amendments on 21 November 2019, the ESO also submitted an intermediate methodology to act as part of the market suspension and restoration rules until the novel provisions it introduced could be implemented into the relevant GB industry codes. This intermediate methodology became the Grid Code modification GC0144⁵ which was implemented into the GB codes on 26 May 2021. This modification added a new section to BC2.9.8 clarifying when the GB system will be considered to be in an emergency state and the conditions in which the market will be suspended as a result. Furthermore, a new section was added to BC4.10 which clarified the circumstances in which the Trans European Replacement Reserves Exchange (“TERRE”) market will be suspended in GB.

It is noted that GC0144 did not change any operating processes relating to market suspension and restoration, it only ensured clarity to stakeholders as to the situations in which the market may be suspended by the ESO.

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’s proposal states that the provisions that cover the settlement rules for market suspension

⁵ Information on GC0144 available here: <https://www.nationalgrideso.com/industry-information/codes/grid-code-old/modifications/gc0144-alignment-market-suspension-rights-eu>

already exist in the BSC. Accordingly, 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 proposal submitted to us in line with the requirements of the NCER Regulation, the wider objectives of the Regulation (EU) 2019/943⁶ (the "Electricity Regulation") 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.

In our letter of 21 November 2019 requesting amendments, we asked the ESO to address 8 points in their resubmission. A number of these points were administrative in nature, so the points pertaining to our decision are those discussed below.

- 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"*

As mentioned above, in response to this request, the ESO's amended submission proposed that the transmission system in GB would be deemed to be in the blackout state if the final stage of LFDD had been enacted. In GB, the final stage of LFDD enacting corresponds to a 50% loss of demand nationally. We therefore believe this submission to be equivalent to the parameters set out in Article 18(4)(a) of the SOGL Regulation. As a result, this proposal offers no change to the parameters of the SOGL Regulation and maintains the status quo. We have therefore decided to agree with the ESO that no change is needed to the GB system to be in line with 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"*

⁶ Regulation (EU) 2019/943 of the European Parliament and of the Council of 5 June 2019 on the internal market for electricity, available here: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32019R0943>

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

The ESO's original submission, dated 17 May 2019, only provided rules for suspension in two of the four situations described in Article 35(1) of the NCER Regulation, specifically points (a) and (c). Article 36(4) of the NCER Regulation creates an obligation for the ESO to convert all of the situations referred to in Article 35(1) into objectively defined parameters, taking into consideration the factors listed in Article 36(4). As a result, we asked the ESO to provide rules for the situations referred to in Article 35(1)(b) and (d) of the NCER Regulation.

In response to this, the ESO provided additional mapping to further clarify the situation in Article 35(1)(d). More specifically, section BC2.9.7 of the Grid Code, which contains a clear process and procedures to be followed in the event of unplanned outages of electronic communication and computing facilities. Additionally, we suggested in our letter of 21 November 2019 that the ESO should consider whether the existing process of suspension of cross-border trading in replacement reserve,⁸ 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). In response to this, section BC4.9 of the Grid Code was added to the mapping. This section of the Grid Code allows for the TERRE market to be suspended as a result of loss of tools and communication to the central algorithm.

For the situation referenced in Article 35(1)(b) there were no relevant provisions in the Grid Code that satisfied the provisions in the NCER Regulation. The ESO therefore determined an intermediate methodology, which has since been implemented into the Grid Code following modification GC0144. The new provisions added to BC2.9.8 of the Grid Code by GC0144 now satisfy this requirement, as they clarify when the GB system will be considered to be in an emergency state and the conditions under which the market will be suspended as a result.

As a result of these actions by the ESO, we are satisfied that the ESO's submission has now successfully converted the relevant provisions in Article 35 into objectively defined parameters.

- 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"*

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

The ESO has since determined that the time delay for suspension of the market is immediate, unless specified otherwise in the industry codes.¹⁰

Additionally, we asked the ESO to further consider the suspension of the TERRE platform. The new provisions added to BC4.10 through GC0144 satisfy this request by clarifying for stakeholders the circumstances under which the TERRE market will be suspended in GB.

As a result of the above changes, we have decided to approve the market suspension and restoration rules and the settlement rules for market suspension in accordance with Article 4(2) of the NCER Regulation.

Next Steps

Following this approval, in accordance with Article 18(2) of Commission Regulation (EU) 2017/2195¹¹ establishing a guideline on electricity balancing ("EBGL Regulation"), the market suspension and restoration rules and the settlement rules for market suspension now form part of the terms and conditions for balancing under Article 18 of the EBGL Regulation. As such, any amendments to these rules must now follow the same governance processes currently in place for amendments to terms and conditions for balancing.

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

Yours faithfully,

Adam Gilham

Senior Manager, ESMS

¹⁰ In some market suspension situations there is a 72-hour time delay, but the market may be suspended sooner than this if any other market suspension threshold is met. This is noted in the Balancing and Settlement Code section G3.

¹¹ Commission Regulation (EU) 2017/2195 of 23 November 2017 establishing a guideline on electricity balancing. The EBGL came into force on 18 December 2017. Accessible at <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32017R2195>