













# GC0144:

**Mod Title:** Alignment of Market Suspension Rights to the EU Emergency and Restoration Code Article 35.1(b)

01	Proposal Form
02	Workgroup Consultation
03	Workgroup Report
04	Code Administrator Consultation
05	Draft Grid Code Modification Report
06	Final Grid Code Modification Report

**Purpose of Modification:** Article 35.1(b) of the EU Network Code Electricity Emergency and Restoration Code (NCER) states that a TSO may temporarily suspend the market where the TSO has exhausted all options provided by the market while in an emergency state and where continuation of market activities would cause deterioration of one or more of the conditions defined in Article 18(3) of the System Operation Guideline (SOGL). The purpose of this modification is to clarify the Grid Code so it is clear what criteria would constitute an emergency condition under Article 18(3) of the System Operation Guideline and under what conditions National Grid ESO would suspend the market. In addition, the modification also seeks to clarify under what conditions the TERRE market would be suspended and to align these provisions.

	<p><b>The Proposer recommends that this modification should:</b></p> <ul style="list-style-type: none"> <li>• proceed to Code Administrator Consultation</li> </ul> <p>This modification was raised <b>12 May 2020</b> and will be presented by the Proposer to the Panel on <b>28 May 2020</b>. The Panel will consider the Proposer’s recommendation and determine the appropriate route.</p>
	<p><b>High Impact:</b> - None</p>
	<p><b>Medium Impact:</b> - None</p>
	<p><b>Low Impact:</b> - This modification does not propose a fundamental change to the mechanism under which the market is suspended or the process by which the TERRE market is suspended. Since this modification is for the purposes of i) providing clarity only and ii) aligning the GB Grid Code with the EU Emergency and Restoration Code, the impact on parties operating in the wholesale market or TERRE market including NGESO and Elexon are considered low unless the solution were to change.</p>

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Timetable		 Contact: Nisar Ahmed
<i>The Code Administrator will update the timetable.</i>		 <a href="mailto:Nisar.Ahmed@nationalgrideso.com">Nisar.Ahmed@nationalgrideso.com</a>
<b>The Code Administrator recommends the following timetable:</b> <i>(amend as appropriate)</i>		 0777 3043068
Initial consideration by Workgroup	dd month year	Proposer: Antony Johnson
Workgroup Consultation issued to the Industry	dd month year	 <a href="mailto:Antony.Johnson@nationalgrideso.com">Antony.Johnson@nationalgrideso.com</a>
Modification concluded by Workgroup	dd month year	 07966 734856
Workgroup Report presented to Panel	dd month year	National Grid Representative: Susan Mwape
Code Administration Consultation Report issued to the Industry	dd month year	 <a href="mailto:Susan.Mwape@nationalgrideso.com">Susan.Mwape@nationalgrideso.com</a>
Draft Final Modification Report presented to Panel	dd month year	 07976 836946
Modification Panel decision	dd month year	
Final Modification Report issued the Authority	dd month year	
Decision implemented in Grid Code	dd month year	

## Proposer Details

<b>Details of Proposer:</b> (Organisation Name)	Antony Johnson – National Grid ESO
Capacity in which the Grid Code Modification Proposal is being proposed: (e.g. CUSC Party)	CUSC Party – National Grid ESO
<b>Details of Proposer's Representative:</b>  Name: Organisation: Telephone Number: Email Address:	Antony Johnson National Grid ESO 07966 734856 <a href="mailto:Antony.Johnson@nationalgrid.com">Antony.Johnson@nationalgrid.com</a>
<b>Details of Representative's Alternate:</b>  Name: Organisation: Telephone Number: Email Address:	Susan Mwape National Grid ESO 07976 836946 <a href="mailto:Susan.Mwape@nationalgrideso.com">Susan.Mwape@nationalgrideso.com</a>
<b>Attachments (Yes/No): Noe</b> <b>If Yes, Title and No. of pages of each Attachment: - Not applicable</b>	

## Impact on Core Industry Documentation.

*Please mark the relevant boxes with an "x" and provide any supporting information*

<b>BSC</b>	
<b>CUSC</b>	
<b>STC</b>	
<b>Other</b>	

As currently proposed, there is no impact on other industry codes as this modification achieves alignment only rather than making any changes. If an alternative was raised or the scope extended it is possible that there would be an impact on the BSC.

## 1 Summary

In January 2020, National Grid ESO submitted its final proposals for the Market Suspension arrangements under the European Network Code Electricity Emergency and Restoration Code (EU 2017/2196) (NCER) to Ofgem for approval. This, together with other material, was based on “Ofgem’s Request for Amendment” which was received on 21 November 2019 following National Grid’s initial submission on 17 May 2019. Both Ofgem’s “Request for Amendment” and National Grid ESO’s final January 2020 submission are available from the attached links.

Ofgem’s Request for Amendment

[https://www.ofgem.gov.uk/system/files/docs/2019/11/rfa\\_to\\_blackout\\_state\\_proposal\\_and\\_market\\_suspension\\_rules.pdf](https://www.ofgem.gov.uk/system/files/docs/2019/11/rfa_to_blackout_state_proposal_and_market_suspension_rules.pdf)

National Grid ESO’s final January 2020 submission

<https://www.nationalgrideso.com/industry-information/codes/european-network-codes/other-enc-documents>

Since the ESO submission in January 2020, Ofgem have been in contact with the ESO advising that it did not believe there was sufficient evidence in the Grid Code defining how the parameters listed in Article 18(3) of the EU System Operator Guideline (EU 2017/1485 - SOGL) as referenced in Article 35.1(b) of the NCER were reflected in the Grid Code and ultimately the conditions under which the market would be suspended. The ESO reiterated that these issues are referenced in Issue 3 of the System Defence Plan and Issue 3 of the System Restoration Plan but agree that alignment between Article 35.1(b) of the NCER and Grid Code are not clear.

In addition, and as a separate issue the Grid Code does not currently clarify or align the conditions under which the TERRE Market is suspended.

### Defect

The purpose of this modification is to clarify the Grid Code so it is clear what criteria would constitute an emergency condition under Article 18(3) of the EU System Operator Guideline (EU 2017/1485 - SOGL) and under what conditions National Grid ESO would suspend the market.

In addition, the modification also seeks to clarify under what conditions the TERRE market would be suspended which again is not clarified in the Grid Code.

These requirements are required as part of the implementation of the NCER.

### What

In order to address the defect, the Grid Code needs to articulate what is considered to be an emergency condition under Article 18(3) of the EU System Operator Guideline (EU 2017/1485) as referenced in section 2.1.1 of Issue 3 of the Defence Plan and under what conditions the market would be suspended as referenced in section 2.1.7 of Issue 3 of the System Restoration Plan.

To address this defect, it is proposed to introduce a new section of the Grid Code (BC.2.9.8) which specifically outlines what criteria would constitute an emergency condition and then link this to the conditions under which the market would be suspended.

It is the proposers view that this modification is solely for the purposes of providing clarity in terms of what constitutes an emergency condition and when the market would be suspended. It is not proposed to amend the conditions under which the market is suspended as currently defined in OC9.4.6 of the Grid Code.

In addition, a new section BC4.10 will be introduced into BC4 to clarify the conditions when the TERRE market is suspended.

## Why

This change is being introduced to: -

- Provide a clear demonstration of how Article 35.1(b) of the NCER is reflected in the GB Grid Code
- Ensure consistency with Issue 3 of the System Defence Plan and Issue 3 of the System Restoration Plan
- Provide clarity (as per current practice) that the market will only be suspended during a total system shutdown or partial system shutdown where the market suspension threshold has been met as provided for in OC9.4.6 of the Grid Code and section G3 of the BSC.
- Update BC4 of the Grid Code detailing the conditions under which the TERRE market would be suspended
- Respond to feedback from the National Regulatory Authority
- Minimise the impact on market participants and changes to other industry codes.

## How

The defect is to be addressed by introducing two new sections of Grid Code – BC2.9.8 in respect of Article 35.1(b) of the NCER and BC4.10 in respect of TERRE Market suspension.

Article 35.1 of the NCER is not mandatory. Market suspension has profound and complex interactions for the entire industry both in terms of suspension, compensation and uncertainty. NGENSO do not believe it is in the best interests of the industry or consumer to introduce new conditions under which the market is suspended. Any additional criteria for market suspension would introduce additional costs with the proposer believes has little or no benefit. To this end, the aim of this modification is therefore to provide clarity under what criteria constitutes an emergency condition and how these link to the already established principles of when the market will be suspended.

The addition of BC4.10 is a new section to clarify when the TERRE market will be suspended.

Since there is no proposal to change the conditions under which the market is suspended from those already in place (OC9.4 / BSC Section G3) and TERRE has not yet gone live, it is believed that this Grid Code modification will have a low impact on all parties. The proposer also notes that if this proposal is adopted as currently drafted, there is no need to change the BSC.

## 2 Governance

### Justification for Self-Governance Procedures

The Proposer believes that this modification should be subject to Self-Governance on the basis of: -

**The modification** is unlikely to discriminate between different classes of Grid Code Parties and is unlikely to have a material effect on:

- i) Existing or future electricity customers;
- ii) Competition in the generation, distribution, or supply of electricity or any commercial activities connected with the generation, distribution or supply of electricity,
- iii) The operation of the National Electricity Transmission System
- iv) Matters relating to sustainable development, safety or security of supply, or the management of market or network emergencies
- v) The Grid Code's governance procedures or the Grid Code's modification procedures

### Requested Next Steps

This modification should proceed to Consultation

## 3 Why Change?

Article 35.1(b) of the NCERstates: -

1. A TSO may temporarily suspend one or more market activities laid down in paragraph 2 where:

*(b) the TSO has exhausted all options provided by the market and the continuation of market activities under the emergency state would deteriorate one or more of the conditions referred to in Article 18(3) of Regulation (EU) 2017/1485; or*

OC9.4.6 of the Grid Code states the conditions under which the market is suspended. In summary, this occurs under two conditions, these being: -

- A Total Shutdown or:
- A Partial Shutdown and where the Market Suspension Threshold has been met.

There are only three conditions under which the Market Suspension Threshold can be met, these being (as also defined in section 2.1.7 of Issue 3 of the System Restoration Plan): -

- The ESO determines that the spot time Initial National Demand Out-Turn is equal to or lower than 95% of the baseline forecast (this means that 5% or more of demand has been lost); or
- No more baseline forecast data is available to the ESO; or
- 72 hours have elapsed since the Partial Shutdown commenced

In addition, the GB Grid Code does not state the conditions under which the Transmission System would be under an Emergency State. These are detailed in section 2.1.1 of Issue

3 of the System Defence Plan but in summary would be considered to be one of the following events.

- A situation where there is a violation of one of more criteria as defined under the National Electricity Transmission System Security and Quality of Supply Standard (NETS SQSS); or
- A situation when Unacceptable Frequency Conditions as defined under the National Electricity Transmission System Security and Quality of Supply Standard (NETS SQSS) have occurred; or
- At least one measure of the System Defence Plan is activated or
- There is a failure of the computing facilities used to control and operate the Transmission System or unplanned outages of Electronic Communication and Computing Facilities as provided for in BC2.9.7 or the loss of communication, computing and data facilities with other Transmission Licensees as provided for in STCP 06-4.

It is not clear from the Grid Code i) what constitutes an Emergency State on the Transmission System and ii) how these relate to Market Suspension. The National Regulatory Authority (Ofgem) have also alerted the ESO to the fact that this linkage is not clear.

The ESO note that Article 35.1 is not mandatory in so far as Article 35.1 states “A TSO *may* temporarily suspend one or more market activities laid down....” The ESO note these points are addressed in section 2.1.1 of Issue 3 of the System Defence Plan and section 2.1.7 of Issue 3 of the System Restoration Plan but agree with the National Regulatory Authority that the definition of a Transmission System being in an Emergency State and the conditions for market suspension are not clear and a modification to the Grid Code is required to achieve this alignment.

The materiality of this change is limited, however there is a risk that if not implemented, the linkage between the requirements in Article 35.1(b) of the NCER and GB Grid Code are unclear and hence it is debatable if the requirements of the NCER have been fully implemented or if market suspension would be considered achievable in all of the conditions set out in the NCER.

As part of this modification, it is also proposed to add a new section, BC4.10 of the Grid Code outlining the process under which the TERRE market will be suspended.

## 4 Code Specific Matters

### Technical Skillsets

The technical skill sets required to assess this modification include: -

- Knowledge of the EU Emergency and Restoration Code
- Knowledge of the GB Grid Code in particular OC9 and the Balancing Codes
- Knowledge of the Wholesale Electricity Market, Balancing Mechanism and BSC

## Reference Documents

In December 2019, the ESO submitted its proposed solution to the National Regulatory Authority (Ofgem) for implementation of the European Electricity Emergency and Restoration Code (NCER). This includes the following documents which details of the work including Ofgem's decision letters: -

- Grid Code Modification GC0125 (EU Code Emergency & Restoration: Black Start testing requirements for Interconnectors) – *Approved – 5<sup>th</sup> February 2020*  
<https://www.nationalgrideso.com/codes/grid-code/modifications/gc0125-eu-code-emergency-restoration-black-start-testing-requirements>
- Grid Code Modification GC0127 (EU Code Emergency & Restoration: Requirements resulting from System Defence Plan) – *Approved – 5 February 2020*  
<https://www.nationalgrideso.com/codes/grid-code/modifications/gc0127-eu-code-emergency-restoration-requirements-resulting-system>
- Grid Code Modification GC0128 (GC0128 EU Code Emergency & Restoration: Requirements resulting from System Restoration Plan) – *Approved 5 February 2020*  
<https://www.nationalgrideso.com/codes/grid-code/modifications/gc0128-eu-code-emergency-restoration-requirements-resulting-system>

In addition, the following documents were also submitted to Ofgem and their current status is noted below in italics.

- System Defence Plan – *Submitted December 2019 - Awaiting Approval*
- System Restoration Plan – *Submitted December 2019 - Awaiting Approval*
- Test Plan – *Submitted December 2019 - Awaiting Approval*
- Terms and Conditions related to Emergency and Restoration EU Network Code *Submitted December 2019*
- Market Suspension Proposals – *Submitted January 2020 Feedback Received from Ofgem – Process Mod to be raised ahead of formal decision*

All the above materials can be found from the attached link.

<https://www.nationalgrideso.com/industry-information/codes/european-network-codes/other-enc-documents>

Background information relating to the implementation of TERRE can be found from Grid Code modification GC0097 (Grid Code Processes Supporting TERRE). This is relevant for the modification required to define the conditions under which the TERRE Market is suspended.

<https://www.nationalgrideso.com/industry-information/codes/grid-code/modifications/gc0097-grid-code-processes-supporting-terre>



## 5 Solution

The proposed solution is in two parts, these being i) to add a new section to BC2.9 (BC.2.9.8) of the Grid Code to define the criteria under which the Transmission System is in an Emergency State and the conditions when the market shall be suspended and ii) to clarify the conditions under which the TERRE Market is suspended.

With regard to item i), the introduction of BC2.9.8 simply aims to clarify the criteria under which the Transmission System is in an Emergency State and link these to the conditions under which the market is suspended. The ESO does not believe it is in the best interests of the industry to define additional conditions under which the market is to be suspended other than the already existing conditions of total or partial system shutdown as provided for in OC9.4.6 and section G3 of the BSC. The ESO believe that additional criteria over those already defined in the current Grid Code would place unnecessary costs and uncertainty on market participants, consumers and GB as a whole. In addition, it is believed this proposed solution strikes the right balance between seeking clarity between the requirements of the NCER and Grid Code whilst minimising the impact on GB Stakeholders and Industry Code change.

With regard to item ii), the introduction of BC4.10 defines the criteria under which the TERRE market shall be suspended. This would include the following: -

- Suspension of the Balancing Mechanism as defined in OC9.4.6
- An outage of computer systems as defined in BC4.9
- Notification by the ESO that the TERRE market has been suspended. In such an event the ESO shall inform the BSSCO.

Solutions for both BC2.9.8 and BC4.10 are covered in section 9.

## 6 Impacts & Other Considerations

This modification is aimed at providing clarity only and has very limited material impact. As noted above NGESO does not believe it is in the best interests of the industry or consumer to change the criteria under which the market is suspended. However, it is believed that this change is necessary to provide clarity and alignment with the NCER.

The proposed solution does not foresee any need to change any of the other industry codes including the BSC.

As the solution proposes to change Balancing Code 2 (the introduction of BC2.9.8) and BC4 (the introduction of BC4.10) this modification will change the Terms & Conditions relating to Balancing Service Providers and also to System Defence and System Restoration Service Providers. It will therefore require the modification process set out under Article 18 of the European Electricity Balancing Guideline (EBGL – EU Regulation 2017/2195) to be followed. This is as set out in Grid Code modification GC0132 but the main consideration is that the modification must be consulted on for a minimum of 1 month. This will also satisfy the requirements of the NCER process.

### **Does this modification impact a Significant Code Review (SCR) or other significant industry change projects, if so, how?**

Not applicable.

## Consumer Impacts

There are not believed to be any consumer impacts as a result of this proposed modification. Any proposal to change the conditions under which the market is suspended would however have a much greater significance on the wider industry and the consumer.

## 7 Relevant Objectives

*Mandatory for the Proposer to complete.*

### Impact of the modification on the Applicable Grid Code Objectives:

Relevant Objective	Identified impact
(a) To permit the development, maintenance and operation of an efficient, coordinated and economical system for the transmission of electricity	Positive
(b) Facilitating effective competition in the generation and supply of electricity (and without limiting the foregoing, to facilitate the national electricity transmission system being made available to persons authorised to supply or generate electricity on terms which neither prevent nor restrict competition in the supply or generation of electricity);	Neutral
(c) Subject to sub-paragraphs (i) and (ii), to promote the security and efficiency of the electricity generation, transmission and distribution systems in the national electricity transmission system operator area taken as a whole;	Positive
(d) To efficiently discharge the obligations imposed upon the licensee by this license and to comply with the Electricity Regulation and any relevant legally binding decisions of the European Commission and/or the Agency; and	Positive
(e) To promote efficiency in the implementation and administration of the Grid Code arrangements	Neutral

This modification provides clarity between operation of the Transmission System under Emergency Conditions and the criteria under which the market is suspended. It also details the criteria under which the TERRE market would be suspended.

In addition, this modification provides greater clarity and alignment between Article 35.1(b) of the NCER and the implementation of this in the GB Grid Code.

## 8 Implementation

As currently drafted, and as this modification has very limited impact, it is proposed to proceed straight to Code Administrator Consultation which as noted in section 6 would need to run for a minimum of 1 month. Assuming this does proceed to industry consultation, implementation would take place after completion of the Code Administrator Consultation and approval by the Grid Code Review Panel thereafter.

## 9 Legal Text

### [BC2.9.8 Market Suspension](#)

[BC2.9.8.1](#) Within the **GB Synchronous Area**, the **Transmission System** shall be considered to be in an emergency state when operational security analysis requires activation of one of the following measures:

A situation where there is (or could be) a violation of one of more criteria as defined under the **National Electricity Transmission System Security and Quality of Supply Standard (NETS SQSS)**;  
or

A situation when Unacceptable Frequency Conditions as defined under the **National Electricity Transmission System Security and Quality of Supply Standard (NETS SQSS)** have occurred; or

At least one measure of the **System Defence Plan** is activated; or

There is a failure of the computing facilities used to control and operate the **Transmission System** or unplanned outages of Electronic Communication and Computing Facilities as provided for in BC2.9.7 or the loss of communication, computing and data facilities with other **Transmission Licensees** as provided for in STCP 06-4.

BC2.9.8.2 While the **Transmission System** is still in an emergency state if after issuing system warnings and emergency instructions in accordance with (but not limited to) the requirements under OC7.4 and BC2.9, and the situation deteriorates to such an extent that it results in:-

- a) a **Total Shutdown, The Company** will suspend the market in accordance with the provisions of OC9.4.6; or
- b) a **Partial Shutdown, The Company** will also suspend the market but only where the **Market Suspension Threshold** has been met in accordance with OC9.4.6.

.....

BC4.9 Outages of computer systems leading to the suspension of the TERRE market

The **TERRE** market operates in short processing times meaning that **Planned Maintenance Outages** or unplanned computer system failures can result in the suspension of the **TERRE** market.

Suspension of the **TERRE** market in **GB** will occur in the following circumstances:

- (a) Loss of communication from **The Company** to the **TERRE Central Platform**
- (b) Failure of the **TERRE Central Platform** to produce **RR Acceptances**
- (c) Loss of communication from the **TERRE Central Platform** to **The Company**
- (d) Loss of electronic logging devices to a large number of **BM Participants**

Where the **TERRE** market is suspended as a result of any of the circumstances listed in (a) – (d) above, **The Company** shall notify all **BM Participants** taking part in **TERRE** and the **BSSCo** that the **TERRE** market has been suspended.

BC4.10 TERRE Market Suspension

The **TERRE** market shall be suspended when one of the following circumstances arises:

- (a) Suspension of the **Balancing Mechanism** in accordance with OC9.4.6; or
- (b) Outages of computer systems leading to the suspension of the **TERRE** market as provided for in BC4.9; or
- (c) Notification by **The Company** that the **TERRE** market has been suspended.

Where any of the above circumstances arise **The Company** shall notify all **BM Participants** taking part in **TERRE** and the **BSSCo** that the **TERRE** market has been suspended.

## Text Commentary

A summary of the solution at a high level is given in section 5 of this paper.

## 10 Recommendations

### Proposer's Recommendation to Panel

Panel is asked to:

Issue this modification directly to Consultation

Acronym table and reference material

Acronym	Meaning
SOGL	System Operation Guideline
TSO	Transmission System Operator
BSC	Balancing Settlement Code
NCER	Network Code on Electricity Emergency and Restoration
NGESO	National Grid Electricity System Operator
TERRE	Trans European Replacement Reserve Exchange
BSSCo	Balancing and Settlement Code Company