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Grid Code Modification Proposal Form

GC0186:

Proposed Grid Code Changes – Post Electricity System Restoration Standard (ESRS)

Overview: The purpose of this modification is to update the Grid Code in respect of the restoration requirements following the implementation of GC0156, in particular (but not limited to) the introduction of 'Regional Restoration Plans', the equitable treatment of NGET, SPT and SHETL during a restoration , the ability for Network Operators to switch at sufficient speed, clarifications / improvements in testing / data requirements and correction of known errors.

Modification process & timetable

1. **Proposal Form**
   10 February 2026
2. **Workgroup Consultation**
   18 June 2026 – 19 July 2026
3. **Workgroup Report**
   19 September 2026
4. **Code Administrator Consultation**
   29 September 2026 – 29 October 2026
5. **Draft Final Modification Report**
   18 November 2026
6. **Final Modification Report**
   02 December 2026
7. **Implementation**
   10 Business Days after Authority Decision

Status summary: The Proposer has raised a modification and is seeking a decision from the Panel on the governance route to be taken.

This modification is expected to have a: High impact
Transmission System Operators, Transmission Owners, Network Operators and Generators

Modification drivers: Efficiency, Harmonisation, System Operability, and Transparency

Proposer's recommendation of governance route	Standard Governance modification with assessment by a Workgroup	
Who can I talk to about the change?	**Proposer:** Antony Johnson Antony.Johnson@neso.energy	**Code Administrator Contact:** Claire Goult Claire.Goult@neso.energy

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What is the issue?

During the final phases of developing the Grid Code and the System Operator Transmission Owner Code(STC) Changes through Industry Code Modifications GC0156 and CM089/CM091, National Grid Electricity Transmission (NGET) raised a request at the STC Panel in early 2024 for NGET to be treated in the same way as Scottish Power Transmission (SPT) and Scottish Hydro-Electric Transmission Limited (SHETL) during a restoration, noting that SPT and SHETL have much more autonomy (as provided for in Grid Code OC9 and STCP06-1) than NGET, especially during the Local Joint Restoration Plan (LJRP) phase.

In response to this action, National Energy System Operator (NESO) met with NGET in the Summer of 2024 and subsequently developed an informal group with NGET, SPT and SHETL to consider these implications and what changes would be required to the Grid Code and STC.

Although it was initially considered that changes would be required to Grid Code OC9 and consequential changes to System Operator Transmission Owner Code Procedure (STCP) 06-1, it soon became apparent based on the experience progressing through the implementation of the Electricity System Restoration Standard (ESRS), that a range of further changes to the Grid Code would be required including:

- Update Operating Code 9 (OC9) to ensure equitable treatment of NGET, SPT and SHETL during restoration.
- Introduction of the defined term 'Regional Restoration Plans' (RRPs) to the Glossary & Definitions
- Changes to OC5.7.2.1(g) to accommodate testing (dead-line charge tests) to ensure consistency with OC5.7.2.3(d) and ensure that any revised testing to simplify testing arrangements are as robust as the existing requirements.
- Obligations on Network Operators and Transmission Licensees to ensure sufficient switching speed to facilitate the ESRS.
- Changes to PC.A.5.7 as the current text only relates to Directly Connected and Large Power Stations, not Connection and Use of System Code Parties (CUSC) Parties
- Housekeeping changes in particular consistency between the Planning Code (PC.A.5.7) and Data Registration Code (DRC Schedule 16).
- Requirements for Restoration Contractors with multiple sites but one Control Point
- Implications on the Distribution Code

- Confidentiality in LJRPs and Distribution Restoration Zone Plans (DRZPs) between Restoration Contractors

It has therefore been proposed to raise this Grid Code Modification as a joint Grid Code / Distribution Code modification to progress through the Standard Governance process via a Workgroup. It is also proposed to raise a consequential STCP change, to amend STCP 06-1.

Why change?

Grid Code OC9, and STCP 6-1 currently provide for different arrangements between NGET and SPT/SHETL during a system restoration. In Scotland, the Scottish Transmission Owners (TOs) (SPT and SHETL) have much greater autonomy than NGET in England and Wales, during the post Local Joint Restoration Plan and in addition to the ability to instruct generation. Although NGET do not wish to instruct generation, they do want the autonomy to switch circuits back into service without reference to NESO in both the LJRP and post LJRP phases.

In addition, Grid Code OC9 currently details LJRPS and DRZPs in a lot of detail but the process between the post LJRP and DRZPs to the establishment of a skeleton network to system normal is very light on detail. To address this deficiency, it is proposed to introduce the concept of a 'Regional Restoration Plan' (RRP) which would detail this process in a lot more detail and which is also supported by NGET, SPT and SHETL.

As part of the implementation of Grid Code Modification GC0156, which is scheduled to go live on 31 December 2026, several comments have been received from the industry on improvements to the Grid Code which are listed out in the "What's the issue" section of this proposal.

In in its broadest sense, over and above the points raised above, the purpose of this modification is to improve clarity, ensure parties currently progressing through the ESRS requirements are not disadvantaged by these proposed requirements, correct any known errors and take the opportunity to address any housekeeping issues.

What is the Proposer's solution?

The proposed solution addresses the above issues is as follows:

- Glossary and Definitions - Introduce the concept of 'Regional Restoration Plans', clarify the definition of Anchor Plant capability and update other related definitions to improve clarity.
- Planning Code – Update PC.A.5.7 to apply to CUSC Parties, rather than just Large and Directly Connected Power Stations. Ensure PC.A.5.7 is consistent with DRC Schedule 16.
- Connection Conditions (CCs) / European Connection Conditions (ECCs)
    - Provide clarification around the phrasing "total loss of supplies" and "cold start" in Sections CC/ECC.7.11.
    - Explicitly define the requirements of Critical Tools and Facilities also apply to Offshore Transmission System Development User Works (OTSDUW) in ECC.7.10
    - Clarify the requirement on Network Operators and Transmission Licensees to switch at sufficient speed to match the block loading capability of Plant in the LJRP, DRZP and RRP phases. A switching speed of 10 minutes or less would be considered appropriate.
    - Clarify where Restoration Contractors have one Control Point but have multiple sites with Restoration Contracts, that they have sufficient resource at those Control Points to operate their sites in accordance with the requirements and timeframes defined in the Restoration Contracts.
    - General housekeeping and consistency checks.
- Operating Code 5 (OC5)
    - Ensure consistency between OC5.7.2.1(g) which relates to deadline charge tests for Anchor Plant and OC5.7.2.3(d) which relates to deadline charge tests for HVDC Systems.
    - Ensure equitable treatment between NGET, SPT and SHETL in respect of deadline charge tests and the possibility of testing to the Circuit Breaker rather than a dead bar. This could be achieved with the close coils of the relay being removed.
    - Ensure that for any deadline charge test or remote synchronisation test, adequate measures are put I place to limit voltage step changes.

- Ensure that any changes to the testing arrangements in OC5.7.2.1(g) and OC5.7.2.3(d) are as robust as current practice.
- Include additional testing requirements to ensure Restoration Contractors with one Control Point, but multiple sites can satisfy the requirements of the restoration contract timescales.
- Clarify the requirement on Network Operators and Transmission Licensees to switch at sufficient speed to match the block loading capability of Plant in the LJRP, DRZP and RRP phases. A switching speed of 10 minutes or less would be considered appropriate.
- Update OC5.7.4.2 to confirm the requirement on Network Operators and Transmission Licensees to switch at sufficient speed to match the block loading capability of Plant in the LJRP, DRZP and RRP phases. A switching speed of 10 minutes or less would be considered appropriate.
- General housekeeping and consistency checks.

- Operating Code 9
  - Ensure equitable treatment of NGET, SPT and SHETL during a Restoration event.
  - Introduce the concept of RRPs including establishment, testing, provisions and operation.
  - Ensure there is sufficient confidentiality between Restoration Contractors who are party to a LJRP or DRZP and CUSC Parties (excluding Network Operators) who are party to a 'Regional Restoration Plan'.
  - Define the requirement for Network Operators and Transmission Licensees to switch at sufficient speed to match the block loading capability of Plant in the LJRP, DRZP and RRP phases. A switching speed of 10 minutes or less would be considered appropriate.

    General housekeeping and consistency checks.

What is in and out of scope?

The scope is strictly limited to the Terms of Reference and solution as highlighted above. A draft Terms of Reference suggested by the Proposer can be found in **Annex 02**.

Draft legal text

It is proposed that this modification should be assessed by a Workgroup via the Standard Governance arrangements.

The following sections of the Grid Code Legal Text which are proposed to change under this modification:

- Glossary & Definitions
- Planning Code
- Connection Conditions
- European Connection Conditions
- Operation Code 5
- Operating Code 9

Updates to other areas of the Grid Code where necessary to ensure consistency with the changes detailed in the solution section of this document.

Changes to the Data Registration Code Schedule 16 are expected to ensure consistency with revised sections of the Grid Code.

High level legal text suggestions are attached in **Annex 01** which is for illustration purposes only and will be refined at the Workgroup stage.

What is the impact of this change?

This change will impact the following parties:

Party	Impact
NESO	It will provide greater clarity, introduce the concept of 'Regional Restoration Plans', ensure equitable treatment between NESO and NGET, SPT and SHETL (allowing for any regional difference where appropriate), provide clarification on switching speed which is a necessity for implementation of the ESRS and address some outstanding issues which have been picked up as part of implementation of ESRS.
SPT, SPT and SHETL	Provide greater autonomy for NGET in the post LJRP, DRZP and RRP phases and ensure greater consistency with SPT and SHETL during a Restoration. Provide greater clarity and flexibility for deadline charge tests Clarify Transmission Licensees to switch at sufficient speed to match the block loading capability of Plant in the LJRP, DRZP and RRP phases. A switching speed of 10 minutes or less would be considered appropriate.
Network Operators	Clarify Network Operators and Transmission Owners to switch at sufficient speed to match the block loading capability of Plant in the LJRP, DRZP and RRP phases. A switching speed of 10 minutes or less would be considered appropriate.
Restoration Contractors	Ensure Restoration Contractors with a single Control Point can confirm that each of their sites with a Restoration Contract can meet the terms of that contract, in particular with regard to timescales. Ensure LJRP's, DRZPs and RRPs are structured in such a way as to provide confidentiality between parties. Ensure that as part of deadline charge testing, mitigation measures are included to prevent voltage step changes.
CUSC Parties	Introduce the concept of 'Regional Restoration Plans' (RRPs) and ensure confidentiality between CUSC Parties under an RRP. The aim of this modification is not to apply additional requirements on CUSC parties who are already working towards achieving the

	requirements of the Electricity System Restoration Standard which becomes effective on 31st December 2026.

Proposer's assessment against Grid Code Objectives	
Relevant Objective	**Identified impact**
(i) To permit the development, maintenance and operation of an efficient, coordinated and economical system for the transmission of electricity;	**Positive** We see the proposals as positive against this Grid Code Objective. Equitable treatment of NGET, SPT and SHETL and the introduction of a 'Regional Restoration Plan' will speed up the Restoration process following a System Shutdown which we see as positive.
(ii) 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);	**Positive** Confidentiality between Restoration Contractors during the LJRP and DRZP phases and subsequently between CUSC Parties during the 'Regional Restoration Plan' is essential for facilitating competition.
(iii) 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** The proposals suggested should promote a more holistic approach and result in greater restoration times should a system shutdown occur.
(iv) To efficiently discharge the obligations imposed upon the licensee by this license* and to comply with	**Positive**

the Electricity Regulation and any relevant legally binding decisions of the European Commission and/or the Agency; and	The proposals will result in a greater ability to meet the requirements of the Electricity System Restoration Standard which is a NESO Licence Requirement.
(v) To promote efficiency in the implementation and administration of the Grid Code arrangements	**Neutral**

** See Electricity System Operator Licence*

Proposer's assessment of the impact of the modification on the stakeholder / consumer benefit categories	
Stakeholder / consumer benefit categories	**Identified impact**
Improved safety and reliability of the system	**Positive** The changes will result in the ability to restore the system
Lower bills than would otherwise be the case	**Neutral** There will be no cost impact to consumers as a consequence of this change.
Benefits for society as a whole	**Positive** The changes introduced by this modification will result in faster restoration of the System following a total or partial system shutdown and the sooner supplies are restored the greater the benefit to society.
Reduced environmental damage	**Positive** If site supplies are restored more quickly it is expected to result in the prompt restoration of other systems such as water and sewage which will have a positive impact on reducing environmental damage.
Improved quality of service	**Positive** Restoring site supplies more quickly and getting customers supplies back on is seen as positive in improving quality of service.

When will this change take place?

Implementation date:

Ideally, though not critical by the 31 December 2026 to align with the go live date of the Electricity System Restoration Standard.

Proposer's justification of Implementation date:

An implementation date of the 31 December 2026 would be beneficial to align with the Go-Live date for the Electricity System Restoration Standard. Although not critical it would be helpful if they were aligned.

Date decision required by

TBC

Implementation approach

There would also need to be a consequential STC/STCP and Distribution Code Change. We would recommend this modification is a combined Grid Code/Distribution Code modification and a consequential STC /STCP change is raised shortly after this modification starts.

Proposer's justification for governance route

Governance route: Standard Governance modification with assessment by a Workgroup
This modification contains quite a few moving parts with potentially large volumes of legal text. It is therefore felt that it is best if this modification is progressed via a workgroup through the standard governance route.

Interactions

☐CUSC	☐BSC	☒STC	☐SQSS
☐European Network Codes	☒ EBR Article 18 T&Cs[1]	☐Other modifications	☒Other

This modification will have an impact with the Distribution Code, especially DOC5 and DOC9. It is therefore proposed this modification is run as a joint Grid Code / Distribution Code workgroup.

In addition, there will be changes to the STC and STCPs, in particular STCP 06-1. It is therefore proposed a separate STC modification is raised shortly after this Grid Code modification so that consequential changes developed through this Grid Code modification are reflected in the STC and STCPs.

The Proposer notes that proposed changes to OC9.4 will have an EBR impact.

Industry engagement and feedback

An initial work group was established in the Summer of 2024 with NGET, SPT and SHETL. This group was then expanded with the DNOs in September 2025 to discuss and progress concepts. The issue was presented to the GCDF in February 2026 and the comments received have been included in this paper.

Acronyms, key terms and reference material

Acronym / key term	Meaning
BSC	Balancing and Settlement Code
CC	Connection Conditions
CUSC	Connection and Use of System Code
DRC	Data Registration Code
DRZP	Distribution Restoration Zone Plan
EBR	Electricity Balancing Regulation
ECC	European Connection Conditions
ESRS	Electricity System Restoration Standard

GC	Grid Code
HVDC	High Voltage Direct Current
LJRP	Local Joint Restoration Plan
NESO	National Energy System Operator
NGET	National Grid Electricity Transmission
OC	Operating Code
OTSDUW	Offshore Transmission System Development User Works
PC	Planning Code
RRP	Regional Restoration Plan
SHETL	Scottish Hydro-Electric Transmission Limited
SPT	Scottish Power Transmission
SQSS	Security and Quality of Supply Standards
STC	System Operator Transmission Owner Code
STCP	System Operator Transmission Owner Code Procedure
TO	Transmission Owner

Annexes

Annex	Information
Annex 01	GC0186 High Level Legal Text Suggestions
Annex 02	GC0186 Draft Terms of Reference