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Grid Code Modification Proposal Form

GC0186:

Grid Code Restoration updates following Implementation of Grid Code Modification GC0156

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 SHE Transmission during a Restoration event, 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 26 February 2026
2	Workgroup Consultation 03 September 2026 – 24 September 2026
3	Workgroup Report 21 January 2027
4	Code Administrator Consultation 03 February 2027 – 03 March 2027
5	Draft Final Modification Report 22 April 2027
6	Final Modification Report 11 May 2027
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:

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What is the issue?

During the final phases of developing the Grid Code and STC Changes through Industry Code Modifications GC0156 and CM089/CM091, NGET raised a request at the STC Panel in early 2024 for NGET to be treated in the same way as SPT and SHE Transmission during

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a Restoration event, noting that SPT and SHE 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, NESO met with NGET in the Summer of 2024 and subsequently developed an informal group with NGET, SPT and SHE Transmission 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 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:-

- Equitable treatment of NGET, SPT and SHE Transmission during a Restoration event (OC9)
- Introduction of Regional Restoration Plans (RRPs)
- 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 CUSC Parties
- House keeping 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 Local Joint Restoration Plans (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, in particular to change STCP 06-1.

Why change?

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Grid Code Operating Code 9, and STCP 6-1 currently provide for different arrangements between NGET and SPT/SHE Transmission during a System Restoration event. In Scotland, the Scottish TOs (SPT and SHE Transmission) have much greater autonomy than NGET in England and Wales, in particular 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 Operating Code 9 (OC9) currently details Local Joint Restoration Plans (LJRPS) and Distribution Restoration Zone Plans (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 SHE Transmission.

As part of the implementation of Grid Code Modification GC0156, which is scheduled to go live on 31st 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 Issue Paper.

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 house keeping issues.

What is the Proposer’s solution?

The proposed solution at address 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 Restoration 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 / European Connection Conditions

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- Provide clarification around the phrasing “total loss of supplies” and “cold start” in particular in their reference in CC/ECC.7.11.
- Explicitly define the requirements of Critical Tools and Facilities also apply to OTSDUW (Offshore Transmission System Development User Works) 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
 - 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 SHE Transmission 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 in 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 in particular 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.

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- 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 SHE Transmission during a Restoration event.
 - Introduce the concept of Regional Restoration Plans (RRP) including Establishment, Testing, Provisions and Operation.
 - Ensure there is sufficient confidentiality between Restoration Contractors who are party to a Local Joint Restoration Plan or Distribution Restoration Zone Plan 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.
- Data Registration Code (DRC)
 - Update DRC Schedule 16 to ensure consistency with revised and updated sections of the Grid Code as provided for in the above solution.
- Other
 - Update other sections of the Grid Code as necessary to ensure consistency with the above changes.

What is in and out of scope?

The scope is strictly limited to the Terms of Reference and solution as highlighted above.

Draft legal text

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

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Please see the Proposer's Solution above which details those sections of the Grid Code Legal Text which are proposed to change under this modification.

High level legal text is attached in **Appendix X** 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 SHE Transmission (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 SHE Transmission	Provide greater autonomy for NGET in the post LJRP, DRZP and RRP phases and ensure greater consistency with SPT and SHE Transmission 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.

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	Ensure LJRP's, DRZPs and RRP's 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 SHE Transmission 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	Positive Confidentiality between Restoration Contractors during the LJRP and DRZP phases and subsequently between

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which neither prevent nor restrict competition in the supply or generation of electricity);	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 the Electricity Regulation and any relevant legally binding decisions of the European Commission and/or the Agency; and	Positive 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 Please provide your rationale

* 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.

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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 31st 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 31st 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

31st December 2026

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

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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.

Guidance on governance routes		
Timescales	Route	Who makes the decision (Governance type)
Normal	Proceed to Code Administrator Consultation*	Authority (Standard Governance) or Panel (Self-Governance)
	Assessment by a Workgroup**	
Urgent	Proceed to Code Administrator Consultation	Authority (Standard Governance)
	Assessment by a Workgroup	
Fast-track	Straight to appeals window, then implementation	Panel (Self-Governance)
* This route is for modifications which have a fully developed solution and therefore don't need to be considered by a Workgroup. ** For modifications which need further input from industry to develop the solution.		
Self-Governance Criteria		
It depends on the material effect of the modification as to whether it should be subject to Standard or Self-Governance. If you are proposing that your modification should be subject to Self-Governance, you must explain how it meets the below criteria. The modification is unlikely to discriminate between different Grid Code Parties and is unlikely to have a material effect on: - Existing or future electricity customers; - Competition in the generation, distribution, or supply of electricity or any commercial activities connected with the generation, distribution or supply of electricity, - The operation of the National Electricity Transmission System		

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- Matters relating to sustainable development, safety or security of supply, or the management of market or network emergencies
- The Grid Code Panel's governance procedures or the Grid Code Panel's modification procedures

Urgency Criteria

If you are proposing that your modification is Urgent, you must explain how it meets Ofgem's Urgent criteria (below). When modifications are granted Urgency, this enables the us to shorten the standard timescales for industry consultations. Note that we (Code Admin) must seek Authority approval for this option.

Ofgem's current guidance states that an urgent modification should be linked to an imminent issue or a current issue that if not urgently addressed may cause:

- A significant commercial impact on parties, consumers or other stakeholder(s); or
- A significant impact on the safety and security of the electricity and/or gas systems; or
- A party to be in breach of any relevant legal requirements.

Fast-Track Self-Governance Criteria

This route is for modifications which are minimal changes to the code. E.g. Typos within the codes. If you are proposing that your modification should be subject to Fast-Track Self-Governance, you must explain how it meets the below criteria.

The modification is a housekeeping modification required as a result of an error or factual change, such as:

- Updating names or addresses listed in the Grid Code;
- Correcting minor typographical errors;
- Correcting formatting and consistency errors, such as paragraph numbering, or;
- Updating out of date references to other documents or paragraphs.

Interactions

☐ CUSC

☐ BSC

☒ STC

☐ SQSS

☐ European Network
Codes

☐ EBR Article 18
T&Cs¹

☐ Other
modifications

☒ Other

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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.

Industry engagement and feedback

An initial work group was established in the Summer of 2024 with NGET, SPT and SHE Transmission. 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
CUSC	Connection and Use of System Code
DRC	Data Registration Code
DRZP	Distribution Restoration Zone Plan
EBR	Electricity Balancing Regulation
ESRS	Electricity System Restoration Standard
GC	Grid Code
HVDC	High Voltage Direct Current
LJRP	Local Joint Restoration Plan
NGET	National Grid Electricity Transmission
OTSDUW	Offshore Transmission System Development User Works
RRP	Regional Restoration Plan
SHE	Scottish Hydro Electric

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SPT	Scottish Power Transmission
SQSS	Security and Quality of Supply Standards
STC	System Operator Transmission Owner Code

Reference material

- Add links to reference material