

## Workgroup Terms of Reference and Membership

### GC0148: Implementation of EU Emergency and Restoration Code Phase II

#### Responsibilities

1. The joint Workgroup of Distribution Code Review Panel and Grid Code Review Panel is responsible for assisting the Grid Code Review Panel in the evaluation of Grid Code Modification Proposal **GC0148 Implementation of EU Emergency and Restoration Code Phase II** proposed by **Antony Johnson, ESO**, at the the Grid Code Review Panel on 30 July 2020. The proposal must be evaluated to consider whether it better facilitates achievement of the Applicable Grid Code Objectives

#### Applicable Grid Code Objectives

- i) To permit the development, maintenance and operation of an efficient, coordinated and economical system for the transmission of electricity;
- ii) To facilitate 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);
- 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; and
- 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. In conducting its business, the Workgroup will at all times endeavour to operate in a manner that is consistent with the Code Administration Code of Practice principles.
- v) To promote efficiency in the implementation and administration of the Grid Code arrangements.

#### Scope of work

2. The Workgroup must consider the issues raised by the Modification Proposal and consider if the proposal identified better facilitates achievement of Grid Code Objectives.

3. In addition, the Workgroup shall consider and report on the following specific issues:

Workgroup Term of Reference	Location in Workgroup Report (to be completed at Workgroup Report stage)
a) Implementation and costs;	<p><b><u>Page: 23</u></b></p> <p>There may be some costs in terms of comms resilience and critical tools and facilities, but most Users have them already, so it is considered relatively low. There will be additional costs with regards to communications, infrastructure but this is more of an issue relating to Electricity System Restoration Standard (ESRS) and will be picked up as part of GC0156.</p>
b) Review draft legal text should it have been provided. If legal text is not submitted within the Grid Code Modification Proposal the Workgroup should be instructed to assist in the developing of the legal text; and	<p><b><u>Page: 20</u></b></p> <p>Legal text has been provided and assessed by the Workgroup.</p>
c) Consider whether any further Industry experts or stakeholders should be invited to participate within the Workgroup to ensure that all potentially affected stakeholders have the opportunity to be represented in the Workgroup. Demonstrate what has been done to cover this clearly in the report.	<p>The workgroup consisted of appropriately experienced personnel. Specialist knowledge was called in in respect of the Control Telephony requirements.</p>
<p>d) Consider how the following remaining elements of the Network Code Electricity Emergency and Restoration (NCER) can be implemented in the GB Grid Code:</p> <p>i) Articles 15(5) – 15(8), 41 and 42(1)(2) and (5) of the NCER which have an implementation date of 18 December 2022.</p> <p>ii) Articles 15(9), 48(3) and 50 which are consequentially related to Articles 15(5) – 15(8), 41 and 42(1)(2) and (5) of the NCE.</p> <p>iii) The outstanding issues arising from implementation of the NCER carried out through Grid Code modifications GC0127 and GC0128, namely a) whether and, if appropriate, how the NCER should apply to Non-CUSC Parties and b) the requirements applicable to Electricity Storage Modules when transitioning from an import mode of operation to an export mode of operation during low system frequencies.</p>	<p><b><u>Pages: 8 to 15</u></b></p> <p><b><u>Consider how Articles 15(5) – 15(8) of the EU NCER can be implemented in the GB Grid Code</u></b></p> <p>This relates to Low Frequency Demand Disconnection (LFDD). The workgroup agreed that there is no change required to the existing legal text and recommended that a wider review of the LFDD arrangements should be considered by a future Grid Code modification.</p> <p><b><u>Consider how Article 41 of the EU NCER can be implemented in the GB Grid Code</u></b></p> <p>This relates to Communication Systems. The Control Telephony Standard is being updated to address this issue. All Defence Service Providers and Restoration Service Providers will have Control Telephony installed at their relevant site(s). The Control Telephony Standard is one of the suite of documents which falls under the Relevant Electrical Standards and is subject to its own Governance Arrangements under the Grid Code.</p> <p><b><u>Consider how Article 42(1), (2) and (5) of the EU NCER can be implemented in the GB Grid Code</u></b></p>

This issue relates to Critical Tools and Facilities and is covered through updates to the System Defence Plan, System Restoration Plan and Test Plan. All these plans are referenced in the Grid Code.

Consider how Article 15(9) of the EU NCER can be implemented in the GB Grid Code

Article 15(9) refers to Article 15(8) which relates to LFDD initiated by a frequency gradient. Article 15(8) is not a mandatory requirement and it is not proposed to use a frequency gradient for the LFDD Scheme. Therefore, this requirement is not necessary.

Consider how Article 48(3) of the EU NCER can be implemented in the GB Grid Code

Article 48(3) relates to the formulation of a Test Plan. The Test Plan is being updated as part of this modification and is included as an Annex within this consultation document. The Grid Code Glossary and Definitions will be updated to refer to the Test Plan.

Consider how Article 50 of the EU NCER can be implemented in the GB Grid Code

Article 50 relates to compliance testing and periodic review of the System Defence Plan. The System Defence Plan is being updated as part of this modification and is referenced in the Grid Code.

Consider how the EU NCER would apply to Non-CUSC Parties.

As part of this solution Non-CUSC parties would fall under the requirements of the EU NCER where they have a contract with National Grid ESO to provide a defence service (i.e. they are a defence service provider) or a restoration service (i.e. they are a restoration service provider). A condition of these contracts would bind them to the appropriate requirements of the Grid Code and therefore they would be caught by the requirements of the EU NCER.

Consider how the requirements applicable to Electricity Storage Modules when changing from an import mode of operation to an export mode of operation during low system frequencies

The Grid Code legal text has been updated to address this issue and ensure compliance with Article 15(3) for new and existing storage.

<p>e) Whilst it is not proposed to implement the recommendations / findings of the Distributed Re-Start Project as part of this modification, where time allows and the Workgroup believe it is appropriate and efficient, then the Workgroup may consider if it is expedient to include those elements of the Distributed Re-start project that have been finalised and agreed by affected stakeholders in this modification. Alternatively, the Workgroup should make code changes in such a way as to facilitate the future delivery of code changes associated with the Distributed Re-Start Project.</p>	<p><b><u>Pages: 16 to 18</u></b> Requirements for Distributed ReStart has been discussed by Workgroup and they have decided this should be moved to GC0156.</p>
<p>f) Following the 9th August 2019 System frequency incident, the E3C's initiated work (being carried out by the Electricity Task Group) on the low frequency demand disconnection (LFDD) scheme. The Workgroup should ensure that they are familiar with this work and ensure that the solution developed in GC0148 is co-ordinated with any code changes that may be required to implement the findings of the ETG work.</p>	<p>As part of the solution a meeting has been held with those involved in the E3C work to ensure their solution is consistent with the development of the GC0148 solution.</p>
<p>g) As a joint workgroup (as recommended by the Proposer), consider the impact on the Distribution Code and EREC G99.</p>	<p><b><u>Pages: 18 and 23</u></b> The Workgroup is a joint Grid Code / D Code Workgroup. Legal text for The Distribution Code and G99 has been developed in respect of Distributed ReStart. Following workgroup consultation, it was agreed that Distributed Restart will be transferred to GC0156</p>
<p>h) Consider any other cross codes impacts.</p>	<p><b><u>Pages: 18 and 23</u></b> This question has been raised throughout the workgroup and reflected through the actions on the Code Administrator. There are Cross Code Impacts for Distributed ReStart which may result in changes for the STC, CUSC and BSC. However now that it has been agreed that Distributed Re-Start should move to Grid Code modification GC0156 these consequential code modifications can now be considered at a later stage.</p>

4. As per Grid Code GR20.8 (a) and (b) the Workgroup should seek clarification and guidance from the Grid Code Review Panel when appropriate and required.
5. The Workgroup is responsible for the formulation and evaluation of any Workgroup Alternative Grid Code Modifications arising from Group discussions which would, as

compared with the Modification Proposal, better facilitate achieving the Grid Code Objectives in relation to the issue or defect identified.

6. The Workgroup should become conversant with the definition of Workgroup Alternative Grid Code Modification which appears in the Governance Rules of the Grid Code. The definition entitles the Group and/or an individual member of the Workgroup to put forward a Workgroup Alternative Code Modification proposal if the member(s) genuinely believes the alternative proposal compared with the Modification Proposal better facilitates the Grid Code objectives. The extent of the support for the Modification Proposal or any Workgroup Alternative Modification (WAGCM) proposal arising from the Workgroup's discussions should be clearly described in the final Workgroup Report to the Grid Code Review Panel.
7. Workgroup members should be mindful of efficiency and propose the fewest number of WAGCM proposals as possible. All new alternative proposals need to be proposed using the Alternative Request Proposal form ensuring a reliable source of information for the Workgroup, Panel, Industry participants and the Authority.
8. All WAGCM proposals should include the Proposer(s)'s details within the final Workgroup report, for the avoidance of doubt this includes WAGCM proposals which are proposed by the entire Workgroup or subset of members.
9. There is an option for the Workgroup to undertake a period of Consultation in accordance with Grid Code GR. 20.11, if defined within the timetable agreed by the Grid Code Panel. Should the Workgroup determine that they see the benefit in a Workgroup Consultation being issued they can recommend this to the Grid Code Review Panel to consider.
10. Following the Consultation period the Workgroup is required to consider all responses including any Workgroup Consultation Alternative Requests. In undertaking an assessment of any Workgroup Consultation Alternative Request, the Workgroup should consider whether it better facilitates the Grid Code Objectives than the Grid Code Modification Proposal.
11. As appropriate, the Workgroup will be required to undertake any further analysis and update the appropriate sections of the original Modification Proposal and/or WAGCM proposals (Workgroup members cannot amend the original text submitted by the Proposer of the modification). All responses including any Workgroup Consultation Alternative Requests shall be included within the final report including a summary of the Workgroup's deliberations and conclusions. The report should make it clear where and why the Workgroup chairman has exercised their right under the Grid Code to progress a Workgroup Consultation Alternative Request or a WAGCM proposal against the majority views of Workgroup members. It should also be explicitly stated where, under these circumstances, the Workgroup

chairman is employed by the same organisation who submitted the Workgroup Consultation Alternative Request.

12. The Workgroup is to submit its final report to the Modifications Panel Secretary on 22 June 2022 for circulation to Panel Members. The final report conclusions will be presented to the Grid Code Review Panel meeting on 30 June 2022.

## Membership

13. The Workgroup had the following members:

Role	Name	Representing
Chair	Sally Musaka	Code Administrator (ESO)
Technical Secretary	Shazia Akhtar	Code Administrator (ESO)
Proposer	Antony Johnson	ESO
Workgroup Member	Richard Wilson/ Bill D'Albertson (Alternate)	UK Power Networks
Workgroup Member	Garth Graham	SSE Generation
Workgroup Member	Julie Richmond/ Priyanka Mohapatra (Alternate)	Scottish Power Renewables (UK) Limited
Workgroup Member	Matthew Cullen	E.ON UK
Workgroup Member	Graeme Vincent	SP Energy Networks
Workgroup Member	Alastair Frew	Drax Generation Enterprise Ltd
Workgroup Member	Alan Creighton	Northern Powergrid
Workgroup Member	Mark Dunk	Energy Networks Association
Observer	Mike Kay	ENA
Observer	Stephanie Hay	TNEI Services Ltd
Observer	Paul Crolla	Muirhall Energy
Observer	Mark Bingham	National Grid
Observer	Camille Gilsenan	ESO
Observer	Alex Markham	ESO

Authority Representative	Christopher Statham	Ofgem
--------------------------	---------------------	-------

14. A (\*) Workgroup must comprise at least 3 members (who may be Panel Members). The roles identified with an asterisk (\*) in the table above contribute toward the required quorum, determined in accordance with paragraph 15 below.
15. The Grid Code Review Panel must agree a number that will be quorum for each Workgroup meeting. The agreed figure for this modification is that at least 3 Workgroup members must participate in a meeting for quorum to be met.
16. A vote is to take place by all eligible Workgroup members on the Modification Proposal and each WAGCM. The vote shall be decided by simple majority of those present at the meeting at which the vote takes place (whether in person or by teleconference). The Workgroup chairman shall not have a vote, casting or otherwise. There may be up to three rounds of voting, as follows:
  - Vote 1:** whether each proposal better facilitates the Applicable Grid Code Objectives;
  - Vote 2:** which option is considered to BEST facilitate achievement of the Applicable Grid Code Objectives. For the avoidance of doubt, this vote should include the existing Grid Code baseline as an option.The results from the vote and the reasons for such voting shall be recorded in the Workgroup report in as much detail as practicable.
17. It is expected that Workgroup members would only abstain from voting under limited circumstances, for example where a member feels that a proposal has been insufficiently developed. Where a member has such concerns, they should raise these with the Workgroup chairman at the earliest possible opportunity and certainly before the Workgroup vote takes place. Where abstention occurs, the reason should be recorded in the Workgroup report.
18. Workgroup members or their appointed alternate are required to attend a minimum of 50% of the Workgroup meetings to be eligible to participate in the Workgroup vote.
19. The Technical Secretary shall keep an Attendance Record for the Workgroup meetings and circulate the Attendance Record with the Action Notes after each meeting.
20. The Workgroup membership can be amended from time to time by the Grid Code Review Panel and the Chairman of the Workgroup.