Grid Code Modification Proposal Form

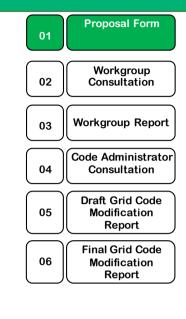
GC0136

Mod Title: Non-material changes to the Grid Code following implementation of the EU Connection Codes.

Purpose of Modification: To implement a number of non-material amendments to various sections of the Grid Code, to correct errors which were identified following the implementation of previous Grid Code Modifications GC0100, GC0101, GC0102 and GC0104. Those Modifications were introduced following the implementation of the European Connection Network Code (ie Requirements for Generators (RfG), HVDC and Demand Connection (DCC) codes).

| 0 | The Proposer recommends that this modification should be:subject to self-governance | | | |
|---|--|--|--|--|
| | proceed directly to Code Administrator Consultation | | | |
| | This modification was raised 04 December 2019 and will be presented by the Proposer to the Panel on 19 December 2019. The Panel will consider the Proposer's recommendation and determine the appropriate route. | | | |
| 0 | High Impact: None. | | | |
| | Medium Impact None. | | | |
| 0 | Low Impact All users – correction to errors in Grid Code and provides clarification. | | | |

At what stage is this document in the process?



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| 2 Governance | | |
| 3 Why Change? | Nisar.ahmed@nationa | |
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| 5 Solution | 07773043068 | |
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| 7 Relevant Objectives | 5 | Antony Johnson |
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| 10 Recommendations | 8 | 07966 734856 |
| Timetable | National Grid ESO Representative: | |
| | owing timotoble. | Phil Smith |
| The Code Administrator recommends the foll Code Administrator Consultation issued to the | owing timetable: | |
| Industry | January 2020 | Philip.smith4@nationa |
| Draft Final Modification Report presented to | 19 February 2020 | grideso.com |
| Panel Modification Panel decision | | 07779 560 468 |
| Final Modification Report – 15 day Appeal | 27 February 2020 12 March – 02 April | 07779 560 468 |
| window | 2020 | |
| Decision implemented in Grid Code | 10 working days after Ofgem decision | |
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| Proposer Details | | | | | |
|----------------------|-------------------|--|--|--|--|
| Details of Proposer: | National Grid ESO | | | | |

| (Organisation Name) | | | | |
|---|------------------------------------|--|--|--|
| Capacity in which the Grid Code Modification Proposal is being proposed: (e.g. CUSC Party) | The Company | | | |
| Details of Proposer's Representative: | | | | |
| Name: | Antony Johnson | | | |
| Organisation: | National Grid ESO | | | |
| Telephone Number: | 07966 734856 | | | |
| Email Address: | antony.johnson@nationalgrideso.com | | | |
| Details of Representative's Alternate: | | | | |
| Name: | Phil Smith | | | |
| Organisation: | National Grid ESO | | | |
| Telephone Number: | 07779 560 468 | | | |
| Email Address: | philip.smith4@nationalgrideso.com | | | |
| Attachments (Yes): | | | | |
| Updated Grid Code Legal Text | | | | |

1 Summary

Defect

In 2018, the GB Grid Code was updated (through Grid Code modifications GC0100, GC0101, GC0102 and GC0104) to implement the European Connection Network Codes (ie Requirements for Generators (RfG), HVDC Code and the Demand Connection Code (DCC))

Shortly after the requirements of RfG and HVDC Codes were implemented into the GB Grid Code, it was realised that the effective date from when the RfG and HVDC Codes applied were incorrect, together with a number of other minor errors. It was initially proposed to address all these issues at the same time, however the implementation dates were first corrected via Grid Code modification GC0116 and the later house keeping changes are being implemented in this Grid Code Modification (GC0136).

As part of this modification, the opportunity is being taken to correct a number of other outstanding errors which have been observed in checking the current Grid Code legal text.

What

This modification seeks to correct these errors in the relevant sections of the Grid Code.

Why

This will provide clarity to users, remove known errors and improve the quality of the Grid Code.

How

It is proposed to modify the Grid Code to correct the identified errors. Please see the Legal Text Section for a summary of the proposed changes, and the attached Legal Text for those sections in full detail.

2 Governance

Justification for Self-Governance Procedures

Self-Governance is proposed as the changes are non-material..

Self-Governance - 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;
- 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:

- be subject to self-governance
- be assessed by a Workgroup meeting, if the Panel deems this necessary, to review the changes proposed

3 Why Change?

Correcting the typographical and other non-material errors will address the defect. The ESO is also grateful to those stakeholders and customers who have informed us of known errors in the Grid Code.

4 Code Specific Matters

Technical Skillsets

- Knowledge of the Grid Code sections impacted by the changes and an understanding of the conventions of the Grid Code documents.
- Understanding of the previous Modifications: GC0100, GC0101, GC0102 and GC0104

Reference Documents

• None

5 Solution

Correcting the typographical and other non-material errors will address the defect.

Please see the Legal Text Section for the list of the proposed changes here.

6 Impacts & Other Considerations

No Cross Code, Consumer, IS System, Business Process or Environmental impacts are expected from this modification.

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

No.

Consumer Impacts

None

7 Relevant Objectives

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 | Neutral |

| 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); | |
|--|----------|
| (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; | Neutral |
| (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 | Positive |

8 Implementation

As the proposed solution is clarification of text only, and no IS Systems or Business Process changes are expected, no specific implementation requirements are foreseen. The requirements addressed are already covered by existing custom and practice and no changes to processes or requirements on any parties are expected.

9 Legal Text

The following Grid Code sections have been updated:

- 1. Glossary and Definitions
- 2. Planning Code
- 3. Connection Conditions
- 4. European Connection Conditions
- 5. Demand Response Services Code
- 6. Compliance Processes
- 7. European Compliance Processes
- 8. Operating Codes
- 9. Balancing Codes
- 10. Data Registration Code
- 11. General Conditions
- 12. Governance Rules

Given the size of the documents involved we have uploaded this revised legal text to our website at https://www.nationalgrideso.com/codes/grid-code/modifications/gc0136-rfg-housekeeping-modification

The main changes to the Grid Code include:

- 1. Corrections of typo's, embolded text, spacing and referencing.
- 2. Changes to alphabetical order in the Glossary and Definitions.
- In some parts of the Grid Code, references to the Connection Conditions (CC) or Compliance Processes (CP) have been updated to also include the corresponding European Connection Conditions and/or European Compliance Processes references.
- 4. Introduction of new terms for inertia (Active Power seconds (MWs)) and Reactive Power seconds (MVArs). This has been introduced to avoid confusion with the plural of MW and MVAr which appears throughout the Grid Code on several occasions.
- 5. Clarification of terms, for example where the term Generator has been used, it is more applicable in some cases to use the term Generating Unit or Power Generating Module.
- GB Code User the term DC (Direct Current) Connected Power Park Module has been removed from the definition of GB Code User as it only applies to plant caught by the requirements of the European Connection Network Codes (eg HVDC Code).
- 7. The term 'Reactive Despatch to zero MVAr Network Restriction' has been added following notification that this term had inadvertently been removed from a previous iteration of the Grid Code.
- 8. Definition of TERRE Gate Closure needs discussion.
- 9. Governor Deadband and Governor Insensitivity have been changed to Frequency Response Deadband and Frequency Response Insensitivity respectively to align with RfG definitions.
- 10. CC/ECC.6.1.5b Phase Unbalance has been updated to Phase (Voltage) Unbalance.
- 11. Corrections to diagram labelling where necessary in the European Connection Conditions.
- 12. Amendments to Figure ECC.6.3.7.3.4(a) and Figure ECC.16.3.16(c).
- 13. Removal of Appendix 4EC introduced through Grid Code Mod GC0111.
- Amendments to references of Minimum Stable Operating Level and Minimum Regulating Level – there are some examples where the term Minimum Stable Operating Level has been used where the term Minimum Regulating Level should have been used, and vice-versa.
- 15. CP.A.3.2.1(v) phrasing changed to improve readability.
- 16. ECP.A.3.5.1 last Figure in Table A.3.5.1 has been amended from 10% to 0% in line and consulted upon in GC0100.

- 17. References to the Seven Year Statement (SYS) have not been changed to Electricity Ten Year Statement (ETYS), as this needs to be subject to a separate modification.
- 18. Updates to Figure 2 of ECP.A.5.8.8, Figure 2 of ECP.A.6.6 and Figure 2 of ECP.A.7.5.
- 19. ECP.A.6.4.5 new test added for operation at 50% maximum capacity under lagging power factor conditions to reflect RfG requirements. This was omitted during implementation of RfG.
- 20. OC5.5.4 table subsynchronous torsional interaction damping capability, power oscillation damping capability and control facilities for HVDC systems included against the requirements of ECC6.3.17.
- 21. OC8A.5.3.4 / OC8B.5.3.4 Query on the term 'gas insulated switchgear three position isolators and earth switches'.
- 22. OC9.4.7.4(c) new title added as this section was missing a title.
- 23. OC9.6.4 minor amendments to wording introduced to improve readability.
- BC2.13 There are several undefined terms such as 'Intraday Cross Zonal Gate Closure Time'. These require discussion and have been highlighted in yellow.
- 25. BC5 The term 'DNO' has been changed to 'Network Operator'.
- 26. BC5.4.1(d)ii Reworded to improve readability.
- 27. Data Registration Code Schedule 18 updates to include OTSDUW (Offshore Transmission System Development User Works) (page 23).
- 28. General Conditions GC5.2 and GC5.4 do not make sense so need reviewing (paragraphs highlighted in yellow). Part B, reference NGESO should this be 'The Company'? to be agreed
- 29. GCB.3.3 GCB.1.5.2 'Legacy data' not a defined term

10 Recommendations

Proposer's Recommendation to Panel

Panel is asked to:

- Agree that Self Governance procedures should apply
- Refer this proposal to a Workgroup for assessment if deemed necessary.