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Grid Code Modification Proposal Form

GC0171:

Improving the clarity and transparency of the Compliance Process for Small Generators with a Bilateral Embedded Generator Agreement (BEGA)

Overview: This modification aims to update the definitions of operational notifications for Embedded Small Generators with a Bilateral Embedded Generator Agreement (BEGA) with the ESO. This modification will help improve the clarity and transparency around the compliance responsibilities between the ESO and relevant Network Operator, therefore increasing overall efficiency and stakeholder satisfaction during the compliance process.

Modification process & timetable

1. **Proposal Form**
   28 March 2024
2. **Code Administrator Consultation**
   30 April 2024 – 30 May 2024
3. **Draft SG Modification Report**
   19 June 2024
4. **Final SG Modification Report**
   27 June 2024
5. **Appeals Window**
   09 July 2024 – 31 July 2025
6. **Implementation**
   07 August 2024

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: Low impact

Generators in respect of Embedded Small Power Stations, Network Operators, ESO

Modification drivers: Efficiency, Harmonisation, Transparency

Proposer's recommendation of governance route	Self-Governance modification to proceed to Code Administrator Consultation	
Who can I talk to about the change?	**Proposer:** Tanmay Kadam Tanmay.kadam@nationalgrideso.com 07707172090	**Code Administrator Contact:** Lizzie Timmins Elizabeth.timmins@nationalgrideso.com

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What is the issue?

Sections ECP.6 and ECP.7 of the European Compliance Processes (ECP) refers to provisions in relation to the issue of an Interim Operational Notification (ION) and Final Operational Notification (FON) respectively for a Power Station consisting of Type C and Type D Power Generating Modules (PGM).

- ECP.6 lists the items for submission which includes but not limited to planning code data and simulation studies as per Connection Conditions (CC)/Compliance Processes (CP)/European Connection Conditions (ECC)/European Compliance Processes ECP, prior to issue of the Interim Operational Notification.
- ECP.7 lists the items for submission which includes but not limited to planning code data, test results as per CC/CP/ECC/ECP and controller model validation (PC),prior to issue of the Final Operational Notification.
- When the requirements of ECP.6 and ECP.7 have been met to The Company's satisfaction, ION and FON can be issued.

An Embedded Small Power Station may comprise of Type C or Type D Power Generating Modules. However, Embedded Small Power Stations are excluded from the scope of Connection Conditions (CC.3.1), European Connection Conditions (ECC.3.1), Compliance Process (CP.3) and Planning Code (PC.3.2(d)).

- An Embedded Small Power Station undergoes the Energy Networks Association (ENA) Engineering Recommendation, G99 compliance as per the Requirements for Generators (RfG), which is within scope of Distribution Network Operator (DNO). The technical requirements between ENA G99 and the Grid Code are almost similar with only minor differences*. Embedded Small Power Stations may decide to have a Bilateral Embedded Generator Agreement (BEGA) with ESO, in order to participate in the Balancing Mechanism.
- In view of this, the above text in the Grid Code (ECP.6, ECP.7) would prompt Type C/D Power Generating Modules in respect of Embedded Small Power Stations to go through full Grid Code Compliance despite of already proving the compliance in respect of technical requirements as per Engineering Recommendation G99 to the Network Operator. An Embedded Small Power Station is not required to fulfil the technical requirements in Connection Conditions (CC), European Connections Conditions (ECC), Compliance Processes (CP) and Planning Code (PC), as they are exempted from these codes. Such a contradiction in the code forces ESO Compliance Engineers to assess the compliance of technical requirements for Embedded Small Power Stations against G99 Code. As ensuring technical compliance with respect to G99 code is the responsibility of Network Operator (as per RfG), this causes duplication of efforts on ESO side, leading to inefficient compliance process and hence delays in issuing ESO Operational Notifications.

In view of this, the above text in the Grid Code is misleading as it would prompt Type C/D PGMs in Embedded Small Power Stations to go through full Grid Code compliance. This has raised concerns as Small BEGA customers cannot fulfil the requirements of ECP.6 and ECP.7, which may hinder them from receiving ESO Operational Notifications, and hence not allow them to be part of the Balancing Mechanism. This prompts ESO Engineers to assess the Small BEGA technical compliance which the DNOs are already assessing, causing duplication of efforts which leads to delays in issuing Operational Notifications.

*These minor differences are to be addressed through Grid Code Modification GC0169 which is proposed to be a joint Grid Code / Distribution Code Workgroup.

Why change?

The purpose of the ESO Interim/Final Operational Notifications for a Generator is to allow them to export/import to/from the National Electricity Transmission System and operate their assets in accordance with the Grid Code obligations. An Embedded Small Power Station, due to its small size (below 50MW in E&W and 30MW in Scotland) has very little impact on the National Electricity Transmission System and are monitored and operated by relevant Network Operator. Embedded Small Power Stations would fulfil the technical requirements in accordance with G99 which the Network Operator ensures by issuing their Operational Notifications. The only reason a Generator in respect of Embedded Small Power Station signs a Bilateral Agreement (Small BEGAs) with ESO is to participate in the Balancing Mechanism.

Going forward, ESO will utilise the compliance confirmation from the Network Operator that a Generator in respect of Embedded Small Power Station has undergone technical compliance as per G99. This would prevent duplication of compliance efforts for ESO, as well as for Generators. However, ESO shall be responsible for assessing compliance with ECC.6.5 requirements that allows a Small Generator to participate in the Balancing Mechanism. In addition to that, ESO shall assess compliance of all the additional requirements that are in the Bilateral Agreements but not in G99.

The proposed solution in this Grid Code Modification will improve the clarity and transparency around the Compliance Process for Small BEGA customers which would clearly outline the scope and responsibilities between relevant stakeholders in the compliance process.

What is the proposer's solution?

It is proposed to change the definitions of ESO ION (Interim Operational Notification), ESO FON (Final Operational Notification) and ESO LON (Limited Operational Notification) for Generators in respect of Embedded Small Power Stations with a BEGA, where the requirements and purpose of these definitions will be clearly outlined.

These new definitions will reflect that the ESO is issuing the notification to confirm that only the compliance activities required for the Generator to participate in the Balancing Mechanism have been performed with all other compliance activities being completed by the relevant Network Operator.

The solution is anticipated to affect the following sections of legal text:

- European Compliance Process
- Glossary and Definitions

Draft legal text

Draft legal text for this change can be found in Annex 1.

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What is the impact of this change?

Proposer's assessment against 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** By clarifying the Grid Code as indicated in the proposal, it will improve clarity around the compliance process for Embedded Small Power Stations with Bilateral Agreement. This will set the right expectations from relevant stakeholders which will result in more efficient managing of the compliance process.
(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);	**Positive** The proposal aims to bring more consistency in the Grid Code requirements and improve transparency around compliance process for Embedded Small Generators. It would promote Embedded Small Customers to continue pursuing the BEGA route to contribute to the balancing market, thereby facilitating healthy competition amongst generators.
(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	**Neutral** [Please provide your rationale]
(e) To promote efficiency in the implementation and administration of the Grid Code arrangements	**Positive** The proposed solution aims to clearly define the

	obligations in compliance process and share responsibilities between the relevant network operator and ESO to avoid duplication. This will promote efficiency in managing the compliance for Embedded Small Generators.

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	**Neutral** This modification will improve clarity around compliance process for Embedded Small Customers. Whilst not having a direct impact on improved safety and reliability of the System, it will improve clarity which we overall see as positive.
Lower bills than would otherwise be the case	**Neutral**
Benefits for society as a whole	**Neutral**
Reduced environmental damage	**Neutral**
Improved quality of service	**Positive** The Grid Code is a complex document running to many pages. Any change which improves clarity to Stakeholders and Users and hence the quality of service they receive is only seen as positive.

When will this change take place?

Implementation date
07 August 2024

Date decision required by
Decision required from the Grid Code Review Panel on 27 June 2024

Implementation approach
There will be no system changes required as a result of this modification.

Proposer's justification for governance route
Governance route: Self-Governance modification to proceed to Code Administrator Consultation

The proposed modification was presented to Industry at the Grid Code Development Forum in November 2023 and March 2024 with feedback gathered to assist with refining the solution. On the basis that the proposed changes present no material changes to Users, and the ESO Compliance Team have already adopted these changes when completing compliance activities with Users we believe that the presented solution and Legal Text is fully formed and should take the Self-Governance route and proceed directly to Code Administrator Consultation.

Interactions

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

There are some amends being proposed to G99 however there are no dependencies on the changes.

Acronyms, key terms and reference material

Acronym / key term	Meaning
BEGA	Bilateral Embedded Generation Agreement
BSC	Balancing and Settlement Code
CC	Connection Conditions
CP	Compliance Process
CUSC	Connection and Use of System Code
DNO	Distribution Network Operator
EBR	Electricity Balancing Regulation
ECC	European Connection Conditions
ECP	European Compliance Process
ENA	Energy Network Association
FON	Final Operational Notification
FRT	Fault Ride Through
FSM	Frequency Sensitive Mode
GC	Grid Code
ION	Interim Operational Notification
LON	Limited Operational Notification
PC	Planning Code
PGM	Power Generating Module
RfG	Requirements for Generators
SQSS	Security and Quality of Supply Standards
STC	System Operator Transmission Owner Code
T&Cs	Terms and Conditions

Annexes

Annex	Information
Annex 1	Legal Text

[1] If your modification amends any of the clauses mapped out in Annex GR.B of the Governance Rules section of the Grid Code, it will change the Terms & Conditions relating to Balancing Service Providers. The modification will need to follow the process set out in Article 18 of the Electricity Balancing Regulation (EBR – EU Regulation 2017/2195). All Grid Code modifications must be consulted on for 1 month in the Code Administrator Consultation phase, unless they are Urgent modifications which have no impact on EBR Article 18 T&Cs. N.B. This will also satisfy the requirements of the NCER process.