

Grid Code Alternative Form

GC0117 Alternative Request 4:

Improving transparency and consistency of access arrangements across GB by the creation of pan-GB commonality PGM requirements

Overview: This alternative is the same as WAGCM1 other than in respect that it requires Network Operator to install a Regional Development Programme Monitor which will enable the ESO to observe and control the effect of Non-CUSC Embedded Generation behind Grid Supply Points

Proposer: Antony Johnson – National Grid ESO

Guidance for Alternative Proposers

Who can raise an Alternative? Any CUSC or BSC Party, or Citizens Advice can raise an Alternative Request in response to the Workgroup Consultation.

How do Alternative Requests become formal Workgroup Alternative Modifications?

The Workgroup will carry out a Vote on Alternatives Requests. If the majority of the Workgroup members or the Workgroup Chair believe the Alternative Request will better facilitate the Applicable Objectives than the current version of the Code, the Workgroup will develop it as a Workgroup Alternative Modification.

Who develops the legal text for Alternatives? ESO will develop the Legal text for all Workgroup Alternative Modifications and will liaise with the Alternative Proposer to do so.

Contents

- What is the proposed alternative solution?
 - Difference between this and the Original Proposal
- What is the impact of this change?
- When will the change take place?
- Acronyms, key terms and reference material

What is the proposed alternative solution?

The original proposal seeks to rationalise the existing GB arrangements for the connection of new Power Stations, such that there is a common definition of Small, Medium (where appropriate) and Large Power Stations. The original proposal promotes removing any regional differences across GB and having one consistent value of Large Power Station which would be for Power Stations with a Registered Capacity of 10MW and above and Small Power Stations with a Registered Capacity of less than 10MW. All Large Power Stations are required to provide the necessary structural, scheduled and real time data the capability to be instructed in the Balancing Mechanism.

What is the difference between this and the Original Proposal?

Unlike the original proposal where there are direct arrangements between the ESO and Large Power Stations, this proposal achieves the same type of functionality but the concept would now rely on the Embedded Medium Power Station submitting the necessary data only once the relevant Network Operator and the Network Operator would then submit that data to the ESO. In addition as there is a Balancing Mechanism interaction all non confidential instructions would be issued from the ESO to the DNO and from the DNO to the Generator. This has the benefit of greater coordination between the ESO and DNO unlike the original where there is often the difficulty of the ESO issuing instructions to the Generator and the DNO are often blind to the issued instructions and the subsequent issues this can cause on the DNO's network.

This proposal is the same as WAGCM1 which proposes to apply the Large, Medium and Small Power Station thresholds in England and Wales into Scotland, with the additional requirement of requiring Network Operators to install a Regional Development Programme Monitor. A Regional Programme Monitor is a control system which sits behind each Grid Supply Point and enables the ESO in coordination with each Network Operator to monitor the flow of Active and Reactive Power behind that Grid Supply Point as part of an Active Network Management Scheme.

The advantage of this approach is that it builds on the work developed through the Open Networks, the process is being trialled in the South West of England and complements the Appendix G process and it is a low cost solution which prevents smaller parties from having to be exposed to the full requirements of the Balancing Mechanism.

What is the impact of this change?

The impact of this change is the following:-

- 1) There would be no change to the arrangements in England and Wales as the Power Station threshold would remain the same other than the need for the Network Operator to install a Regional Development Programme Monitor. This scheme is already being trialled. Hence there is a small impact for Network Operators but this is believed to be small.
- 2) It would give the ESO greater visibility and controllability of Embedded Generation in coordination with the Network Operator.
- 3) It builds on the existing arrangements developed through Open Networks

- 4) The costs are believed to be small though it is unclear at this stage if it would yield sufficient information to the ESO to be able to control and manage the system in the longer term.
- 5) It prevents Smaller Generators from being exposed to the full effects and requirements of the BM
- 6) For Generators in Scotland it significantly reduces the current existing burden on Small Generators, though in view of the lower interconnection on the Scottish System the impact on Scottish Transmission Licensees is unknown.
- 7) Although the retrospective requirements are unclear, if rolled forward the obligations on existing Large Power Stations in Scotland could be relaxed.
- 8) This alternative is very similar to WAGCM1 with the addition of a Regional Development Programme Monitor which is seen as comparatively inexpensive.

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	As original proposal
(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);	As original proposal
(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;	As original proposal
(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	As original proposal
(e) To promote efficiency in the implementation and administration of the Grid Code arrangements	As original proposal

When will this change take place?

Implementation date:

This modification should be implemented as soon as is practicable as agreed within the Workgroup

Implementation approach:

To be agreed within the Workgroup

Acronyms, key terms and reference material

Acronym / key term	Meaning
BEGA	Bilateral Embedded Generation Agreement
BELLA	Bilateral Exemptible Large Licence Exempt Generator Agreement
ESO	National Grid Electricity System Operator

Reference material:

Full legal text is attached to this solution