

WAGCM10 - Grid Code Alternative Form

GC0141:

Preferred permutation across all GC0141 “Sub-Modification” workstreams

Overview:

The Alternative has been raised to cover the proposers chosen permutation in relation to the elements that comprise the modification.

Details of the chosen permutation as attached and summarised below:

Solution	Independent Engineer	Sharing for SSTI / SSCI	RMS & EMT Models	Fault Ride Through Definition & Retrospective Requirements	Compliance Repeat Plan	Enhanced FRT Studies	Torsional Data
WAGCM10	Min threshold 100MW before IE required	No requirement on ESO/TO to share models	Specification of RMS & EMT model (fully encrypted)	No time duration or respective requirements	Every 5 years Users submit compliance statement and DRC Schedules	Additional studies for complex connections agreed at start of process	All Users provide torsional data (retrospective)
	No change from Baseline						
	Original Proposal						
	Alternative Option						

Requirement for an Independent Engineer – Alternative Option 1a – A minimum threshold for Users with a Registered Capacity of 100MW before an Independent Engineer is required

Sharing of SSTI / SSCI Models – Current Baseline

Specification for RMS & EMT Models – Original Proposal

Fault Ride Through Definition and Retrospective Requirements – Current Baseline

Compliance Repeat Plan – Original Proposal

Enhanced Fault Ride Through Studies – Original Proposal

Provision of Torsional Data for Older Plant – Original Proposal

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What is the proposed alternative solution?

The alternative covers the proposers chosen elements of the modification, with some elements differing from the Original Proposal. The reasons for the suggesting some differences from the original proposal are presented in the section below.

What is the difference between this and the Original Proposal?

Requirement for an Independent Engineer – Alternative Option 1a – A minimum threshold for Users with a Registered Capacity of 100MW before an Independent Engineer is required

This is to ensure that smaller projects are not affected by this additional review in terms of budget and timescale. The Proposer of this Alternative believes this review process should only be applicable to the first compliance process and not to LON or any other material change (Mod App or similar processes).

The objective of the independent Engineer is to provide an initial screening review of the compliance submission from a User and to ensure no evident errors or mistakes are included, but it does not eliminate any of the ESO's responsibilities in reviewing and approving such submission. The Proposer of this Alternative believes that this process would be suitable for the initial compliance process to achieve the first FON. However, for processes such as LON or in the case of material changes, only a part of the compliance process is often expected to be repeated - if this included the review of an independent engineer, we believe it would only cause complications and potential delays with no evident benefits.

Sharing of SSTI / SSCI Models – Current Baseline

We believe that the current proposal and alternatives for SSTI and CI studies are discharging the ESO and TOs of their responsibility to maintain and safely operate the transmission network. By asking Users that have no or limited visibility of the entire network and of its operability, we believe the ESO and TO are effectively asking others to take charge of their Licence requirements. This is standard practise in many other countries and there no reasons why this approach could not be applied in the UK. We therefore believe the current baseline is currently the only solution that meets the Grid Code objectives, as all other proposal have a negative impact on objectives a) and d).

Fault Ride Through Definition and Retrospective Requirements – Current Baseline

The new 30-minute requirement may be too demanding in terms of capability of a User and on the countermeasures that projects in operation may need to take to meet it. Retrospectivity should not be applicable to projects that were not designed with this 30-minute requirement in mind, unless further investigations are made before the Grid Code is modified.

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 It will support the connection of new Users ensuring that aspects affecting the stability of the system are evaluated.
(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 It will allow a transparent solution to share models and data among Users and support the development of the transmission system.
(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;	Positive It will support the connection of new Users ensuring that aspects affecting the stability of the system are evaluated.
(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 It will allow the TOs and SO to discharge their obligations in terms of supporting the exchange of models between parties and assess the safe operability of the network.
(e) To promote efficiency in the implementation and administration of the Grid Code arrangements	Positive It will ensure that requirements of the Grid Code are evaluated in more details by Users covering more scenarios.

When will this change take place?**Implementation date:**

In line with GC0141

Implementation approach:**Acronyms, key terms and reference material**

Acronym / key term	Meaning
BCA	Bilateral Connection Agreement - between a User and ESO
ECC	European Connection Conditions – part of Grid Code
PC	Planning Code – part of Grid Code
TO	Transmission Owner
NG ESO	National Grid Electricity System Operator

Reference material:

None.