

WAGCM11 - 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
WAGCM11	Min threshold 100MW (inc of Users at LON status or material change) before IE required	User employs a Consultant who sees network data & carries out the studies	Specification of RMS & EMT model (fully encrypted)	Adds a time duration & retrospective requirements	Submit material changes from submission made to achieve FON	Additional studies for complex connections agreed at start of process	User provides data when asked prior to a completion date of 1st April 2015
	No change from Baseline						
	Original Proposal						
	Alternative Option						

Requirement for an Independent Engineer – Alternative Option 1c – A minimum threshold for Users with a Registered Capacity of 100MW (inclusive of Users at Limited Operational Notification (LON) status or the User has notified material change which impact on Grid Code Compliance) before an Independent Engineer is required

Sharing of SSTI / SSCI Models – Alternative Option 2b (User should employ a consultant to carry out studies on behalf of a User (without User getting the model data) to allow User to fulfil obligations to demonstrate compliance with (EEC.6.3.17). Terms of arrangements agreed in Bilateral Connection Agreement.)

Specification for RMS & EMT Models – Original Proposal

Fault Ride Through Definition and Retrospective Requirements – Original Proposal

Compliance Repeat Plan – Alternative Option 5a (Only changes to original baseline data to be submitted in order to achieve compliance)

Enhanced Fault Ride Through Studies – Original Proposal

Provision of Torsional Data for Older Plant – Alternative Option 7a (requirement for User to only provide Torsional Data for Generating Units with a completion date before 01 April 2015 on request)

Proposer: Pukar Mahat, Siemens Gamesa Renewables

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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.

What is the difference between this and the Original Proposal?

Requirement for an Independent Engineer – Alternative Option 1c – A minimum threshold for Users with a Registered Capacity of 100MW (inclusive of Users at Limited Operational Notification (LON) status or the User has notified material change which impact on Grid Code Compliance) before an Independent Engineer is required

SGRE: The option to notify change which would impact on grid compliance will reduce the burden to all stakeholders by limiting the use of an Independent Engineer without compromising the security and efficiency of electricity system.

Sharing of SSTI/ SSCI Models – Alternative Option 2b (User should employ a consultant to carry out studies on behalf of a User (without User getting the model data) to allow User to fulfil obligations to demonstrate compliance with (EEC.6.3.17). Terms of arrangements agreed in Bilateral Connection Agreement.)

SGRE: This will remove the need for a supplier having an NDA with various parties and expediate the process.

Specification for RMS & EMT Models – Original Proposal

SGRE: This will protect the IP right of the suppliers and developers.

Fault Ride Through Definition and Retrospective Requirements – Original Proposal

SGRE: It makes the requirement clearer.

Compliance Repeat Plan – Alternative Option 5a (Only changes to original baseline data to be submitted in order to achieve compliance)

SGRE: Compliance repeat can be helpful in having efficient, coordinated, and economical operation of the electricity system. However, having a fixed schedule to 5 years is inefficient if changes do not impact compliance with the Grid Code requirements.

Enhanced Fault Ride Through Studies – Original Proposal

Provision of Torsional Data for Older Plant – Alternative Option 7a (requirement for User to only provide Torsional Data for Generating Units with a completion date before 01 April 2015 on request)

SGRE: This would be more beneficial as it can be difficult/expensive to obtain data.

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
(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
(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
(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

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.