

**WAGCM6 - Grid Code Alternative Form**

# **GC0141:**

## **Parallel Hosting of EMT study network for User SSCI/SSTI studies (PC.3.8)**

**Overview:** Original proposal includes sharing of model data with other users for interaction studies (EEC.6.3.17). This Alternative suggests NG ESO or TO should host an EMT network with remote/parallel access for User to carry out studies without sight of other Users or network data.

**Proposer:** Mark Horley, NG ESO

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## What is the proposed alternative solution?

This Alternative suggests NG ESO or TO should host an EMT network with remote/parallel access for User to carry out studies without sight of other Users or network data.

## What is the difference between this and the Original Proposal?

The User would not see the models supplied by other Users but would run his plant and apparatus in parallel with a network hosted by ESO or TO containing the models. This would allow the User to carry out studies to meet ECC.6.3.17 obligations for considering SSTI/SSCI.

Currently the ESO/TO do not have a sufficient network model to facilitate this. Potentially the HVDC Centre could provide supervised secure hosting facilities.

## 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	<b>Positive:</b> facilitates the studies for compliance with ECC.6.3.17.
(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);	<b>Positive:</b> facilitates the studies for compliance with ECC.6.3.17.
(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;	<b>Positive:</b> facilitates the studies for compliance with ECC.6.3.17. keeping responsibility with User
(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	<b>None:</b> Uncertain technology status in terms of network model. User might have to do studies at an NG ESO/TO location
(e) To promote efficiency in the implementation and administration of the Grid Code arrangements	<b>None</b>

## When will this change take place?

### Implementation date:

September 2025

### Implementation approach:

Requires NG ESO/TO to create a full EMT suitable model.

## 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:

Annex 1 - Legal Text

Addition to existing Grid Code (Planning Code) drafting underlined

PC.3.8 [From 1 April 2025] In order to comply with the requirements of ECC.6.3.17.1.5 and ECC.6.3.17.2.3 The Company or Relevant Transmission Licensee may provide a User with access to an Electro-magnetic Transient (EMT) model of an appropriate portion of the National Electricity Transmission System as determined by screening studies and prepared with information to the extent available as described in ECC.6.3.17. The EMT model shall be hosted by The Company or Relevant Transmission Licensee while the model of the User Plant and Apparatus will be provided by the User and hosted separately as arranged by The Company or Relevant Transmission Licensee. The arrangements put in place by The Company or Relevant Transmission Licensee shall as far as reasonably practical prevent the portion of the EMT model of the National Electricity Transmission System being visible to the User. A User may only use this access to complete the analysis required by ECC.6.3.17.1 and ECC.6.3.17.2 as applicable and the Bilateral Agreement.