Workgroup Terms of Reference and Membership

GC0168: Submission of Electro Magnetic Transient (EMT) Models

Responsibilities

1. The Workgroup is responsible for assisting the Grid Code Review Panel in the evaluation of Grid Code Modification Proposal **GC0168: Submission of Electro Magnetic Transient (EMT) Models insert mod reference and modification** raised by **NESO** at the Grid Code Review Panel meeting on **21 March 2024**. The proposal must be evaluated to consider whether it better facilitates achievement of the Applicable Grid Code Objectives.

Applicable Grid Code Objectives

i) To permit the development, maintenance and operation of an efficient, coordinated and economical system for the transmission of electricity;

ii) To facilitate 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);

iii) Subject to sub-paragraphs (i) and (ii), to promote the security and efficiency of the electricity generation, transmission and distribution systems in the national; and

iv) 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. In conducting its business, the Workgroup will at all times endeavour to operate in a manner that is consistent with the Code Administration Code of Practice principles.

v) To promote efficiency in the implementation and administration of the Grid Code arrangements.

Scope of work

2. The Workgroup must consider the issues raised by the Modification Proposal and consider if the proposal identified better facilitates achievement of Grid Code Objectives.

3. In addition, the Workgroup shall consider and report on the following specific issues:

Workgroup Term of Reference	Location in Workgroup Report (to be completed at Workgroup Report stage)
a) Implementation and costs;	
b) Review draft legal text;	
c) Consider whether any further Industry experts or stakeholders should be invited to participate within the Workgroup to ensure that all potentially affected stakeholders have the opportunity to be represented in the Workgroup. Demonstrate what has been done to cover this clearly in the report; and	
d) Consider EBR implications	
e) Consider a cost recovery mechanism to receive the model data required to share with a CUSC Workgroup.	
f) Consider the use/introduction into the Legal Text of generator classifications types C, D as opposed to Medium and Large.	
g) Consider approach on collecting models and reference to published guidance/phased application of approach.	
h) Consider codifying the list of Users who are required to submit EMT models.	
i) Consider the scenario where a User is unable to provide an EMT model	
j) Consider whether there is a need for any consequential changes to the DCode and / or DCUSA.	
k) Consider whether there is a need to obtain EMT models from medium power stations embedded in distribution networks and, if so, the mechanism for engaging with the host DNO and the Generator and the process to be followed in the event that the Generator is unable to provide the EMT models or would incur significant costs in doing so.	

l) Consider if we are reflecting international practice including observation of the modelling developments proposed for RfG 2.0 and HVDC 2.0	

4.   As per Grid Code GR20.8 (a) and (b) the Workgroup should seek clarification and guidance from the Grid Code Review Panel when appropriate and required.

5.   The Workgroup is responsible for the formulation and evaluation of any Workgroup Alternative Grid Code Modifications arising from Group discussions which would, as compared with the Modification Proposal or the current version of the Grid Code, better facilitate achieving the Grid Code Objectives in relation to the issue or defect identified.

6.   The Workgroup should become conversant with the definition of Workgroup Alternative Grid Code Modification which appears in the Governance Rules of the Grid Code. The definition entitles the Group and/or an individual member of the Workgroup to put forward a Workgroup Alternative Code Modification proposal if the member(s) genuinely believes the alternative proposal compared with the Modification Proposal may better facilitates the Grid Code objectives The extent of the support for the Modification Proposal or any Workgroup Alternative Modification (WAGCM) proposal WAGCM arising from the Workgroup's discussions should be clearly described in the final Workgroup Report to the Grid Code Review Panel.

7.   Workgroup members should be mindful of efficiency and propose the fewest number of WAGCM proposals as possible. All new alternative proposals need to be proposed using the Alternative Request Proposal form ensuring a reliable source of information for the Workgroup, Panel, Industry participants and the Authority.

8.   All WAGCM proposals should include the Proposer(s)'s details within the final Workgroup report, for the avoidance of doubt this includes WAGCM proposals which are proposed by the entire Workgroup or subset of members.

9.   There is an option for the Workgroup to undertake a period of Consultation in accordance with Grid Code GR. 20.11, if defined within the timetable agreed by the Grid Code Review Panel. Should the Workgroup determine that they see the benefit

in a Workgroup Consultation being issued they can recommend this to the Grid Code Review Panel to consider.

10. Following the Consultation period the Workgroup is required to consider all responses including any Workgroup Consultation Alternative Requests. In undertaking an assessment of any Workgroup Consultation Alternative Request, the Workgroup should consider whether it better facilitates the Grid Code Objectives than the current version of the Grid Code.

11. As appropriate, the Workgroup will be required to undertake any further analysis and update the appropriate sections of the original Modification Proposal and/or WAGCM proposals (Workgroup members cannot amend the original text submitted by the Proposer of the modification). All responses including any Workgroup Consultation Alternative Requests shall be included within the final report including a summary of the Workgroup's deliberations and conclusions. The report should make it clear where and why the Workgroup chairperson has exercised their right under the Grid Code to progress a Workgroup Consultation Alternative Request or a WAGCM proposal against the majority views of Workgroup members. It should also be explicitly stated where, under these circumstances, the Workgroup chairperson is employed by the same organisation who submitted the Workgroup Consultation Alternative Request.

12. The Workgroup is to submit its final Workgroup Report to the Grid Code Review Panel Secretary on **XX Month XXXX** for circulation to Panel Members. The final Workgroup Report conclusions will be presented to the Grid Code Review Panel meeting on **XX Month XXXX**.

Membership

13. It is recommended that the Workgroup has the following members:

Role	Name	Representing
Chair		
Technical Secretary		
Proposer		
Workgroup Member		

Workgroup Member (Alternate)		
Workgroup Member		
Workgroup Member		
Workgroup Member (Alternate)		
Authority Representative		

14. A (*) Workgroup must comprise at least 5 members (who may be Panel Members). The roles identified with an asterisk (*) in the table above contribute toward the required quorum, determined in accordance with paragraph 15 below.

15. The Grid Code Review Panel must agree a number that will be quorum for each Workgroup meeting. The agreed figure for this modification is that at least 5 Workgroup members must participate in a meeting for quorum to be met.

16. A vote is to take place by all eligible Workgroup members on the Modification Proposal and each WAGCM. The vote shall be decided by simple majority of those present at the meeting at which the vote takes place (whether in person or by teleconference). The Workgroup chairperson shall not have a vote, casting or otherwise. There may be up to three rounds of voting, as follows:

   Vote 1: whether each proposal better facilitates the Applicable Grid Code Objectives;

   Vote 2: where one or more WAGCMs exist, whether each WAGCM better facilitates the Applicable Grid Code Objectives than the original Modification Proposal;

   Vote 3: which option is considered to BEST facilitate achievement of the Applicable Grid Code Objectives. For the avoidance of doubt, this vote should include the existing Grid Code baseline as an option.

   The results from the vote and the reasons for such voting shall be recorded in the Workgroup report in as much detail as practicable.

17. It is expected that Workgroup members would only abstain from voting under limited circumstances, for example where a member feels that a proposal has been insufficiently developed. Where a member has such concerns, they should raise these with the Workgroup chairperson at the earliest possible opportunity and certainly before the Workgroup vote takes place. Where abstention occurs, the reason should be recorded in the Workgroup report.
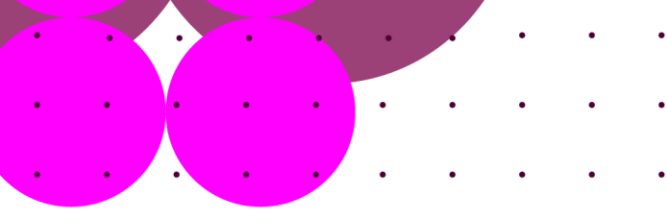
18.   Workgroup members or their appointed alternate are required to attend a minimum of 50% of the Workgroup meetings to be eligible to participate in the Workgroup vote.

19.   The Technical Secretary shall keep an Attendance Record for the Workgroup meetings and circulate the Attendance Record with the Action Notes after each meeting. This will be attached to the final Workgroup report.

20.   The Workgroup membership can be amended from time to time by the Grid Code Review Panel and the Chairperson of the Workgroup.

Terms of Reference Version Control

Issue	Date	Summary of Changes / Reasons	Panel Approval Date
1	XX/XX/20XX	Panel approved Terms of Reference ahead of nominations	XX/XX/20XX