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## Workgroup Consultation Response Proforma

### GC0168: Submission of Electro Magnetic Transient (EMT) Models

Industry parties are invited to respond to this consultation expressing their views and supplying the rationale for those views, particularly in respect of any specific questions detailed below.

Please send your responses to [grid.code@nationalenergyso.com](mailto:grid.code@nationalenergyso.com) **5pm on 21 February 2025**. Please note that any responses received after the deadline or sent to a different email address may not receive due consideration.

If you have any queries on the content of this consultation, please contact [grid.code@nationalenergyso.com](mailto:grid.code@nationalenergyso.com)

Respondent details	Please enter your details	
<b>Respondent name:</b>	Frank Kasibante	
<b>Company name:</b>	NESO	
<b>Email address:</b>	Frank.kasibante1@nationalenergyso.com	
<b>Phone number:</b>	07182774066	
<b>Which best describes your organisation?</b>	<input type="checkbox"/> Consumer body <input type="checkbox"/> Demand <input type="checkbox"/> Distribution Network Operator <input type="checkbox"/> Generator <input type="checkbox"/> Industry body <input type="checkbox"/> Interconnector	<input type="checkbox"/> Storage <input type="checkbox"/> Supplier <input checked="" type="checkbox"/> System Operator <input type="checkbox"/> Transmission Owner <input type="checkbox"/> Virtual Lead Party <input type="checkbox"/> Other

**I wish my response to be:**

(Please mark the relevant box)

☒ **Non-Confidential** (this will be shared with industry and the Panel for further consideration)

☐ **Confidential** (this will be disclosed to the Authority in full but, unless specified, will not be shared with the Workgroup, Panel or the industry for further consideration)

**For reference the Applicable Grid Code Objectives are:**

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

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- 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);*
- 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;*
- 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*
- e) *To promote efficiency in the implementation and administration of the Grid Code arrangements*

\* See Electricity System Operator Licence

**Please express your views in the right-hand side of the table below, including your rationale.**

Standard Workgroup Consultation questions		
1	Do you believe that the Original Proposal and/or any potential alternatives better facilitate the Applicable Objectives?	Mark the Objectives which you believe the Original Solution better facilitates:
		Original <input checked="" type="checkbox"/> A <input type="checkbox"/> B <input checked="" type="checkbox"/> C <input type="checkbox"/> D <input type="checkbox"/> E
		Yes, we support this modification. The Transmission System is becoming increasingly complex, not least as a result of the increasing use of power electronic converter technology much of which is used in modern generator and HVDC schemes. The additional complexity of these schemes necessitates the use of more advanced models so we can continue to operate a safe, secure, affordable and clean system. In this respect, this modification is positive against Grid Code objectives A and C.
2	Do you support the proposed implementation approach?	<input checked="" type="checkbox"/> Yes  <input type="checkbox"/> No
		Yes, we support the implementation approach.
3	Do you have any other comments?	No

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4	Do you wish to raise a Workgroup Consultation Alternative Request for the Workgroup to consider?	<input type="checkbox"/> Yes (the request form can be found in the Workgroup Consultation Section) <input checked="" type="checkbox"/> No Click or tap here to enter text.
5	Do you agree the Workgroup's assessment that GC0168 does not impact the European Electricity Balancing Regulations (EBR) Article 18 terms and conditions held within the Grid Code?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No We do not anticipate any impact on EBR as there are no changes to the Balancing Codes as a result of this modification.
6	Do you have any comments on the Impact of GC0168 on the EBR Objectives?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No We do not anticipate any impact on the EBR objectives

## Specific Workgroup Consultation questions

7	Do you believe it is reasonable to require those Users identified in the draft legal text in PC.A.9.2.2 to provide an EMT model when requested by the NESO noting the importance of accurate modelling on power system	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No EMT models are required from Users for accurate modelling of the power system, including planning, operation and post event analysis.
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	design, operation and post event analysis?	
8	Do you believe the timelines proposed for the submission of an EMT model as drafted in PC.A.9.2.2.1 are appropriate?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No  Click or tap here to enter text.
9	Do you believe that it is appropriate to set out the remuneration and cost recovery provision of the models in the CUSC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No  We believe it is appropriate to set out a cost recovery mechanism for existing User's where an EMT model is requested, noted that some developers may incur quite significant costs arising from provision of a model, especially for those plants which are old and there was never any requirement for such a model when these plants were first connected to the system. The costs required to obtain a model, especially for plant designs which are no longer manufactured, are not insignificant and we believe it would be inappropriate for such costs to result in premature closure of these plants.
10	Do you believe it is appropriate to define the detail of the model submission in an Electrical Standard rather than in a specific part of the Grid Code, or as a separate guidance note. If you do not believe this to be the case, please state why you would support an alternative approach?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No  We believe the use of an Electrical Standard provides the optimum vehicle to give User's and Stakeholders the opportunity to comment on the requirements without the wider burden of a full Grid Code modification.

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11	As part of the electrical standard, it is expected that an EMT model would be submitted in PSCAD Version 5. Do you have any views on this approach and if so, please state what they are?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <p>This requirement stems from the model format the NESO would use to assess EMT models and therefore we support this requirement.</p>
12	Do you believe that the timeline proposed for the Workgroup meetings and target date of September 2025 are reasonable?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <p>Click or tap here to enter text.</p>
13	Does this proposal deal adequately with LEEMPs?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <p>Under the proposal, LEEMPS would fall under the requirements to provide an EMT model where requested, however we acknowledge there could be issues for them to claim against a form of cost recovery mechanism noting they are not a CUSC Party.</p>
14	Please could you share your rationale for a cost-recovery mechanism to be put in place supported by evidence, where available. If no cost recovery mechanism were available, what do you believe the implications would be?	<input type="checkbox"/> Yes <input type="checkbox"/> No <p>We as NESO are unable to provide evidence as we are not a plant owner and operator, however we acknowledge that there are a number of plants in operation which use plant which is no longer manufactured or fully supported by manufacturers. The cost to provide an EMT model of these plants is not insignificant, and we would have concerns if the requirements of Grid Code Modification GC0168 were to be approved without a cost recovery mechanism which could result in premature closure of these plants. Although this is a decision for the Generator, we would</p>

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		note that against the background of CP30 (which acknowledges some gas plant will be required in the future) the incentive to build new gas plants in the current environment is less attractive than it has been in the past.
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