Code Administrator Consultation Response Proforma

GC0141: Compliance Processes and Modelling amendments following 9th August Power Disruption

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@nationalgrideso.com by **5pm 08 July 2022**. 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 Jennifer Groome Jennifer.groome@nationalgrideso.com or grid.code@nationalgrideso.com

Respondent details	Please enter your details
Respondent name:	Fraser Norris
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I wish my response to be:
(Please mark the relevant box) ☒Non-Confidential ☐Confidential

Note: A confidential response will be disclosed to the Authority in full but, unless agreed otherwise, will not be shared with the Panel or the industry and may therefore not influence the debate to the same extent as a non-confidential response.

For reference the Applicable Grid Code Objectives are:

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

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

Standard Code Administrator Consultation questions							
1	Do you believe that the Original Proposal and WAGCM1-14 better facilitates the Applicable Objectives?	Mark the Objectives which you believe each solution better facilitates:					
		Original	☐A	☐B	☐C	☐D	☐E
		WAGCM1	☐A	☐B	☐C	☐D	☐E
		WAGCM2	☐A	☐B	☒C	☐D	☐E
		WAGCM3	☐A	☐B	☐C	☐D	☐E
		WAGCM4	☐A	☐B	☐C	☐D	☐E
		WAGCM5	☐A	☐B	☐C	☐D	☐E
		WAGCM6	☐A	☐B	☐C	☐D	☐E
		WAGCM7	☐A	☐B	☐C	☐D	☐E
		WAGCM8	☐A	☐B	☐C	☐D	☐E
		WAGCM9	☐A	☐B	☐C	☐D	☐E
		WAGCM10	☐A	☐B	☐C	☐D	☐E
		WAGCM11	☐A	☐B	☐C	☐D	☐E
		WAGCM12	☐A	☐B	☐C	☐D	☐E
		WAGCM13	☐A	☐B	☐C	☐D	☐E
		WAGCM14	☐A	☐B	☐C	☐D	☐E
		Our reasoning for coming to the above conclusions is detailed in Question 3 below.					
2	Do you support the proposed implementation approach?	☒Yes ☐No					
		Yes, we support the proposed implementation approach.					
3	Do you have any other comments?	Yes, we have a number of other comments, as set out below. **Independent Engineer:** The proposed obligation to demonstrate compliance falls upon the User, hence it is up to the User to decide on the approach taken. This obligation is independent of the site's MW capacity. If the User can demonstrate compliance itself, then the services of an Independent Engineer are redundant and, if this were a mandatory requirement, this would represent an unnecessary expense. Should the User wish to employ the services of an Independent Engineer, then they are free to do					

		so. If the services of one of a group of suitably qualified individuals (Independent Engineers) is mandated, then this group of individuals effectively becomes an oligopoly, leading to an additional requirement (for Ofgem) to regulate their activities (including their prices). The definition of 'suitably qualified' is not clear either – the criteria would need to be developed. Overall this administrative burden would undoubtedly lead to an increase in cost, which would ultimately be born by the consumer. For these reasons SSE Generation strongly opposes the proposal to mandate the employment of an Independent Engineer to review simulation reports produced for the purposes of demonstrating compliance. As such, SSE Generation cannot support the Original proposal, nor WAGCMs 3,9,10,11,12. **Sharing for SSCI / SSTI Studies** NGESO is the only party which has access to all of the data required to identify the risk of adverse controller interactions and as such it should take the lead on this analysis – ideally with in-house capability; it should not be necessary to require the services of an external consultant. It is not unreasonable to expect the Electricity System Operator to have the in-house capability required to identify and mitigate the risk of adverse controller interactions. SSE Generation would not object to the sharing of information for this purpose, however, particularly in the case of adverse controller interactions, the decision will be made by the manufacturer which owns the intellectual property rights. Depending on the arrangements put in place for the sharing of information, there is a risk that the manufacturer does not give their consent. **Provision of Torsional/Shaft Data from Older Plant** SSE Generations' hydro fleet comprises numerous synchronous gensets, some dating as far back as circa 1930. Each hydro genset is unique, and in many cases the torsional data being requested is simply not available; obtaining this data with sufficient accuracy would therefore be extremely difficult, expensive, and time-consuming, as in many cases a station outage and overhaul would be required to allow component inspection. In many cases this exercise would be purely academic and a 'tick box' exercise, rather than as mitigation for an appreciable risk which has actually been identified. SSE Generation therefore strongly opposes the notion to mandate this requirement as a blanket rule applicable to all generators regardless of age. In cases where an evidenced appreciable risk of SSTI has been clearly identified, SSE Generation believes it is, in those limited circumstances, reasonable to be asked to provide this data. However, given the amount of work involved in obtaining the data, it is also of the view that the associated expense

		should be met by the requester, because it is the requester which is introducing the risk to the system. SSE Generation therefore cannot support the Original proposal, nor WAGCMs 1,3,6,7,9,10. **RMS and EMT Model Submission** SSE Generation is generally supportive of the principle of a new requirement to provide RMS and EMT models to NGESO according to a specification for new connections where those are readily available. There is serious concern, however, regarding the risk that manufacturers may (will?) refuse to agree to supply the required models – either to the developer or to NGESO – due to the risk of their proprietary information (particularly EMT models) being disclosed to a competitor, via another User. The proposed obligation to ensure Grid Code compliance is on the User, is therefore unreasonable in all circumstances as this would not be under the User's full control. There is also the risk that this new requirement will ultimately lead to an increase in cost to the consumer, as manufacturers may review their pricing strategy following the introduction of this new requirement. **Fault Ride Through Definition & Retrospective Requirements** As a matter of principle, SSE Generation strongly opposes any proposal which introduces a retrospective requirement placed on Users which then necessitates significant and expensive modifications to existing plant. User equipment is designed according to the Grid Code requirements at the time they were procured / constructed / commissioned; over-engineering equipment during the design process would add unnecessary cost, and hence this activity never occurs. When Users are issued with a FON following Grid Code compliance testing, this is NGESO stating that, based on the evidence presented, the User has demonstrated compliance with the Grid Code requirements at that time. It is unreasonable to subsequently change the Grid Code requirements on a retrospective basis (unless of course the full cost, to the User, of making these changes is met completely by NGESO). SSE Generation generally supports any modification which clarifies the FRT requirements provided this is done on a forward-looking basis only. This, given the retrospective application, therefore rules out the Original proposal and WAGCMs 1,3,4,7,8,9,11,12,13,14. We also note that the FRT requirements are being clarified by a dedicated Grid Code modification – GC0155 – so this proposal ought to be discussed in that forum. **Compliance Repeat Plan** The original proposal of a compliance repeat plan every five years should not be required because this is already covered by the submission of Week 24 data to NGESO. This new

		proposed requirement would therefore introduce an unnecessary burden on Users as it would duplicate effort. As a compromise, SSE Generation would support the principle of a new requirement on Users to notify NGESO of any material changes as they occur. **Enhanced FRT Studies** SSE Generation supports the proposal to identify complex connection requests on a case-by-case basis and define the required set of enhanced FRT studies at the beginning of the process. **Concluding Remarks:** Since the maximum number of combinations exceeds 14, it has been impossible to optimise the selection for each section in turn. It would have been better to separate GC0141 into multiple separate modification proposals, so that the most optimal solution could be selected for each. On balance, of all the options, SSE Generation is most in favour of WAGCM 2.