

Workgroup 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 on **30 March 2021**. Please note that any responses received after the deadline or sent to a different email address may not receive due consideration by the Workgroup.

If you have any queries on the content of this consultation, please contact Joseph Henry Joseph.henry@nationalgrideso.com or grid.code@nationalgrideso.com

Respondent details	Please enter your details
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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 regarding the Workgroup Consultation in the right-hand side of the table below, including your rationale.

Standard Workgroup Consultation questions		
1	Do you believe that the GC0141 Original	It may in parts.

	Proposal better facilitates the Applicable Objectives?	
2	Do you support the proposed implementation approach?	Click or tap here to enter text.
3	Do you have any other comments?	<p>The Addition of a new paragraph to CC.6.3.15 and ECC.6.3.15</p> <p>The Proposer is suggesting that the new text (see below) being added to CC.6.3.15 and ECC.6.3.15 are just clarifications, however I believe these are a new retrospective requirements be applied to all Users.</p> <p>“For the avoidance of doubt, for up to 30 minutes following such a fault or disturbance Generating Units, Power Park Modules, DC Converters and OTSDUW Plant and Apparatus are required to remain connected and stable provided system operating conditions have returned within those specified in CC.6.1.”</p> <p>This is adding a requirement that a Unit must stay connected for 30 minutes following fault or disturbance, now assuming it doesn't mean ignoring PNs and BOAs (but as drafted it doesn't say that), nor is it intended to remove the dispensations of (E)CC.6.3.15.3, it now says units shall not trip off no matter the circumstances if there has been a fault or disturbance within the last 30 minutes. This additional requirement is a safety concern as currently operators are permitted to trip or shutdown units whenever a plant or apparatus moves into an unsafe operating condition. Whilst these events might have nothing to do with the fault or disturbance and could be permitted by drafting changes to the proposed text, there is still the possibility that the event has been caused by the fault and tripping needs to be permitted. For example there are stations which can become completely disconnected from the main transmission system due to lightning strikes on the transmission system, these unit have to trip on overspeed protection in this situation. Similarly, a system fault could initiate an internal fault in an existing item of apparatus such as an ageing transformer which again would be required trip. This proposed change appears to be creating a situation where the transmission system faults are seen dangerous and need to be cleared but other faults on other party's assets are not as important and should not be cleared.</p>

		<p>Whilst that was the main issue, I also have issues with what is defined as a fault or disturbance to start the 30 minute clock ticking. Is it a fault anywhere on the transmission network? Does the voltage at my connection point have to drop below 0.9 pu? or what?</p> <p>Currently it is accepted that it is not in a party's commercial interest to trip off unplanned and they with incur out of balance costs, however modification appears be making tripping a compliance issue with the arbitrary timing of system fault events determining there seriousness.</p>
4	Do you wish to raise a Workgroup Consultation Alternative Request for the Workgroup to consider?	Possibly as this modification is based on the range of different areas there may be a requirement to raise some alternative proposals with some sections removed.
Modification Specific Workgroup Consultation questions		
5	What should the Independent Engineer's deliverables be with respect to the outcome of the compliance process?	The ESO should still be carrying out the compliance process as at the end of the day it is there duty. Introduction of a third-party Independent Engineer into this process should be avoided at it will just add complication to the process. If the ESO requires additional assistance in assessing compliance due to technical difficulties in understanding the data supplied by the User then the ESO can employ an Independent Engineer.
6	Should there be specific requirements on the retention of data for the User and/or the ESO?	Its difficult to answer this without a better understanding of what data is being referred to here. It would be useful however if Users were able to see and review the current data held by the ESO on a specific site.
7	Should the detailed design stage be more clearly identified within the Grid Code?	Click or tap here to enter text.
8	What stages of implementation would the industry believe are appropriate?	Click or tap here to enter text.
9	Should the ESO be required to undertake the responsibilities associated with an independent engineer?	Reading the OFGEM report into the 9 August 2019 in section 3.13 it contains the statements "The ESO relied significantly on self-certification", "the ESO relied on the RWE's confirmation that the modifications had not impacted the generator's

	Please outline your rationale.	<p>compliance” and finished with the statement “No independent compliance testing or verification was carried out”. These statements do not specifically state that a third-party Independent Engineer is required, all as these statements are requiring is a party independent from the original party needs to check and the ESO itself does meet this criterion.</p> <p>Currently compliance assessment and system operability are the responsibility of the ESO. The ESO currently appears to be trying to reduce their involvement and requirements in this process by implementing more self-certification. The proposed introduction of a third-party Independent Engineer appears to be a further step in the reduction in the ESO duties whilst passing them on to Users to contract third-parties along with the additional costs.</p> <p>The other problem the introduction of a third-party Independent Engineer creates for Users is that they now need to get 3 independent parties to agree, ie the ESO, the supplier and the Independent Engineer. This will potentially lead to increased costs to Users and risks Users being stuck in the middle of disputes between everyone.</p> <p>Hence ESO should still retain its current requirements and if the ESO has technical difficulties in understanding the data supplied by the User it can employ an Independent Engineer to assist its assessment.</p>
10	Should there be greater definition be given to “substantial modification” given that the self-certification process places the onerous on the User to make these decisions?	It is difficult to clearly identify what modifications are likely to cause system issues.
11	Should there be a review of the effectiveness of GC0141 post implementation and after the industry has experience of implementing?	Not clear how this would take place nor the benefits.

12	What are your thoughts on the workgroup's discussions regarding compliance repeat plan? How would this work in regard to Independent Engineer Verification?	<p>In principle this does not appear to be a major issue, however it is not clear what is supposed to happen with older Units which were not required to supply all the data originally and may not have additional data which is now being requested.</p> <p>The biggest risk is an implementation problem as suddenly all Users need to simultaneously submit this data and this could cause a bottleneck leading to issuing of LONs and possible derogation requests.</p> <p>If this is only limited to resubmission of original data it is not clear what function a third-party Independent Engineer would perform.</p>
13	Do you believe that screening processes should be applied ahead of detailed dynamic EMT simulation, and if so, do you believe data exchange should support that?	Click or tap here to enter text.
14	Do you agree that the roles and responsibilities associated with interaction studies should be detailed and clarified, and to what extent?	Yes as it's not clear at the moment whether all parties who equipment could potentially affected are informed that such studies are even taking place.
15	Do you agree that improved definitions of the types of analysis and definitions suitable analysis environments ahead of the detailed design phase provides useful clarity and minimised project disruption in delivering the principles of this grid code change? Should these form part of legal text or made available with the modification as	Click or tap here to enter text.

	guidance that may be separately updated from time to time	
16	Do you agree that clarifying roles and responsibility in the management of interaction studies assists more clearly defining the analysis needs of each party, minimising confusion, unnecessary overlap and cost in the design phase?	Yes
17	Do you agree that small signal analysis supporting the screening of interaction cases should be clearly specified within this grid code change, to better focus the range of EMT studies being discussed, and within the context of existing SSTI and SSO analysis better inform assessment of risks and the need for detailed dynamic simulation which includes shaft data for SSTI?	<p>Yes, this will make it clearer what detailed simulations are required.</p> <p>There is another area which does not seem to be addressed anywhere, this is that new connections are required to carry out assessments to show that they will not cause SSTI. The results of these studies only require to be shared with the ESO, the other parties who's equipment is potentially at risk are not provided with any details of the assessment.</p>
18	What is your view on the separation of the simplified RMS model and EMT model when it comes to confidentiality, distribution and the protection of IP?	Click or tap here to enter text.
19	As it currently stands, what is your view on the process by which detailed manufacturer	Click or tap here to enter text.

	EMT-type models are exchanged for necessary studies as part of project delivery?	
20	Are sections PCA.9.8 and PC.A.9.9 better suited to a guidance document and or should they be included, at least partly, within the legal text? Are there any specific concerns with respect to requirements set out within those sections?	PC.A.9.8 & .9.9 are better held within the Grid Code as there is more industry control over modifications and changes, than being contained in a guidance document.
21	In terms of the requirement for existing users to provide sub-synchronous torsional data for existing plant that may be provided, do you see any issues in regard to the provision of this data?	<p>Retrospective application of these requirements can be very difficult and costly, even if the OEM exists. Under the current requirement this data can be requested (I believe at the cost of the party requesting the data), but it can take years to manage to get the OEM interested in looking through their archives to start to do the calculations. What will happen to existing Users who find themselves in the position they are unable to obtain this data?</p> <p>The current arrangements are better as the process to obtain data is only started if it is identified that data is required, however under the proposed new arrangements parties could be involved in a very difficult process to obtain data which may never be used.</p>
22	Should responsibility for interoperability remain with the generator or the ESO, inclusive of interoperability studies such as control interactions and SSCI/SSTI studies? Please provide your reasoning.	Yes, as the ESO is the only party with access to all system data.