

**Workgroup Consultation Response Proforma****GC0151: Fault Ride through process**

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](mailto:grid.code@nationalgrideso.com) by **5pm on 16 August 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 **Nisar Ahmed**, [Nisar.Ahmed@nationalgrideso.com](mailto:Nisar.Ahmed@nationalgrideso.com) or [grid.code@nationalgrideso.com](mailto:grid.code@nationalgrideso.com)

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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 GC0151 Original Proposal better facilitates the Applicable Grid Code Objectives?	<p>a) To permit the development, maintenance and operation of an efficient, coordinated and economical system for the transmission of electricity [SPR] Neutral</p> <p>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); [SPR] Neutral</p> <p>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; [SPR] Neutral</p> <p>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 [SPR] Neutral</p> <p>e) To promote efficiency in the implementation and administration of the Grid Code arrangements [SPR] Neutral</p>
2	Do you support the proposed implementation approach?	Partially. The proposal is a positive step as it is seeking to find a compromised position between its content and the interim process outlined by NGESO on 17th May letter but SPR believes this process should not be codified in the GB Grid Code as will create more issues in relation to the interpretation of the clauses wanted to be modified by the proposal in the Grid Code CCs and ECC sections.
3	Do you have any other comments?	No
4	Do you wish to raise a Workgroup Consultation Alternative Request for the Workgroup to consider?	No
Specific GC0151 Workgroup Consultation questions		

5	Do you have any comments on the Process to be followed after a suspected fault ride through failure?	<p>SPR have the following concerns with the proposal:</p> <ul style="list-style-type: none"> <li>the commercial impact on generators and consumers because of the potential power output constraints could be significant</li> <li>establishing the cause of a trip cannot always be done immediately;</li> <li>there are timescales with respect to actions throughout the proposed process</li> </ul>
6	Do you have any comments on the required sharing by the ESO of largest infeed loss information?	SPR considers that this information should be shared with User
7	Do you have any comments on the sharing of user lessons learned information (including any information from Fault Data/Recorders)?	<p>SPR have reservation on sharing own data from generating plant fault recorder publicly. SPR would like more clarity on what a definition of user lesson learned would be as potentially the User could be in breach of confidentiality inadvertently with a manufacturer if information related to a fault is disclosed to NGESO (or the wider industry). SPR consider that information from the User can be shared with NGESO confidentially</p>
8	Do you have any comments on the sharing of information by the ESO on faults (with or without identified FRT issues)?	<p>SPR consider that sharing such data will be helpful on finding the root cause of a potential FRT non-compliance. For the issue of voltage waveform, it would be advantageous to have NGESO fault recorders data even if the User has its own fault recorders installed on site. These devices on occasion can fail to record data properly due to several issues (e.g. power supply failure, communication issue, faulty components) and knowing that NGESO will provide fault data would be a great advantage, if the User fault recorder fails to record data properly. This also will be of great help for very old sites where fault recorders are not installed.</p>
9	The proposal sets out the time to investigate by the User et al. Do you believe this time is appropriate or not? Please provide your rationale	SPR considers that the time proposed for investigation may be adequate as NGESO interim process seems to be silent on some timescales
10	The proposal sets out the MW threshold. Do you believe this is appropriate or not?	SPR consider that ideally the power constraint should be only implemented if it is technically demonstrated after an investigation that a FRT non-compliance occurred, but the proposed MW

	Please provide your rationale	threshold seem fair as this will not allow an unnecessary/unacceptable degree of power output constrain.
11	The proposal sets out the level of the forced constraint. Do you believe this is appropriate or not? Please provide your rationale	The level of forced constraint in the proposal is considered adequate. As per response to question 10 this will not constrain power output unnecessarily to an unacceptable level
12	Do you believe that the methodology should apply differently to projects in receipt of an ION or a FON?	No, if the issue is only related to FRT. SPR would like to highlight that any project prior to obtaining an ION or a FON must demonstrate FRT compliance to connect to the grid so having an ION or a FON should not have material impact on the methodology.
13	Should the ESO have the ability to constrain a User suspected of FRT failure ahead of further investigation?	No. Until a FRT non-compliance is technically investigated then a constraint may be considered acceptable.
14	In respect of the voltage wave form data, should the Grid Code prescribe or not the format in which that data is to be provided? Please provide your rationale.	Yes, as there are industry standard formats for such type of data to be exchanged like COMTRADE. Fault recorders in the market can produce COMTRADE files. Defining this data to be machine readable data is too generic as NGENSO/User could then think that a plot of the waveforms should be sufficient when raw data is more useful and could assist with root cause analysis and any simulations required to find out any potential issues.
15	In respect of the constraint limitation to be applied to affected parties, should this be set within a range or a fixed value? If so, what do you believe that to be. Please provide your rationale.	SPR considers that the constraint limitation should be applied within a range as this will allow more flexibility to generators and avoid unnecessary power constraints
16	Would you agree that a generator should continue to operate if there was a derogation required?	Yes, as NGENSO will know at this stage the non-compliance and risk could be managed adequately by the ESO.

17	Do you believe that generators operational history should be taken into account when deciding upon the constraint level whilst an investigation is taking place?	Yes, as it could be the case that the generators have rode through faults in the past similar to the one that raises an investigation.
18	Do you have any comments on possible Alternative from the ESO as included in the consultation?	SPR does not support NGESO alternative proposal
19	Do you have any comments on the Strawman document on the FRT process?	<p>SPR comments on Appendix 8</p> <ul style="list-style-type: none"> <li>• SPR no changes shall be performed in Grid Code CC section as this could impact retrospectively plant that is working perfectly fine and riding through faults. SPR disagrees with the proposed changes to the CC section in the GB Grid Code</li> <li>• ECC.6.3.15.8 (vii) TGN 288 only applies in England and Wales not Scotland. As mentioned during the workgroup discussion there is not clear high voltage ride through requirement in the GB Grid Code. The proposed clause seems to be too generic. SPR suggest that a proper workgroup to define HVRT requirements shall be facilitated by the NGESO</li> <li>• SPR disagrees with the text inserted in page 19 of appendix 8 “<b>within a tolerance of plus or minus 10% of the Rated Capacity</b>” This is not considering renewables generators as not necessarily renewables generator will be at rated capacity before a fault. This could also be extended to some conventional generator</li> </ul>
<b>Legal Text</b>		