

## Grid Code Workgroup Consultation Response Proforma

### GC0100 EU Connection Codes GB Implementation – Mod 1

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 by **5pm on 2 October 2017** to [grid.code@nationalgrid.com](mailto:grid.code@nationalgrid.com).

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

Any queries on the content of the consultation should be addressed to Chrissie Brown at [Christine.brown1@nationalgrid.com](mailto:Christine.brown1@nationalgrid.com)

<b>Respondent:</b>	<i>Alan Creighton</i>
<b>Company Name:</b>	<i>Northern Powergrid</i>
<b>Please express your views regarding the Workgroup Consultation, including rationale.  (Please include any issues, suggestions or queries)</b>	<p><i>For reference, the Grid Code objectives are:</i></p> <ul style="list-style-type: none"><li>i. To permit the development, maintenance and operation of an efficient, coordinated and economical system for the transmission of electricity</li><li>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)</li><li>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 electricity transmission system operator area taken as a whole</li><li>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; and</li><li>v. To promote efficiency in the implementation and administration of the Grid Code arrangements</li></ul>

### Standard Workgroup Consultation questions

Q	Question	Response
1	Do you believe that GC0100 Original proposal, or any potential alternatives for change that you wish to suggest, better	The original proposal and the potential alternative proposal on banding would both better facilitate the Grid Code and Distribution Code objectives. We are not convinced that the potential alternative related to

	facilitates the Grid Code Objectives?	the 'stringency' concern would better facilitate these objectives.
2	Do you support the proposed implementation approach?	Yes
3	Do you have any other comments?	No
4	Do you wish to raise a WG Consultation Alternative Request for the Workgroup to consider?	No <i>If yes, please complete a WG Consultation Alternative Request form, available on National Grid's website, <a href="http://www2.nationalgrid.com/uk/industry-information/electricity-codes/grid-code/modifications/forms-and-guidance/">http://www2.nationalgrid.com/uk/industry-information/electricity-codes/grid-code/modifications/forms-and-guidance/</a> and return to the Grid Code inbox at <a href="mailto:grid.code@nationalgrid.com">grid.code@nationalgrid.com</a></i>

### Specific GC0100 questions

Q	Question	Response
1	Removing More Stringent Requirements' concerns have been expressed by some Workgroup members that applying more stringent requirement on newly connecting parties (that fall within this scope of the EU Network Codes for generation, demand and HVDC systems) maybe incompatible with EU law. Do you have any views on this topic that could assist the Workgroup when they are considering the topic in due course?	We are not convinced by the arguments put forwards, but have no specific comments on the legality of the original proposal. Legal guidance from BEIS and / or Ofgem would probably be beneficial.
2	Are you comfortable with using the EU definition of Maximum Capacity instead of the GB definition of "Registered Capacity"?	It is not really clear from the consultation documentation what the definition of Maximum Capacity is and how it differs from that of Registered Capacity. We note that the Distribution documents relate to Registered Capacity; it seems reasonable to continue to use this existing terminology where possible to help make the changes easier for customers to understand..
	<b>Fast Fault Current Injection questions</b>	
3	What are your views on options	Option 2 & 3 seem more realistic at the moment. If

	1, 2 and 3 as set out in paragraph 4.4 for Fast Fault Current Injection and which option (if any) would you prefer?	there is a need to implement option 1, then this would be best properly considered by a separate GCode WG. We understand the concerns about codifying a requirement to implement what is currently a non-proven solution.
4	Do you have any alternative fast fault current injection solutions noting that the requirement applies to the Converter not the wider Power System?	No
5	In considering the three Fast Fault Current Injection options 1, 2 and 3 in paragraph 4.4 do you have any comments in relation to technology readiness, cost implications, and can they be implemented date within the context of product development timescales?	No
6	Do you have any evidence to support your views?	N/A
7	Do you have any views on the specific costs related to the additional requirements?	No
8	Is the current proposed wording for the remote end HVDC and DC Connected Power park modules sufficient to facilitate future new technology?	No response
	<b>Banding questions</b>	
9	What are the specific costs related to the additional requirements?	No response
10	Do you have any views on the banding thresholds for the original and those suggest for the possible alternative?	We have a slight preference for the possible alternative banding threshold on the basis that it probably require less change now, particularly given that NGET can propose different thresholds in 3 years (from EIF) when there may be more experience and evidence of any additional cost. However the original proposal is likely to be more future proof and it would be reasonable to implement this if there is no evidence that it will materially increase costs.
11	Can you provide any feedback/comments on the associated legal text?	We have separately provided comments on the proposed legal text associated with the Distribution Code to the technical authors, in order that these comments could be factored into the legal text that is currently being drafted for GC0102. It is difficult to form a view of the legal text until a complete set of

		<p>legal text, including the definitions, required to implement RfG is available.</p> <p>If any of the potential alternatives are developed, stakeholders will need to have visibility and the opportunity to comment on the legal text required to implement them.</p>
	<b>Fault Ride Through</b>	
12	<p>Do you support the fault ride through voltage against time curves</p> <p>If not please state why you disagree, what alternative you would recommend and your justification for any alternative?</p>	No response
13	<p>Do you have any specific views about the proposal to modify the stage 2 under voltage protection for distributed generation interface protection?</p>	The proposal seems reasonable to help ensure that the ride through capability can be delivered in practice.
	<b>Other questions</b>	
14	<p>Does the Legal drafting contained in annex 2 and 3 deliver the intent of the solution outlined in section 3?</p>	See response to 11
15	<p>Do you have any information based on the proposed solution in respect of implementation costs?</p>	No response