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. 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

Respondent:	*Graeme Vincent* *Graeme.vincent@spenergynetworks.co.uk*
Company Name:	*SP Energy Networks*
Please express your views regarding the Workgroup Consultation, including rationale. **(Please include any issues, suggestions or queries)**	*For reference, the Grid Code objectives are:* i. To permit the development, maintenance and operation of an efficient, coordinated and economical system for the transmission of electricity 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) 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 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 v. To promote efficiency in the implementation and administration of the Grid Code arrangements

Standard Workgroup Consultation questions

Q	Question	Response
1	Do you believe that GC0100 Original proposal, or any potential alternatives for change	We believe that the proposals outlined in the GC0100 Original Proposal better facilitate the Grid Code Objectives.

	that you wish to suggest, better facilitates the Grid Code Objectives?	
2	Do you support the proposed implementation approach?	Yes
3	Do you have any other comments?	In general, it would have been helpful to have provided further information (eg summary of results and what on the studies which have been undertaken which have enabled NGET certain conclusions to be reached. Reading through
4	Do you wish to raise a WG Consultation Alternative Request for the Workgroup to consider?	No

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?	Whilst we have some sympathy with the views being expressed this is not the interpretation that we understand nor the expectation of those involved during the development and drafting process of the network codes at the European level..
2	Are you comfortable with using the EU definition of Maximum Capacity instead of the GB definition of "Registered Capacity"?	As long as the definition is made clear and unambiguous and is used in a consistent manner by all parties and all Codes then the use of maximum capacity as a definition should be okay. However, confusion may arise if the terms are used interchangeably and
	Fast Fault Current Injection questions	
3	What are your views on options 1, 2 and 3 as set out in paragraph 4.4 for Fast Fault Current Injection and which option (if any) would you prefer?	No particular comment, though specification of a solution which is not yet commercially or technical proven at this level is perhaps not the ideal solution and we would support the establishment of an interim solution which would allow some further development period to establish a technologically 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 response.
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?	See response to 3 above.
6	Do you have any evidence to support your views?	No response
7	Do you have any views on the specific costs related to the additional requirements?	No response
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
	Banding questions	
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 agree with the proposed (original) proposal as the proposed thresholds more closely align with the existing requirements in Scotland and therefore continue to ensure the operation of the Electricity system in Scotland. We believe that this reflects the direction of travel required to adapt to the changing system background with an ever increasing penetration of distributed generation connecting to Distribution networks. Adopting a higher set more closely aligned to those of Central Europe does not seem to be an appropriate solution given the relative magnitude of the CE system compared to that in GB. In addition given the evidence that a number of European TSOs are actively trying to establish lower bandings than the maximum values proposed in the RfG, we believe alignment to these higher levels which other European TSOs are seeking to reduce is not an appropriate solution. We do appreciate that lowering these thresholds is likely to have an increase in associated compliance assessment and monitoring costs for other parties

		including DNOs, however, as stated within the document it is likely that exist smaller generators would need to have certain technical requirements to meet the future requirements for the management and operation of the national electricity transmission network.
11	Can you provide any feedback/comments on the associated legal text?	Whilst I appreciate that the track changes are present to assist the reader understand the changes which have been made, we did find it quite difficult to follow what a 'clean' version of the text would look like. Also as we have a limited time to read and review all the associated legal text associated with this modification and that of GC0101 (both distribution and transmission elements.) which has limited us to high level comments only at this stage.
	Fault Ride Through	
12	Do you support the fault ride through voltage against time curves If not please state why you disagree, what alternative you would recommend and your justification for any alternative?	No response
13	Do you have any specific views about the proposal to modify the stage 2 under voltage protection for distributed generation interface protection?	No we don't have any specific views on this aspect, though acknowledge that changes will be required to align with RfG requirements.
	Other questions	
14	Does the Legal drafting contained in annex 2 and 3 deliver the intent of the solution outlined in section 3?	Whilst I appreciate that the track changes are present to assist the reader understand the changes which have been made, we did find it quite difficult to follow what a 'clean' version of the text would look like but believe so.
15	Do you have any information based on the proposed solution in respect of implementation costs?	No response