

## Grid Code Workgroup Consultation Response Proforma

### GC0101 EU Connection Codes GB Implementation – Mod 2

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>pthomas@nordex-online.com</i>
<b>Company Name:</b>	<i>Nordex Acciona Wind Power</i>
<b>Please express your views regarding the Workgroup Consultation, including rationale.</b> <b>(Please include any issues, suggestions or queries)</b>	<i>For reference, the Grid Code objectives are:</i> <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 GC0101 Original proposal, or any potential alternatives for change that you wish to suggest, better	Yes

	facilitates the Grid Code Objectives?	
2	Do you support the proposed implementation approach?	Yes
3	Do you have any other comments?	See below
4	Do you wish to raise a WG Consultation Alternative Request for the Workgroup to consider?	No

### Specific GC0101 questions

Q	Question	Response
1	As set out under 'Potential Alternatives - (a) 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?	No Comment
2	Do you agree that the comments raised from the GC0048 voltage/reactive consultation have been addressed, in particular those relating to the Offshore reactive range. If not please advise why these issues have not been addressed?	No Comment
3	Do you agree that the comments raised from the GC0087 frequency response consultation have been addressed; if not please advise why these issues have not been addressed?	No Comment
4	Do you agree with the proposed	- ECC.6.3.2.6.1

	<p>voltage/ reactive and frequency requirements (including associated diagrams and parameters) captured under the HVDC Code are reasonable? If not please advise why.</p>	<ul style="list-style-type: none"> <li>- The referred parts ECC.6.3.2.3.2-5 apply to synchronous units. For clarification, do these parts also apply to power park modules of type C and D, and only in case of connection to embedded customers system or private network.</li> <li>- ECC.A.7.2.2 - Q(U) mode</li> <li>- The covered QU range of ECC.A.7.2.2c exceeds (ranges CDE and AGH) for some points the required QU steady state capability defined in Figure X3 for connections below 33 kV. Can it occur that continuously acting automatic voltage control is required from a power module connected to a voltage below 33 kV and will it be allowed to limit Q to what is shown in Figure X3? Do we interpret it correct that these range only have to be fulfilled if no current limits are exceeded? Please extend to current OR voltage limits. Nordex have implemented them where the connection permits reactive capability above X3. So the areas should be shaded and offered by the PPM (if available)</li> <li>- ECC.6.1.2.1.2</li> <li>- If the frequency drops for a few seconds below 51.5 Hz and then again above 51.5 Hz, the power park module have to remain connected again for 15 minutes? Can a statement be added here that if 15 min including short interruptions where the frequency drops below 51.5 Hz.</li> <li>-</li> </ul>
5	<p>Do you have any views on the time durations proposed for the frequency ranges defined in the Annex I of the HVDC Code? The time durations must be longer than those stipulated for RfG, however is there any materiality for an HVDC System in setting a value longer than that required under the RfG Code.</p>	<p>No Comment</p>
6	<p>Do you believe it is reasonable to require HVDC Systems, DC Connected Power Park Modules and Remote End HVDC Converter Stations to meet similar requirements to Type D Power Park Modules defined under RfG? If not please state so.</p>	<p>No Comment</p>

7	Do you agree that the Offshore Transmission Arrangements (OTSDUW) should be included as part of the drafting?	No Comment
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