

## Grid Code Workgroup Consultation Response Proforma

### GC0125 'EU Code Emergency & Restoration: Black Start testing requirements for Interconnectors, HVDC System Owners and Owners of Transmission DC Converters'

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 **12 July 2019** to [christine.brown1@nationalgrideso.com](mailto:christine.brown1@nationalgrideso.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@nationalgrideso.com](mailto:christine.brown1@nationalgrideso.com)

These responses will be considered by the Workgroup at their next meeting at which members will also consider any Workgroup Consultation Alternative Requests. Where appropriate, the Workgroup will record your response and its consideration of it within the final Workgroup Report which is submitted to the Grid Code Review Panel.

<b>Respondent:</b>	<i>Please insert your name and contact details (phone number or email address)</i>
<b>Company Name:</b>	<i>Please insert Company Name</i>
<p>Please express your views regarding the Workgroup Consultation, including rationale.</p> <p>(Please include any issues, suggestions or queries)</p>	<p>(a) <i>To permit the development, maintenance and operation of an efficient, coordinated and economical system for the transmission of electricity</i></p> <p>(b) <i>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);</i></p> <p>(c) <i>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;</i></p> <p>(d) <i>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</i></p> <p>(e) <i>To promote efficiency in the implementation and administration of the Grid Code arrangements</i></p>

## Standard Workgroup consultation questions

Q	Question	Response
1	<b>Do you believe that GC0125 Original proposal, better facilitates the Grid Code Objectives?</b>	Yes subject to achieving clarification on the comments noted below.
2	<b>Do you support the proposed implementation approach?</b>	Yes
3	<b>Do you have any other comments?</b>	What is the meaning of 'HVDC achieving a stable operating point at an agreed capacity as agreed with the Company'? Is this related to capability to operate at a specific transfer, if yes, how can this be tested?
4	<b>Do you wish to raise a Workgroup Consultation Alternative Request for the Workgroup to consider?</b>	No

## Specific questions for GC0125

Q	Question	Response
5	<b>Do you believe the Black Start testing requirements set out in the draft legal text at OC5.7.1(a) – (e) accurately reflects the testing requirements and adequately distinguishes the obligations between Black Start Power Stations and Black Start HVDC Systems acknowledging that there are differences between them on the basis of their technology. Please provide your rationale bearing in mind a power station could be made up of a number of Black Start Generating Units whereas as Black Start HVDC System would apply to each HVDC System.</b>	-

Q	Question	Response
6	<p><b>Do you have any comments on the proposed legal text in Annex 4 of the consultation?</b></p>	<p>Yes- the requirements specified in OC5.7.2.3 and OC5.7.2.5 seem to be at odds with each other. Under 5.7.2.3 (c) the test is deemed passed if the HVDC System or DC Converter Station is able to energise the busbar of the isolated AC-substation, however, under OC5.7.5 there is an expectation that in order to pass a Black Start Test (of which the Black Start HVDC Test specified in OC5.7.2.3 is one) that you need to synchronise with the system. Also ECC.6.3.5.4 also suggests there is an expectation the “HVDC System shall synchronise” within defined frequency and voltage limits.</p> <p>Clarification on whether synchronisation is required as part of a Black Start HVDC test is required and amendments made to the relevant clauses/definitions to recognise this.</p>