

**Workgroup Consultation Response Proforma****GC0156: Facilitating the Implementation of the Electricity System Restoration Standard**

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 **21 December 2022**. Please note that any responses received after the deadline or sent to a different email address may not receive due consideration.

If you have any queries on the content of this consultation, please contact Banke John-Okwesa [banke.john-okwesa@nationalgrideso.com](mailto:banke.john-okwesa@nationalgrideso.com) or [grid.code@nationalgrideso.com](mailto:grid.code@nationalgrideso.com)

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**I wish my response to be:**

(Please mark the relevant box)

☒ Non-Confidential☐ Confidential

*Note: A confidential response will be disclosed to the Authority in full but, unless agreed otherwise, will not be shared with the Panel or the industry and may therefore not influence the debate to the same extent as a non-confidential response.*

**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 using the tick boxes and text box spaces provided in the right-hand side of the table below.

Standard Workgroup Consultation questions		
1	Do you believe that the Original Proposal better facilitates the Applicable Objectives?	<p>Mark the Objectives which you believe each solution better facilitates:</p> <p>Original    <input checked="" type="checkbox"/> A    <input type="checkbox"/> B    <input type="checkbox"/> C    <input type="checkbox"/> D    <input type="checkbox"/> E</p> <p>SHET believes the original proposal better facilitates objective A. We have provided a summary of our rationale below.</p> <ul style="list-style-type: none"> <li>a) SHET believes it will be a positive step, however we don't believe that GC0156 alone will achieve the overall goal of the ESRS as it increases the complexity of the restoration.</li> <li>b) No – The objective diverts incentives from the main interconnected NETS to more embedded generation and as above adds further complexity.</li> <li>c) No – This promotes efficiency, but it is not a simple and straightforward process which hinders overall efficiency. It will add less reliability to the restoration.</li> <li>d) No – We do not think it discharges the license and we don't believe it makes the ESO comply with ESRS. SHET does not believe a code change can be the only tool to ensure compliance.</li> <li>e) Neutral</li> </ul>
2	Do you support the proposed implementation approach?	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>We agree with the approach but there are some key points missing. The skeleton network is crucial to restoration and the quality of assets/upgrades that need to be built hasn't been looked at.</p> <p>Under the whole system approach, the remainder of restoration will still need to be considered, in addition to ESRS.</p>
3	Do you have any other comments?	<p>SHET believes this proposal leads to a fundamental performance change for Transmission Owners and other users. This is expected and it will cost. We also believe there will be changes required to R45.</p> <p>SHET feel the consultation itself and the number of questions asked of industry has been quite convoluted.</p>
4	Do you wish to raise a Workgroup Consultation Alternative Request	<p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>Click or tap here to enter text.</p>

	for the Workgroup to consider?	
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### Specific Workgroup Consultation questions

5	Do you believe that a cost benefit analysis should be undertaken by the Workgroup and if yes what factors should be considered?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <p>We don't believe that a full CBA should be undertaken but a lighter review &amp; cost comparison should be carried out. This should examine the costs to the end consumers and work upon services the ESO buys rather than the network costs. It should look at comparable value against conventional and revised mechanisms, this will review how the two compare and what they both deliver.</p>
6	Do you believe that parties obligated by GC0156 should have a cost recovery mechanism in place?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <p>Yes, obligated parties should have a cost recovery mechanism in place to ensure there is an incentive to carry out their duties. This should ensure that the duties are carried out to a high enough standard before the cost recovery can take place so no cost cutting measures have played a part. As a Transmission Owner, we have provided more detail in Question 8.</p>
7	Do you think that the proposals are sufficient and cost effective to ensure that NGESO can meet its ESRS licence obligations?  Please provide a rationale for your answer	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <p>We believe that most of the proposals are supportive enough to work towards ESRS however are not sufficient to achieve it fully. Further changes outside of this piece of work will be required to ensure that the licence obligations are met. GC0156 does not fully answer how to speed up restoration.</p> <p>Obligations under the STC and Grid Code are currently clearly defined, and the changes proposed under ESRS are not yet clearly defined in order to assess the impact these changes will have on our TO obligations. For current obligations, the scale change, complexity, and number of interfaces with new parties proposed under ESRS has a significant impact. SHET's view on the consultation is there has been a lack of clarity on what this means for Transmission Owners, and the impact these changes will have.</p>

		In terms of cost effectiveness, we would need to review the outcome of any CBA, cost comparison etc. (question 5). A review of the current re-opener approach may need to be carried out. More detail is provided in Question 8.
8	Do you agree that all the costs associated with TO/DNO implementation of ESRS should be recovered through their respective price controls? If not, what funding mechanism do you favour?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No  <p>SHET believes that to provide the requirements requested under GC0156, we would require additional funding than is already allocated under RIIO-T2. We require this additional funding and commitment from the ESO to allow for us to accelerate our scale up on our path to delivery. We would only be able to do this if we had the commitment from Ofgem prior. While we appreciate there is the opportunity for reopeners, these are currently only every 12 months, and this could lead to delays in us meeting the timescales currently laid out. We would propose a 6 monthly reopener specifically relating to ESRS to allow us to scale up to meet the requirements.</p> <p>Following the implementation of ESRS, we would propose to move to ongoing funding from traditional mechanisms such as through price controls.</p>
9	The ESRS restoration target is expressed in terms of transmission demand rather than total demand (see Glossary and Definitions). Do you understand the implications of this, and are you happy with those implications?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No  <p>SHET believes that across the industry there is still ambiguity around the definition and clarity of 'Transmission Demand'.</p> <p>We believe there should be as much clarity as possible as to what this definition is, prior to the event occurring as this would likely cause delays to the restoration during an ESRS event.</p>
10	Do you think that there is a common understanding between stakeholders of the demand to be restored in GB required by ESRS?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No  <p>We think that there is an understanding of the high-level demand to be restored, e.g., 60% in 24 hours and 100% in 5 days. The section "Clarification of Definition of Restoration Demand" highlights that there is still some fine tuning to be done before a common understanding will be in place.</p>

		<p>The definition “transmission demand” is derived figure based on forecast values. The aim to restore any percentage of this creates a measure but does not achieve an industry ambition to restore all customer demand. It has been a point of confusion during development of GC0156 and workshops and is most likely to remain so in the ESR event.</p> <p>We agree with the general concerns that there would be a proportion of Distribution demand that is not covered by ESRS. In the Scottish network area, there could be a considerable proportion of demand left off supply due to the non-return of embedded generation following an ESRS event.</p> <p>SHET believes there needs to be a line added to confirm that Scottish TO's will be required to talk to BM participants on the ESO's behalf. The TO would not be able to instruct any parties if there has not been an exchange of information.</p>
11	Do you see any barriers for Network Operators and Users to deliver the changes proposed to implement the ESRS by December 2026?	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>We don't see any barriers at present as duties &amp; responsibilities should not be changing. However, there will need to be re-openers or upfront funding to allow for more staff to be brought in due to the size of the changes required. On top of this there will be the need to procure the appropriate equipment and upgrade the network to the standards required by ESRS.</p>
12	Do you believe there are further changes to the network i.e., NETS and/or Distribution Network required to implement ESRS obligations?	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>The Distributed Energy recovery system will lead to several embedded islands. Codes state that TO's in Scotland will instruct and manage power islands with DNO operating frequency and voltage control. These small power islands will have an impact of the effectiveness/speed of the restoration so there will need to be a review of how we connect them to Transmission Connection Assets.</p> <p>There will need to be another interface between TO's &amp; DNO's as we will need to coordinate and instruct any DER.</p>

		Regarding the work required by TO's under Annex 13, we will require appropriate time to review network capabilities and topology to facilitate the standard and new mechanisms of the restoration.
13	The Annex (pages 29 – 32) in the Future Networks subgroup report covers 2 scenarios where site supplies are lost up to 72 hours. Which of these 2 scenarios is the most realistic? (The full details of these scenarios can be found on pages 29 – 34 of the Future Networks subgroup report in Annex 4)	<input type="checkbox"/> Scenario 1 <input type="checkbox"/> Scenario 2  We think both scenarios are based upon the current as is world, and not based on GC0156 being put in place. Our view is that any scenario should be looking at where the resilience is included.
14	What are your views on the scope of the parties being impacted by the mandatory changes proposed as part of GC0156?	Transmission Owners are not mentioned in the 'analysis of parties' in the consultation and we believe there should be a section analysing the effect on TO's as these changes do have an impact.  As a TO we meet the requirements highlighted, and where we don't, we are already resolving this through the RIIO-T2 price control. However, in some aspects there is still a requirement to scale up and we do not believe this has been captured.
15	The GC0156 proposed solution 72 hrs resilience is expected to be applied retrospectively to existing CUSC parties. Do you agree with this retrospective application and if not, what is your rationale / view about this?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No  All participants need to be involved in restoration.
16	Do you believe that cyber security requirements in accordance with the NIS standard are sufficient and as referenced in the proposed Grid Code drafting (available in Annex 6)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No



17	Do you agree that the draft legal text is appropriate and sufficient to implement GC0156? If not please provide your suggestions?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No  <p>The drafting is overly complex given the scale of the changes, but it appears to set out a framework for the changes that are to be implemented. Much of the actual change (and the impacts of the change) will arise from subsidiary documents which make it impossible to confirm that the current text is appropriate and sufficient in its own right. Where possible, it would be advantageous to specify any definitive requirements which will apply within the Code itself to promote certainty and clarity. Similarly, it would be helpful for the “Electricity System Restoration Standard” to be defined in the glossary on its own rather than through reference to the Company’s Licence conditions.</p>
18	Are there any barriers to new entrants to provide restoration services that are not covered in the GC0156 legal drafting?	No
19	Do you believe there should be further assurance activities in addition to those described in the proposed legal text within OC5? If yes, please state the activity and explain why?	<p>The mechanisms set out in OCR 5.7.4 and 5.7.5 look broadly fine from a drafting point of view.</p> <p>We note that the consultation document refers to a minimum period of 72 hours for certain requirements (e.g., in terms of the period in which communication systems must remain operational, an ability to restart etc.) but this is expressed as a lessor obligation of “a period up to 72 hours” in OCR5.7.4.2(v). Presumably, this timescale should be increased to “a minimum period of 72 hours” so that assurance activities are measured against the underlying requirements?</p>
20	Do you think the right requirements have been identified for Network Operators in terms of Network design and operational capability as summarised in the consultation document and annex and as detailed in the proposed legal text in CC/ECC.6.4.6.3b and OC9?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No  <p>No as there is still work to be done on the amendments to the STC and STCPs.</p> <p>We believe the ESO has intentions to do more work in this area.</p>

21	Due to comments received from some Workgroup members on Appendix 9 (technical requirements associated with restoration services) of the ECC draft legal text, the ESO has proposed that a separate subgroup should be established under the umbrella of GC0156 to develop a set of technical requirements associated with restoration services for inclusion in the Relevant Electrical Standards which would include appropriate experts from across the industry. Do you believe this is an appropriate way forward if not why?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
22	Are you aware that Anchor Plants may be expected to carry out a deadline line charge test and remote synchronisation test as described in OC5.7.2.2(h) / OC5.7.2.3(d)? If so, do you have a view on this test?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
23	The distributed restart legal text has been drafted on the basis that ESO will lead on the procurement of restoration services. Do you think this should move to DNO led in future? If yes, please explain why	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
24	<p>The distributed restart legal text has been drafted on the basis that:</p> <p>i) there will be a connection agreement with the DNO that binds an embedded restoration service provider to the Distribution Code and</p>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No  <p>SHET believe that as a transmission owner, we are an operationally impacted party, however we don't believe we need to be contractually involved.</p>



	<p>ii) a tripartite agreement that binds the embedded restoration service provider to the relevant parts of the Grid and Distribution Codes. Do you see any difficulties with this proposed contractual arrangement?</p>	<p>Where we are operationally impacted, we should be involved so we can assist. But where we are not operationally impacted, we do not need to be involved.</p>
25	<p>Do you believe it is appropriate to have a mains independence minimum resilience period of 24 hours as required by the NCER or 72 hours as a general GB standard for existing black start purposes as proposed with the GC0156 solution for Grid Code parties, BM parties, VLPs and restoration service providers?</p> <p>Do you agree with a retrospective application of this and if not, what is your suggestion / views about this?</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>We believe that the mains independent minimum period should be 72 hours. We believe this should be retrospective.</p>
26	<p>As a stakeholder, are there any implications of the proposed future requirements which are not clear?</p>	<p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>
27	<p>Do you have any views on how the requirements should be implemented into the Grid Code bearing in mind the requirements of the ESRS are not enforceable until 31 December 2026?</p>	<p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>
28	<p>Do you agree with Ofgem's proposed approach to the DNO ESR re-opener?</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>