

## Grid Code Workgroup Consultation Response Proforma

### **GC0134: Removing the telephony requirements as part of Wider Access to the Balancing Market for small, distributed and aggregated market participants**

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 3 June 2020** 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.

<b>Respondent:</b>	<i>Phil Smith</i> <a href="mailto:philip.smith4@nationalgrideso.com">philip.smith4@nationalgrideso.com</a>
<b>Company Name:</b>	<i>National Grid ESO</i>
<b>Please express your views regarding the Workgroup Consultation, including rationale.</b>  <b>(Please include any issues, suggestions or queries)</b>	

### **Standard Workgroup Consultation questions**

Q	Question	Response
1	Do you believe that GC0134 Original proposal better facilitate the Applicable Grid Code Objectives?	<p>We support the concept of this modification and the potential benefits, and are keen to help develop a solution that delivers these benefits. At this stage we require further information to draw firm conclusions, some of which we hope to get from the consultation responses, but overall are supportive.</p> <p>The concept of removing barriers to entry and enabling increased Balancing Mechanism (BM) participation for small, distributed and aggregated market participants aligns with the goals of NGENSO's Wider Access project, and the move towards a decarbonised energy system. As we face new challenges in balancing the electricity system, we need to maximise the resources we have available on the system today and in the future. Increased BM participation is one way of doing this.</p>

In the future it may be the case that there is an equally robust and economically viable alternative to Control / System Telephony that doesn't need to be staffed 24/7, but we don't believe this is currently the case. Therefore, the best alternative would seem to be as proposed: a threshold below which telephony requirements are reduced, combined with clear communications processes for periods when telephony is not operational (covering for both BAU operation and emergency / safety situations).

It is essential to the success of this proposal that the threshold is set at the right level:

- High enough that it captures the Users most likely to find the telephony requirements associated with entering the BM to be a significant barrier, and therefore to benefit from the solution.
- Low enough that it doesn't result in a sizeable capacity of generation being inaccessible to NGENSO outside office hours and during outages either now, or in the future. We need to ensure that the solution protects the future integrity of the system, when the penetration of small / aggregated participants grows. Whilst we feel that the proposed thresholds are suitable reasonable, they should be subject to regular review of the capacity of generation that is below the threshold, and the number of participants who chose to take up the option of only providing telephony coverage during office hours, in line with this proposal. We also need to consider the potential for existing participants to abandon their telephony outside office hours in response to this modification, reducing our access and visibility.
- As the system evolves, the requirements on embedded generation, in particular Black Start and the ability to energise distribution restart zones (Distribution Networks using embedded generation to reenergise) and their subsequent involvement in the establishment of Local Joint Restoration Plans, will become an increasingly important issue. To achieve this functionality, greater telecoms resilience and robustness will be needed. Based on the

current thresholds proposed (on an individual and cumulative basis) we do not believe this will be an issue. However, if a small party which fits into this category wished to provide a Black Start service, or was part of a Local Joint Restoration plan, they would have to have robust 24/7 telephony in place.

- Whilst Black Start is a voluntary service, it is important that NGEN has enough capability to restart the system following a shutdown. It is also important that there is sufficient embedded generation to participate in a Local Joint Restoration Plan. Therefore, if the volume of embedded plant opting to take up this proposal increased to a significant level, this could potentially have the risk of undermining the robustness of the overall system, particularly following a system shutdown.

Below are our comments in relation to each of the Applicable Grid Code Objectives:

*(i) to permit the development, maintenance and operation of an efficient, coordinated and economical system for the transmission of electricity;*

**Yes, provisionally.** The proposal would support the move to a decentralised energy system and the 2050 net zero carbon ambition, by supporting smaller participants in joining the BM. We support the solution, subject to the points we have raised in this consultation response being addressed.

*(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);*

**Yes.** Reducing the telephony requirements for participants below a certain threshold is likely to increase the number of BM participants and therefore increase competition. It will give smaller Users the ability to become established in the BM before requiring 24/7 telephony.

		<p>Whilst any reduction in requirements is likely to increase competition, we currently have very limited evidence of the actual appetite and likely impact of the change. We don't know how many potential BM participants find the telephony requirements a barrier to entry and therefore the potential additional capacity that might join the BM if this change is made. We hope that the consultation responses will provide further evidence of the appetite for this change and therefore the impact on competition.</p> <p><i>(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;</i></p> <p><b>Yes, provisionally.</b> The proposal has the potential to improve security and efficiency by expanding NGENSO's visibility of generation; increasing the capacity and range of generation that is available for dispatch via the BM; and enabling improved forecasting. We support the solution, subject to the points we have raised in this consultation response being addressed.</p> <p><i>(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</i></p> <p><b>None.</b></p> <p><i>(v) To promote efficiency in the implementation and administration of the Grid Code arrangements.</i></p> <p><b>None.</b></p>
2	Do you support the proposed implementation approach?	<p>Yes.</p> <p>If this solution is implemented, it should be subject to regular review of the capacity of generation that is below the threshold, and the number of participants who chose to take up the option of only providing telephony coverage during office hours, in line with this proposal.</p>

		<p>If this volume increases materially above the level we expect, it could create a risk to system security, both BAU operation and under emergency conditions following a system shutdown, and would potentially require a change to the threshold, or other intervention.</p> <p>To mitigate the risk outside of hours, participants should endeavour to recommend and agree alternative (emergency) despatch with the relevant DNO/DSO, which would be reviewed and assessed by NGENSO on a case by case basis, and where appropriate have it defined in their Connection Agreement.</p>
3	Do you have any other comments?	<p>The following should also be considered:</p> <p><b>GC0117</b></p> <ul style="list-style-type: none"> <li>• Grid Code modification proposal GC0117 aims to harmonise the definitions of Small / Medium and Large Power Stations thresholds across GB. NGENSO currently applies different Control / System Telephony requirements depending on these definitions.</li> <li>• If the thresholds are revised, this could alter the number of Large Power Stations that would be obligated to have 24/7 telephony. This could impact system security, which is a key consideration for GC0134, and change the number of generators that this modification could apply to.</li> </ul> <p><b>Threshold considerations: GC0117 &amp; RfG</b></p> <ul style="list-style-type: none"> <li>• The current system of thresholds in GB for generators is quite complex and one of the aims of GC0117 is to simplify this if possible. 10MW is one of the possibilities being discussed as the single GB threshold for a 'Large Power Station', which is mandated to be part of the BM and to comply with the Grid Code.</li> <li>• This is also the threshold set in GB to be a 'type C' generator as designated under the Requirements for Generators European Network Code. Under RfG, type A and B generators must comply with requirements that are similar in style to product standards while type C and D generators are expected to be more operationally interactive and to</li> </ul>

		<p>provide things such as frequency response capability to utilise which communications are necessary.</p> <ul style="list-style-type: none"> <li>It would make sense in the considerations under GC0134 to try to achieve as aligned a position as possible taking these points into account.</li> </ul> <p><b>Distributed ReStart</b></p> <ul style="list-style-type: none"> <li>Distributed ReStart aims to develop Black Start capability within distribution networks. For this to work, any embedded Black Start station would be required to have 24/7 Control Telephony. This will also have an impact on Local Joint Restoration Plans. See section above.</li> </ul> <p><b>E&amp;R Phase 2</b></p> <ul style="list-style-type: none"> <li>E&amp;R Phase 2 aims to introduce communications requirements for system restoration providers. This may have an impact on the volumes of providers that opt for this proposal.</li> </ul>
4	Do you wish to raise a WG Consultation Alternative Request for the Workgroup to consider?	No

### Specific GC0134 questions

Q	Question	Response
5	Has the workgroup considered all the issues arising from GC0134 / are there any unintended consequences of this modification?	n/a – NGESO were part of the GC0134 workgroup
6	Do you believe there are any other options that this workgroup has not considered?	n/a – NGESO were part of the GC0134 workgroup
7	Do you have any other suggestions that the workgroup may not have considered to operability and security of out of hours operations?	<p>The requirement for robust telephony in the event of Black Start, Distributed Restart, and participation in a Local Joint Restoration Plan, as outlined above.</p> <p>We also note the requirement to develop E&amp;R Phase 2 as outlined above.</p>

8	The workgroup believes it is appropriate for the NGESO to consider the cost/risk/benefit of this proposal and keep this under ongoing review going forwards. Do you have any suggestions or comments?	n/a – NGESO were part of the GC0134 workgroup
9	Would this solution help facilitate you entering the BM? If so, what volume would you anticipate offering into the BM?	n/a – NGESO were part of the GC0134 workgroup
10	For those already in the BM, would this solution encourage you to stop providing 24/7 Control / System Telephony coverage? If so, approximately what volume do you currently offer into the BM?	n/a – NGESO were part of the GC0134 workgroup
11	Do you see any issues with the thresholds per unit or in aggregation?	n/a – NGESO were part of the GC0134 workgroup
12	Would you propose any alternative thresholds and what is your rationale?	n/a – NGESO were part of the GC0134 workgroup
13	In order to implement this change are there any compromises which need to be made?	n/a – NGESO were part of the GC0134 workgroup
14	Do you believe there is an alternative method for contingency dispatch which could provide at least the same level of reliability, resilience and accuracy as fixed telephony?	n/a – NGESO were part of the GC0134 workgroup