

**Workgroup Consultation Response Proforma****GC0147: Last resort disconnection of Embedded Generation – enduring solution**

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 **27 November 2020**. Please note that any responses received after the deadline or sent to a different email address may not receive due consideration by the Workgroup.

If you have any queries on the content of this consultation, please contact **Nisar Ahmed**, [Nisar.Ahmed@nationalgrideso.com](mailto:Nisar.Ahmed@nationalgrideso.com) or [grid.code@nationalgrideso.com](mailto:grid.code@nationalgrideso.com)

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**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 regarding the Workgroup Consultation in the right-hand side of the table below, including your rationale.**

Standard Workgroup Consultation questions		
1	Do you believe that the GC0147 Original Proposal better facilitates the Applicable Grid Code Objectives?	<p>a) Positive</p> <p>b) Negative – without inclusion of measures to ensure embedded generators are properly compensated, those that are unable to participate in balancing markets are more likely to be curtailed without payment, and therefore face undue financial detriment.</p> <p>c) Positive</p> <p>d) Negative – without inclusion of provision to both pay compensation, and favour disconnection of non-renewable assets ahead of renewable assets, this change would be in contravention of the terms of the Clean Energy Package</p> <p>e) Neutral</p>
2	Do you support the proposed implementation approach?	No – as set out above in question 1.
3	Do you have any other comments?	<p>Article 13, paragraph 6 (a) of the Clean Energy Package clearly states</p> <p><i>“Power-generating facilities using renewable energy sources shall only be subject to downward redispatching if <b>no other alternative exists or if other solutions would result in significantly disproportionate costs or severe risks to network security</b>”</i> [emphasis added]</p> <p>It is therefore incumbent on DNOs to demonstrate that where renewable assets are disconnected or partially curtailed, that all non-renewable assets have already been disconnected. Wherever they have not been, there must be clear evidence for the negative impact on system security, or disproportionate cost, that would have been incurred. It does not follow that just because this is a last-resort activity, that all things are therefore permissible. The CEP explicitly states that alternatives must be taken first.</p>

		<p>Secondly, the suggestion that disconnection of embedded generators does not constitute curtailment owing to their not holding TEC fails to take account of the wider framework surrounding embedded generators. Embedded generators below 100MW in size are not required to hold agreements with the TSO. Their connection agreements are made with the DNO, who then contracts with the relevant TSO on behalf of all users connected to their network for access to the transmission system. To suggest otherwise would render every firm connection agreement between an embedded generator and the DNO non-firm. If this is the case, then all embedded generators on so-called firm connections should be entitled to rebates on their connection charges. Such a significant change to if connections may be considered firm or non-firm lies far outside the scope of this modification.</p>
4	Do you wish to raise a Workgroup Consultation Alternative Request for the Workgroup to consider?	
<b>Specific GC0147 Workgroup Consultation questions</b>		
5	How can it be ensured that all reasonable commercial alternatives have been pursued first before emergency instructions are used as a last resort?	<p>This question appears to lie outside the scope of the code. Although the code should include the requirement that all reasonable commercial alternatives have been pursued first before emergency instructions are used, the “how” is a question of internal ESO/DNO processes. It is the responsibility of the ESO and each DNO to content themselves that their internal processes are consistent with provisions in the code. The emergency nature of the use of these provisions implying that they will be seldom used, this can be investigated ex-post by the regulator following the disconnection event.</p>
6	Are there any further alternatives to emergency disconnection that have not been considered?	

7	In terms of possible safety implications of disconnection, are there any specific risks in relation to this solution? What is the additional risk?	
8	How should embedded generators that are not participants in the balancing mechanism be compensated for emergency control actions including disconnection? Is it your opinion that they should be compensated?	Those generators that are not participants in the BM, or other mechanisms that would allow them to access commercial revenues ahead of disconnection (eg. ODFM) <b>should</b> be compensated where disconnection occurs. Not to do so would create an uneven playing field between those able to access commercial revenue streams and those that are not. This could have a negative impact on the cost of capital for such generators. Payments could be made easily via suppliers either as a bespoke payment, or in the form of a reduced BSUoS charge, which code requirements could compel suppliers to pass through to relevant generators. Volumes may be based on DNO expectation of generation reduction owing to curtailment (with scope for generators to challenge where this lies outside a narrow tolerance of their view of what generation would otherwise have been).
9	What mechanism could compensation be achieved by?	As above.
10	Would modifications to any other GB Codes be required? [for example, imbalance and cash-out arrangements in the BSC, arrangements with DNOs, suppliers or embedded generators in the CUSC and DCUSA)	
11	Is compensation a requirement of the Clean Energy Package legislation? Please expand where possible on why or why not.	Yes compensation is very clearly a requirement of the Clean Energy Package. <i>“Where non-market based redispatching is used, it shall be subject to financial compensation by the system operator requesting the redispatching to the operator of the redispatched generation, energy storage or demand response facility except in the case of producers that</i>

		<p><i>have accepted a connection agreement under which there is no guarantee of firm delivery of energy”</i></p> <p>As set out above, to suggest that embedded generators connections are by their nature infirm, unless they have contracted directly with the TSO, would be a change of a scale far beyond the scope of this modification.</p>
<b>Form/Implementation of instructions</b>		
12	What form should an instruction take? (eg % or MW; registered capacity or active power output)	
13	What priority order should generators reasonably be disconnected in? Have a link in the report to the guidance note on priority order.	<p>The risk of disconnection should be reflective of the lifetime carbon impact of the generators – those imposing the greatest carbon impact should be disconnected first. This shows leadership in going beyond the requirements of the CEP which sets out that non-renewable generators should be prioritised for disconnection. Once these sites are disconnected, we propose that the following sites should be those generators that may be disconnected and reconnected without the need for physical site visits, to ensure costs are kept to a minimum. Any decision on disconnection priority however should naturally be taken with regard to physical safety and energy security concerns, however should be led by carbon impacts.</p>
14	What arrangements are necessary for restoration?	
15	How much of the detail of how an instruction should be implemented needs to be codified rather than in a guidance document?	
<b>Legal Text</b>		
16	Do you agree with the proposed Grid Code legal text? Please	

	provide the rationale for your response and any specific comments.	
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