

Grid Code Administrator Consultation Response Proforma

GC0143: 'Last resort disconnection of Embedded Generation'

Industry parties are invited to respond to this Code Administrator 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 **17:00** on **5 May 2020** to grid.code@nationalgrideso.com. Please note that any responses received after the deadline or sent to a different email address may not be included within the Final Modification Report to the Authority.

Any queries on the content of the consultation should be addressed to Christine Brown at christine.brown1@nationalgrideso.com

These responses will be included within the Draft Grid Code Modification Report to the Grid Code Panel and within the Final Grid Code Modification Report to the Authority.

Respondent:	Caroline Bragg
Company Name:	Association for Decentralised Energy
Please express your views regarding the Code Administrator Consultation, including rationale. (Please include any issues, suggestions or queries)	<p><i>For reference, the Applicable Grid Code objectives are:</i></p> <ul style="list-style-type: none">(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.

Code Administrator Consultation questions

Q	Question	Response
1	<p>Do you believe GC0143 better facilitates the Grid Code Objectives? Please include your reasoning.</p>	<p>The ADE recognises that the current circumstances are exceptional and has no wish to risk a serious power outage.</p> <p>However, we do not think that this proposal as it stands meets Grid Code objective b) or c). Under the current proposal, embedded generation that is disconnected will not be compensated. This is a very different situation to those at Transmission whose firm connection rights with NGET mean that they would be compensated if the ESO took emergency actions to reduce their output.</p> <p>This should be addressed in the immediate short-term for this modification and in the longer-term in a more sustainable solution.</p> <p>In the short-term, embedded generation disconnected through this emergency instruction should be compensated. As above, this would better meet Grid Code objective b) and c). By introducing a financial cost to this emergency instructions such as pricing it at the Value of Lost Load, it would better align with the trend away from unpriced actions and, as importantly, it would create a market for the most cost-effective actions before this is ever needed.</p> <p>In the long-term, this modification and the new ODFM service that was also raised in considerable haste without industry engagement strongly underlines that we need to move to a smart energy system that is able to use flexible distributed assets for national system operability in a much more normal way. On Ofgem's side, it underlines the urgency of Ofgem's Access work considering connection agreements at Distribution and the lack of parity between Distribution and Transmission. It also strongly underlines the need for the ESO to move more quickly towards being able to take much greater advantage of the flexibility available from distributed generation, storage and load on a commercial basis.</p>

Q	Question	Response
2	<p>Do you support the proposed implementation approach?</p>	<p>As above, we recognise the current exceptional circumstances. We also welcome the sunset clause included in this modification.</p> <p>However, we would like to note the extraordinary process that has been used for this modification – including a lack of appropriate consultative process. We are not totally convinced that this could not have been anticipated earlier. This is particularly the case given that the ESO removed services such as Demand Turn-Up previously but had not put in place any replacement until the improved new ODFM service a few weeks ago. We would welcome work starting sooner rather than later on a more regular modification proposal with adequate industry consultation.</p> <p>Secondly, we would also like to propose that the timescales for the new ODFM service should be aligned to this one given that the former is effectively the commercial equivalent of the latter. The ODFM service is currently scheduled to continue until 31st August, unless it is extended by the ESO. That is significantly earlier than the sunset clause of this measure.</p> <p>We would also note that the timescales for entering that service by the implementation of these changes will be very challenging for many large users – meaning that they are exposed to this whilst not able to participate in the commercial services.</p> <p>Finally, we would note the welcome engagement from the ESO and the ENA during this very short period. However, this modification has raised several questions among users who will be potentially affected. It is absolutely critical that DNOs are having discussions as soon as possible with large users in their regions who could be the subject of this emergency instruction so that they can prepare their businesses and this can be done safely.</p>

3	<p>Do you have any other comments in relation to GC0143?</p>	<p>In addition to the comments we have set out above, we wanted to particularly highlight the risks that such a disconnection would pose to larger industrial and commercial sites – risks that are likely significantly more serious than those faced by broader pure generation distribution assets.</p> <p>On the part of industrial sites with both export and import, through for example on-site CHP, disconnection of their export without notice would create very significant issues for process on-site and for safety. For some sites, immediate automatic disconnection would lead to –</p> <ul style="list-style-type: none"> • Dangerous harm to on-site large gas turbines and associated infrastructure; • Safety concerns for those working on-site in confined spaces in complete darkness; • The inability to perform control system actions and loss of critical control elements • Disruption to processing that may take weeks to recover from and would therefore significantly disrupt production; including in critical sectors. <p>In addition, the loss of on-site gas turbines would breach environmental permits; including IED permits. At present, there is no clarity on who bears this risk if a site is disconnected outside of its control.</p> <p>To take another example, emergency instruction to disconnect Energy from Waste centres exporting electricity would have similarly serious implications. This would include risks to on-site infrastructure and risking tripping the plant. It may also lead to increased carbon and other emissions and very significant financial loss.</p> <p>Whilst we are confident that the DNOs are aware of this, it is concerning that the plans to ensure this emergency instruction could never lead to this scenario have not accompanied this modification. As a result, this modification has led to very significant uncertainty among large distributed users with on-site generation.</p> <p>It is absolutely critical that the DNOs work closely with those users who could be identified and</p>
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Q	Question	Response
		<p>instructed to disconnect. At the very least, we ask for –</p> <ul style="list-style-type: none"> • Urgent clarification of how disconnection would be implemented by each DNO; including which sites would be disconnected, whether sites with both export and import would be disconnected, whether disconnection would be automatic or manual • Plans between the DNOs and large users in their region who could be instructed to be put in place so that it is absolutely clear what will be asked of users • Advance notice of disconnection of at least 30 mins <p>Finally, we would also note the impact on supplier's imbalance positions and that there needs urgently to be a way to revise this if such emergency instructions are taken.</p>