

## 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](mailto: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](mailto: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.

<b>Respondent:</b>	<i>Matthew Gee</i> E: <a href="mailto:Matthew.Gee@thameswater.co.uk">Matthew.Gee@thameswater.co.uk</a> M: 07747646352
<b>Company Name:</b>	<i>Thames Water Utilities Limited</i>
<b>Please express your views regarding the Code Administrator Consultation, including rationale. (Please include any issues, suggestions or queries)</b>	<i>For reference, the Applicable Grid Code objectives are:</i>  (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

	<p>binding decisions of the European Commission and/or the Agency; and</p> <p>(e) To promote efficiency in the implementation and administration of the Grid Code arrangements.</p>
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### Code Administrator Consultation questions

Q	Question	Response
1	<p><b>Do you believe GC0143 better facilitates the Grid Code Objectives? Please include your reasoning.</b></p>	<p>No, we accept that GC0143 is required, but not in it's current form.</p> <p>The modification makes no attempt to categorise which generating stations should be prioritised for disconnection on economical, security, efficiency or other grounds.</p> <p>This modification also fails to give any indication of how long a disconnection could last, and therefore makes preparation for mitigation impossible, and increases safety and environmental risk.</p>
2	<p><b>Do you support the proposed implementation approach?</b></p>	<p>We support the sunset clause and understand the need for the rapid implementation of this legislation.</p> <p>We would however recommend that at a minimum the following changes are made to the implementation;</p> <ol style="list-style-type: none"> <li>1. The DSOs are obliged by the code to disconnect those generating stations with the least operational impact first, these being Solar and Wind, before other forms of generation are disconnected.</li> <li>2. A notice period be required before disconnection, and a duration of disconnection also communicated.</li> <li>3. CHP plant which have a dual-function – to generate both a supply of electricity and heat – particularly CHPs which are disposing of biogas, should be able to decline a request to disconnect.</li> </ol>

Q	Question	Response
3	<p><b>Do you have any other comments in relation to GC0143?</b></p>	<p>There is no consideration in GC0143 of the technology of the generating stations. Disconnection of Wind and Solar PV is relatively low risk, but by contrast the disconnection of biogas CHP generating stations in the Water Industry will have the unintended consequence of also interrupting the production of heat required in the Water Industry's processes for safe treatment and disposal of sewage sludge. Thames Water has 24 CHP locations which require the heat generated from our CHPs for the treatment of sewage sludge. It is not possible to suspend the sludge treatment process at these locations.</p> <p>Furthermore the sludge treatment process produces biogas which must also be disposed of in a safe manner, and in compliance with environmental legislation must not be released to atmosphere. An unplanned disconnection of our CHPs could result in unsafe disposal of biogas.</p> <p>There are no clear guidelines as to the notice period for disconnection or to where the notification would be provided. There may need to be notification to a centralised control room, which may not be co-located with the generating station.</p> <p>Finally, there is no consideration in the code modification on the safety consequences of remote disconnection.</p>