

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:	Nicola Percival, Policy & Regulations Manager nicola.percival@innogy.com
Company Name:	Innogy Renewables UK Ltd
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

	<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>Do you believe GC0143 better facilitates the Grid Code Objectives? Please include your reasoning.</p>	<p>As an emergency action we feel the best intentions of the proposal do help fulfil the operation of an efficient transmission system and therefore better meets objective (a).</p> <p>However, there is likely to be an impact on competition if operating embedded power stations sites are forced out of a functioning market where this leads to material supplier imbalances. This could impact detrimentally on Objective (b). We note that the ESO intends that the instructions as a “last resort” having exhausted all feasible commercial actions. This provides some safeguards regarding the use of these instructions. We do have concerns though (see our answer to Q2 below).</p> <p>The proposal is based on “disconnection” of embedded power stations to protect the transmission system. The proposal could lead to isolation of such power stations from the relevant system and impact on system security (Objective b). There may be further issues associated with the provision of balancing services and restarting of disconnected power stations,.</p>

Q	Question	Response
2	<p>Do you support the proposed implementation approach?</p>	<p>Innogy's concerns are primarily related to issues left unaddressed by this modification proposal.</p> <p>We would like some reassurance and/or guidance that DNOs will seek to remove generation in a controlled manner in preference to a sudden 'trip' like actions. The term 'disconnection' implies an abrupt removal from the system, and this has potential to cause damage to generating equipment.</p> <p>The proposal contains no information regarding the selection of sites from DNOs. For example, if a large embedded power station is running to provide inertia to the system, are DNOs aware that if instructed to deload X MW at a GSP then this inertia is not to be disconnected/excluded from this 'quota'? We are also concerned that this will disproportionately affect renewable embedded generators at 132kV whose BMUs clearly identify them as "wind farms", for example, as compared with smaller embedded generators connected at lower voltages.</p> <p>What notification process will be employed to give prior warning to an instruction to disconnect?</p> <p>Will there be any expected duration to be attached to the proposed 'disconnection' notice/instruction?</p>

3	Do you have any other comments in relation to GC0143?	<p>We appreciate the difficult position that the ESO is presented with at the moment.</p> <p>We have 3 main areas of concern with the proposed provision;</p> <ol style="list-style-type: none">1. Commercial arrangements are already in place for some of our embedded generating sites. We want assurance that the ESO has utilised all possible commercial arrangements available to them before enacting an emergency instruction to a Network Operator.2. The quick turnaround on this by ESO does not give enough time for all parties to be comfortable that they can manage an emergency instruction, particularly in these current times. Some Network Operators are not set up to manage this type of instruction nor are some of the smaller remote embedded generator sites which are not manned 24/7. A forced disconnection may require the need for innogy personnel and Original Equipment Manufacturer contractors to attend sites in order to restore availability. In addition, faults could be encountered at some generating stations particularly if a disconnection continues for a number of hours. These issues require particular consideration during the Covid-19 pandemic, as the rules around travel, social distancing and the fact that this is to be first required on a bank holiday causes innogy concerns. A controlled shut down is always preferable.3. Following an emergency instruction, a controlled restoration would also need to be enacted. This should involve the network operators. The modification proposal should set out the arrangements for how the associated system restoration process will work. It is unclear as to whether the network operators could cope with several sites being switched on at the same time. Local joint restoration plans do not currently envisage the proposed arrangements and require consideration. Local restoration requires the planning and co-ordination of several parties and to ensure that all sites can return to service. In the absence of a managed restoration plan, the proposal
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Q	Question	Response
		<p>could create the opposite problem of not enough generation on the system which would adversely affect consumers.</p> <p>It should be noted that innogy has approached ESO in in the past about setting up commercial curtailment operations. We are concerned that the ESO has not fully engaged with market participants on this issue. We would be happy to have further engagement on commercial alternatives as soon as practicable, focusing first on larger embedded assets which do not have arrangements in place already. It should be noted that when implementing commercial solutions, it may require further bilateral discussions with the power off-takers.</p> <p>Rushing a solution to the problem identified may create more problems than it will solve. The ESO must provide the market with comfort around their management of emergency instructions and that commercial arrangements can be put in place as a the first step in demonstrating that all commercial opportunities have been explored to resolve the problem of low demand periods. The market can assist the ESO in its management of potentially low demand from this Friday (8th May 2020) and will help with the management of system constraints over the summer period.</p>