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:	*Mark Draper* *mdraper@peakgen.com* *01926 336127*
Company Name:	*Flexible Generation Group*
Please express your views regarding the Code Administrator Consultation, including rationale. **(Please include any issues, suggestions or queries)**	*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.

Code Administrator Consultation questions

Q	Question	Response
1	**Do you believe GC0143 better facilitates the Grid Code Objectives? Please include your reasoning.**	No. We are concerned this modification is a poorly thought out reaction to the current situation which will impact competition and could have unforeseen consequences. Embedded generators would be happy to help the ESO, but under reasonable commercial terms using an agreed system for instructing plants.

Specific comments against the objectives:

a) We are concerned that to suddenly raise an urgent change, with limited consultation and no robust analysis, suggests that the ESO is prepared to rely on emergency actions over commercial solutions. If there is an issue with the Grid Code then it needs a robust long term solution, not an interim measure that seems to fly in the face of the requirement for them to "permit the development, maintenance and operation of an efficient, coordinated and economical system for the transmission of electricity". If an interim measure is required it should be for a very short duration.

The DNOs have persistently said that they are unaware of the embedded generation connected to their system. Their performance on 9 August 2019, disconnecting sites that were simultaneously being called by the ESO, raised concerns that the DNOs trialling a new process could create more problems on the system than it will resolve. Furthermore, if the DNOs disconnect some sites this may lead to other sites tripping, leading from a surplus to a deficit of generation very quickly.

The result of any actions is also likely to distort competition in the rest of the market, as there seems to be no proposal to make these actions transparent to the market. The DNOs suddenly taking off embedded plant may result in a frequency disturbance and the rest of the market will not know what is going on. The efficiency of the system is enhanced by transparency, which is lacking in this proposal. GC109 being implemented would be very helpful to any further operational changes.

The modification is negative against objective:

a) as it is not an ideal way to manage the system to introduce new powers at short notice with no obvious communication plan. Under BC2.6.3 the ESO should be required to communicate with the relevant DNO and then notify the whole market, using an established communication system like BMRS.

b) FGG is surprised that the ESO does not believe that this proposal has an impact on competition. If the ESO were going to lose money in this type of event we suspect they would object to it. They seem to fail to understand the economic consequences for market participants.

If accepted, this change will distort competition in generation and supply. It is unacceptable that embedded generators will not be compensated for being interrupted, as their transmission connected counterparts would be, and as are customers. FGG assumes that the focus is on reducing solar output and/wind generation. These plants will have no opportunity to make up lost revenue as they cannot despatch themselves at times of higher prices. Depending on their contracts, they may also have to make up energy costs to the suppliers they have notified they will supply. No other parties can be cut off with no compensation, so it is unduly discriminatory to let a class of users be treated differently.

The legal drafting sees the ESO able to specify which sites are disconnected, but it is unclear how the ESO knows what is connected to make such an instruction. The legal text also says that BM sites should not be interrupted, but the DNOs do not know which are BM sites, so how will they make this distinction? Finally, BC2.9.4.1 does not seem to require all available actions over interconnectors, including SO to SO Trades, are taken prior to the use of these emergency powers.

The Suppliers will be left out of balance when the generation that they were expecting is not delivered. Unlike demand disconnection, there are no processes in the BSC to adjust imbalance positions as a result of emergency disconnection of generation. Had the ESO made this proposal sooner there could have been time to address imbalances and compensation. With some Suppliers specialising in "green" supplies there is a risk that the impact on them will be significantly more onerous than on others, at a time when suppliers are already facing operational challenges. While imbalance prices may be benign, they may not be.

The way the ESO is having to balance at present is also creating incentives on BM plant to increase their BOA prices as the ESO is taking so many balancing actions. However, the ESO should make sure that they take all market actions, including via the interconnectors, before any emergency actions. If the current operating regime continues for some months, Ofgem and BEIS should be concerned about the impact these ad hoc ESO developments are having on customers' bills.

The Optional Downward Flexibility Management (ODFM) service does not seem to have robust terms for checking DSR has delivered and contains odd requirements about only allowing generation to participate only if it can turn off, not reduce output. This may stop generators being able to offer a commercial service to the ESO where delivery can be checked, instead of allowing the ESO to favour a simple, and cost free to itself, option of disconnecting them. With no consultation on the ODFM, there is a risk that the ESO is adding to customer bills with a poorly designed service.

c) While FGG can see that the aim of this modification is to maintain security of supplies we do not believe this is a robust, transparent or economically efficient approach, and the ESO could have instead requested that the Secretary of State use its power, under the Fuel Security Code, to create foot-room or sought commercial services with embedded assets. Alternatively, we understand the EU rules allow interconnectors to be shut for security reasons. These type of actions would allow the vast majority of the market to operate normally and make it easier for the ESO to balance the system in an economic and efficient manner, without the adverse impacts that spiralling BSUoS costs will have on customers. It is clear that the change in demand profiles could remain for months (as witnessed by the ESO asking for a sunset clause) and the market therefore needs a more well considered, transparent approach where the impacted parties can be reasonably compensated.

On objective d), we do not believe that this impacts EU regulations, nor e) the administration of the Grid Code. However, there are other impacts that Ofgem must take account of under its wider duties:

Safety – there are embedded generators whose operations are based around the control of environmental sites, for example the control of methane release from landfill sites and the treatment of hazardous waste. Interruption of these operations presents significant risk to both life and health and the environment through release of pollutants, threatening breach of environmental permits and enforcement action. It is unrealistic that in the timeframe proposed for adoption of these powers DNOs will either gain an understanding of which connections present this risk or, ensure a means

Q	Question	Response
of exercising these powers so as to prevent such disconnections and remove those risks. These sites should be identified and excluded in the same way the DNOs try to keep priority customers connected. DNO Processes - The processes that the DNO's would use if instructed are undefined, untested and have not been communicated to sites that will be impacted. How does the DNO identify sites to interrupt, how do they communicate, how do they physically disconnect the site, etc.? There has been no communication to smaller sites, with only the Grid Code mailing lists used to advertise this change proposal, and FGG is surprised that the ESO has not at least contacted the DCUSA parties so that they could alert potentially impacted sites. Cost Benefit – If these powers start to be used, this will be a major change to the way the system operates and there has been no cost benefit analysis about whether this is the most economic action the ESO could take. This may be as a result of the way the defect is drafted, saying NGESO does not have these powers, without providing any reason as to why they need the powers. Given the actual defect, around managing very low demand, would it be more efficient for the generators, DNOs or Suppliers to be offered a fixed price to take sites off line for a defined period pending the further development of a market-based pricing mechanism? This could reflect the prices being determined by the market mechanisms which are available to the ESO (but with insufficient capacity, if that is the case) and should similarly ensure that generators are at least made whole for the cost of turn down taking into account wholesale pricing, ancillary benefits and operational costs and risks. Should ODFM allow for part loading plant with more notice? If this is an issue the ESO believes is ongoing, has it requested larger plants? Legal Clarity – The National Terms of Connection do allow the DNOs to disconnect sites but giving notice where a threat is not immediate. Will the site see a notice that a disconnection is likely? Are warnings given from the ESO or the DNO and how are they given? Is Ofgem assuming this action will only occur only once a threat is "immediate"? Each site's own connection agreement may have unique terms not exactly reflective of the National Terms of Connection, notably older connections. It is unclear how the DNOs are going to remain compliant with their own legal obligations unless they have quickly come up with a robust compliance process. FGG understand that one of the reasons for this change was the DNOs' own concerns about their legal positions. Embedded generators need more information around these issues so that they can plan and manage their own businesses, such as notifying staff on sites, counter parties, etc.		

Q	Question	Response
2	**Do you support the proposed implementation approach?**	No. There is no implementation plan in the document. All of the questions above about timing, communication, identification of sites in the BM, etc. all need to be planned for and communicated to all parties. NGESO has known about falling demand for some time and if Ofgem allow this change it should be for a far shorter period and until other, more economic and efficient solutions are devised**. We would propose a maximum period of one month.**
3	**Do you have any other comments in relation to GC0143?**	FGG would note that embedded generators have been in discussions with NGESO about joining the BM for years, but the ESO has yet to make the changes necessary to make that decision easier and access quicker. For example, the roll out of the API to embedded generators for BM access, the redrafting of the BEGA, etc. We are concerned that the ESO has not provided adequate, non-discriminatory market access for smaller parties in a timely manner and is now facing the consequences. The proposed solution includes further discrimination against embedded generators.