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:

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Company Name:

Power Balancing Services Ltd

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

Q1
Do you believe GC0143 better facilitates the Grid Code Objectives? Please include your reasoning.
No.

This modification seems to be a badly thought out response to the current situation. There is no need for the ESO to ask for emergency help from BEIS to reduce generation, or develop a robust process. In particular, it is unacceptable to not compensate a set of parties for having their businesses interrupted when their competitors (TO connected gencos) would be compensated. We also note customers also receive compensation if disconnected.

It is also a of grave concern that the ESO has not communicated to us a change that directly impact our business. They could have asked our DNO to contact us, but we are only aware of this change because we have a regulatory support service. It is unacceptable for fundamental changes to be proposed to market arrangements without communicating those to the most impacted parties.

Specific comments against the objectives:
a) NGESO says that there is no impact on the "development, maintenance and operation of an efficient, coordinated and economical system for the transmission of electricity". We disagree.

We have been following the weekly NGESO calls on the implications of the Covid lock down. We are surprised that the need for this modification was not explained the day before on the call. It feels as if NGESO does not have a holistic view as to how to manage the system. Instead, we get a new service on one day and an emergency modification the next day. There is no analysis as to how and when this modification would be used. There is no analysis as to how this modification, the new product and the balancing market would interact. Generators are being asked to support being taken off the system with no compensation. Without proper and substantive analysis, it is not possible to conclude that this proposal "permits the development, maintenance and operation of an efficient, coordinated and economical system for the transmission of electricity".

In what order is it proposed that the DNOs would take generation off the system, how much, over what time period, for how long, using which communications, etc.? The easiest way for DNOs to reduce generation is to take the largest units first. This of course would be discriminatory. Would the DNOs take generators with flexible

connection terms ahead of generators with firm connection terms? There is no transparency as to how generators would be taken off the system. As such, this proposal risks uncontrolled disconnection of generators by the DNOs. This cannot be consistent with "efficient, coordinated and economical system for the transmission of electricity."

b) NGESO says that this proposal has no impact on "facilitating effective competition in the generation and supply of electricity". This is clearly wrong. There are several reasons why NGESO is wrong.

First, NGESO could be choosing to disconnect embedded generation ahead of transmission connected generation. This is clearly discriminatory, inefficient and therefore does not facilitate competition in generation.

Second, we do not see why nuclear power stations would be allowed to stay on the system when embedded generation is being disconnected. We would have expected the NGESO to have proposed a way to take a nuclear generator off the bars as well as this proposal to disconnect embedded generation. This would seem to be an equally valid way of reducing generation and would achieve a much larger reduction in generation.

Nuclear generation is described as inflexible and therefore cannot react in the way that other generation can. However, nuclear generation can be taken off for maintenance (or as we saw in France recently, when the ESO is reducing nucelar output). NGESO should be able to negotiate with the nuclear fleet to see if maintenance can be pulled forward to this Summer to reduce electricity supply during the Summer. Alternatively BEIS could use the Fuel Security Code to require a reduction in output, with EdF compensated alter for lost revenue.

Third, current balancing actions taken by NGESO allow parties to be compensated for coming on, or coming off, the bars. The NGESO proposal would allow NGESO to avoid costly balancing actions by instructing non-compensated actions. There is no transparency as to how these non-compensated actions would impact on NGESO's incentives. There is no understanding as to when such actions would be taken and therefore embedded generators would be competing at a disadvantage with other generators who had been compensated via the balancing mechanism.

Fourth, we believe that this modification is intended to reduce solar output. We note that many of the solar farms are not even aware of the Grid Code and it is unclear how the DNOs will implement this proposal with respect to the solar farms. Nevertheless, the solar farms will not be able to recover lost revenue as they cannot despatch themselves at times of higher prices. It is unduly discriminatory to let a class of users be treated differently and therefore this will distort competition in the generation market.

Fifth, there is no transparency as to how the DNOs would implement this proposal, or whether the DNOs would act in a consistent manner. What is to stop one DNO from taking solar plant off the system while another DNO might take on-site gas fired generation off the system? Thus, there is every possibility that the DNOs could act

in a way that was inefficient and discriminatory, thereby distorting competition. We have already highlighted in our answers on objective a) that the DNOs might call larger sites rather than smaller sites or that the DNOs might not be able to communicate with all sites. We note that under DCP350, the DNOs say that they do not know where most sites or what services they offer to the DNOs.

Sixth, BC2.9.4.1 does not refer to interconnectors. If the interconnectors are importing prior to an emergency being declared, it is discriminatory to order UK based generation off the system while allowing interconnectors to add to supply in the UK. At the very least, the proposal should ensure that interconnector imports are at zero before embedded generators are disconnected. Furthermore, the CACM does allow interconnectors to be shut down, so surely the economics of this vs emergency actions needs to be considered.

Seventh, suppliers will also 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. With more time, it would be possible to understand how to feed this type of disconnection into imbalance calculations, and how generators and suppliers would be appropriately compensated.

Finally, NGESO is also introducing a new service, Optional Downward Flexibility Management (ODFM) service, with no consultation. Unlike GC0143, this service was mentioned on the weekly NGESO Covid call. However, this is little analysis as to how this service fits with the proposals under GC0143. This adds to the feeling that NGESO is not providing an holistic analysis as to how it expects to manage the system. Without a greater understanding as to the priority that NGESO sees between its existing services, its new services, its treatment of interconnectors, and this proposed emergency power, we do not believe that there is no impact on competition in generation and supply.

c) NGESO says that its proposal is positive with respect to promoting the security and efficiency of the electricity generation, transmission and distribution systems". We disagree.

The reasons given above with respect to objective b) are relevant here also. A lack of time and transparency means that this proposal cannot be said to be positive. We believe that it will probably have a negative impact on security and efficiency. For example, were a DNO to ask am embedded user to come off who is a BMU do they accept or refuse as per the mod? How do the DNOs know who is in the BM, who is on a ODFM contract, etc. Without more information and analysis we do not know what response there may be and we do not believe that the ESO or DNOs know either. We note that Ofgem has granted urgent status to this modification and therefore there will be no analysis to underpin the decision of the Panel and thereafter Ofgem, unless Ofgem does the work itself.

There are two Grid Code changes that must now be implemented urgently to add to transparency. GC133 would allow the market to see the state of the system should be implemented with urgency, and GC109 should also now be given urgent status so

that any emergency instructions or system warning will be seen by the whole market. The ESO by refusing to add to transparency is simply making it more difficult for the market to respond rationally to the system in these very challenging times. Likewise, we need to understand how the DSOs will tell the market how much generation it has taken off, when, where, etc.

There seems to be no consideration as to whether the Government should invoke the Fuel Security Code as more measured, reliable and probably cheaper option. While the original aim of the FSC was to ensure that power stations have adequate supplies of fuel, it does allow the Secretary of State to instruct how generators act, we assume including to stop generating. We would have expected to see a consideration of the Secretary of State's powers as part of the rational for NGESO's proposals.

We note the sunset clause in the proposal. That seems to imply that NGESO is intending to take these powers for six months. That seems a long time in which the market will be distorted, and the efficient operation of the system will be impacted. It is not at all clear that the supply / demand balance will have recovered by that time. We note that there are many forecasts that say it might take up to 5 years before normality is achieved with respect to business output and therefore electricity consumption. This proposal should be rejected by Ofgem and NGESO should be tasked with bringing forward a fully developed proposal, with supporting analysis, that can be reviewed by Ofgem in the normal way.

On objective d), we do not believe that this impacts EU regulations, but note others have suggested that the restoration code and requirements on genrators may be legally at odds with this proposal.

On objective e), NGESO says that there is no impact on the efficiency and administration of Grid Code arrangements. We disagree.

If NGESO is allowed to ride roughshod over the Grid Code process, it will feel that it can always wait until the last minute, and force Ofgem and the market into accepting proposals with unknown impacts. NGESO has had weeks to bring this proposal forward. In its weekly calls, there has been no sign that such a dramatic increase in its scope was going to be necessary. The administration of the Grid Code will be damaged if NGESO and / or Ofgem allows the process of the Grid Code to be abused in this way.

Q2
Do you support the proposed implementation approach?

No. As far as we can see, there is no implementation approach. We have no idea as to how NGESO and the DNOs would propose to implement this. The fact that the DNOs and NGESO do not even know the level of embedded generation connected to the system gives us no confidence that this proposal can work.

Q3
Do you have any other comments in relation to GC0143?

Other elements do not seem to have been considered by NGESO:

- Impact assessment – there must be some assessment of the immediate impact on competition against the so-called security of supply needs of NGESO.
- Safety – some generation – if interrupted in an uncontrolled way – will impact industrial process, and we have no confidence that the DNOs understand which sites where this would be a risk.
- Connection terms – the DNOs are always explaining the connection agreements have different terms from different vintages, and it seems that no analysis has been undertaken as to whether this proposal by the NGESO is consistent with contractual relationship between DNOs and its customers.
- DNO / NGESO overlap – this proposal does not explain how the NGESO effectively directing the DNOs customers to disconnect will be consistent with the DNOs operation of its own system, as the DNOs have a series of flexible connection agreements that presumably they could be managing before an instruction from NGESO.
- Implementation – we have highlighted above that we do not believe that the DNOs have direct contact with all its generators, and there is no clarity as to how the DNOs are actually going to implement this proposal, particularly with respect to smaller sites who have little knowledge of the distribution system let alone the Grid Code.
- Covid – many parties will now be working from home, or will have put in place alternative methods of control of plant, and introducing an emergency power to disconnect might not be consistent with how these plants are now operating. For example a site manager may now be working remotely and needs to physically be at site to disconnect it. The DNOs have not been working on sites, but they will not know which generators have also changed their ways of working.

In conclusion, much more time and analysis should be given before the NGESO is given the power to disconnect embedded generators. In this time ALL embedded sites also need to be contacted about these proposals.