

ELEXON

20 December 2022

By email to: grid.code@nationalgrideso.com

Dear Grid Code team,

Re: Grid Code Modification GC0156 'Facilitating the Implementation of the Electricity System Restoration Standard'

Thank you for the opportunity to respond to the GC0156 Workgroup's consultation.

Elxon is the Code Manager for the Balancing and Settlement Code (BSC). Because of the amount of documentation forming part of the GC0156 consultation (more than 40 separate documents) and the number of associated consultation questions (28), we have focused in the time available on identifying and commenting on any potential BSC interactions.

The current, end-to-end, industry Black Start process includes:

- Provisions in Operating Code (OC) 9 of the Grid Code ('Contingency Planning'), which cover how electricity is restored across the Total System following a Black Start, and which define a Black Start as either a Total Shutdown or Partial Shutdown of the system;
- Provisions in Balancing Code (BC) 2 of the Grid Code ('Post Gate Closure Process'), which cover the emergency actions and instructions that NGESO may use during the Black Start restoration process under OC9; and
- Provisions in Section G of the BSC ('Contingencies') and BSC Procedure 201 ('Black Start and Fuel Security Contingency Provisions and Claims Processes'), which cover:
 - When and how normal BSC market operations are suspended and resumed following NGESO's notification that a Black Start (either a Total Shutdown or Partial Shutdown) has occurred under the Grid Code; and
 - The processing and payment of BSC Black Start compensation claims for any BSC Parties to whom NGESO has given specific types of Grid Code instructions, during the Black Start restoration process, under OC9 and BC2.

The Grid Code and BSC provisions cross-reference each other, both on the process steps to be taken and in determining which Black Start instructions under the Grid Code are eligible for BSC compensation. We have therefore focused our review of the GC0156 legal text on the changes to BC2 and OC9.

Black Starts are emergency black-out events that are likely to significantly disrupt normal communication channels. It is therefore important that all affected industry parties have certainty (in advance of any Black Start event actually occurring) of the contingency rules that will apply during a Black Start, and that these rules work effectively as an end-to-end process across the Grid Code and BSC.

With this in mind, our response offers our comments on the following:

1. **The potential BSC impacts of GC0156 that will need further assessment and development by a Workgroup, as part of any related BSC Modification Proposal.**
Because of the interactions between the Grid Code and BSC processes, NGESO's clarification of the intended BSC outcomes will be critical to support development and assessment of any necessary BSC changes. Our comments in this area are relevant to Consultation Question 26, which asks if any implications of GC0156 for stakeholders are unclear.
2. **The potential risks and issues for industry parties in the end-to-end Black Start process, which could be created by the proposed GC0156 implementation approach and legal text.**
We have concerns that the current GC0156 implementation approach may not enable alignment of implementation for the drafting to all impacted Industry Codes. This means that the changes to the Grid Code and BSC will come into effect at different points, potentially some months apart. This could result in inconsistent interpretation and application of the Black Start rules between different Codes if a Black Start occurs. As well as creating potential confusion over the rules during an emergency, this could have material consequences for BSC Parties if it affects their ability to bring claims for BSC Black Start compensation. These comments are relevant to Consultation Questions 2 and 17 on the GC0156 implementation approach and legal text.

We include our detailed comments in Appendix 1.

We understand that NGESO intends to raise a BSC Modification Proposal to support the outcomes of GC0156. We thank you for your discussions with us on this so far. We welcome your continued engagement and clarification on the scope of the BSC Modification as you prepare to raise it. We would also welcome NGESO's confirmation as the Proposer of [BSC Issue 100](#)¹ that we can now close this Issue, which has been on hold for some time at NGESO's request. We understand that the scope of Issue 100 has been superseded by the GC0156 Workgroup discussions and therefore no longer reflects your latest thinking on the intended BSC changes.

If you would like to discuss any areas of our response, please feel free to contact me at: kathryn.coffin@elxon.co.uk. This response is public and is published on our website.

Yours faithfully,

Kathryn Coffin

Senior Market Architect, Design Authority
Future Markets and Engagement

Appendix 1 – Elxon's detailed consultation response

Attachment A – [Elxon's note to the Issue 100 Group, 13/12/22](#)

Attachment B – [Note to GC0156 Markets and Funding Mechanisms Subgroup, 24/08/22](#)

¹ 'Assessing BSC Black Start processes to support NGESO's Distributed ReStart project'.

Appendix 1 – Elexon’s detailed consultation response

Impacts of GC0156 on the BSC

Consultation question	Answer	Reasons
26) As a stakeholder, are there any implications of the proposed future requirements which are not clear?	Yes	The scope of the required BSC changes are currently unclear and a BSC Modification Proposal has not yet been raised to progress them. See our further comments below.

Based on the GC0156 documentation, we believe the following changes will be required to the BSC’s Black Start provisions:

1. **Changes to BSC terminology, to reflect the Grid Code terminology change from ‘Black Start’ to ‘System Restoration’.**

This includes both updating BSC references to Grid Code defined terms and changing the BSC’s own defined terms that include the words ‘Black Start’ (e.g. ‘black start compensation’ and ‘black start instruction’).

We note that GC0156 continues to define System Restoration as the recovery procedures following either a Total or Partial Shutdown, whose own definitions remain unchanged in the Grid Code. We therefore believe that GC0156 does not alter the actual BSC processes for determining when and how to suspend and resume normal BSC market operations.

2. **Updating BSC cross-references to relevant parts of the Grid Code that have been renumbered by the GC0156 legal text.**

For example, the BSC refers to NGESO’s determination under Grid Code OC9.4.7.9 of when the Total System could return to normal operation. This triggers the BSC process for determining the end of the BSC’s own contingency provisions. While the GC0156 legal text hasn’t changed the actual activities in this OC9 step, it has renumbered it. The BSC cross-reference will therefore need updating to avoid confusion.

3. **Changes to the BSC’s rules for who can claim compensation for Black Start instructions and, potentially, for what types of instruction.**

Currently only a BSC Party who is the Lead Party for a BM Unit that’s given a Black Start instruction by NGESO under the Grid Code can claim BSC compensation. The BSC defines the eligible instructions by cross-referencing specific types of NGESO instruction in BC2 and OC9 of the Grid Code.

We understand that the intention of GC0156 is to expand the BSC’s compensation arrangements, so that non-BSC Parties providing contracted Restoration Services to NGESO (defined as Anchor and Top-Up Restoration Services in the GC0156 legal text) should be able to claim BSC compensation for instructions given to them during System Restoration. This will require changes to the BSC’s claims rules and procedures, as well as likely changes to BSC / Elexon systems.

We note that GC0156 replaces the existing Grid Code concepts of Black Start Station and Black Start Service Provider with the new concepts of Anchor and Top-Up Restoration Services and Anchor and Top-Up Restoration Service Providers. Where these Restoration Service Providers are distribution-connected, we are currently unclear from the GC0156 legal text whether any instructions they receive from Distribution Network Operators to enact these services will be considered to be NGESO instructions for Grid Code purposes under BC2/OC9. If they are not, then neither BSC Parties nor non-Parties providing these distribution-connected Restoration Services will be able to claim BSC compensation unless changes are made to the BSC.

You can find more information on what BSC changes we believe may be needed in our attached [note to the Issue 100 Group](#) (Attachment A).

GC0156 implementation approach and legal text

Consultation question	Answer	Reasons
2) Do you support the proposed implementation approach?	No	<p>We believe the current 10WD implementation approach creates risks in the operation of the end-to-end Black Start process, as it's very unlikely that the BSC changes can be raised, progressed and implemented by mid-2023 (which we understand is NGESO's target implementation point for GC0156).</p> <p>We initially estimate that the timescales to progress the necessary BSC Modification Proposal are likely to be around 9 months for Workgroup / Panel assessment and Ofgem approval, followed by around 6 months for implementation of the approved changes to BSC documents and systems. The exact timescales will depend on the final scope of the required BSC changes, as developed and assessed by a Workgroup once a BSC Modification Proposal has been raised.</p> <p>See our further comments below.</p>
17) Do you agree that the draft legal text is appropriate and sufficient to implement GC0156? If not please provide your suggestions?	Unsure	<p>Because of the interaction between the Grid Code and BSC provisions, it's difficult to answer this without understanding fully what changes are required to the BSC. For example, see our question above about the instructions given to distribution-connected Restoration Service Providers.</p> <p>The GC0156 legal text also replaces (overwrites) the existing Black Start process in the Grid Code. Given the proposed 10WD implementation date for GC0156, it's unclear what happens if a Black Start (System Restoration) event occurs before parties are ready to start providing the new types of Restoration Services.</p> <p>Not all of the GC0156 deletions to existing provisions in OC9 are showing as redlined strike-out text, which makes it more difficult to see/understand all the changes.</p>

Further comments on implementation approach

We believe that, if the current GC0156 implementation approach doesn't allow the Grid Code and BSC changes to come into effect at the same point, this creates risks to parties in the end-to-end Black Start (System Restoration) process. If a Black Start (System Restoration) event occurs in between implementing the Grid Code and BSC changes, then the risks are that:

- There will be confusion caused by the two Codes using different terminology and by some existing BSC cross-references no longer pointing to the correct part of the Grid Code.
- There will be confusion and lack of clarity on what types of instruction are eligible for BSC compensation. In the worst-case scenario, a disjoint between the Grid Code and BSC rules could mean that some Black Start (Restoration) Service Providers are unable to recoup the costs they incur during the event.

We understand that the Electricity System Restoration Standard doesn't come into force until 31 December 2026. We believe that affected parties will also need time to make the necessary operational and contractual changes that are needed to comply with the new GC0156 requirements. Usually in this scenario we would expect GC0156 to have a fixed implementation date, by which parties must be ready to comply with the new rules (e.g. this could be 31 December 2026, or some other earlier fixed date). Other impacted Industry Codes could then align implementation of their changes on that same date, so that all aspects of the new end-to-end process come into effect at the same time.

We recognise that there may be complexities of which we're unaware, e.g. around contractual and testing arrangements, that might require some GC0156 requirements to come into force earlier than others. In this scenario, we would usually still expect an overall fixed date for implementing the legal text. However this date could be earlier, with the legal text including transitional arrangements to apply during the period in which the new rules are phased in. Examples of BSC changes where the legal text has included transitional provisions include the introduction of BETTA² and the changes to support TERRE³. The Market-wide Half Hourly Settlement (MHHS) Programme is also likely to include transitional provisions within its legal text to implement MHHS in the BSC and other Codes. Elexon's Legal team would be happy to run through past examples of BSC transitional text with NGESO's lawyers, if that would be helpful.

At the GC0156 industry webinar on 7 December 2022, NGESO advised that it's considering operating two parallel versions of the Grid Code between 2023 and 2026 – one with the current rules, and the other with the new GC0156 rules. NGESO indicated that this could also require other impacted Code bodies to operate two live versions of their Codes, including the BSC. We can confirm that it's not possible to have two live versions of the BSC in force simultaneously. Our Legal team would be happy to discuss this further, in case there's been confusion over past BSC approaches (e.g. for BETTA).

² The British Electricity Trading and Transmission Arrangements.

³ The Trans European Replacement Reserves Exchange.