

P451 ‘Updating BSC Black Start provisions and compensation arrangements to align with NGESO’s new approach to System Restoration’

P451 seeks to facilitate the implementation of the National Grid Electricity System Operator’s (NGESO’s) new approach to Black Start, termed System Restoration. In doing so, it proposes to update all BSC references to “Black Start” to “System Restoration”, and enable contracted Restoration Contractors who are non-BSC parties to claim BSC System Restoration compensation.



The P451 Workgroup recommends **approval** of P451



The P451 Workgroup **does** believe P451 impacts the European Electricity Balancing Guideline (EBGL) Article 18 terms and conditions held within the BSC but believe the impacts to be **neutral**

This Modification is expected to impact:

- Ellexon as the BSC Company (BSCCo)
- Trading Parties
- System Restoration Contractors

E L E X O N

Phase

Initial Written Assessment

Definition Procedure

Assessment Procedure

Report Phase

Implementation

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About This Document

You can find the definitions of the terms and acronyms used in this document in the [BSC Glossary](#)¹.

This document is the P451 Workgroup's Assessment Report to the BSC Panel. Elexon will present this report to the Panel at its meeting on 12 October 2023. The Panel will consider the Workgroup's recommendations, and will agree an initial view on whether this change should be made. It will then consult on this view before making its final recommendation to Panel on 14 December 2023 with implementation proposed for 5 Working Days after Authority approval.

There are 4 parts to this document:

- This is the main document. It provides details of the solution, impacts, costs, benefits/drawbacks and proposed implementation approach. It also summarises the Workgroup's final views on the areas set by the Panel in its Terms of Reference and contains details of the Workgroup's membership and full Terms of Reference.
- Attachment A contains the P451 Proposal Form.
- Attachment B contains the draft redlined changes to the BSC for P451.
- Attachment C contains the draft redlined changes to the Code Subsidiary Documents (CSDs) for P451.



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Not sure where to start?

We suggest reading the following sections:

- Have 5 minutes? Read section 1
- Have 15 minutes? Read sections 1 and 7
- Have 30 minutes? Read all except section 6
- Have longer? Read all sections and the annexes and attachments.

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¹ <https://www.elexon.co.uk/glossary/?show=all>

Why Change?

The NGENSO is currently progressing [GC0156 'Facilitating the implementation of the Electricity System Restoration Standard'](#).² GC0156 facilitates the implementation of NGENSO's new approach to Black Start called System Restoration. Amongst several other Code Modifications, it proposes to update all references to Black Start to System Restoration in the Grid Code. Unless a change is made to update the BSC, the BSC's Black Start processes will not align with the Grid Code if GC0156 is approved by Ofgem. Furthermore, NGENSO's new approach will allow Distributed Energy Resources (DERs) to be used as System Restoration Contractors. These Restoration Contractors will be connected to a Distribution System and operated by BSC or non-BSC Parties. Currently, non-BSC parties cannot claim Black Start (soon to be System Restoration) compensation.

In addition to P451, there are a suite of modifications related to the implementation of the Electricity System Restoration Standard - Connection and Use of System Code (CUSC) [CMP398](#)³ and [CMP412](#)⁴ System Operator Transmission Owner Code (STC) changes [PM0128](#)⁵ and [CM089](#)⁶.

Solution

To update all BSC references to "Black Start" to "System Restoration" and to amend [BSC Section G 'Contingencies'](#)⁷ to allow non-BSC parties who have a contract with NGENSO to provide System Restoration services to claim BSC System Restoration compensation. The proposed solution is for Elexon to recoup claims payments from BSC Parties as part of their Black Start Reallocation Proportion.

The current proposed cost recovery mechanism is based on offtaking of net demand, but the Workgroup and Proposer discussed and consulted on three options as part of the Assessment Consultation. This potential change in cost recovery mechanism was ultimately ruled out of scope after opinion from Elexon's legal counsel. The Workgroup has therefore proceeded with the original proposal as outlined in the proposal form (rationale explained further in Section 3 'Solution').

Impacts & Costs

We expect this Modification to impact BSCCo, BSC Trading Parties & System Restoration Contractors. The impacts on BSC Trading Parties will be limited to funding non-BSC party's compensation claims

² <https://www.nationalgrideso.com/industry-information/codes/cusc/modifications/cmp398-gc0156-cost-recovery-mechanism-cusc-parties>

³ <https://www.nationalgrideso.com/industry-information/codes/cusc/modifications/cmp412-cmp398-consequential-charging-modification>

⁴ <https://www.nationalgrideso.com/industry-information/codes/stc/modifications/pm0128-implementation-electricity-system-restoration>

⁵ <https://www.nationalgrideso.com/industry-information/codes/stc/modifications/pm0128-implementation-electricity-system-restoration>

⁶ <https://www.nationalgrideso.com/industry-information/codes/stc/modifications/cm089-cm091-implementation-electricity-system>

⁷ <https://bscdocs.elexon.co.uk/bsc/bsc-section-g-contingencies>

Costs Estimates			
Organisation	Implementation (£)	On-going (£)	Impacts
Elxon	<£2k	N/A	Documents
NGESO	N/A	N/A	N/A
Industry	N/A	Expected to be low – subject to responses from Assessment Consultation	System Restoration Reallocation Proportion costs only if a System Restoration event were to occur
Total	<£2k	0	

Implementation

The Workgroup recommends implementing P451 5 Working Days after Authority decision, to realise P451 at the earliest opportunity and provide additional clarity to parties tendering for System Restoration contracts.

Recommendation

The P451 Workgroup agree that P451 better facilitates Applicable BSC Objectives (a), (c) and (d) and should be approved.



What is Black Start?

Black Start is the procedure to recover from a total or partial shutdown of the GB Transmission System, which has caused an extensive loss of supplies. This entails isolated power stations being started individually and gradually being reconnected to each other to form an interconnected system again.

What is the issue?

In April 2021, the Department for Business, Energy and Industrial Strategy (BEIS)⁸ issued a [policy statement](#)⁹ announcing its intention to introduce a legally binding target for the restoration of electricity supplies in the event of a National Electricity Transmission system (NETS) failure¹⁰. This new policy is called the Electricity System Restoration Standard (ESRS).

The ESRS will require the NGESO to have the necessary restoration services and tools in place to restore 60% of peak National Demand across all System Restoration Regions in 24 hours and 100% peak National Demand to be restored across System Restoration Regions in 5 days. DESNZ requires NGESO to be compliant with the ESRS by 31 December 2026.

NGESO has submitted [GC0156 'Facilitating the implementation of the Electricity System Restoration Standard'](#)¹¹ to the Authority for decision alongside other Grid Code Modifications (e.g. [GC0148 'Implementation of EU Emergency and Restoration Code Phase II'](#)¹² which was approved by Ofgem for implementation on 4 September 2023) to put the necessary measures, tools and procedures in place to satisfy the ESRS.

NGESO raised GC0156 in February 2022 as a Standard Governance modification with assessment by a Workgroup. It was initially consulted on between 21 November 2022 and 21 December 2022 and is currently recommended for implementation 10 Working Days (WD) after Authority approval. GC0156's proposed solution has impacts on the BSC, which P451 seeks to address. These are discussed below.

References to Black Start

GC0156 proposes to replace all Grid Code references to "Black Start" with "System Restoration" in line with the DESNZ's policy and the Transmission Licence¹³. To ensure consistency across industry codes, P451 will need to update both BSC references to Grid Code defined terms and the BSC's own defined terms that include the words "Black Start". It will also need to update cross references to relevant parts of the Grid Code that have been renumbered by the GC0156 legal text.

⁸ Now Department for Energy Security and Net Zero (DESNZ)

⁹ <https://www.gov.uk/government/publications/introducing-a-new-electricity-system-restoration-standard/introducing-a-new-electricity-system-restoration-standard-policy-statement>

¹⁰ Potential causes include physical damage to a network in the event of an extreme weather event, inadvertent configuration of the system due to malfunction or human error, or a malicious attack such as a cyber or terrorist attack.

¹¹ <https://www.nationalgrideso.com/industry-information/codes/gc/modifications/gc0156-facilitating-implementation-electricity-system>

¹² <https://www.nationalgrideso.com/industry-information/codes/gc/modifications/gc0148-implementation-eu-emergency-and-restoration-code>

¹³ To facilitate the introduction of an ESRS and further align the regulatory framework for procurement of restoration services with that of balancing services, Ofgem made [modifications](#) to the Electricity Transmission Licence in October 2021.

BSC Compensation Arrangements

Whilst there is already an obligation under the Grid Code for the NETS to incorporate Restoration Capability, the introduction of the ESRS had led NGESO to re-evaluate its current approach.

If the NETS fails and there is a Total or Partial Shutdown, NGESO can call upon Restoration Contractors to re-energise parts of the Transmission System to gradually restore supply. The key to providing a restoration service is the ability to start up without external supplies (i.e. power taken directly from the transmission and/or distribution networks). This has traditionally been provided by (carbon intensive) gas or coal based power stations that are now reducing in numbers as the industry heads towards Net Zero.

To satisfy the new standard, NGESO need to procure new types of Restoration Contractors (previously Black Start service Providers). For example, the [Distributed ReStart¹⁴](#) project demonstrated how distributed energy resources (DERs) such as solar, wind and hydro can be used to restore power to the transmission network in the event of a Total or Partial System Shutdown. DERs (e.g., windfarms, solar farms and battery energy storage systems¹⁵) are expected to be used as Restoration Contractors from 2025.

GC0156 built on the Distributed ReStart project via its Market and Funding Mechanisms sub group. The Subgroup recommended a change to the BSC's rules on who can claim System Restoration compensation.

The BSC's existing Black Start compensation applies to any BSC Party that is given a Black Start instruction by NGESO under the Grid Code. Such Parties can claim compensation for Avoidable Costs via the Lead Party of the relevant BM Unit.

When the existing rules were written, the expectation was that it would be transmission connected generators who receive the relevant Black Start instructions and therefore claim the BSC compensation. The expectation was also that these generators would be BSC Parties.

However, the DERs that will be providing new System Restoration services will be connected to the Distribution System and operated by BSC or non-BSC Parties. Non-BSC Parties are not currently eligible to claim for BSC Black Start compensation. Moreover, there is no alternative compensation mechanism that would allow a non-BSC Party with a System Restoration Contract to claim for Avoidable Costs.

Background

Issue 100 'Assessing BSC Black Start processes to support NGESO's Distributed ReStart project'

NGESO raised Issue [100 'Assessing BSC Black Start processes to support NGESO's Distributed ReStart project'¹⁶](#) in April 2022. The original purpose of Issue 100 was to consider whether the BSC should be amended to allow providers of new Distribution Restoration services to claim BSC Black Start compensation.

It was originally intended to support progression of Grid Code Modification GC0148, which NGESO raised in July 2020. However, the GC0156 Workgroup concluded in May 2022 (after its own consultation and NGESO's raising of Issue 100) that Distributed ReStart



What is a Black Start Instruction?

For the purposes of BSC Section G3.3, a "black start instruction" is:

- (a) in relation to any Settlement Period(s) which fall within both a Black Start Period and a Market Suspension Period, an instruction given by the NETSO pursuant to OC9.4.7.4, BC2.7 or BC2.9 of the Grid Code; or
- (b) in relation to any Settlement Period(s) which fall within a Black Start Period but not within a Market Suspension Period, an instruction given by the NETSO pursuant to BC2.9.1.2(e)(i) of the Grid Code.



What are Avoidable Costs?

Avoidable Costs are the amount of the net costs of operating the BM Unit which would not have been incurred but for:

- (a) the relevant changes in Exports and/or Imports; or
- (b) a black start instruction.

For the purposes of the Code, the Avoidable Costs shall be the amount determined by the Panel under Section G2.1.2.

¹⁴ <https://www.nationalgrideso.com/future-energy/projects/distributed-restart>

¹⁵ NGESO's live trials demonstrating Black Start from DERs can be found [here](#) and [here](#)

¹⁶ <https://www.elexon.co.uk/smg-issue/issue-100/>

requirements should instead be considered as part of GC0156. This was on the basis that it aligned better within the framework of ESRS and was not an obligation of the EU Emergency and Restoration Code.

In July 2022, NGESO asked Elexon to put Issue 100 on hold pending the outcome of the [GC0156 Markets and Funding Mechanisms subgroup](#)¹⁷. The subgroup recommended that a modification should be raised to expand the BSC's compensation to contracted DERs. They did not recommend expanding this to other non-contracted DERs, which was originally proposed by Issue 100. As the original scope of Issue 100 was no longer relevant and has been superseded by P451, NGESO agreed that Issue 100 could be closed. The Issue report was presented at the BSC Panel meeting in April 2023.

Desired outcomes

The desired outcome is for the BSC to remain robust whilst adopting changes to align with (and facilitate) the implementation of NGESO's new System Restoration approach, including allowing Restoration Contractors, who may or may not be BSC Parties, to claim BSC System Restoration compensation.

¹⁷ See Annex 4 of the GC0156 Workgroup Consultation Report



What is Anchor Plant Capability and Top Up Restoration Capability?

Under GC0156, Anchor Plant Capability is:

The ability of a Restoration Contractor's Plant to Start-Up from Shutdown and to be Synchronised and remain Synchronised to a part of the Total System upon instruction from The Company or Relevant Transmission Licensee (in Scotland) or relevant Network Operator, within a defined time period, pursuant to the terms of the Top Up Restoration Contract, once external electrical power supplies are restored to that Restoration Contractor's site. In the case of a Local Joint Restoration Plan, an instruction from The Company or Transmission Licensee in Scotland to a Restoration Contractor in respect of their Top Up Restoration Plant would generally be issued immediately after an instruction to an Anchor Restoration Contractor with the Top Up Capability expected to be delivered consecutively after external power supplies had been restored to the Top Up Restoration Contractor's site. In the case of a Distribution Restoration Zone Plan, an instruction from a Network Operator to a Restoration Contractor in respect of their Top Up Restoration Plant would generally be issued immediately after an instruction to an Anchor Restoration Contractor with the Top Up Capability expected to be delivered consecutively after external power supplies had been restored to the Top Up Restoration Contractor's site. For the avoidance of doubt a Restoration Contractor with a Top Up Restoration Capability shall have sufficient Auxiliary Energy Supplies to be capable of delivering the service they have agreed to provide as soon as their Connection Point or User System Entry Point is energised.

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Proposed solution

References to Black Start

P451 proposes to amend all references to "Black Start" to "System Restoration". This includes BSC references to Grid Code defined terms and the BSC's own defined terms that include the words "Black Start" (37 instances in Section G, four instances in Section T and one instance in Section X-1).

The tables below show the terms in the BSC that will need to be amended.

Grid Code defined terms in the BSC	
Existing	Post implementation of GC0156
Black Start	System Restoration
Black Start Capability	Anchor Plant Capability Top Up Restoration Capability
Black Start Station	Anchor Plant Top Up Plant

BSC defined terms	
Existing	P451 Proposed amendments
Black Start Period	System Restoration Period
Black start compensation	System Restoration compensation
Black Start Reallocation Proportion	System Restoration Reallocation Proportion

BSC compensation arrangements

P451 proposes to expand the BSC's existing compensation arrangements to include non-BSC Parties who have Restoration Contracts with NGESO to provide Restoration Services under the Grid Code. These non-BSC Restoration Contractors will be connected to a Distribution system, thereby providing Restoration Services through an invoked Distribution Restoration Zone Plan (DRZP). They will also be part of a Supplier's BM Unit for the purposes of the BSC.

Under the proposed P451 solution, eligible non-BSC Restoration Contractors will follow the same process that currently exists for BSC Parties to claim restoration compensation for Avoidable Costs. In other words, claims will be made via the Lead Party of the relevant BM Unit. The existing process is outlined in full in [BSC Section G 'Contingencies'](#) and [BSC Procedure \(BSCP\) 201 Black Start and Fuel Security Contingency Provisions and Claims Processes](#)¹⁸. There will be no change to the existing arrangements for BSC Parties seeking to claim for Avoidable Costs.

Similarly, there will be no changes to the way that claims are paid out by Elexon. The BSC Clearer will pay Lead Parties the net sum for all relevant BM Units and relevant Settlement

¹⁸ <https://bscdocs.elexon.co.uk/bsc-procedures/bscp201-black-start-and-fuel-security-contingency-provisions-and-claims-processes>

Periods via the Funds Administration Agent (FAA). Any redistribution of funds between the Lead Party and Restoration Contractors is outside the BSC arrangements.

Currently, the amounts of compensation paid out are funded by all BSC Trading Parties (including the Lead Party claimant) according to their Black Start Reallocation Proportions. Under the P451 Proposed Solution, if a System Restoration event were to occur, BSC Trading Parties would also be required to fund compensation amounts paid to non-BSC Parties as part of their Reallocation Proportions.

High-level guidance updates

Currently, NGESO issues a notification to Grid Code Users that there is a Total or Partial Shutdown and that it intends to implement a System Restoration event. This triggers the BSC process for determining the start of the System Restoration Period and whether there is a Market Suspension Period. Aside from the above terminology changes and the expansion of the BSC's compensation arrangements to non-BSC Restoration Contractors, GC0156 (and therefore P451) does not propose any changes to the actual BSC System Restoration processes for deciding whether and when to suspend and resume normal BSC market operations.

GC0156 does propose changes to the Grid Code's System Restoration process (e.g. by introducing Distribution Restoration Zones). However, with the exception of some high-level guidance in [BSCP201 'Black Start and Fuel Security Contingency Provisions and Claims Processes'](#), which P451 proposes to update, the BSC is not impacted by the details of the Grid Code's System Restoration process.

Cross references to the Grid code

P451 proposes to update cross references to relevant parts of the Grid Code that have been renumbered within the GC0156 legal text.

For example, BSC Section G3 and BSCP201 make references to the current Grid Code OC9.4.7.9 which has content allowing NGESO to make a determination under the Grid Code of when the Total System has returned to normal operation. This triggers the BSC process for determining the end of the System Restoration Period (and of any "Market Suspension Period"). This clause OC9.4.7.9 is due to be renumbered to OC9.4.7.11 in the Grid Code if GC0156 is approved.

Benefits

It is the Proposer's view that P451 will facilitate the implementation of NGESO's new approach to System Restoration and ensure that the BSC remains aligned with the necessary changes to the Grid Code and CUSC.

[Section 4](#) expands on the intended benefits of P451, including the facilitation of a faster, more reliable, and less carbon intensive System Restoration process in the event of a Total or Partial System Shutdown.

Potential Alternative solutions?

The P451 Workgroup did not identify any alternative solutions. However, the Workgroup did consult on 3 variants to the P451 Solution: the original proposal, a variant with gross demand (including final demand) and a variant with gross demand (including non-final demand) to help them come to an informed decision. Depending on industry consultation responses and subject to confirmation from Elexon that the change would be

in scope, it was possible that the Proposed Solution could change to this approach, or an Alternative solution could be raised at that point.

Assessment Consultation Responses			
Do you believe that cost recovery under P451 should be based on net or gross demand?			
Net	Gross	Neutral/ No Comment	Other
0	1	0	0
<p>The respondent argued that the original proposal unless amended by the proposer, would continue by default with the net demand recovery basis of existing BSC Section G claims by relevant BSC Parties under baseline. The definition of the recovery proportion suggests that only demand pays. Switching to recovery based on gross demand would avoid creating any kind of “embedded benefit” in relation to this exceedingly rare circumstance, the materiality of which over time will be very small due to the extreme rarity of the relevant situation, and would avoid what might seem like inappropriate avoidance of the charge. If a GSP was net exporting (due to having more generation than demand behind it) in North Scotland across the reference period for the black start costs reallocation proportion, demand there wouldn’t pay its share of the Section G claims costs under the baseline, net-demand-based, approach. So as proposer we are open to moving the original proposal to a gross demand recovery basis (which would then apply to the recovery of all Section G claims costs), if other responses and/or the Workgroup lean that way. Or that could be the basis of the alternative form of the mod, if no other ideas for an alternative are formed, and if there is a rival support basis for net charge recovery.</p>			

Assessment Consultation Responses			
Do you believe that cost recovery under P451 should be based on final demand?			
Yes	No	Neutral/ No Comment	Other
1	0	0	0

Assessment Consultation Responses			
Do you agree with the Workgroup that there are no other potential Alternative Modifications within the scope of P451 which would better facilitate the Applicable BSC Objectives?			
Yes	No	Neutral/ No Comment	Other
1	0	0	0

In order to keep to timescales, it had not been possible to confirm the legal status of the suggested change in time for the issuing of the Assessment Consultation. However, during the consultation period Elexon developed the legal opinion that change to the cost recovery to be based on net or gross demand would go beyond the scope of this particular Modification as the suggested variation is not ‘addressing the same issue or defect as originally identified by the Proposer in their Modification Proposal’ as required by Section F2.1.12 (b) (ii).

Elexon’s legal counsel noted that the Modification Proposal issues (identified in various places through the Proposal) appear two-fold and are:

- 1) the change of terminology from Black Start to System Restoration; and
- 2) extending the range of parties entitled to claim compensation to include non-BSC Parties

Elexon's legal counsel reported that that the Proposal is silent as to altering the basis of the compensation (and it appears and the Proposer has confirmed) that this was not contemplated at the time. The implication is that the extension of the compensation for non-BSC Parties would be to compensation calculate on the existing basis set out in the Code.

For avoidance of doubt, the outcome is that the Workgroup will proceed with progression of the original proposed solution. This was discussed with the P451 Proposer and the Workgroup; all concurred. Further consideration may be necessary on whether to raise a separate Modification to address the cost recovery issues, however this will need to occur outside of progression and discussions of this P451 BSC Modification

Legal text

The proposed redlined changes to the BSC and its subsidiary documents to deliver P451 can be found in Attachments B and C.

Assessment Consultation Responses			
Do you agree with the Workgroup that the draft legal text in Attachment B delivers the intention of P451?			
Yes	No	Neutral/ No Comment	Other
1	0	0	0

Assessment Consultation Responses			
Do you agree with the Workgroup that the draft amendments to the CSDs in Attachment C deliver the intention of P451?			
Yes	No	Neutral/ No Comment	Other
1	0	0	0

Estimated costs of P451

Costs have been assessed via limited response to the Assessment Procedure Consultation and will be included in the Report Phase Consultation. However, for those roles the Workgroup believe will be impacted, the Workgroup have provided estimated costs.

Implementation costs estimates			
Organisation	Item	Implementation costs (£)	Comment
Elexon	Systems	N/A	N/A
	Documents	<£2k	
	Other	N/A	N/A
NGESO	Systems	N/A	N/A
	Other	N/A	N/A
Industry	Systems & processes	N/A	N/A
Total		<£2k	

On-going costs estimates		
Organisation	On-going costs (£)	Comment
Elexon	N/A	There will be an expected cost of approx. £1k to review each claim. However, this will be recouped via BSC Trading Parties Reallocation Proportions. This cost will only be incurred if a System Restoration event were to occur.
NGESO	N/A	N/A
Industry	Low	This cost will only be incurred if a System Restoration event were to occur resulting in compensation claims for Avoidable Costs. The amounts of compensation paid out are funded by all BSC Trading Parties (including the Lead Party claimant), according to their System Restoration Reallocation Proportions. These arrangements are already in place but will be extended to include the amounts paid to non-BSC Restoration Contractors.
Total	Low	

P451 impacts

Impact on BSC Parties and Party Agents		
Party/Party Agent	Impact	Estimated cost
Trading Parties	Currently, the amounts of compensation paid out are funded by all BSC Trading Parties (including the Lead Party claimant), according to their Black Start Reallocation Proportions. There will be an impact to these parties if a System Restoration event were to occur as they would also be required to fund compensation amounts paid to non-BSC Restoration Contractors.	L

Impact on BSCCo		
Area of Elxon	Impact	Estimated cost
Performance Assurance	Changes to the BSC Black Start compensation process and arrangements.	L

Impact on BSC Settlement Risks		
Elxon anticipates no impact to BSC Settlement Risks as a result of P451 and none were identified via consultation with industry.		

Impact on Code	
Code Section	Impact
BSC Section G: Contingencies	References to “black start”, BSC Black Start processes, and cross references to the Grid Code will need to be updated. Section G will also need to be updated to extend compensation arrangements to non-BSC Restoration Contractors.
BSC Section T: Settlement and Trading Charges	References to “Black Start Period” and cross references to the Grid Code will need to be updated.
BSC Section X-1: General Glossary	Reference to “Black Start Period” will need to be updated.

Impact on MHHS	
Elxon anticipates no impact on MHHS as a result of P451. This has been confirmed by the MHHS Programme	

Impact on EBGL Article 18 terms and conditions

The changes proposed to BSC Section G3 and T1.7 amend BSC provisions identified as constituting European Balancing Guideline (EBGL) Article 18 Terms and Conditions, as listed in [BSC Section F, Annex F-2](#).¹⁹ As such, P451 will be subject to a Report Phase Consultation of 1 calendar month. The Workgroup believe that P451 is neutral against the EBGL Article 18 Terms and Conditions.

Impact on Code Subsidiary Documents

CSD	Impact
BSCP18: Corrections to Bid-Offer Acceptance Related Data	References to “black start” will need to be updated.
BSCP201: Black Start and Fuel Security Contingency Provisions and Claims Processes	References to “black start”, guidance on BSC Black Start processes, and cross references to the Grid Code will need to be updated.

Impact on other Configurable Items

Configurable Item	Impact
Energy Contract Volume Aggregation Agent (ECVAA) Service Description	References to “black start” will need to be updated.
Central Registration Agent (CRA)	References to “black start” will need to be updated.

Impact on Core Industry Documents and other documents

Document	Impact
Ancillary Services Agreements	No impact identified.
Connection and Use of System Code	
Data Transfer Services Agreement	
Distribution Code	
Grid Code	P451 has been raised to align the BSC with proposed changes to the Grid Code. However, there will be no direct impact on the Grid Code as a consequence of P451. Instead, it facilitates GC0156.
Retail Energy Code	
Supplemental Agreements	

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¹⁹ <https://bscdocs.elexon.co.uk/bsc/bsc-section-f-modification-procedures>

Impact on Core Industry Documents and other documents	
Document	Impact
System Operator-Transmission Owner Code	No impact identified.
Transmission Licence	
Use of Interconnector Agreement	

Impact on a Significant Code Review (SCR) or other significant industry change projects
<p>Elxon requested that Ofgem treat this Modification as a SCR exempt Modification on 02 March 2023. On 6 March 2023, Ofgem agreed to treat this Modification as a SCR exempt Modification.</p>

Impact of the Modification on the environment and consumer benefit areas:	
Consumer benefit area	Identified impact
<p>1) Improved safety and reliability</p> <p>P451 ensures that NGESO's new System Restoration approach works coherently across industry Codes (in this case the BSC). This will help to ensure restoration of supply in the event of a Total or Partial System Shutdown and help to minimise security of supply impacts on consumers in the event of a Total or Partial System Shutdown.</p>	Positive
<p>2) Lower bills than would otherwise be the case</p> <p>The new System Restoration approach will enable a wider range of potential Restoration Contractors to tender for System Restoration Services. Through competition, this can reduce consumer costs via the Balancing Services Use of System (BSUoS) element within their retail electricity tariffs.</p>	Positive
<p>3) Reduced environmental damage</p> <p>The new System Restoration approach seeks to enable low carbon technologies and storage providers to take part in System Restoration as the number of carbon intensive System Restoration power stations reduce in numbers due to Net Zero.</p>	Positive
<p>4) Improved quality of service</p> <p>The new System Restoration approach that this Modification facilitates will ensure that NGESO's System Restoration Capability meets the new ESRS. This means a more reliable, faster System Restoration in the event of a Total or Partial System Shutdown.</p>	Positive
<p>5) Benefits for society as a whole</p> <p>As above. A quicker, more reliable System Restoration in the event of a Total or Partial System Shutdown would reduce the economic damage that would arise from a more prolonged system shut down.</p>	Positive



What are the consumer benefit areas?

- 1) Will this change mean that the energy system can operate more safely and reliably now and in the future in a way that benefits end consumers?
- 2) Will this change lower consumers' bills by controlling, reducing, and optimising spend, for example on balancing and operating the system?
- 3) Will this proposal support:
 - i) new providers and technologies?
 - ii) a move to hydrogen or lower greenhouse gases?
 - iii) the journey toward statutory net-zero targets?
 - iv) decarbonisation?
- 4) Will this change improve the quality of service for some or all end consumers. Improved service quality ultimately benefits the end consumer due to interactions in the value chains across the industry being more seamless, efficient and effective.
- 5) Are there any other identified changes to society, such as jobs or the economy.

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Assessment Report

12 October 2023

Version 1.0

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Assessment Consultation Responses			
Do you agree with the Workgroup's assessment of the impact on the BSC Settlement Risks?			
Yes	No	Neutral/ No Comment	Other
1	0	0	0

Assessment Consultation Responses			
Will P451 impact your organisation?			
Yes	No	Neutral/ No Comment	Other
1	0	0	0
<p>The respondent highlighted that P451 is one of the vital measures that will directly assist NGESO to fully comply with their critical new ESRS licence condition from 31/12/2026 (and building up to full compliance ahead of that time) by supporting their contracting with non-BSC parties for ESRS services; they will be confident in tendering knowing that they will be able to make a claim to be reimbursed for avoidable costs that will be assessed and paid on a comparable basis to how it is for BSC Parties providing ESRS services. However, in terms of finance and settlements and the assessment of claims by a committee in this rare case, the burden will fall on Elexon, as per existing Section G processes and BSCP201, and not on NG-ESO.</p>			

Assessment Consultation Responses			
How much will it cost your organisation to implement P451?			
High	Medium	Low	Other
0	0	1	0
<p>The respondent stated that in terms of operational processes like finance and settlements and the assessment of claims by a committee in this rare case, the burden will fall on Elexon, as per existing Section G processes and BSCP201, and not on NG-ESO. The raising of BSC Modification P451 and taking it through process will in total at the end of the mod process, by the time the FMR is remitted to Ofgem, probably cost NGESO £20k of ESO resource, but there would not then be ongoing work other than the de minimis time involved in sometimes explaining to tenderers for ESRS and pre-tender enquirers, the basis of BSC P451 and how it assists them and gives them confidence as ESRS tenderers on avoidable cost recovery in the rare case where the claims hurdles set out in Section G are met.</p>			

Assessment Consultation Responses

What will the ongoing cost of P451 be to your organisation?

High	Medium	Low	Other
0	0	1	0

The organisation felt that there would not then be ongoing work other than the de minimis time involved in sometimes explaining to tenderers for ESRS and pre-tender enquirers, the basis of BSC P451 and how it assists them and gives them confidence as ESRS tenderers on avoidable cost recovery on the same basis as for a relevant BSC Party in the rare case where the claims hurdles set out in Section G are met. NGESO clarified that they are already explaining to some relevant parties what BSC P451 is and the above-mentioned significance and benefit to them.

Assessment Consultation Responses

How long (from the point of approval) would you need to implement P451?

The consultation response recommended 5 Working Days after Authority decision for implementation.

Implementation

NGESO's new approach to System Restoration is driven, in part, by the need to comply with the ESRS by 31 December 2026. The Workgroup considered the value of (and ultimately agreed to) implementing P451 5 Working Days after Authority decision. This will ensure that P451 (if approved) is implemented prior to the ESRS contracts going live in July 2025. The first contracts will be awarded in December 2023 and so awarded Restoration Contractors will need to be able to review P451's changes to the BSC, which will be shared and socialised upon approval.

Recommended Implementation Date

The Workgroup recommends an Implementation Date for P451 of:

- 5 Working Days after Authority decision.

Assessment Consultation Responses

Do you agree with the Workgroup's recommended Implementation Date?

Yes	No	Neutral/ No Comment	Other
1	0	0	0

Assessment Consultation Responses

Do you have a preference for implementing P451 in the Standard BSC June 2024 release, or 5 Working Days after Authority decision?

5 Working Days after Authority decision

The P451 Workgroup met on 5 May, 14 June, 9 August and 29 September 2023 to consider the Terms of Reference and vote on applicable BSC objectives.

The P451 Workgroup noted the low response rate to the consultation (with only one response received from the Proposer). The Workgroup discussed why this may have been the case noting that non-BSC parties, who would likely be beneficiaries, may not have the resource or understand of Elexon to respond to this consultation. Whilst the Proposer confirmed efforts to engage impacts parties, The Workgroup requested that NGESO and Elexon take additional action to engage with potential tenders, restoration providers, and relevant Trade Associations to ensure that all views are captured.

Elexon will reach out to contacts at Association for Decentralised Energy, Energy UK, Energy Networks Association and Sustainable Energy Association in advance of the Report Phase consultation to provide context of the upcoming modification, explanation of potential impacts and benefits with focus on non-BSC parties and encourage their engagement with the upcoming consultation. This will include an offer of additional explanation of the modification and Elexon processes if required.

Alongside this, NGESO will utilise their existing weekly distribution email to industry to inform on the modification process.

ToR (a) – Who should be eligible to claim for BSC System Restoration compensation?

Workgroup discussions

Elexon provided an overview of the role of Generators in the BSC, noting that the Grid Code currently states that a Generator who receives an emergency instruction during a System Restoration is eligible to claim compensation under BSC Section G (BC2.9.2.6).

A distinction was made between Licensable and Exemptable generators. For example, licensable generators are required (by Standard Licence Condition 9.1) to become a BSC Party, and (by BSC Section K) to register their own Metering Systems and BM Units. Exemptable generators do not have to become BSC Parties.

A Workgroup member asked whether non-restoration contracted BSC Parties who receive a System Restoration instruction will be eligible to claim for BSC System Restoration compensation. The Proposer explained that non-restoration contracted BSC Parties who receive a relevant instruction can currently claim under the BSC and this will not change. P451 seeks to enable non-BSC Restoration Contractors to be eligible to claim but this will not be extended to non-restoration non-BSC Parties.

A Workgroup member asked whether there could be a situation where a System Restoration Contractor would not be a Generator. The Workgroup could not envisage this being the case.

Elexon asked the Workgroup for their views on ToR (a) 'Should non-BSC Parties who are Restoration Contractors be eligible to claim for BSC System Restoration compensation?' The Workgroup agreed with ToR (a).

Outcome

The Workgroup agrees that non-BSC Parties who are System Restoration Contractors should be eligible to claim for BSC compensation.

ToR (b)(i) – Which instruction(s) would trigger eligibility for a non-BSC Restoration Contractors to receive compensation?

Workgroup discussions

Elexon explained that, under GC0156, non-BSC Parties who are Restoration Contractors may receive instructions as part of a DRZP. These instructions will be given by the relevant Network Operator who will have received an Emergency Instruction from the NETSO.

The P451 Proposed Solution is that these instructions would trigger eligibility for non-BSC Parties who are Restoration Contractors to receive BSC System Restoration compensation. The Workgroup agreed with this.

Outcome

The Workgroup agreed with the Proposed Solution for ToR (b)(i)

ToR (b)(ii) – Are changes needed to the BSC's definition of Avoidable Costs?

Workgroup discussions

The Workgroup considered whether a change was needed to the definition of Avoidable Costs in BSC Section G2.1.4. The Proposer expressed his view that a change is not needed, but stated that it would be a good idea for Elexon to produce a guidance document that details what Avoidable Costs might look like in practice. This would be developed following Report Phase Consultation in advance of implementation. This could then be updated as needed without a Code Change. The Workgroup agreed with this view as they believe that the current definition does not discriminate against new types of Generation.

Outcome

The Proposed Solution does not amend the definition of Avoidable Costs, but states that it would be a good idea for Elexon to produce a guidance document that details what Avoidable Costs might look like in practice. The Workgroup agreed with the Proposed Solution for ToR (b)(ii).

ToR (b)(iii) – Will simply pointing to the relevant Grid Code (or other) instruction be sufficient to limit compensation to the intended non-BSC Restoration Contractors, or do further restrictions need to be placed in the BSC?

Workgroup discussions

The Proposer and Workgroup have considered the draft Legal Text and Code Subsidiary Documents and do not believe any further restrictions are necessary within the BSC for P451.

Outcome

No further restrictions have been included in the draft legal text for P451 which can be found in Appendix B.

ToR (c)(i) – Will the Lead Party submit the claim on behalf of the non-BSC Restoration Contractor, or will the non-BSC Restoration Contractor submit the claim direct?

Workgroup discussions

Elxon explained that, under the proposed solution for P451, the Lead Party will submit the claim on behalf of the non-BSC Restoration Contractor. This avoids the need for a BSC system change. It also means that, as per the existing arrangements for BSC Parties, any redistribution of funds between the Lead Party and Subsidiary Parties is outside of the BSC arrangements.

Elxon presented three other options: the non-BSC Restoration Contractor acceding for a very limited purpose, the non-BSC Restoration Contractor signing a side letter detailing the parts of the Code relating to them, and giving the non-BSC Restoration Contractor a clearly defined third party right within the BSC. Elxon expressed a view that these options are impractical and onerous.

A Workgroup member asked whether all potential non-BSC Restoration Contractor claimants would be registered to a BM Unit. Elxon confirmed that all potential claimants will be registered to a Lead Party's BM Unit even if the said claimant is not a signatory of the BSC.

A Workgroup member expressed some concern that DERs may prefer to act independently and not have to rely on the Lead Party to submit a claim and pass on any payment. They also stated that there is no natural incentive on Lead Party Suppliers to submit the claims quickly.

The Workgroup felt they lacked representation from non-BSC Parties who would be impacted by this. They agreed that wider non-BSC Party views should be sought regarding ToR(c)(i) as part of the Assessment Procedure Consultation.

Outcome

Under the Proposed Solution for P451, the Lead Party will submit the claim on behalf of the non-BSC Restoration Contractor. Some concerns were raised by the Workgroup with the Proposed Solution for ToR (c)(i). It was agreed that these risks should be clearly articulated as part of the Assessment Procedure Consultation.

Assessment Consultation Responses			
Do you agree that under P451 the Lead Party will submit the claim on behalf of the non-BSC Restoration Contractor?			
Yes	No	Neutral/ No Comment	Other
1	0	0	0

ToR (c)(ii) – Is the period of 20 business days after the end of a System Restoration Period or equivalent still an appropriate timescale for claims to be submitted?

Workgroup discussions

Elxon explained that under the current arrangements, Lead Parties have 20 Business Days following the end of a Black Start Period to submit a claim. The P451 proposed solution will keep this “as is” (no change to the existing arrangements) for System Restoration. The Workgroup agreed with this approach, noting that BSC Section G already allows for a time extension to be granted at the Panel’s discretion.

Outcome

Currently, Lead Parties have 20 Business Days following the end of a Black Start Period to submit a claim. The P451 Proposed Solution will keep this the same for System Restoration. The Workgroup agreed with the Proposed Solution for ToR (c)(ii).

ToR (d) – How will claims by non-BSC Restoration Contractors be validated?

Workgroup discussions

Elxon explained the existing role of the Claims Committee which is appointed by the Panel to process System Restoration claims. The P451 Proposed Solution will extend the role of the Claims Committee to include non-BSC Restoration Contractor claims. The Workgroup agreed with this approach.

Outcome

The P451 Proposed Solution will extend the role of the Claims Committee to include non-BSC Restoration Contractor claims. The Workgroup agreed with the proposed solution for ToR (d).

ToR (d)(i) – How will the non-BSC Restoration Contractor evidence that (a) it received the eligible type of instruction, and (b) that the costs for which it is seeking compensation only occurred as a result of complying with that instruction?

Workgroup discussions

Elxon explained that under the existing approach, the onus is on the claimant to supply sufficient evidence to the Claims Committee to enable them to determine the amount payable to the claimant. Moreover, Generators will receive the relevant instructions from the NETSO by telephone call which will be logged and recorded. A Workgroup member confirmed that if the Network Operator were to give instructions to Generators connected to the Distribution Network, these would also be recorded.

The Panel may request information from the NETSO and each Network Operator to assist with the validation process. A Workgroup member asked whether the NETSO would

provide evidence of the recorded calls to both the Panel and the claimant. A Workgroup member representing the NETSO confirmed that they would provide the evidence to the Panel and/or the claimant should they request it.

Outcome

Under the P451 Proposed Solution, the Claimant (Non-BSC Restoration Contractor) will be required to supply sufficient evidence to the Claims Committee to enable them to determine the amount payable. This is the same as the existing approach. The Workgroup agreed with the Proposed Solution for ToR (d)(i).

ToR (d)(ii) – How do we ensure that, if the relevant asset is part of a Supplier’s or Virtual Lead Party’s BM Unit, there is no double counting of costs for compensation purposes?

Workgroup discussions

Elxon explained that an asset can be included in more than one BM Unit. This creates the potential for double-counting compensation costs if the Lead Party of both BM Units submit a compensation claim. Procedures taken to avoid the risk of double counting is not covered in the BSC. This is an internal, manual process that would involve keeping a log or register of claims made against each BM Unit and by whom. The Workgroup were asked whether the existing approach sufficient for System Restoration. The Proposer expressed his view that it is proportionate given the rarity of a System Restoration event. The Proposed Solution would keep this as is. The Workgroup agreed with this view.

Outcome

There is an internal, manual Elxon process that would involve keeping a log or register of claims made against each BM Unit and by whom. The Proposer expressed his view that it is proportionate given the rarity of a System Restoration event. The Proposed Solution would keep this as is. The Workgroup agreed with the Proposed Solution for ToR (d)(ii).

ToR (d)(iii) – Is it clear how the proposed BSC compensation arrangements interact with and differ from other available funding options related to System Restoration?

Workgroup discussions

Elxon provided an overview of the Connection and Use of System Code (CUSC) Modification [CMP398 ‘GC0156 Cost Recovery mechanism for CUSC Parties’](#) that provides a funding mechanism for CUSC Parties who are not Restoration Contractors. The funding mechanism addressed by CMP398 is for the recovery of costs of compliance with the new requirements imposed on them via GC0156 whereas the BSC only included costs incurred during a Total or Partial Shutdown.

A Workgroup member sought clarification on whether P451 was an extension of CMP398. The Proposer confirmed that the two Modifications are entirely separate and that P451 is an extension of the current BSC arrangements to non-BSC Restoration Contractors.

Elxon explained that the CMP398 draft legal text includes a short paragraph explaining the distinction between the costs covered by CMP398 and the costs which may be claimed for under the BSC. Elxon asked the Workgroup whether something similar should be placed in the BSC. The Proposer expressed his view that this is not necessary and the Workgroup agreed.

Elxon also asked the Workgroup whether there is any other relevant compensation mechanism that relates to or interacts with BSC System Restoration compensation. The Proposer and Workgroup agreed that there is not.

Outcome

The Proposer's view is that this is clear and no additional clarifications are required in the BSC. The Workgroup agreed with this view.

ToR (e) – How will claims be paid out by Elxon?

Workgroup discussions

Elxon explained that under the existing approach the BSC Clearer pays Lead Parties the net sum for all relevant BM Units and relevant Settlement Periods as per [BSC Section G3.6.6\(a\)](#). These payments are considered to be Ad-Hoc Trading Charges for the purposes of [BSC Section N6.9](#). BSCCo gives instructions to the Fund Administration Agent (FAA) as necessary to give effect to the payment of Ad-Hoc Trading Charges. Under P451, the same approach is proposed for non-BSC Restoration Contractors. The Workgroup agreed with this approach.

Elxon noted that ToR (e) is somewhat dependent on ToR (c)(i) and that any Alternative Proposal would have to consider this.

Outcome

The Workgroup agreed with the Proposed Solution for ToR (e) on the basis that, under ToR (c)(i), the Lead Party makes the claim on behalf of the non-BSC Restoration Contractor.

ToR (e) (i) What is the likely volume of non-BSC Restoration Contractor claims and the associated impacts of this?

Workgroup discussions

Elxon shared speculative figures provided by NGESO regarding the number of Emergency Instructions that might be given during a System Restoration event.

More accurate figures may be available once NGESO completes the tender process, but this is likely to be after the point that P451 has been passed to Ofgem.

Restoration Contractors (RCs) expected by 2026:

- Anchor RCs on Transmission Network (approx. 25)
- Top Up RCs on Transmission Network (approx. 10)
- Distribution Restoration Zones - (approx. 5)
 - Anchor RCs on Distribution Network
 - Top Up RCs on Distribution Network

35 instructions to Transmission connected RCs and 5 instructions to DNOs from ESO.

Elxon presented a high level view of expected volumes and costs

Total Cost (£m) of Compensation to Restoration Contractors
Total Capacity of Service Providers Utilised (MWh): 12,800

		<i>Average Compensation Claimed (£/MWh)</i>		
		100	200	500
<i>Average duration</i>	12	15.36	30.72	76.8
<i>(in hours) for which</i>	24	30.72	61.44	153.6
<i>each provider runs</i>	48	61.44	122.88	307.2

Figure 1

The table above is based on the estimated number of Transmission and Distribution connected Restoration Contractors available in 2026 (35 Transmission & 5 Distribution) and their estimated total volume by 2026 (12.8 GW) provided by NGESO. The average compensation claimed is based on the potential Imbalance costs which could be incurred by these Restoration Contractors.

Total compensation cost = total capacity of Restoration Contractors used * average duration each one runs * average compensation claimed.

For example, it could be that 12.8 GW = 12,800 MW of RCs would run for 24 hours on average and claim £200/MWh, the total cost would be $12800 * 24 * 200 = \text{c. } \mathbf{£61m}$.

The Workgroup agreed that it is difficult to estimate the likely number of claims until further provisions are in place e.g. contracts and DRZPs.

Outcome

Elxon will use the speculative figures when impact assessing P451, noting that more accurate figures may become available in the future.

ToR (e) (ii) – Should BSC System Restoration compensation claims be prioritised?

Workgroup discussions

Under existing arrangements, claims are not prioritised and are paid out on a first come, first serve basis. The P451 Proposed Solution will keep this the same. The Workgroup agreed with this approach. The Workgroup also discussed whether to set a minimum threshold to ensure that it does not cost more for Elxon to run the process than the

amount(s) being claimed for. Elexon estimated that it would cost approximately £1k to review a claim. The P451 Proposer and Workgroup agreed not to set a minimum claim level to ensure fairness and flexibility for all Restoration Contractors.

Outcome

Under the current approach, BSC compensation claims are not prioritised. The Proposed Solution will keep this the same.

ToR (f)(i) – How will the amounts paid out to non-BSC Restoration Contractors be recouped/recovered by Elexon? Should this come from BSC Parties as part of their System Restoration Reallocation Proportion?

Workgroup discussions

Elexon explained that, under the current approach, compensation payments are funded by all BSC Trading Parties (including the Lead Party) according to their Black Start Reallocation Proportions. Elexon asked whether the recoupment of monies paid out to non-BSC Restoration Contractor should come from BSC Parties as part of their Reallocation Proportions. This is the Proposed Solution for P451. An alternative approach could see non-BSC Restoration Contractor being charged a submission fee. The Workgroup agreed with the proposed solution, noting that charging a submission fee could discriminate against smaller claimants.

The Workgroup also discussed whether to set a minimum threshold to ensure that it does not cost more for Elexon to run the process than the amount(s) being claimed for. Elexon reported that they anticipate it will cost Elexon approximately £1k to review a claim – this includes creating the relevant papers for the Panel/Committee. The P451 Proposer and Workgroup agreed not to set a minimum claim level to ensure fairness and flexibility for all Restoration Contractors.

A Workgroup member noted that, until this point, the proposed P451 cost recovery mechanism was based on offtaking net demand, but challenged this and prompted the Proposer and Workgroup to consider whether offtaking gross demand would be more appropriate. The Workgroup member stated that recovering from net demand if a trading unit has a period of net export would lead to a differential that would end up reflected in the System Restoration costs and thus create a competitive distortion that would have to be factored into potential System Restoration Providers (SRPs') tendering offers to reflect this uncertainty in costs.

The Proposer was initially open to this idea of moving away from net reallocation and adopting gross demand reallocation as part of their solution but first wanted to confirm that this was in the scope of the P451 Modification.

Elexon have considered the scope of the Modification as captured in the P451 Proposal Form to see if this allows for this change in cost recovery mechanism. If this is in scope, the Proposer and Workgroup wish to consult on this option ahead of making any final decisions on the mechanism for the Proposed Solution or any Alternative. While the Workgroup are minded to change the cost recovery basis, they wished to consult on three options as part of the Assessment Consultation, the original proposal, a variant with gross

demand (including final demand) and a variant with gross demand (including non-final demand) to help them come to an informed decision.

Outcome

Under the current approach, compensation payments are funded by all BSC Trading Parties (including the Lead Party) according to their System Restoration Reallocation Proportions. The P451 Proposed Solution will adopt this approach for recouping non-BSC Restoration Contractor compensation payments. The P451 Proposed Solution does not require a submission fee. The Workgroup agreed with the Proposed Solution, noting that charging a submission fee could discriminate against smaller claimants. No minimum claims threshold will be set.

Additional consultation question

The Workgroup wished to consult on 3 variants to the P451 Solution: the original proposal, a variant with gross demand (including final demand) and a variant with gross demand (including non-final demand) to help them come to an informed decision.

The Workgroup agreed with the Elexon legal view that changes to the cost recovery mechanism are out of scope of the original description of the defect in the proposal form and therefore unable to be included as an alternative to this Modification. Two Workgroup members did raise that they would have included this as an Alternative Solution if it had been considered in scope. Elexon agreed to reflect this preference for an alternate approach to cost recovery that is ultimately out of scope so would require a separate Modification to enable.

ToR (g) – How will the implementation of the Grid Code, CUSC and BSC changes be aligned? What are the risks if they do not align at the same time and can these risks be mitigated?

Workgroup discussions

At the third meeting in August 2023, Elexon presented the current view of the relevant Grid Code and CUSC changes to verify the approach for implementation of P451.

Change	Implementation date	Date decision required by
Grid Code GC0156	10 working days following The Authority decision	Q3 2023
CUSC CMP398 & CMP412	In line with GC0156	Q3 2023
STC CM089 & CM091	10 working days following The Authority decision	In line with GC0156
STC PM0128	In line with GC0156	TBC
SQSS GSR032	10 working days following The Authority decision	Q3 2023

NGESO confirmed that additional Restoration Contractor contracts are planned to go live in July 2025 and therefore it is acceptable for P451 to target the BSC June 2024 release.

A NGESO representative noted that potential Restoration Contractors need to be able to understand the BSC before their contracts are awarded to understand how payment would be made. The tender contract award date is December 2023 and service go live is July 2025. Therefore the representative questioned whether Elexon would be able, on approval of P451, to make sure these parties are aware of approved changes to the BSC as a result of P451 ahead of June 2024 release.

Outcome

NGESO confirmed that the ESRS contracts are planned to go live in July 2025 and therefore it is acceptable for P451 to target the BSC June 2024 release.

The Workgroup considered the value of implementing P451 5 Working Days after Authority decision, which could provide additional clarity to parties tendering for System Restoration Contractor roles. The Workgroup agreed that implementation 5 Working Days after Authority decision would be preferable.

ToR (h) – Should the BSC System Restoration compensation payment mechanism sit within the BSC?

Workgroup discussions

The Proposer confirmed that their rationale for proposing a BSC change was because of the existing route for recovery in BSC Section G, which could be extended to non-BSC Restoration Contractors via a BSC Modification.

The Workgroup noted this but some identified several potential advantages to giving effect to cost-recovery for non-BSC Restoration Contractors via the CUSC, as claims could then be made directly. Moreover, the CUSC has a gross demand recovery for BSUoS charges born solely by demand and not generation. There was a view that just because cost-recovery for BSC parties sits in the BSC it does not mean that it is the right place.

The Workgroup discussed the issue of introducing processes which rely on non-BSC Parties interacting with BSC Parties. It was noted that this would also be a problem within the CUSC - while large generators are CUSC Parties, all potential SRPs would not sign a Restoration Contract with the DNO and not be asked to sign up to the CUSC. Therefore this issue would be present within both codes. One member stated that within the BSC, there is a level of confidence that there is a line of connection between the non-Party SRP and the BSC Party who would be making the claim for compensation on their behalf, thus providing a clearer route to compensation. In addition, a member noted that if this process was effected via CUSC, it would likely be recovered via BSUoS which Generators do not, so would offer less socialisation of those costs than under the BSC.

Outcome

Several members noted that there may be advantages a solution contained via the CUSC than the BSC including moving BSC Section G into this CUSC to help streamline compensation processes, but were happy for this to be noted and captured in the report, with no further discussions proposed as part of this BSC Modification due to the focus of P451 on modifying the BSC by through updating references and widening eligibility for avoidable cost claims.



Does P451 better facilitate the Applicable BSC Objectives?		
Obj	Proposer's Views	Other Workgroup Members' Views ²⁰
(a)	• Positive	• Positive
(b)	• Neutral	• Neutral
(c)	• Positive	• Positive
(d)	• Positive	• Positive
(e)	• Neutral	• Neutral
(f)	• Neutral	• Neutral
(g)	• Neutral	• Neutral

The Proposer and Workgroup unanimously agree that P451 is positive against the overall arrangements and should therefore be approved.

The P451 Proposer and Workgroup unanimously agree that the Modification better facilitates Applicable Objectives (a), (c) and (d).

Applicable BSC Objective (a) - The efficient discharge by the Transmission Company of the obligations imposed upon it by the Transmission Licence

The Proposer believes that P451 will facilitate the implementation of NGESO's new approach to System Restoration set out in GC0156. This new approach will enable NGESO to meet their new Transmission Licence obligation to satisfy the ESRS that comes into full effect on 31 December 2026.

Ahead of the consultation, a majority of Workgroup members initially agreed with this, while a minority believed that P451 is actually neutral against this objective, noting that they believed in the absence of P451 that NGESO would find another way to fulfil their Licence obligation.

Following the consultation, the Workgroup now unanimously agree with the recommendation. The minority voter now believes that P451 is positive against this objective as it will be inefficient to run two separate processes.

Applicable BSC Objective (c) - Promoting effective competition in the generation and supply of electricity and (so far as consistent therewith) promoting such competition in the sale and purchase of electricity

The Proposer believes that the new System Restoration/Distributed ReStart approach that P451 facilitates will enable a wider range of potential Restoration Contractors to tender for System Restoration Services.

What are the Applicable BSC Objectives?

(a) The efficient discharge by the Transmission Company of the obligations imposed upon it by the Transmission Licence

(b) The efficient, economic and co-ordinated operation of the National Electricity Transmission System

(c) Promoting effective competition in the generation and supply of electricity and (so far as consistent therewith) promoting such competition in the sale and purchase of electricity

(d) Promoting efficiency in the implementation of the balancing and settlement arrangements

(e) Compliance with the Electricity Regulation and any relevant legally binding decision of the European Commission and/or the Agency [for the Co-operation of Energy Regulators]

(f) Implementing and administering the arrangements for the operation of contracts for difference and arrangements that facilitate the operation of a capacity market pursuant to EMR legislation

(g) Compliance with the Transmission Losses Principle

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²⁰ Shows the different views expressed by the other Workgroup members – not all members necessarily agree with all of these views.

The Workgroup agree with the Proposer, believing that P451 will provide system restoration services to a vastly larger number of restoration contractors and reduce potential for discriminatory practices. Applicable BSC Objective

(d) - Promoting efficiency in the implementation of the balancing and settlement arrangements

The Proposer believes that P451 promotes efficiency in the implementation of balancing and settlement arrangements because without it, the BSC's System Restoration processes and terminology will become outdated and misaligned with other industry codes such as the Grid Code and CUSC.

The Workgroup agree with this recommendation believing that BSC arrangements should be changed to ensure accurate references to the Grid Code.

Self-Governance

The Proposer and Workgroup agree that P451 should not be progressed as a Self-Governance Modification, on the basis that it should be considered by the Authority in the context of multiple other CUSC and DCUSA changes addressing the issue.

EBGL Article 18 Terms and Conditions

The changes proposed to BSC Section G3 and T1.7 amend BSC provisions identified as constituting European Balancing Guideline (EBGL) Article 18 Terms and Conditions, as listed in BSC Section F, Annex F-2. This means that the Report Phase Consultation is required to be of one calendar month's duration.

Recommendations

The P451 Workgroup invites the Panel to:

- **AGREE** that P451:
 - **DOES** better facilitate Applicable BSC Objective (a);
 - **DOES** better facilitate Applicable BSC Objective (c); and
 - **DOES** better facilitate Applicable BSC Objective (d);
- **AGREE** an initial view that P451 **should not** be treated as a Self-Governance Modification;
- **AGREE** that P451 **DOES** impact the EBGL Article 18 terms and conditions held within the BSC;
- **AGREE** that P451 is **NEUTRAL** against the EBGL Article 18 terms and conditions held;
- **AGREE** an initial recommendation to the Authority that P451 should be **approved**
- **AGREE** an initial Implementation Date Modification of:
 - **5 Working Days** after Authority decision
- **AGREE** the draft Legal Text for P451 ;
- **AGREE** the draft amendments to the Code Subsidiary Documents for the Alternative Modification;
- **AGREE** that P451 is submitted to the Report Phase; and
- **NOTE** that Elexon will issue the P451 Draft Modification Report (including the draft Legal Text) for a one month consultation and will present the results to the Panel at its meeting on 14 December 2023.

Workgroup's Terms of Reference

Specific areas set by the BSC Panel in the P451 Terms of Reference	Conclusion
<p>a) Who should be eligible to claim for BSC System Restoration compensation?</p> <p>i) Should non-BSC Restoration Contractors be eligible to claim?</p>	<p>(a)(i) The Workgroup agrees that non-BSC Parties who are System Restoration Contractors should be eligible to claim for BSC compensation.</p>
<p>b) What type(s) of System Restoration instruction(s) could be given to non-BSC Restoration Contractors and do they differ from existing types of Black Start instruction?</p> <p>i) Which instruction(s) would trigger eligibility for a non-BSC Restoration Contractor to receive BSC compensation?</p> <p>ii) Are changes needed to the BSC's definition of Avoidable Costs?</p> <p>iii) Will simply pointing to the relevant Grid Code (or other) instruction be sufficient to limit compensation to the intended non-BSC Restoration Contractor recipients, or do further restrictions need to be placed in the BSC?</p>	<p>b) Under GC0156, non-BSC Parties who are Restoration Contractors may receive instructions as part of a Distribution Restoration Zone Plan (DRZP).</p> <p>i) The P451 Proposed Solution is that these instructions would trigger eligibility for non-BSC Parties who are Restoration Contractors to receive BSC System Restoration compensation</p> <p>ii) The Proposed Solution does not amend the definition of Avoidable Costs, but states that it would be a good idea for Elexon to produce a guidance document that details what Avoidable Costs might look like in practice.</p> <p>iii) No further restrictions beyond pointing to the relevant Grid Code instructions have been included in the draft legal text for P451 which can be found in Appendix B.</p>
<p>c) How will claims be submitted by non-BSC Restoration Contractors?</p> <p>i) Will the Lead Party submit the claim on behalf of the non-BSC Restoration Contractor, or will the non-BSC Restoration Contractor submit the claim direct?</p> <p>ii) Is the period of 20 business days after the end of a System Restoration Period still an appropriate timescale for claims to be submitted?</p>	<p>(c)(i) Under the Proposed Solution for P451, the Lead Party will submit the claim on behalf of the non-BSC Restoration Contractor. Some concerns were raised by the Workgroup with this approach. It was agreed that these risks should be clearly articulated as part of the Assessment Procedure Consultation.</p> <p>ii) Currently, Lead Parties have 20 Business Days following the end of a System Restoration Period to submit a claim. The P451 Proposed Solution will keep this the same for System Restoration.</p>

Specific areas set by the BSC Panel in the P451 Terms of Reference	Conclusion
<p>d) How will claims by non-BSC Restoration Contractors be validated?</p> <p>i) How will the non-BSC Restoration Contractor evidence that it received the eligible type of instruction, and that the costs for which it is seeking compensation only occurred as a result of complying with that instruction?</p> <p>ii) How do we ensure that, if the relevant asset is part of a Supplier's or Virtual Lead Party's BM Unit, there is no double counting of costs for compensation purposes?</p> <p>iii) Is it clear how the proposed BSC compensation arrangements interact with and differ from other available funding options related to Black Start/System Restoration? E.g. CMP398</p>	<p>d) The P451 Proposed Solution will extend the role of the Claims Committee to include non-BSC Restoration Contractor claims.</p> <p>Under the P451 Proposed Solution, the Claimant will be required to supply sufficient evidence to the Claims Committee to enable them to determine the amount payable. This is the same as the existing approach for BSC Parties.</p> <p>i) Under the P451 Proposed Solution, the Claimant will be required to supply sufficient evidence to the Claims Committee to enable them to determine the amount payable. This is the same as the existing approach.</p> <p>ii) There is an internal, manual Elexon process that would involve keeping a log or register of claims made against each BM Unit and by whom. The Proposed Solution would keep this as is.</p> <p>iii) The Proposer's view is that this is clear and no additional clarifications are required in the BSC. The Workgroup agreed with this view.</p>
<p>e) How will claims be paid out by Elexon?</p> <p>i) What is the likely volume of non-BSC Restoration Contractor claims and the associated impacts of this?</p> <p>ii) Should BSC Black Start compensation claims be prioritised?</p>	<p>e) Under the existing approach the BSC Clearer pays Lead Parties the net sum for all relevant BM Units and relevant Settlement Periods. These payments are considered to be Ad-Hoc Trading Charges. BSCCo gives instructions to the FAA as necessary to give effect to the payment of Ad-Hoc Trading Charges. Under P451, the same approach is proposed for non-BSC Restoration Contractors.</p> <p>i) Elexon will use the speculative figures when impact assessing P451, noting that more accurate figures may become available in the future.</p> <p>ii) Under the current approach, BSC compensation claims are not prioritised. The Proposed Solution will keep this the same.</p>

Specific areas set by the BSC Panel in the P451 Terms of Reference	Conclusion
<p>f) How will the amounts paid out to non-BSC Restoration Contractors be recouped/recovered by Elexon?</p> <p>i) Should this come from BSC Parties as part of their System Restoration Reallocation Proportion?</p> <p>ii) Should non-BSC Restoration Contractor claimants be charged a submission fee? Should a permitted claim level/amount be set?</p>	<p>(f)(i) Compensation payments will continue to be funded by all BSC Trading Parties (including the Lead Party) according to their System Restoration Reallocation Proportions, including payments made to non-BSC Restoration Contractors.</p> <p>ii) No submission fee or permitted claim amount will be set.</p>
<p>g) How will the implementation of the Grid Code, CUSC and BSC changes be aligned? What are the risks if they do not align at the same time and can these risks be mitigated?</p>	<p>g) NGESO confirmed that the ESRS contracts are planned to go live in July 2025 and therefore it is acceptable for P451 to target the BSC June 2024 release, on the basis that it could be shared with Potential Restoration Contractors once the contract is awarded.</p> <p>Elexon also wish to consider the value of implementing P451 5 Working Days after Authority decision, which could provide additional clarity to parties tendering for System Restoration Provider roles.</p>
<p>h) Should the BSC System Restoration compensation payment mechanism sit within the BSC?</p>	<p>h) Several members noted that there may be advantages in a solution contained via the CUSC than the BSC, but were happy for this to be noted and captured in the report, with no further discussions proposed as part of this BSC Modification.</p>

Assessment Procedure timetable

P451 Assessment Timetable	
Event	Date
Panel submits P451 to Assessment Procedure	9 March 2023
Workgroup Meeting 1	5 May 2023
Workgroup Meeting 2	14 June 2023
Workgroup Meeting 3	9 August 2023
Assessment Procedure Consultation	4 Sept – 25 Sept 2023
Workgroup Meeting 4	29 September 2023
Panel considers Workgroup's Assessment Report	12 October 2023

P451
Assessment Report

12 October 2023

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Workgroup membership and attendance

P451 Workgroup Attendance					
Name	Organisation	5 May 23	14 Jun 23	9 Aug 23	29 Sept 23
Non-voting members					
Ivar Macsween	Ellexon (<i>Chair</i>)	✓	✓	✓	✓
Kayleigh Neal	Ellexon (<i>Lead Analyst</i>)	✓	✓	✓	✗
Patrick Matthewson	Ellexon (<i>Lead Analyst</i>)	✗	✗	✗	✓
Voting Members					
Paul Mott	NGESO (<i>Proposer</i>)	✓	✓	✓	✓
Andrew Colley	SSE	✓	✓	✓	✓
Graz Macdonald	Waters Wye	✓	✗	✓	✓
Paul Youngman	Drax	✓	✓	✓	✓
Sean Gauton	Uniper	✓	✓	✓	✓
Jack Haynes	SP Energy Network	✗	✓	✗	✗
Richard Wilson	UK Power Networks	✗	✓	✓	✗
Tendayi Mutamiri	Acorn Peach Energy	✗	✗	✗	✗
Non-voting Participants					
Lorna Lewin	Ellexon (<i>Market Design</i>)	✓	✓	✓	✓
Rosalind Archer	Ellexon (<i>Lead Lawyer</i>)	✗	✓	✓	✓
David Thomas	Ellexon (SME)	✓	✗	✗	✗
Oliver Meggitt	Ellexon (SME)	✓	✓	✗	✗
Christopher Statham	Ofgem	✓	✓	✓	✗
David Conkie	SP Energy Network	✗	✓	✗	✗
Llewellyn Hoenselaar	NGESO	✓	✓	✓	✓
Sade Adenola	NGESO	✓	✓	✓	✗
Phil Monks	SSE	✓	✓	✓	✓
Paul Murray	SSE	✓	✗	✗	✗