

The background of the slide is a landscape photograph. It features a range of mountains, with the highest peaks covered in snow. The sky is filled with large, white clouds, and a bright light source, likely the sun, is visible behind the clouds on the left side, creating a strong glow. In the foreground and middle ground, there are rolling hills and valleys. Overlaid on this landscape are several bright, glowing orange light trails that curve across the scene, suggesting movement or energy.

WELCOME

GC0156

Implementation of the Electricity System Restoration Standard

Meeting 12

06 March 2023

Online Meeting via Teams

Agenda

Topics to be discussed	Lead
Welcome	Chair
Review of Actions Log	Chair
Review of draft Workgroup Report	All
Updates on GC0156 related modifications	LH/Pmo/TJ
AOB / Next Steps <ul style="list-style-type: none">Finalise Workgroup Report, legal texts and supplementary documentsWorkgroup Vote	Chair

Members / Alternates & Observers

Role	Name	Representing
Chair	Banke John-Okwesa	Code Administrator (ESO)
Technical Secretary	Milly Lewis	Code Administrator (ESO)
Proposer	Antony Johnson	NGESO
Proposer	Sade Adenola	NGESO
Workgroup Member	Abdi Osman	NGV Interconnectors
Workgroup Member	Alan Creighton	Northern Powergrid
Workgroup Member	Alastair Frew	Drax Power Station
Workgroup Member	*Andrew McLeod	Northern Powergrid
Observer	Andrew Larkins	Sygensys
Workgroup Member	Andrew Vaudin	EDF Energy
Observer	Audrey Ramsey	NGESO
Observer	Ben Kuchta	NGET
Workgroup Member	Bill D'Albertanson	UK Power Networks
Workgroup Member (Alternate)	Brad Kent	NGET
Workgroup Member	Brian Morrissey	SSEN Distribution
Workgroup Member	Cefin Parry	Northern Powergrid
Workgroup Member (Alternate)	Chanditha Udalagama	NGV Interconnectors
Workgroup Member	*Daniel Randles	Electricity North West Ltd
Workgroup Member	David Adam	SP Energy Networks
Workgroup Member	Dozie Nnabuife	NGESO
Workgroup Member	Eric Leavy	SP Energy Networks
Observer	Eva Shamu	NGESO
Workgroup Member	Garth Graham	SSE Generation
Workgroup Member (Alternate)	Gavin Anderson	Electricity North West Ltd
Workgroup Member	*Graeme Vincent	SP Energy Networks
Workgroup Member	Grace March	Sembcorp
Workgroup Member	Graz Macdonald	Waters Wye
Workgroup Member	Gwyn Jones	Western Power Distribution

Role	Name	Representing
Workgroup Member	Howard Downey	SP Energy Networks
Workgroup Member (Alternate)	John Costa	EDF Energy
Workgroup Member (Alternate)	Lisa Waters	Waters Wye
Observer	Mark Bingham	NGET
Observer	Mark Holland	Scottish & Southern Electricity Networks Transmissions
Workgroup Member	*Michelle Macdonald	Scottish & Southern Electricity Networks Transmissions
Observer	Mike Kay	Distribution Code Administrator
Observer	Neha Gupta	NGESO
Observer	Neil Sandison	Scottish & Southern Electricity Networks Transmissions
Workgroup Member	Nikhil Singh	NGET
Observer	Paul Murray	Scottish & Southern Electricity Networks
Workgroup Member (Alternate)	Paul Youngman	Drax Power Station
Workgroup Member	Peter Couch	Joint Radio Company Limited
Workgroup Member	Priyanka Mohapatra	Scottish Power
Workgroup Member	*Richard Poole	NGV Interconnectors
Workgroup Member (Alternate)	Richard Wilson	UK Power Networks
Workgroup Member	Robert Longden	Eneco Energy Trade BV
Workgroup Member (Alternate)	Ross Strachan	Scottish Power
Workgroup Member	Tolu Esan	Electricity North West Ltd
Authority Representative	Christopher Statham	Ofgem

*Lead / voting member

Expectations of a Workgroup Member

Contribute to the discussion

Be respectful of each other's opinions

Language and Conduct to be consistent with the values of equality and diversity

Do not share commercially sensitive information

Be prepared - Review Papers and Reports ahead of meetings

Complete actions in a timely manner

Keep to agreed scope

Your Roles

Help refine/develop the solution(s)

Bring forward alternatives as early as possible

Vote on whether or not to proceed with requests for Alternatives

Vote on whether the solution(s) better facilitate the Code Objectives



Review of Actions Log

Banke John-Okwesa – ESO Code Administrator

Action number	Workgroup Raised	Owner	Action	Comment	Due by	Status
64	WG11	BJO	Share specific Workgroup questions around with CBA assumptions with Ofgem: <ul style="list-style-type: none"> - Total cost assumed for generators to comply with specified annual cost including 1st year and subsequent years - Proportion of existing CUSC party fleet that have the capability being captured by GC0156 - Any consideration of Aggregators, size of plant under 50mw 		WG12	Complete
65	WG11	TJ	Consider whether there should be an obligation for the ESO to report the progress of industry ahead of 31 December 2026		WG12	Open
66	WG11	TJ	Change 'consequential' and 'consecutive' to agreed terms in OC5 and OC9		WG12	Open
67	WG11	TJ	Ensure OC5 7.2.4 intent is clear		WG12	Open
68	WG11	AF	Recirculate WAGCM1 with additional thoughts post Workgroup including: <ul style="list-style-type: none"> - whether there needs to be a further type of restoration contract - relationship with LJRP's 		WG12	Open
69	WG11	BJO	Update Terms of Reference with ENCR implications		WG12	Complete
70	WG11	BJO	Share draft Workgroup Report		WG12	Complete
71	WG11	TJ	Share draft legal text with Workgroup as it is finalised		By 3 March 2023	Open
72	WG11	BJO	Update meeting invites		WG12	Complete



Review of draft Workgroup Report



Updates on GC0156 related modifications



BSC modification

Llewellyn Hoenselaar / Paul Mott - ESO

Facilitation of the Electricity System Restoration Standard (ESRS)

Special Condition 2.2 of National Grid's Electricity System Operator's Transmission Licence, the Electricity System Restoration Standard (ESRS) was introduced in October 2021 and requires

- a. 60% of electricity demand being restored within 24 hours in all regions;
and
- b. 100% of electricity demand being restored within 5 days nationally.

The purpose of this direction is to require that the ESO

- a) Ensures and maintains an electricity restoration capability; and
- b) Ensures and maintains the restoration timeframe.
- c) Replace the definition of "Black Start" with "System Restoration"

The aim is to restore the system and supplies as quickly as possible in the most economic manner

BSC modification overview

- Elexon are the custodian of the BSC and hence will make all modifications.
- The GC0156 markets and funding mechanisms sub-group report noted an intention that new restoration contractors which are non-BSC parties and which have a system restoration contract should be eligible to claim for avoidable costs if they qualify under BSC section G3 provisions. Hence, BSC Section G needs amendment, achieved as part of this modification, to allow lead parties to claim compensation even if the asset owner is a non-BSC party; it is the ESO's opinion, and a part of this ESO-raised modification proposal, that these additional BSC section G3 claimants would have to have a contract with both the ESO and a DNO.
- 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').
- Updating BSC cross-references to relevant parts of the Grid Code that have been renumbered by the GC0156 legal text.

BSC modification Indicative timeline (Subject to change)

Task	Date
Initial consideration by Workgroup	09 March 2023
Assessment Procedure Consultation	12 – 30 June 2023
Workgroup Report presented to Panel	10 August 2023
Report Phase Consultation	16 Aug 2023 - 13 Sep 2023
Draft Modification Report presented to Panel	12 October 2023
Final Modification Report submitted to Authority [not Self-Governance]	18 October 2023



Black Start - House keeping modification

Paul Mott - ESO

Background - Black Start

- The ESO has raised major Grid Code change package GC0156, affecting large parts of the Grid Code, replacing the definition and use of “Black Start” with “System Restoration” and a range of other necessary changes
- The ESO is raising a BSC modification at BSC panel on 9th March, to do the same thing in the BSC (and to extend the basis of section G3 claims for avoidable fuel)

Reason for this Change

- The ESO needs to replace definitions and terms in CUSC that relate to “Black Start” to reflect new terminology in GC0156
 - Seeking to remove of a tiny handful of references to ‘black start ’ in the CUSC, including one in charging (section 14), to be replaced with appropriate new terms related to the new phrase “system restoration”
- This modification is aligned with GC0156 ... we hope for Ofgem approval to be in sync with it so terms “flip” to their replacements in all codes on the same date
- *(NB : this pair of charging and non-charging CUSC mods is independent of SSE’s cost reclaim mod CMP398, and is needed regardless)*

References to black start in main CUSC (non-charging)

Non-Charging changes for the non-charging CUSC mod : the following will need updating :

- In 6.8.3 If the User chooses to participate in the Balancing Mechanism then the following provisions must be met:
 - The requirements as specified in Appendix 2 to this Section 6 must be met for all generating plant, including any plant specifically installed for **Black Start**, that is the subject of bids or offers to the Balancing Mechanism

Second Change (non-charging) in the non-charging mod, of the pair :

- EXHIBIT B, connection agreement, needs updating too – current content is :
 - “C. Technical Information:
 - 1. Please provide the Data listed in Part 1 of the Appendix to the Planning Code.
Note: the Data concerned forms part of the Planning Code and Data Registration Code. Applicants should refer to these sections of the Grid Code for an explanation.
 - 2. Please indicate any terms which you are prepared to offer for: A. **Black Start** Capability”

(appears again in another almost identical list in another part of exhibit B, which has multiple slightly different connection agreement sample pro formae for different generator types, as “h **Black Start** Capability”)

Reference to black start in section 14 of CUSC (charging)

Charging (section 14) changes in a Charging twin mod :

1. Each reference in section 14 to “BSCd” (expanded on in the table 14.31.8 Balancing Services Use of System Acronym Definitions, as meaning “black start costs”) is to be replaced with SRCd. *Note that BSCd is a component of BSUoSEXT, the external costs element of BSUoS; it is the way by which black start costs feed in to BSUoS. Earlier copies of CUSC in that table defined BSCd by reference to standard licence condition SLC G4.5 in the transmission licence. As this was not replicated in the new ESO licence – it was dropped*
2. In 14.31.8 Balancing Services Use of System Acronym Definitions, The entry for definition of BSCd , Black Start Costs, in the relevant box in the table at 14.31.8 to be changed to (words borrowed from the former SLC G4.5) :

EXPRESSION	ACRONYM	Unit	Definition
Black Start System Restoration Costs	BSG SRC _d	£	As defined in the Transmission Licence The total costs associated with the provision of System Restoration, formerly known as Black Start, including procuring, testing, warming, utilisation, capital contributions and payments for Feasibility Studies costs.



AOB

Banke John-Okwesa – ESO Code Administrator



Next Steps

Banke John-Okwesa – ESO Code Administrator

- Finalise Workgroup Report and Legal Texts
 - Workgroup Vote



Timeline

Banke John-Okwesa – ESO Code Administrator

Revised Timeline for GC0156

Milestone	Date	Milestone	Date
Proposal Presented to Panel	24 February 2022	Workgroup 12 - Review draft Workgroup Report, check and finalise all objectives on Terms of Reference	06 March 2023
Workgroup 1 – Understand / discuss proposal and solution, review and agree on Terms of Reference and Timeline, agree next steps	26 April 2022	Workgroup 13 – Finalise Workgroup report, legal text discussions	14 March 2023
Workgroup 2 – Review high level options and legal text, consider outputs from related modifications (such as GC0148)	19 May 2022	Workgroup 14 - Agree that Terms of Reference have been met, sign off Workgroup Report, Workgroup Vote	17 March 2023
Workgroup 3 – Recap of GC0148 and Distributed Re Start, Subgroup Terms of Reference, Review of high level solutions / options	16 June 2022	Workgroup Report issued to Panel	22 March 2023
Workgroup 4 – Review draft legal text, finalise scope and function of subgroups, develop solution(s)/options, identify/asses any possible alternative solutions	14 July 2022	Panel sign off that Workgroup Report has met its Terms of Reference	30 March 2023
Workgroup 5 – Develop solution(s)/options, subgroup outputs, conclude on preferred options / consider and agree on alternatives	18 August 2022	Code Administrator Consultation	03 April 2023 – 03 May 2023
Workgroup 6 - Develop WG consultation questions, progress of draft legal texts, subgroup updates, assess alternatives (if applicable)	20 September 2022	Draft Final Modification Report (DFMR) issued to Panel	17 May 2023
Workgroup 7 – Refine WG consultation report, review subgroup reports, review legal texts, agree alternatives	20 October 2022	Panel undertake DFMR recommendation vote	25 May 2023
Workgroup 8 – Finalise Workgroup Consultation documents, finalise draft legal text	10 November 2022	Final Modification Report issued to Panel to check votes recorded correctly (5 working days)	29 May 2023 – 02 June 2023
Workgroup Consultation (15 Working Days)	21 November 2022 – 09 December 2022	Final Modification Report issued to Ofgem	05 June 2023
Workgroup 9 – Review/assess consultation responses	17 January 2023	Ofgem decision	TBC
Workgroup 10 – Finalise review of consultation responses, review updated WG report and legal text following consultation responses	31 January 2023	Implementation Date	10 working days after Ofgem decision
Workgroup 11 – Review and finalise updated legal text, assess and vote alternatives, Terms of Reference check	21 February 2023		