GC0166: Introducing new Balancing Programme Parameters for Limited Duration Assets

Workgroup 1 – 1 February 2024

Online Meeting via Teams

WELCOME

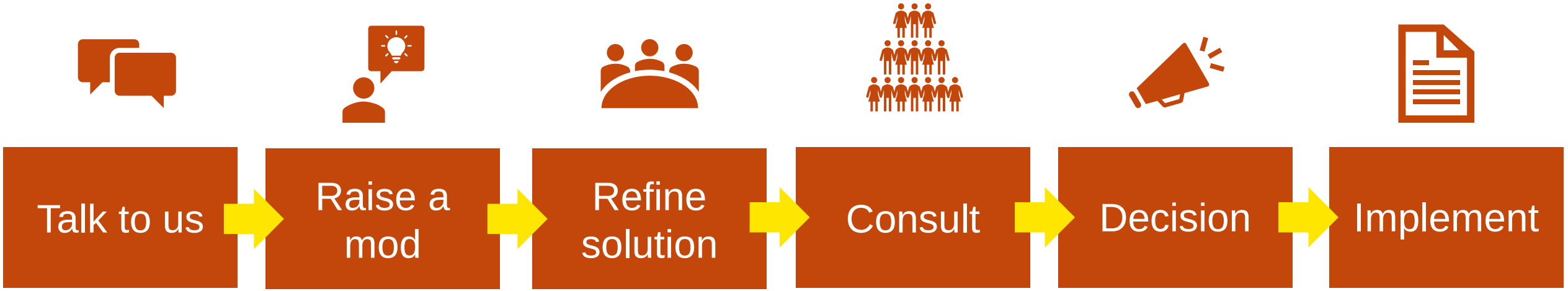
Agenda

#	Topics to be discussed	Lead
1.	Introductions	Chair
2.	Code Modification Process Overview • Workgroup Responsibilities • Workgroup Alternatives and Workgroup Vote	Chair
3.	Objectives and Timeline • Walk-through of the timeline for the modification	Chair
4.	Review and agree Terms of Reference	All
5.	Proposer Presentation and Questions	Proposer
6.	Cross Code Impacts	All
7.	Any Other Business	Chair
8.	Next Steps	Chair

Modification Process

Jonathan Whitaker – ESO Code Administrator

Code Modification Process Overview



Forums

Panels

Workgroups
(Workgroup Consultations)

Ofgem/Panel

Refine solution
Workgroups

- If the proposed solution requires further input from industry in order to develop the solution, a Workgroup will be set up.

- The Workgroup will:
  - further refine the solution, in their discussions and by holding a **Workgroup Consultation**
  - Consider other solutions, and may raise **Alternative Modifications** to be considered alongside the Original Modification
  - Have a **Workgroup Vote** so views of the Workgroup members can be expressed in the Workgroup Report which is presented to Panel

Consult

Code Administrator Consultation

- The Code Administrator runs a consultation on the **final solution(s)**, to gather final views from industry before a decision is made on the modification.

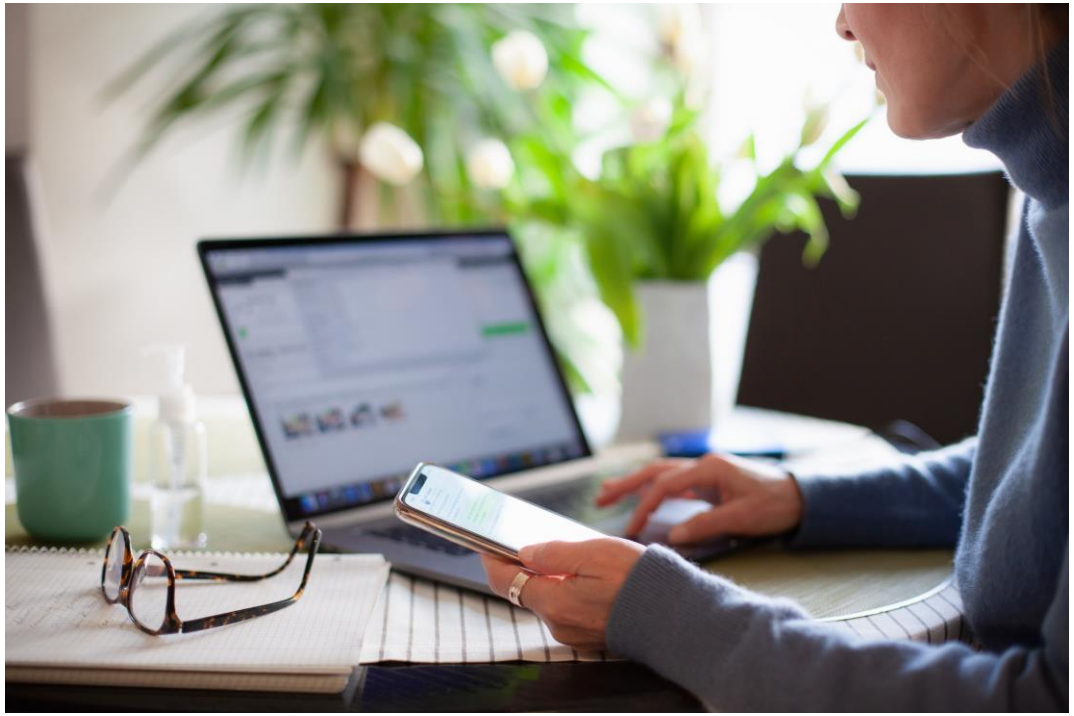
- After this, the modification report is voted on by Panel who also give their views on the solution.

Decision

- Dependent on the Governance Route that was decided by Panel when the modification was raised
- **Standard Governance:** Ofgem makes the decision on whether or not the modification is implemented
- **Self-Governance:** Panel makes the decision on whether or not the modification is implemented
  - an appeals window is opened for 15 days following the Final Self Governance Modification Report being published

Implement

- The Code Administrator implements the final change which was decided by the Panel / Ofgem on the agreed date.



Workgroup Responsibilities

Jonathan Whitaker – ESO Code Administrator

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
- Email communications to/cc'ing the .box email

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

Workgroup Alternatives and Workgroup Vote

Jonathan Whitaker – ESO Code Administrator

Can I vote? and What is the Alternative Vote?

To participate in any votes, Workgroup members need to have attended at least 50% of meetings

Stage 1 – Alternative Vote

- Vote on whether Workgroup Alternative Requests should become Workgroup Alternative Grid Code Modifications.
- The Alternative vote is carried out to identify the level of Workgroup support there is for any potential alternative options that have been brought forward by either any member of the Workgroup OR an Industry Participant as part of the Workgroup Consultation.
- **Should the majority of the Workgroup OR the Chair believe that the potential alternative solution may better facilitate the Grid Code objectives than the Original then the potential alternative will be fully developed by the Workgroup with legal text to form a Workgroup Alternative Grid Code modification (WACM)**and submitted to the Panel and Authority alongside the Original solution for the Panel Recommendation vote and the Authority decision.

Can I vote? and What is the Workgroup Vote?

To participate in any votes, Workgroup members need to have attended at least 50% of meetings

Stage 2 – Workgroup Vote

- 2a) Assess the original and Workgroup Alternative (if there are any) against the relevant Applicable Objectives compared to the baseline (the current code)
- 2b) Vote on which of the options is best.

Workgroup Membership

Name	Alternative Name	Role	Company
Jon Whitaker		Chair	ESO Code Administrator
Andrew Hemus		Technical Secretary	ESO Code Administrator
TBC		Authority Representative	Ofgem
Steve Baker		Proposer	National Grid ESO
Giorgio Balestrieri	Giulio Beseghi	Workgroup Member	Tesla
Kamila Nugumanova	Joshua Logan	Workgroup Member	Drax Group
Lauren Jauss	Jo Manship	Workgroup Member	RWE Supply & Trading GmbH
Jamie Clark	Sonia Quiterio	Workgroup Member	Conrad Energy
Richard Devenport	Melanie Ellis	Workgroup Member	Shell
Isaac Gutierrez	Julie Richmond	Workgroup Member	ScottishPower Renewables
Stephen Knight	Mark Ajal	Workgroup Member	SSE
Tom Palmer		Workgroup Member	Zenobe
Shantanu Jha	Anna Szumska	Workgroup Member	Zenobe
	Robert Newton	Workgroup Member	Zenobe
Simon Lord	Andrew Rimmer	Workgroup Member	Engie

Workgroup Membership

Name	Alternative Name	Role	Company
Eli Treuherz	Rory Stewart	Workgroup Member	Arenko Group
Hooman Andami		Workgroup Member	Elmya Energy
Oluwabukola Daniel	Harry Burns	Workgroup Member	EDF Renewables
Davide Miriello	Seyedali Khatami	Workgroup Member	Enel X
Jasper Vermandere	Tikshala	Workgroup Member	YUSO
Peter Errington	Georgios Chiotis	Workgroup Member	Flexitricity Ltd
Graz Macdonald	Kyran Hanks	Workgroup Member	Waters Wye & Associates / Saltend
Robert Longden	Tom Faulkner	Workgroup Member	Cornwall Insight/Eneco Energy Trade BV
Damian Jackman	Edoardo Nerenzi	Workgroup Member	Field Energy
Chris McLeod	Matt Bird	Workgroup Member	Habitat Energy
Maria Popova	Cathrin Stadler	Workgroup Member	Centrica

Workgroup Membership

Name	Alternative Name	Role	Company
Ife Garba		Observer	ESO
Shivam Malhotra	Thomas Debenham	Observer	LCP Delta
Tim Viney		Observer	LCP Delta
Sushanth Kolluru		Observer	LCP Delta
Andrei Bejan	Nathan Moriarty	Observer	ESO
Liam Dennis		Observer	Volcore Ltd
Euan Killengray	Charlotte Johnson	Observer	KrakenFlex
Steve Dale		Observer	ESO
Ewen Ellen		Observer	Scottish Power
Olly Frankland		Observer	Electricity Storage Network/Regen
David Graves		Observer	Quorum Development
Daniel Moore-Oats		For Information Only	Arenko

Objectives and Timeline

Jonathan Whitaker – ESO Code Administrator

Timeline for GC0166 – Proposed Timeline - *Workgroup*

Milestone	Date	Milestone	Date
Modification presented to Panel	14 December 2023	Code Administrator Consultation (1 Month)	02 July 2024 to 02 August 2024
Workgroup Nominations (15 Working Days)	18 December 2023 to 11 January 2024	Draft Final Modification Report (DFMR) issued to Panel (5 working days)	14 August 2024
Workgroup 1 Workgroup 2 Workgroup 3 To discuss the proposal, analysis required and begin refining the solution.	01 February 2024 7 March 2024 28 March 2024	Panel undertake DFMR recommendation vote	22 August 2024
Workgroup Consultation (15 working days	02 April 2024 to 23 April 2024	Final Modification Report issued to Panel to check votes recorded correctly	23 August 2024 – 30 August 2024
Workgroup 4 Workgroup 5 To review the Workgroup Consultation responses and to finalise the solution	15 May 2024 10 June 2024	Final Modification Report issued to Ofgem	02 September 2024
Workgroup report issued to Panel (5 working days)	19 June 2024	Ofgem decision	04 November 2024
Panel sign off that Workgroup Report has met its Terms of Reference	27 June 2024	Implementation Date	19 November 2024

Terms of Reference

Jonathan Whitaker – ESO Code Administrator

GC0163 - Terms of Reference

Workgroup Terms of Reference

a) Implementation and costs;

b) Review draft legal text should it have been provided. If legal text is not submitted within the Grid Code Modification Proposal the Workgroup should be instructed to assist in the developing of the legal text;

c) Consider whether any further Industry experts or stakeholders should be invited to participate within the Workgroup to ensure that all potentially affected stakeholders have the opportunity to be represented in the Workgroup. Demonstrate what has been done to cover this clearly in the report; and

d) Consider EBR implications

e) Liaise with other industry groups regarding related information that Network Operators may require

Proposer’s Solution

New Parameters for Storage *(GC0166)*

ESO

Background

The Balancing Programme

- The ESO has initiated a programme to update the tools and capabilities within the control room in readiness for net-zero operation
- Details of the programme can be found at the following location Balancing programme | ESO (nationalgrideso.com)
- The programme holds quarterly face-2-face reviews (all are invited to attend)
- In addition, the programme has been holding a number of forums that meet on a more regular basis to discuss specific topics
- One forum covers Storage – we have held six meetings to date and the forum has 80 signed up members
- From this forum there have been a number of suggestions for new parameters that can be used to optimise the dispatch of Storage units
- Today we would like to take you through the discussions held to date

Problem Statement

Short Term (Dispatch)

- How to get beyond the limitations of the 15 minute rule
- Increasing utilisation of limited duration assets in dispatch
- How can assets provide accurate technical limits to the ESO

Long Term (Scheduling)

- How to utilise limited duration assets in planning timescales
- How to ensure best total value for consumers
- Provide the ESO confidence in the long-term management of risk

Communication Mechanism

- What is the easiest way to send and receive data between the ESO and Limited Duration Assets

Current Situation

The “15 minute rule”

- The ESO cannot be sure of the available energy from a storage unit
- To overcome this we use the “15 minute rule”
- The ESO will not issue an instruction beyond 15 minutes and uses the Maximum Import Limit (MIL) and Maximum Export Limit (MEL) to determine the amount of energy that can be safely dispatched
- After issuing an instruction the ESO waits for a redeclaration of MIL/MEL before issuing another instruction
- This advice is contained in the following document Stacking with BM (nationalgrideso.com)
- This rule has a number of shortcomings and so we have been engaging with industry on suggestions for new parameters that can be used to optimise the use of Limited Duration Assets

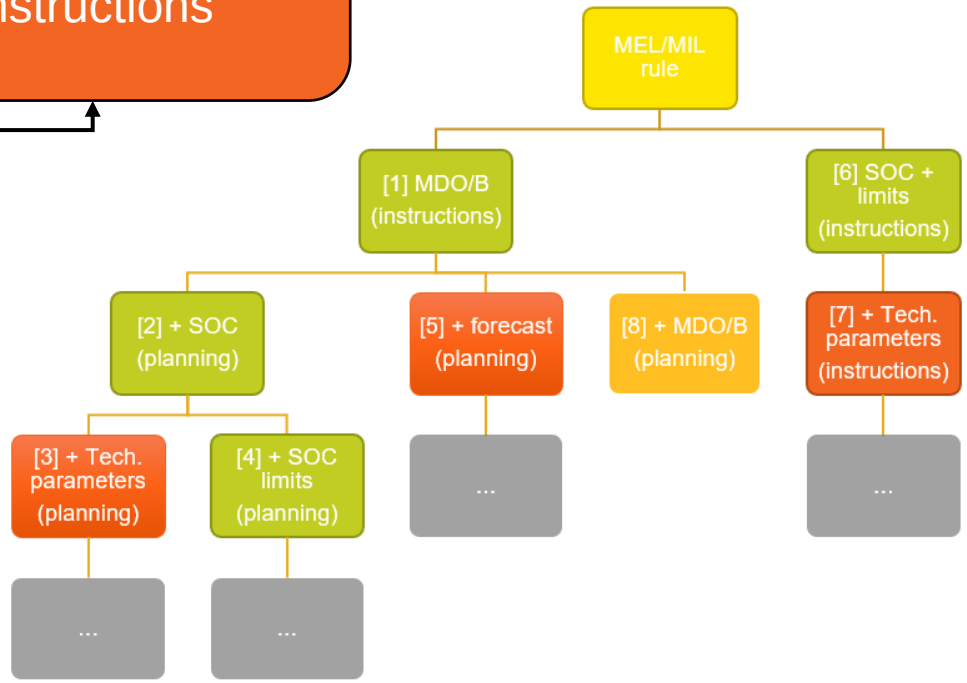
Parameters Discussed in detail so far

State of Charge (SOC)
For other asset types equivalent physical attributes

MDO/MDB
Maximum Deliverable Offer/ Maximum Deliverable Bid

Model

ESO converts into instructions



Solutions in Dispatch Timescales

Limited Duration Asset

MDO/MDB
(from, to time)

OR

SOC + limits

OR

SOC + limits + Tech Parameters

EDL

OR

SCADA

ESO converts into instructions

Solutions in Scheduling Timescales

Limited Duration Asset

MDO/MDB
Time Varying

OR

SOC + limits
Time Varying

OR

SOC + limits (Time Varying) + Tech Parameters

AND/OR

Reserve Markets (Balancing/Quick/ Slow)

EDL

ESO converts into instructions

Cross Code Impacts

Jonathan Whitaker – ESO Code Administrator

Any Other Business

Jonathan Whitaker – ESO Code Administrator

Next Steps

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