

GC0162: Changes to OC6 to amend the operational timings for the delivery of the additional demand reduction above 20%, with a focus between 20% and 40%

Workgroup 1

10 August 2023
Online Meeting via Teams

WELCOME



Agenda

#	Topics to be discussed	Lead
1.	Introductions	Chair
2.	Code Modification Process Overview <ul style="list-style-type: none">• Workgroup Responsibilities• Workgroup Alternatives and Workgroup Vote	Chair
3.	Objectives and Timeline <ul style="list-style-type: none">• 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

Lizzie Timmins – ESO Code Administrator

Code Modification Process Overview





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

Lizzie Timmins – 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

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

Lizzie Timmins – 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 (WAGCM) 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.



Objectives and Timeline

Lizzie Timmins – ESO Code Administrator

Timeline for GC0162

Milestone	Date	Milestone	Date
Electricity Shortfall Prioritisation Review – Workshop agree to proceed with a urgent modification	29 June 2023	Workgroup 6 – Hold Workgroup Vote, Finalise Workgroup Report	03 October 2023
Urgent modification proposal submitted	20 July 2023	Workgroup report issued to Panel (3 working days)	09 October 2023
Modification presented to Panel	27 July 2023	Panel sign off that Workgroup Report has met its Terms of Reference	12 October 2023 (Special Panel)
Workgroup Nominations (5 Working Days)	28 July 2023 to 4 August 2023	Code Administrator Consultation (1 calendar month)	13 October 2023 to 14 November 2023
Ofgem grant Urgency	04 August 2023	Draft Final Modification Report (DFMR) issued to Panel (2 working days)	20 November 2023
Workgroup 1 – Agree timeline, Terms of Reference and discuss solution	10 August 2023	Panel undertake DFMR recommendation vote	23 November 2023 (existing Panel meeting)
Workgroup 2 – Refine solution and potential alternatives	23 August 2023	Final Modification Report issued to Panel to check votes recorded correctly (<1 working days)	23 November 2023 (11am to 12pm)
Workgroup 3 – Refine solution and potential alternatives	29 August 2023	Final Modification Report issued to Ofgem	23 November 2023 (12pm)
Workgroup 4 - Finalise Workgroup Consultation	8 September 2023	Ofgem decision	01 December 2023 (5pm)
Workgroup Consultation (5 working days)	12 September 2023 to 18 September 2023	Implementation Date	By 15 December 2023
Workgroup 5 - Assess Workgroup Consultation Responses	21 September 2023		



Terms of Reference

Lizzie Timmins – ESO Code Administrator

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) Ensure that the scope of work identified is achievable within the timeframe outlined in the Ofgem Urgency decision letter.
- f) Consider whether the solution has consequences on OC6 that would prevent the intention of the modification being achieved.
- g) Consider the implications for the Distribution Code, including DOC6
- h) Consider cross code implications.
- i) Focus on the arrangements for demand disconnection in the range 20%-40%
- j) Consider whether it is appropriate to remove the prohibition on protecting site supplies, where technically feasible, for demand disconnection in the range 20%-40% (as implemented in GC0161 for demand disconnection in the range 0-20%).
- k) Undertake analysis to consider any adverse implications for the security of supplies to customer generally arising from the protection of supplies to critical sites due to the increased switching time.
- l) Undertake analysis to consider any adverse implications for the generator reserve and response requirement arising from the protection of supplies to critical sites due to the increased switching time.



Proposer's Solution

Usman Farooq – ESO



OC6 Modification - GC0162: Changes to OC6 to amend the operational timings for the delivery of the additional demand reduction above 20%, with a focus between 20% and 40%.

Context & Electricity Shortfall Prioritisation Review (ESPR)

Due to tightening winter margins and additional risks (e.g., war in Ukraine, change in generation mix) that could impact the availability of electricity supply, there has been an increased focus on the tools the ESO would use to reduce demand to ensure the GB Electricity System remains balanced in the event of a supply shortfall.

Ahead of last winter the ESO and Network Operators provided explanations to HMG and media on the likelihood of a supply shortfall and the impacts it would have on electricity consumers. Concerns were raised about the lack of any protection under OC6, as well as the inability to rotate demand reductions if the shortfall lasted for a prolonged period of time. In response to these concerns, the DESNZ lead Electricity Shortfall Prioritisation Review (ESPR) was kicked off.

ESPR objectives included the development of an approach to prioritisation that is consistent as possible across all forms of demand control (LFDD, OC6, ESEC). In particular to ensure that operational time requirements to enact demand disconnection between 20% and 40% are feasible. In order to support that alignment and to address some of the concerns ahead of winter 23/24, GC0162 modification has been proposed.



Grid Code Mods

GC Mod	Purpose	Proposed GC Changes	Benefit
GC0161	To remove wording in OC6 that prevents the protection of particular consumers or not to unduly discriminate/prefer particular customers.	Remove relevant text in OC6.1.5 and OC6.2.1	Will allow the DNOs, where technically possible, to use the 5% demand blocks currently utilised for ESEC for OC6 Demand Control (OC6.5.3), therefore ensure the protection of key sites.
GC0162	To clarify/amend the operational timings for the delivery of the additional demand reduction between 20% and 40% under OC6.5	Additional text specifying when each additional 5% demand can be delivered above 20% (i.e. 5mins for each additional 5% demand block)	Will allow the DNOs, where technically possible, to use the 5% demand blocks currently utilised for ESEC for OC6 Demand Control above 20% (OC6.5.4 & 5), therefore ensure the protection of key sites.
GC01XX (in draft)	Introduce a new demand reduction tool into OC6 for margin shortfall scenario, with [6/24] hours notice .	Additional section under OC6 (OC6.9) detailing the margins shortfall procedure with [6/24] hours notice.	Will allow the DNOs, where technically possible, to use the 5% demand blocks currently utilised for ESEC for OC6 Demand Control, therefore ensure the protection of key sites and allow rotation of the Demand Blocks.

In Progress

OC6 - Operational Timings

The current demand blocks used to facilitate OC6 demand reduction are generally switched at the 33 kV Level. This means the actions can be delivered in short timescales and without any reconfiguration of the networks. However, these blocks do not protect any sites, due to the high level that the switching occurs.

DESNZ, ESO and the DNO's would like to be able to use the demand blocks utilised for ESEC demand reductions under an OC6 event, where technically possible. The current ESEC demand blocks are generally switched at the 11 kV level, which means it takes longer to complete the switching programme to remove each 5% demand block, but provides greater granularity allowing for sites to be protected.

While switching at 11kV level brings an increased level of granularity, it also increases time requirements to enact. OC6 currently dictates the operational timing requirements to enact demand disconnection events. In order to ensure that we can protect sites in the event of a demand disconnection event between 20% and 40%, i.e. use of ESEC blocks, timing requirements need to be changed. The current time requirements means that ESEC blocks cannot be used and that sites cannot be protected. This modification aims to change those timing requirements.

Legal Text – Proposed Changes

Draft legal text

OC6.5.5

- (a) If **The Company** has given a **National Electricity Transmission System Warning - High Risk of Demand Reduction** to a **Network Operator**, and has issued it by 1600 hours on the previous day, it can instruct the **Network Operator** to reduce its **Demand** by the percentage specified in the **National Electricity Transmission System Warning**.
- (b) **The Company** accepts that if it has not issued the **National Electricity Transmission System Warning - High Risk of Demand Reduction** by 1600 hours on the previous day or if it has issued it by 1600 hours on the previous day, but it requires a further percentage of **Demand** reduction (which may be in excess of 40 per cent of the total **Demand** on the **User System** of the **Network Operator** (measured at the time the **Demand** reduction is required) from that set out in the **National Electricity Transmission System Warning**, it can only receive an amount that can be made available at that time by the **Network Operator**.

- (c) ~~Other than with regard to the proviso, the provisions of OC6.5.3 shall apply to those instructions.~~

Other than with regard to the proviso, the provisions of OC6.5.3 shall apply to those instructions, except in regards to OC6.5.3(d) where **Demand Control** initiated by **Demand Disconnection** shall be initiated as soon as possible but in any event no longer than two minutes from the instruction being received from **The Company**, and the first 20% of **Demand Disconnection** completed within five minutes of the instruction being received from **The Company**, and any further **Demand Disconnection** above 20% to take 5 minutes for each extra 5% of **Demand** being disconnected.

Legal Text – Proposed Changes

Given the timelines we are working towards, we feel it is essential to understand implications to terms of reference points k and l so work can be undertaken prior to Workgroup 2.

- What analysis is required?

k) Undertake analysis to consider any adverse implications for the security of supplies to customer generally arising from the protection of supplies to critical sites due to the increased switching time.

l) Undertake analysis to consider any adverse implications for the generator reserve and response requirement arising from the protection of supplies to critical sites due to the increased switching time.

Timeline for GC0162 Modification

Modification Stage	Date	Modification Stage	Date
Request for Urgency Received	20 July 2023	Workgroup 6 – Joint DCode and Grid Code	03 October 2023
Panel consideration of Urgency	27 July 2023	Workgroup Report issued to Panel	09 October 2023
Workgroup Nominations	28 July 2023 (9am) to 04 August 2023 (5pm)	Workgroup Report presented to Panel	12 October 2023
Ofgem decision on Urgency	04 August 2023 (by 5pm)	Code Administrator Consultation Subject to change if solution does not impact Regulated Sections	13 October 2023 to 14 November 2023 (5pm)
Workgroup 1 – Joint DCode and Grid Code	10 August 2023	Draft Final Modification Report issued to Panel and Industry	20 November 2023
Workgroup 2 – Joint DCode and Grid Code	23 August 2023	Draft Final Modification Report presented to Panel / Panel Recommendation Vote	23 November 2023
Workgroup 3 – Joint DCode and Grid Code	29 August 2023	Final Modification Report issued to Panel to check votes recorded correctly	23 November 2023 (11am to 12pm)
Workgroup 4 – Joint DCode and Grid Code	08 September 2023	Submit Final Modification Report to Authority	23 November 2023 (12pm)
Workgroup Consultation	12 September 2023 (9am) to 18 September 2023 (5pm)	Authority Decision	01 December 2023 (5pm)
Workgroup 5 – Joint DCode and Grid Code	21 September 2023	Date of Implementation	By 15 December 2023



Cross Code Impacts



Any Other Business

Lizzie Timmins – ESO Code Administrator



Next Steps

Lizzie Timmins – ESO Code Administrator