Consultation

Connection and Use of System Code (CUSC) CMP470: Introducing an Oversubscribed Technologies Commitment Fee

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Minded-to Consultation Connection and Use of System Code (CUSC) CMP470: Introducing an Oversubscribed Technologies Commitment Fee

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Executive summary

CMP470 seeks to introduce an Oversubscribed Technologies Commitment Fee (OTCF) for technologies whose capacity materially exceeds the relevant government generation capacity target. For example, presently around 90GW of operational and Gate 2 Battery Energy Storage System (BESS) capacity currently exists, against an estimated Clean Power 2030 requirement of around 29GW by 2035.

Our provisional assessment is that this oversubscription represents a material defect and that intervention is justified. Our Initial Impact Assessment (IIA) indicates that persistent oversubscription creates negative network planning and development externalities, because NESO (National Energy System Operator) and Transmission Owners (TOs) are required to plan and invest on the assumption that all projects with Gate 2 status may connect, while developers do not necessarily bear the full costs associated with inefficient network planning outcomes.

While market forces, existing User Commitment arrangements, and evolving project economics are expected to reduce oversubscription over the longer term, we consider that the key issue is not whether attrition will occur, but whether it occurs early enough, and at sufficient scale, to send a credible signal to networks on which projects they need to plan to build to connect. We consider it important therefore that developers of projects within oversubscribed technologies are required to demonstrate commitment to progress their projects as early as possible in the process.

The IIA indicates that around 58% of BESS projects capacity has not passed the "trigger date" (three years before energisation[1]) and therefore faces relatively low or no liabilities and securities requirements, while only around 16% has both passed the trigger date and secured planning consent. This suggests that a significant proportion of projects currently face limited incentives to reassess viability now, which following the Gate 2 to Whole Queue process is where key network planning and investment decisions are being made.

Persistent oversubscription reduces confidence in which projects are likely to connect, increases the risk of inefficient network development and places unnecessary pressure on network planning, supply chain and delivery resources. Alternatively, bringing

[1] The trigger date is generally 1 April three financial years ahead of project energisation. See: CUSC Section 15 - User Commitment Methodology v1.13 (21 January 2026) (1).pdf

forward project viability decisions is likely to improve queue quality, network planning and investment certainty, and the efficient operation of the connections regime.

Provisional Assessment

We consider the baseline performs least effectively against the Applicable CUSC Objectives (ACOs), and that the Original Proposal best facilitates the ACOs. We consider that the Original Proposal delivers a strong and enduring commitment signal to the substantial majority of the oversubscribed queue, bringing forward project viability decisions and improve network planning development.

While Workgroup Alternative CUSC Modification 2 (WACM2), which disapplies the OTCF at Milestone 8 (Start of Project Construction), reduces commitment requirements for some projects and WACM4, which removes the exemption for certain co-located projects, broadens the scope of the intervention, we have not seen sufficient evidence that either option delivers additional benefits over and above the Original Proposal. We nevertheless welcome further evidence through this consultation before reaching a final decision.

This document sets out the Authority's minded-to position and is not a final decision. We are consulting on this assessment and invite stakeholders to provide views and evidence before we reach our final decision.

1. Introduction

This chapter sets out Ofgem's minded-to position on CMP470. It explains the nature and scale of the BESS oversubscription issue, our assessment that a material defect exists and that intervention is justified, and why earlier attrition is required to improve network planning and investment certainty. It also summarises our assessment of the Original Proposal and alternative options, including the main benefits, risks and trade-offs identified in the IIA.

Purpose of this consultation

1.1 We are seeking views on our minded-to position to approve the CMP470 Original Proposal. This consultation sets out Ofgem's assessment that a material BESS oversubscription defect exists and that intervention is likely to be justified. Our minded-to position is that stronger intervention options, particularly the Original Proposal, are more likely to address the defect effectively by delivering earlier and more significant attrition, improving network planning certainty and supporting efficient network development.

1.2 This consultation sets out the nature and scale of the oversubscription issue, our assessment of the Original Proposal and Workgroup Alternative CUSC Modifications (WACMs) against the ACOs, and our minded-to position. It is accompanied by an Initial Impact Assessment (IIA), which provides the analytical evidence supporting our assessment. While our current view is that the Original Proposal is the preferred option, we remain open to further evidence received through this consultation before reaching a final decision.

1.3 This consultation supports Ofgem's objective of enabling a secure, affordable and net zero[2] energy system by seeking views on how best to address material BESS oversubscription and improve the credibility of the connections queue. In reaching a decision, the Authority will consider its statutory duties. This includes protecting the interests of existing and future consumers, and the extent to which the available options improve queue quality, support efficient system development and reduce the risk of avoidable costs to consumers.

[2] As set out in Climate Change Act 2008

Overview

1.4 Current data[3] indicates that around 90GW of operational and Gate 2 BESS capacity exists compared with a Clean Power 2030 requirement of around 29GW. A significant proportion of this capacity has secured, or is expected to secure, Gate 2 status[4] through the protections framework[5] introduced by Connections Reform. While some oversubscription can be beneficial to accommodate future attrition, current levels materially exceed anticipated system requirements.

1.5 This is particularly significant because NESO and TOs must continue to undertake network planning and investment activities on the assumption that contracted projects may connect, while existing User Commitment arrangements may not provide a sufficiently strong incentive for projects to reassess viability and exit the queue at an early stage. Persistent oversubscription therefore reduces confidence in which projects are likely to proceed and weakens the credibility of the connections queue as a basis for future investment decisions.

1.6 Our assessment is that a material oversubscription defect exists and that intervention is justified. The key issue is not whether attrition will eventually occur, but whether it occurs sufficiently early to support efficient network development and reduce the risk of consumers funding infrastructure based on projects that ultimately do not connect. Persistent oversubscription could lead to misalignment between the connections queue and strategic plans such as the Strategic Spatial Energy Plan (SSEP) and Centralised Strategic Network Plan (CSNP), increasing the risk of inefficient network investment[6]. Based on the evidence currently available, we consider that stronger intervention options, particularly the Original Proposal, are more likely to address the defect effectively by bringing forward project viability decisions and improving queue quality.

Related publications

This consultation should be read alongside:

- CMP470 Final Modification Report (FMR)[7]
- CMP470 Initial Impact Assessment (published alongside this consultation)

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[3] Connections Reform Results | National Energy System Operator

[4] Gate 2 status means a project has or qualifies to get Gate 2 offers and enter a contractual arrangement to connect to the grid on a specified energisation date. The project is thus liable for certain connection fee and Cancellation Charges.

[5] Connections Reform design documents and methodologies | National Energy System Operator

[6] The reason is that viable projects can still be delayed by unviable ones that sits in front of them and network operators would design connections and plan the network for projects that will not materialise

[7] CMP470: Introducing an Oversubscribed Technologies Commitment Fee | National Energy System Operator

- Ofgem Decision on Connections Reform Package (TMO4+)[8]
- Clean Power 2030 Action Plan[9]

Consultation Questions

This consultation therefore seeks views on our provisional position and any additional evidence or implementation considerations that should inform our final decision. In particular, we welcome views/evidence on:

Minded-to decision:

Q1. Do you agree with our minded-to position that intervention is justified? Please provide reasons for your answer.

Q2. If so, do you agree that the Original Proposal is the most appropriate option to address the oversubscription issue? If you do not agree that the Original Proposal is the most appropriate, do you have a preferred alternative? Please provide reasons and evidence for your answer.

Initial Impact Assessment (IIA):

Q3. Do you have any comments, evidence or concerns regarding our assessment of the rationale, benefits, risks and implementation of the OTCF in the IIA, including (i) the treatment of negative externalities arising from later queue exits; (ii) the likely behavioural response of projects (including any potential for gaming); and (iii) our assessment of the relative merits of the options considered, including the preference for the wider considerations approach and the Original Proposal?

Both:

Q4. Do you have any further comments, evidence or concerns regarding our minded-to position or the accompanying IIA? In particular, we welcome evidence on the likely behavioural response to the OTCF, its impacts, and any implementation considerations.

Consultation stages

- **Stage 1** Consultation open: 17 September 2026.
- **Stage 2** Consultation closes (awaiting decision). Deadline for responses: 1 October 2026.
- **Stage 3** Consultation outcome (decision or policy statement): TBC.

How to respond

We want to hear from anyone interested in this consultation. Please send your response to the person or team named on the front page of this document.

[8] Decision on Connections Reform Package (TM04+) | Ofgem
[9] Clean Power 2030 Action Plan - GOV.UK

We have asked for your feedback in each of the questions throughout. Please respond to each one as fully as you can.

We will publish non-confidential responses on our website.

Your response, data, and confidentiality

You can ask us to keep your response, or parts of your response, confidential. We will respect this, subject to obligations to disclose information. For example, under the Freedom of Information Act 2000, the Environmental Information Regulations 2004, statutory directions, court orders, government regulations, or where you give us explicit permission to disclose. If you do want us to keep your response confidential, please clearly mark this on your response and explain why.

If you wish us to keep part of your response confidential, please clearly mark those parts of your response that you do wish to be kept confidential and those that you do not wish to be kept confidential. Please put the confidential material in a separate appendix to your response. If necessary, we will contact you to discuss which parts of the information in your response should be kept confidential and which can be published. We might ask for reasons why.

If the information you give in your response contains personal data under the General Data Protection Regulation (Regulation (EU) 2016/679) as retained in domestic law following the United Kingdom's withdrawal from the European Union ("UK GDPR"), the Gas and Electricity Markets Authority will be the data controller for the purposes of GDPR. Ofgem uses the information in responses in performing its statutory functions and in accordance with section 105 of the Utilities Act 2000. Please refer to our Privacy Notice on consultations, see Appendix 4.

If you wish to respond confidentially, we will keep your response confidential, but we will publish the number, but not the names, of confidential responses we receive. We will not link responses to respondents if we publish a summary of responses, and we will evaluate each response on its own merits without undermining your right to confidentiality.

How to track the progress of a consultation

1. Find the web page for the call for input you would like to receive updates on.
2. Click ‘Get emails about this page’, enter your email address and click ‘Submit’.
3. You will receive an email to notify you when it has changed status.

A consultation has three stages: ‘Open’, ‘Closed (awaiting decision)’, and ‘Closed (with decision)’.

2. Background

This chapter provides the background to CMP470. It explains the Connections Reform package (TMO4+), the protections framework introduced as part of those reforms, and how it contributed to the current oversubscription of BESS capacity in the Gate 2 queue. The chapter then outlines the scale of the oversubscription issue, the potential implications for the connections regime, and the interventions considered by industry and Ofgem. Finally, it explains why the timing of project attrition is relevant to consumer outcomes and sets out the context for our assessment of the CMP470 options.

Connections Reform and Protections

2.1 In April 2025, Ofgem[10] approved NESO's Connections Reform package (TMO4+), which introduced a new connections process designed to prioritise projects that are both 1) able to demonstrate suitable "readiness", and 2) strategically needed under the Clean Power 2030 Action Plan (CP30). [11,12] As part of the reforms, through the Gate 2 to Whole Queue ('G2tWQ') process[13], projects in the existing queue are now being assessed against the new readiness and strategic alignment criteria, with qualifying projects given a "Gate 2" status and then receiving "Gate 2" offers.

2.2 Protections were introduced for projects that had already demonstrated significant progress under the previous process. In particular, projects which had submitted a planning application on or before 20 December 2024 were afforded protection and would receive a Gate 2 offer if they secured planning permission before the next application window, even where technology-specific capacity targets had already been exceeded.

[10] References to "Ofgem", the "Authority", "we" and "our" are used interchangeably in this document. The Authority refers to GEMA, the Gas and Electricity Markets Authority. The Office of Gas and Electricity Markets (Ofgem) supports GEMA in its day-to-day work. This minded-to consultation is made by or on behalf of GEMA

[11] See Clean Power 2030 Action Plan - GOV.UK, Clean Power 2030 Action Plan (CP30) is a document setting out a pathway to a clean power system by 2030.

[12] See Decision on Connections Reform Package (TM04+) | Ofgem

[13]The Gate 2 to Whole Queue exercise is the process of NESO and network operators re-examining existing connection offers and determining whether these meet the criteria of the new connections process. This will see existing connection offers amended to bring them in-line with the requirements of the new process

Oversubscription

2.3 At the time of the TMO4+ decision, it was recognised that the protections framework could result in some degree of BESS oversubscription. That outcome was considered an acceptable consequence of providing certainty to projects that had already demonstrated substantial progress under the previous arrangements.

2.4 However, evidence from the G2tWQ process indicates that the resulting level of BESS oversubscription is materially greater than anticipated. The problem is compounded by the fact that protected projects are prioritised over non-protected projects in the connections queue. At the time of the TMO4+ decision, there was uncertainty about the volume of projects in the existing queue that would submit planning application by the deadline and would subsequently achieve consent in time for the next window. While the Authority expected some oversupply relative to technology requirements, the current level significantly exceeds anticipated system need and creates network planning and development impacts along with impacts on other projects, beyond those considered during the TMO4+ assessment.

2.5 Evidence from the G2tWQ process indicates that 7GW of BESS capacity is already operational and approximately 83GW has secured Gate 2 status, compared to a CP30 requirement of 23-27GW by 2030 and a FES-derived requirement of 24-29GW by 2035. Additional protected BESS projects may also qualify for Gate 2 status in future application windows, further increasing the BESS capacity in the queue. While BESS is currently the only technology where material oversubscription has been identified, the protections framework could result in other technologies exceeding target requirements in future application windows, should sufficient protected projects qualify for Gate 2 status.

2.6 Some level of oversubscription is beneficial to compensate for queue attrition, ensuring there is a ready supply of projects of the same technology ready to substitute for any that drop out. Too much oversubscription, however, means that network companies must plan network assets for a significantly greater volume of projects than the system needs, while potentially blocking other needed projects in the queue from progressing in a timely manner. Despite the likelihood that significant attrition will occur as the market corrects an oversaturation of BESS projects over time, there remains a risk that without early intervention to stimulate attrition now, network investments will be planned or made to connect significant numbers of BESS projects that ultimately drop out of the queue. If unaddressed, therefore, the current oversubscription poses a risk to the objectives of Connections Reform and to the long-term interests of consumers.

2.7 As we explain in further detail below in the accompanying IIA, and as evidenced by the risk that investments will be made for projects that do not connect, the high level of over-subscription creates general uncertainty for NESO, TOs and project developers about future investment decisions. Without significant and early attrition in the BESS queue, the build signals relied on by NESO and the TOs are weakened: the level, location, type and timing of necessary network infrastructure and investment cannot be strategically planned when it is not clear which projects will connect and where. This undermines the ability of NESO to coordinate an efficient and economic electricity system and of TOs to plan and develop an efficient, coordinated and economical transmission network. Persistent oversubscription therefore increases the risk that network development is driven by current queue position rather than credible connection outcomes, potentially resulting in inefficient investment and avoidable costs for consumers.

2.8 The Authority, NESO, TOs and DESNZ have worked closely to consider potential mitigations. Given the importance of delivering Gate 2 offers and maintaining momentum in Connections Reform, options that would have required the pause or reversal of the ongoing Gate 2 design and offer process were not taken forward. Such approaches would have introduced significant implementation risks, including delays to connection offers and wider impacts on programmes dependent on timely connection outcomes.

2.9 Instead, the focus has been on identifying measures that could address the oversubscription issue within the established connections framework. A range of interventions have been considered, including approach to managing network build uncertainty, encouraging earlier attrition of projects that would be likely to drop out later in the process, limiting further queue growth in oversubscribed technologies in future windows, and providing opportunities for projects to voluntarily relinquish queue positions.

Need for Earlier Attrition

2.10 The IIA estimates that current levels of expected BESS oversubscription create network planning and build related costs[14]. This demonstrates that this issue has the potential to create material consumer and system impacts.

2.11 The IIA also identifies that stronger intervention options affect a substantially larger proportion of the queue than lower-intervention alternatives[15]. The Original Proposal, WACM2 and WACM4 are expected to increase liabilities for around 78%

[14] As set out in Ofgem's CMP470 Initial Impact Assessment pages 14 to 16.
[15] As set out in Ofgem's CMP470 Initial Impact Assessment page 4.

of projects initially, rising to around 97% of projects if the OTCF reaches its maximum level. In contrast, WACM1 and WACM6 are expected to affect only around 64% of projects initially and fewer than 70% even at their maximum level.[16] Given the high level of oversubscription, we consider that stronger commitment signals are warranted to bring forward viability decisions, improve queue quality and deliver a more efficiently planned network.

2.12 While market forces are expected to reduce oversubscription over time, several market forecasts cited in the CMP470 FMR suggest that the GB BESS market is likely to become economically saturated at capacity levels below 25GW. As additional BESS capacity enters the market, projects increasingly compete for the same revenue streams which reduces arbitrage opportunities and weakens project returns. Consequently, a significant proportion of the approximately 83GW of Gate 2 BESS capacity currently in existence may ultimately struggle to secure an economic business case and may not proceed to connection. However, relying solely on natural in-queue attrition, which may not occur for some time, would leave NESO and TOs facing prolonged uncertainty regarding which projects are ultimately likely to connect.

2.13 NESO has no mechanism to reduce the queue or select the most viable projects, the current process instead relies on the market correcting the issue in the long-term. Under the baseline, projects may exit the queue in response to the existing User Commitment framework[17], and can be terminated if they fail to meet User progression milestones.[18] Under the User Commitment framework, projects become liable for Cancellation Charges associated with network works, while securities are posted as financial protection against those liabilities should a project terminate. These requirements are intended to encourage projects to progress efficiently and to compensate consumers where projects do not proceed. The level of liabilities and securities generally increases as projects progress towards connection and therefore provides a signal of project commitment.

2.14 However, these mechanisms generally become material relatively late in the project lifecycle. Under the User Commitment framework, projects may be required to post securities to support future liabilities, while cancellation liabilities increase as projects move closer to connection. In the meantime, the CMP470 FMR indicates that more than 25% of BESS projects have no securities

[16] As set out in Ofgem's CMP470 Initial Impact Assessment page 24

[17] This framework has been introduced in the CUSC in 2013, via the modification proposal CMP192. User commitment is established in section 15 of CUSC: User Commitment Methodology.

[18] This process has been introduced in 2023 via CUSC modification proposal CMP376.

exposure and approximately 89% have securities below £3,000/MW. This suggests that a substantial proportion of projects currently face limited financial incentives to reassess viability and exit the queue at an early stage.

2.15 As shown in the IIA, 50% of projects have posted less than £800/MW as securities and have assumed approximately £1,500/MW in total liabilities. By comparison, projects that are being commissioned in 2027, to which all securities and liabilities are presumably applicable, have posted £5,600/MW in securities and £12,200/MW in liabilities.[19] This indicates that existing commitment obligations become materially stronger relatively late in the project lifecycle. As a result, many projects may continue to occupy queue positions and influence future connection assumptions during a period when they face only limited incentives to reassess viability or exit the queue.

2.16 NESO and TOs have indicated that earlier and more concentrated attrition would provide significant planning benefits by enabling network plans to be re-optimised sooner and resources to be deployed more efficiently. Earlier project withdrawals would also enable NESO to reallocate released capacity more quickly through the Connections Network Design Methodology[20], while allowing TOs to update investment, delivery and resource plans accordingly. This is particularly important because key investment decisions are taken several years before Wider Cancellation Charges become material. As a result, projects may have limited incentives under the existing framework to reassess viability and exit the queue while these decisions are being made. In addition, developers may not bear the full costs of inefficient network planning. Consequently, attrition may occur too late to inform network planning, increasing the risk of inefficient network development and avoidable consumer costs to consumers.

2.17 As such, our provisional assessment is not whether oversubscription will eventually reduce through market-led attrition but whether developer decision points occur early enough to influence network planning decisions. The IIA indicates that stronger intervention options affect a substantially larger proportion of the oversubscribed queue and are therefore more likely to bring forward viability decisions.[21] Network planning benefits can be realised only where attrition occurs sufficiently far in advance of key investment decisions. Options that provide a stronger and more durable commitment signal are therefore expected to timely deliver greater network planning benefits than the baseline, which relies primarily on longer-term market correction.

[19] As set out in Ofgem's CMP470 Initial Impact Assessment page 12
[20] Connections Reform design documents and methodologies | National Energy System Operator
[21] As set out in Ofgem's CMP470 Initial Impact Assessment page 48

3. The Modification Proposal: CMP470

This chapter provides an overview of the CMP470 proposal and the WACMs. It explains the objectives and operation of the proposed OTCF, summarises the potential benefits and risks associated with the modification and describes the key design features of the mechanism. To provide context for our subsequent assessment, this chapter also outlines the differences between the Original Proposal and each WACM, including variations in the level, duration, scope and application of the OTCF.

Original Proposal

3.1 CMP470 was raised by Field Energy to address material oversubscription in technologies where contracted capacity significantly exceeds system requirements. The proposal seeks to introduce an OTCF to strengthen existing commitment arrangements and encourage projects that are less likely to proceed to connection to reassess viability and exit the queue earlier.

3.2 Under the Original Proposal, the OTCF would establish a minimum level of securities or liabilities for affected projects. The charge would increase following successive six-monthly reviews where oversubscription persists. The mechanism would be activated where a technology exceeds its target requirement by more than 50% and would cease to apply once oversubscription falls below 25%. Once it is activated, it applies a starting value of £3,000/MW, which rises to £5,000/MW after six months, if not deactivated, and thereafter increases by £5,000/MW every six months, up to a maximum of £25,000/MW, if oversubscription persists. It returns the OTCF to projects once they have been energised.

3.3 The OTCF would be applied through the existing User Commitment framework. Where a project's Cancellation Charge, or Cancellation Charge Secured Amount falls below the relevant OTCF level, it would be increased to the applicable minimum level through the biannual Cancellation Charge process.

3.4 The Original Proposal also includes an exemption for certain co-located projects that do not increase Transmission Entry Capacity (TEC) and require only limited additional network works.

3.5 The Workgroup developed six WACMs that modify key design features of the OTCF, including its level, duration, treatment of co-located projects, and interaction with existing liabilities and securities arrangements. These alternatives are summarised in Table 1.

Potential Benefits

3.6 The common objective of the Original Proposal and WACMs is to strengthen project commitment arrangements in materially oversubscribed technologies. The mechanism is intended to encourage projects to make viability decisions earlier and, where appropriate, relinquish queue positions sooner than they otherwise would under existing arrangements. The Proposer considers that, over time, this would benefit both developers and network companies from a more credible and deliverable connections queue, providing greater confidence in network planning assumptions and allowing resources to be allocated more efficiently, while saving consumer costs by avoiding inefficient network development.

3.7 The extent to which these benefits are realised will depend on how developers respond to the OTCF. As such, the principal benefit of CMP470 is not simply reducing oversubscription, but bringing forward viability decisions sufficiently early to improve network planning certainty.

Potential Risks

3.8 The principal risk associated with CMP470 is uncertainty regarding how projects will respond to the OTCF. While the modification is intended to encourage earlier viability decisions and project attrition, the scale and timing of behavioural responses are inherently uncertain. As noted in the IIA, while we can model various scenarios based on currently available data, it is not possible to predict with confidence how many projects would withdraw from the queue or when those decisions would occur.[22] As a result, the benefits realised in practice may differ from expectations.

3.9 The IIA identifies three principal risks.[23] First, stronger intervention options may result in greater attrition than anticipated, increasing the risk of over-correction relative to future system requirements. However, given the current scale of BESS oversubscription relative to anticipated need, we consider the risk associated with persistent oversubscription to be more material at present.

3.10 Second, additional commitment requirements may affect projects differently depending on access to financing and liquidity. In some circumstances, stronger intervention options could influence outcomes based not only on project viability but also on a developer's ability to provide additional security. While the IIA

[22] As set out in Ofgem's CMP470 Initial Impact Assessment page 49
[23] As set out in Ofgem's CMP470 Initial Impact Assessment page 23

indicates that the initial OTCF level represents a relatively small proportion of overall project capital costs and that securities are returned when projects connect,[24] we recognise that financing and liquidity requirements may affect some projects more than others.

3.11 Third, stronger intervention options may affect competition within the affected technology. Additional commitment requirements could create barriers for some participants, particularly where access to capital varies between developers. Conversely, reducing oversubscription may improve competition by releasing scarce queue capacity and allowing projects with a greater prospect of connecting to progress through the queue. The overall impact on competition therefore depends on the balance between these competing effects.

3.12 Stakeholders also raised concerns regarding investment certainty and implementation complexity. In particular, some respondents argued that introducing additional commitment requirements for projects that have already secured queue positions could affect perceptions of regulatory and financing risk. CMP470 would also require NESO to administer the OTCF through the existing User Commitment framework, creating additional operational requirements relative to the baseline.

3.13 We have considered these risks in our assessment of CMP470. The extent to which they materialise will depend on project behaviour, market conditions and implementation outcomes. Our provisional assessment is that they do not outweigh the anticipated consumer and system benefits associated with improving queue quality, bringing forward viability decisions and addressing persistent BESS oversubscription.

Key Design Parameters (Original Proposal)

3.14 **Activation and Deactivation Thresholds:** The OTCF would apply only where a technology is materially oversubscribed relative to its target requirement. The mechanism would activate when oversubscription exceeds 50% and be disapplied once oversubscription falls below 25%.

3.15 **National or Regional Application:** The Original Proposal applies on a national basis. The FMR notes that oversubscription is driven by national technology requirements and that a regional approach could introduce additional complexity, volatility and uncertainty.

[24] As set out in Ofgem's CMP470 Initial Impact Assessment page 30

3.16 **Timing:** The OTCF applies from Gate 2 offer acceptance until project energisation, at which point it ceases to apply and any associated securities are treated in accordance with the existing User Commitment arrangements.

3.17 **Application Method**: The OTCF operates as a minimum Cancellation Charge and Cancellation Charge Secured Amount floor. It is applied on a £/MW basis through existing User Commitment arrangements. Projects whose existing Cancellation Charge or Cancellation Charge Secured Amount falls below the applicable OTCF level are uplifted to the relevant floor, while projects already above the OTCF level are unaffected.

3.18 **Level of the OTCF Floor**: The OTCF would be introduced at £3,000/MW and reviewed every six months. Where oversubscription has not reduced sufficiently, the OTCF would first increase to £5,000/MW and then in £5,000/MW increments every 6 months up to a maximum of £25,000/MW.

3.19 **Application to Co-located Projects:** The Original Proposal excludes certain co-located and hybrid projects, where applying the OTCF could affect technologies that contribute towards CP30 requirements. Under the Original Proposal a targeted exemption would be applied to any co-located projects where the oversubscribed technology:

- connects after the other technology;
- has no associated increase in TEC; and
- results in less than £250,000 of additional Attributable Works and connection costs.

3.20 **Interaction with the Project Commitment Fee (PCF):** The PCF, introduced through CMP448,[25] is a separate commitment mechanism designed to incentivise project progression between Gate 2 acceptance and Milestone 1. The OTCF is intended to address a different defect by encouraging attrition within materially oversubscribed technologies, many of which have already progressed beyond Milestone 1 through protections. The FMR notes that overlap between the two mechanisms is expected to be very limited and, where both apply, the OTCF continues to operate as a Secured Amount floor.

3.21 **Treatment of OTCF Revenues:** If a project exits the queue and a Cancellation Charge including the OTCF is levied, the OTCF element of that charge would be returned to consumers through Transmission Network Use of System (TNUoS) charges. This is consistent with the approach adopted for the PCF.

[25] CMP448 Connection and Use of System Code (CUSC) changes | Ofgem

3.22 **NESO Discretion to apply the OTCF (with Ofgem oversight):** NESO would assess oversubscription levels through the biannual securities process and determine whether the activation thresholds have been met. Where the relevant threshold is met, NESO may decide not to activate or increase the OTCF and would notify Ofgem of its proposed approach. Ofgem would have the ability to direct otherwise. Neither NESO nor Ofgem may activate or increase the OTCF where the relevant threshold has not been met. This process would apply only where:

- the activation threshold has been met and the OTCF is not yet active; or
- the OTCF is active and would otherwise increase following the latest oversubscription assessment.

In all other circumstances, including reductions and deactivation, the OTCF would operate automatically in accordance with the CUSC. These governance arrangements provide an additional safeguard by allowing prevailing market conditions and available evidence to be considered before activation or escalation of the OTCF. This helps reduce the risk of unintended outcomes where oversubscription conditions change materially over time.

3.23 **Implementation and Activation Approach:** If approved, CMP470 would be implemented into the CUSC 10 Business Days after an Ofgem decision. However, the OTCF would not become active immediately. Activation would occur only once a sufficiently complete and stable view of the reformed connections queue is available, following completion of the G2tWQ process and the first CMP434 Gated Application Window.[26] This reflects the fact that the level of oversubscription, and therefore the initial OTCF level, depends on the final composition of the post-reform queue, including projects that may secure Gate 2 status through existing protections. Deferring activation also provides developers with advance notice of the OTCF before it can take effect, allowing time for projects to assess future participation in the queue using a more stable view of the post-reform connections landscape. Under the current implementation assumptions, the OTCF would first be reflected in the July 2027 securities statement, with any resulting securities becoming payable from October 2027.

3.24 **Technology Scope:** CMP470 is initially expected to apply only to BESS, as BESS is currently the only technology exceeding the oversubscription threshold. While the OTCF could apply to other generation technologies in future, this would occur only if the relevant oversubscription thresholds were met against the capacity

[26] CMP434 Implementing Connections Reform | National Energy System Operator

levels in the relevant Strategic Plan. The Original Proposal and the analysis in this decision therefore focus on BESS, as it is the only technology where a current material oversubscription has been identified. However, the OTCF can be equally applicable to other technology types if oversubscription develops over time. Demand is not included in the scope.

Workgroup Alternative CUSC Modifications

Workgroup Alternative CUSC Modification 1 (hereafter "WACM1")

3.25 WACM1 retains the overall design of the Original Proposal but caps the OTCF at a project's Maximum Cancellation Charge Secured Amount. The objective is to ensure that projects are not required to provide security above their maximum existing security exposure, while still encouraging earlier attrition. **Key trade-off**: The project-specific cap reduces the maximum financial commitment that some projects may be required to provide, and this is likely to weaken the commitment signal and reduce attrition relative to the Original Proposal.

Workgroup Alternative CUSC Modification 2 (hereafter "WACM2")

3.26 WACM2 removes the OTCF once a project reaches Queue Management Milestone 8. Under this approach projects which have reached the construction stage have already demonstrated substantial progression and therefore require a lower level of additional commitment signalling. **Key trade-off**: Reduces commitment requirements for projects reaching Milestone 8 but shortens the period over which the OTCF applies.

Workgroup Alternative CUSC Modification 3 (hereafter "WACM3")

3.27 WACM3 lowers the OTCF (proposes a range of £2,000/MW to £8,000/MW), applies the OTCF through Cancellation Charges rather than securities and removes the OTCF at Milestone 8. The objective is to reduce financing impacts while maintaining a level of commitment signal. **Key trade-off**: Reduces the financial commitment for individual projects but weakens the commitment signal and is likely to deliver less attrition than the Original Proposal.

Workgroup Alternative CUSC Modification 4 (hereafter "WACM4")

3.28 WACM4 removes the exemption for certain co-located and staged projects containing an oversubscribed technology. The objective is that all capacity associated with an oversubscribed technology contributes to the overall level of oversubscription and should therefore be subject to a broadly consistent

commitment framework. **Key trade-off:** Extends the OTCF to a larger proportion of oversubscribed capacity and is therefore likely to result in greater attrition but broadens the intervention to include projects currently covered by the co-location exemption and may affect the viability of co-located technologies that are not themselves oversubscribed.

Workgroup Alternative CUSC Modification 5 (hereafter "WACM5")

3.29 WACM5 proposes lower OTCF levels (range of £1,000/MW to £8,000/MW). It establishes differentiated treatment for longer-dated projects, a cap at a project's Maximum Cancellation Charge Secured Amount and disapplies the OTCF at Milestone 8. The objective is to reduce impacts on project financing. **Key trade-off**: Reduces impacts on longer-dated projects but weakens the commitment signal and may therefore result in lower attrition relative to the Original Proposal.

Workgroup Alternative CUSC Modification 6 (hereafter "WACM6")

3.30 WACM6 combines the broader scope of WACM4 with the cap introduced under WACM1. It removes the co-location exemption while capping the OTCF at a project's Maximum Cancellation Charge Secured Amount. **Key trade-off**: Broader coverage than the Original Proposal but a weaker commitment signal than WACM4. It may therefore deliver more attrition than WACM1 but less than WACM4.

Table 1: Comparing the Original Proposal and WACMs*

	Timing: OTCF ends	**OTCF applies through**	**OTCF level**	**Co-located projects exemption**
Original Proposal	Energisation	Cancellation Charge and Cancellation Charge Secured Amount	Start: £3,000/MW First increase: £5,000/MW Then +£5,000/MW Maximum: £25,000/MW	Included
WACM1	Same	Same	Same profile as Original: Maximum capped at lower of OTCF level or Maximum Cancellation Charge Secured Amount	Same
WACM2	Milestone 8	Same	Same	Same

WACM3	Milestone 8	Cancellation Charge only	Start: £2,000/MW +£2,000/MW increments Maximum: £8000/MW	Same
WACM4	Same	Same	Same	Removed
WACM5	Milestone 8	Same	**Two-track profile**: Shorter-dated projects: £2,000/MW → £8,000/MW Longer-dated projects: £1,000/MW → £4,000/MW	Same
WACM6	Same	Same (Subject to project-specific cap)	Same profile as Original Maximum capped at lower of OTCF level or Maximum Cancellation Charge Secured Amount	Removed

* Table includes only design parameters that differ from the Original Proposal.

4. Stakeholder Views

This section summarises stakeholder views on CMP470. While stakeholders broadly agreed that material BESS oversubscription is creating planning and queue-quality issues, there was less consensus on the appropriate remedy. Network stakeholders generally favoured stronger intervention to accelerate viability decisions and improve confidence in future connection outcomes, whereas many developers and representative bodies expressed concerns regarding financing impacts, competition and investor confidence. The principal area of disagreement was therefore not whether intervention is justified, but the extent to which additional commitment requirements are necessary to deliver earlier attrition. Overall, support was strongest for intervention, with debate focused on the appropriate strength and design of the OTCF.

Workgroup

4.1 The CMP470 Workgroup broadly agreed that material BESS oversubscription presents a genuine issue, creating uncertainty over which projects are likely to connect and reducing confidence in future network and generation assumptions.

4.2 While views differed on the appropriate design and strength of intervention, the Workgroup majority concluded that the Original Proposal and WACM4 best facilitated the ACOs. In the majority's view, these options were most likely to deliver the scale and timing of attrition required to improve confidence in future connection outcomes, strengthen the network build signal and reduce the risk of network development being based on projects that are unlikely to connect.

Workgroup Consultation Responses[27]

4.3 The Workgroup Consultation received 55 responses from across the industry. Respondents broadly agreed that BESS oversubscription represents a genuine issue, but views differed on the scale of the issue and the appropriate level of intervention.

4.4 NESO, TOs and other network companies generally agreed that intervention is required, and that stronger intervention better meets the objectives of CMP470, arguing that oversubscription is reducing confidence in future connection outcomes and investment decisions, weakening the network build signal and

[27] See Workgroup consultation and responses.

increasing the risk of inefficient network development. Many of these respondents supported the Original Proposal or WACM4 on the basis that they were most likely to deliver earlier attrition.

4.5 Developers, generators and storage operators were more divided. While many accepted that oversubscription exists, some argued that existing arrangements and natural market attrition should be given more time to take effect. Common concerns included the level of financial commitment required, impacts on project financing and investor confidence, and whether outcomes could be influenced by access to capital rather than underlying project viability.

4.6 Several trade associations and industry representatives generally supported the objective of improving queue quality but questioned the extent to which behavioural responses could be predicted with confidence. Respondents noted that the anticipated benefits of the OTCF depend on how developers respond in practice and sought further evidence regarding likely levels of project attrition, financing impacts and the extent to which stronger commitment signals would improve queue quality and planning certainty. Some respondents also highlighted risks identified in the IIA, including the possibility of greater-than-expected attrition, liquidity constraints affecting otherwise viable projects, and impacts on competition within the affected technology.

4.7 Overall, **consultation responses revealed broad agreement that the oversubscription issue exists, but differing views on how it should be addressed**. Network stakeholders generally placed greater emphasis on the network development efficiency benefits of stronger intervention, while some developers, trade associations and other respondents attached greater weight to the potential impacts on project development, financing requirements and investment certainty. However, views were not uniform within stakeholder groups, and support for both stronger and more targeted approaches was observed across the consultation responses.

Code Administrator Consultation[28]

4.8 The Code Administrator Consultation received 32 responses from developers, generators, storage operators, network companies and representative bodies. Responses largely reiterated views expressed during the earlier Workgroup Consultation.

[28] See Code Administration Consultation.

4.9 NESO, TOs and other network stakeholders generally supported intervention, echoing their rationale mentioned in Paragraph 4.4 above.

4.10 Developers, generators and storage operators echoed similar concerns as in Paragraph 4.5. In addition, some respondents expressed concerns specifically about the OTCF, arguing that it could disadvantage projects based on access to capital rather than underlying viability, and emphasised the need to allow existing processes and market-led attrition further time to take effect.

4.11 Representative bodies repeated their views in Paragraph 4.7. In addition, some respondents emphasised the inherent uncertainty surrounding the scale of anticipated benefits and argued that the resulting consumer and system benefits from any increase in project attrition could be difficult to predict with confidence. Some also raised concerns about the potential for over-correction if attrition levels exceeded expectations.

4.12 Overall, **the consultation responses suggested broad recognition that material BESS oversubscription exists, and intervention is likely to be justified**. However, views differed regarding the appropriate strength of intervention, with respondents balancing anticipated planning and queue-quality benefits against concerns relating to financing impacts, investor confidence and competition. Network stakeholders generally prioritised planning certainty and earlier attrition, whereas developers and representative organisations placed greater weight on the potential impact of additional commitment requirements and the uncertainty surrounding the likely behavioural response to the OTCF.

CMP470 CUSC Panel recommendation[29]

4.13 The Panel broadly agreed that material BESS oversubscription represents a genuine issue requiring intervention, although views differed on the appropriate strength of that intervention. The Panel assessed the Original Proposal and WACMs against the ACOs.

4.14 **ACO (i) [30](efficient discharge of obligations):** Most members viewed impacts as neutral or modestly positive, as they could improve planning certainty and

[29] The CUSC Panel is established and constituted from time to time pursuant to and in accordance with section 8 of the CUSC.

[30] We note that ACO (i) refers to "obligations imposed upon [the licensee] by the Electricity Act 1989 and by this licence." Previously, NESO held a transmission licence under s6(b) Electricity Act 1989 ("EA89"); as such, the EA89 imposed certain general obligations on it via s9(2). Now, NESO holds an Electricity System Operator Licence under s6(da) of EA89. NESO, as the designated ISOP, has a set of "general duties" under s163 of the EA23, which it must meet pursuant also to its licence obligations: A2.20; C1.2(d); E12.7. Further, general obligations on NESO can be found in Condition C1 of the NESO Licence including in C1 regarding whole systems: see Parts, A, D and E.

support NESO and TOs in managing the connections queue more effectively. Those supporting stronger intervention considered earlier attrition would improve planning certainty and assist NESO and TOs in delivering Connections Reform more efficiently.

4.15 **ACO (ii) (facilitating effective competition):** This was the principal area of disagreement. Some members considered that reducing oversubscription would improve competition by releasing capacity to more viable projects, while others were concerned that stronger commitment requirements could favour larger or better-capitalised developers. These concerns led some members to favour lower-intervention options that reduce financing and liquidity requirements, particularly WACM2, WACM5 and WACM6.

4.16 **ACO (iii) (facilitating compliance with the Electricity Regulation)**: The Panel broadly agreed that the Original Proposal and all WACMs were neutral against ACO (iii), with no material impacts on compliance identified.

4.17 **ACO (iv) (efficient implementation and administration of the CUSC):** This was the strongest area of support. Most members agreed that reducing oversubscription would improve queue quality, confidence in future connection outcomes and administration of the connections regime. As with ACO (i), the Original Proposal and WACM4 were generally viewed as the strongest performers.

4.18 Overall, the principal debate was not whether intervention was justified, but how strong it should be. Members supporting the Original Proposal and WACM4 placed greater weight on reducing oversubscription and improving planning certainty. Members supporting WACM2 broadly agreed with the need for a strong intervention but favoured earlier removal of the OTCF for projects that had reached construction. Members supporting WACM1, WACM3, WACM5 and WACM6 generally favoured approaches that reduced project exposure through lower OTCF levels, project-specific caps or shorter application periods. Those supporting the baseline considered that existing arrangements and market forces would address the issue over time.

4.19 **While the Panel did not identify a single unanimously preferred option, the majority of panel members concluded that the Original Proposal and all six WACMs represented an improvement over the baseline**. The final vote showed the strongest support for the Original Proposal, followed by WACM4, reflecting the majority view that earlier attrition, improved queue quality and stronger planning certainty should be the primary objectives of CMP470.

5. Options Assessment

This chapter assesses the Original Proposal and WACMs against the ACOs and the Authority's wider statutory duties. It explains how key design features of the OTCF affect its ability to bring forward viability decisions, improve queue quality and support more efficient network planning. Drawing on evidence from the IIA, stakeholder responses and the Final Modification Report, the chapter compares the options and considers their impacts on consumers, competition and the operation of the connections regime. It concludes with Ofgem's overall assessment of which option best addresses the identified oversubscription issue.

Assessment of Options against Key Design Parameters

5.1 The Original Proposal and the six WACMs differ across several key design parameters. This section considers those parameters individually and explains how they influence the effectiveness of the OTCF in bringing forward viability decisions and improving queue quality. We therefore consider that the effectiveness of each design parameter should principally be assessed according to its ability to strengthen the commitment signal, encourage earlier viability decisions and improve planning certainty. Conversely, design features that reduce developer exposure may reduce financing and liquidity impacts but are likely to be less effective at addressing the underlying issue.

Table 2: Ideal outcomes of the design parameters

Design Parameter	Desired Outcome	Assessment
Timing: OTCF ends	Commitment signal remains until oversubscription risk ceases.	Energisation provides the clearest and most objective endpoint, as oversubscription and planning impacts persist until a project connects or exits the queue. Earlier disapplication reduces project exposure but shortens the commitment signal.
Floor applies to	Commitment signal is visible before liabilities become material.	The IIA suggests many projects currently face limited commitment obligations. Applying the OTCF through both liabilities and securities is therefore more likely to influence behaviour at the point network planning decisions are being made.
OTCF level	Sufficient to encourage viability reassessment.	Higher OTCF levels are more likely to bring forward viability decisions and improve planning certainty but may not materially change behaviour for a significant proportion of projects.
Co-location exemption	Intervention focused on projects driving the issue.	The exemption applies only where the oversubscribed technology does not increase TEC and requires limited additional network works.

		Broader application of the OTCF is likely to increase attrition. However, removing the exemption would extend the intervention to projects with more limited incremental network impacts and could affect the viability of the co-located technology. The incremental benefits of removing the exemption are therefore uncertain.
Security cap	Protect against financial impacts on projects.	Caps reduce projects' financial exposure but also reduce the number of projects materially affected by the OTCF, weakening the expected behavioural response.

5.2 The IIA indicates that a substantial proportion of projects currently face limited commitment obligations during the period most relevant to network planning and investment decisions. For example, around 58% of BESS capacity is pre-trigger, more than 25% of projects have no securities exposure and approximately 89% have securities below £3,000/MW.[31] This suggests that a large proportion of the queue would be materially affected by the introduction of the OTCF.

5.3 While all the other parameters are assessed to increase impacts, the co-location exemption, requires other consideration. The purpose of the co-location exemption is to avoid applying the OTCF where an oversubscribed technology is added to a site without increasing TEC and with only limited additional network works required. In these circumstances, the incremental impact on network planning requirements is expected to be limited because the necessary network capacity has already been secured. The exemption is therefore intended to target the intervention towards projects that contribute most directly to the identified oversubscription defect, while avoiding unintended impacts on co-located technologies that may continue to contribute towards wider system requirements.

5.4 The IIA identified several design considerations associated with the OTCF. It found that returning the OTCF at energisation could reduce the risk of projects exiting the queue after reaching Milestone 8, while imposing only modest additional financing costs on developers. The IIA also concluded that the distinction between implementing the OTCF as a security or liability floor is unlikely to materially affect outcomes. In addition, it found that limiting the OTCF to a project's existing maximum security exposure could reduce its effectiveness by limiting the number of projects subject to additional commitment requirements,

[31] As set out in Ofgem's CMP470 Initial Impact Assessment figure 2

while retaining the co-location exemption would help preserve locational signals and support efficient project siting.[32]

5.5 The IIA also found that all OTCF options, other than the baseline, were likely to support the removal of low-commitment projects from the queue. The Original Proposal aligned most closely with the preferred design parameters, including a higher OTCF level based on wider system considerations, no cap linked to existing security exposure, return of funds at energisation and retention of the co-location exemption. By contrast, WACM1 and WACM6 were assessed as less effective because they cap the OTCF at existing security exposure, while WACM2, WACM3 and WACM5 depart from the preferred approach by returning the OTCF before energisation and, in the case of WACM3 and WACM5, applying a lower OTCF level. WACM4 did not retain the co-location exemption. Overall, the IIA concluded that all OTCF options were preferable to the baseline, but that options aligning most closely with the preferred design parameters were expected to deliver greater consumer and system benefits.[33]

5.6 Taken individually, our assessment suggests that the most effective design features are: (i) application until energisation, (ii) application through both liabilities and securities, and (iii) a sufficiently strong OTCF level. The key area of judgement relates to the treatment of co-located projects, where the benefits of broader coverage must be weighed against the additional intervention. Viewed through this lens, we consider that the Original Proposal incorporates the combination of design features most likely to bring forward viability decisions at the scale and pace required to address the identified issue, whilst avoiding broader intervention where the additional benefits are less clearly evidenced. We therefore consider that it provides the strongest overall balance between effectiveness, impact on the projects and consumer benefit.

ACO (i) Efficient discharge of obligations

Ofgem assessment

5.7 We have considered whether CMP470 supports NESO and TOs in efficiently discharging their statutory and licence obligations, particularly those relating to connections management, network planning and long-term system development.

5.8 Material BESS oversubscription reduces confidence in which projects are likely to connect and therefore weakens the basis on which future network and generation

[32] As set out in Ofgem's CMP470 Initial Impact Assessment section 6
[33] As set out in Ofgem's CMP470 Initial Impact Assessment section 7

assumptions are made. We consider that options which improve the credibility of the connections queue and bring forward developer/investor viability decisions are more likely to facilitate ACO (i), as they provide NESO and TOs with a more reliable basis for planning, development and investment decisions.

5.9 In assessing the options, we have therefore placed particular weight on the extent to which they:

- improve planning certainty;
- strengthen the credibility of the connections queue;
- support efficient network planning and development; and
- reduce the risk of network investment being based on projects that ultimately do not connect.

5.10 We consider that options which deliver earlier and more significant attrition are generally more likely to facilitate ACO (i), as they better align developer decision making with the timing of network investment decisions.

Provisional assessment of options under ACO (i)

Table 3: Overall Assessment against ACO (i)

Option	Provisional assessment against ACO (i)	Rationale
Baseline	Weaker	Existing arrangements are unlikely to deliver attrition early enough to materially improve planning certainty or reduce oversubscription.
Original Proposal	Very Strong	Applies a strong commitment signal to a large proportion of the queue, supporting earlier attrition and improved planning certainty.
WACM1	Moderate	The cap reduces the strength of the commitment signal and the expected level of attrition.
WACM2	Strong	Retains most of the Original Proposal's commitment signal but disapplies the OTCF at Milestone 8 rather than energisation, reducing its effectiveness relative to the Original Proposal.
WACM3	Weaker	Lower OTCF levels and Milestone 8 disapplication reduce the strength of the commitment signal and the likely level of attrition.
WACM4	Very Strong	Applies the OTCF to the largest proportion of BESS capacity and is therefore likely to deliver the greatest reduction in oversubscription.

WACM5	Weaker	Lower OTCF levels, application of a cap, and Milestone 8 disapplication significantly reduce the strength of the commitment signal.
WACM6	Moderate	Broadens coverage relative to WACM1 but the cap reduces effectiveness compared to the Original Proposal and WACM4.

5.11 Overall, we consider that options which provide a stronger commitment signal to a larger proportion of the oversubscribed BESS queue perform best against ACO (i), as they are most likely to deliver earlier attrition, improve planning certainty and support more efficient network development.

ACO (ii) Facilitating Effective Competition

Ofgem Assessment

5.12 We have considered whether the CMP470 proposal would help to facilitate effective competition. We recognise that stronger commitment requirements may affect projects differently depending on access to financing and liquidity. In some circumstances, additional security requirements could influence outcomes based not only on project viability but also on a developer's ability to provide security. However, reducing oversubscription may improve the credibility of the connections queue and improve access to scarce connection opportunities for projects that are more likely to progress.

5.13 We understand that additional commitment requirements could affect participants differently depending on their access to capital. A number of stakeholders argued that stronger OTCF options may place greater burdens on smaller or less well-capitalised developers, particularly where projects remain technically viable and capable of connecting but face more limited access to liquidity to support higher security requirements. In these circumstances, access to capital, rather than the underlying quality or viability of a project, may have a greater influence on whether a project remains in the queue. Alternatively, it might also be the case where larger developers may have a portfolio of projects, of which they only plan to energise a fraction and can take that decision sooner.

5.14 On balance, our view is that competition impacts are likely to be limited. The IIA indicates that the OTCF is applied proportionately on a £/MW basis and therefore scales with project size. The maximum OTCF (£25,000/MW) could account for 25% of capex for a short-duration BESS project and just over 7% for a medium-duration BESS project, while the start OTCF (£3000/MW) will account for much

lower % of their capex.[34] Although financing and liquidity effects may influence outcomes in some cases, we have not seen evidence that they are likely to materially distort competition within the affected technology.

5.15 Accordingly, we consider that the relative performance of the options under ACO (ii) depends on the weight placed on:

- Competition benefits from reducing oversubscription and releasing capacity to projects that are more likely to progress; and
- Competition risks arising from additional commitment requirements, including potential impacts on smaller or less well-capitalised developers.

Provisional assessment of options under ACO (ii)

Table 4: Overall Assessment against ACO (ii)

Option	Improves access to capacity and queue quality	Limits Financing and Liquidity Impacts
Baseline	Weaker	Very Strong
Original Proposal	Strong	Moderate
WACM1	Moderate	Strong
WACM2	Strong	Strong
WACM3	Weaker	Strong
WACM4	Very Strong	Moderate
WACM5	Weaker	Very Strong
WACM6	Moderate	Strong

Note: Unlike ACO (i) and ACO (iv), ACO (ii) involves balancing two competing considerations: improving queue quality and access to capacity and limiting financing and liquidity impacts on affected projects.

5.16 The relative performance of the options under ACO (ii) depends primarily on the balance between improving queue quality and limiting financing and liquidity impacts. The IIA indicates that stronger intervention options affect a larger

[34] As set out in Ofgem's CMP470 Initial Impact Assessment figure 10

proportion of the oversubscribed queue and are therefore more likely to influence project behaviour and improve queue quality. Conversely, options with lower OTCF levels, project-specific caps or shorter application periods are likely to reduce financing and liquidity impacts on affected projects. On balance, we consider that competition impacts are likely to be limited and do not materially distinguish the options from one another.

- The baseline minimises direct project impacts but does not address the competitive effects associated with persistent oversubscription.
- The Original Proposal and WACM4 are likely to deliver the greatest improvements in queue quality and access to connection opportunities by affecting the largest proportion of the oversubscribed queue. The IIA indicates that these stronger intervention options would affect around 78% of projects initially and up to 97% of projects at maximum OTCF levels, increasing the likelihood of earlier viability decisions and attrition.
- WACM1, WACM3, WACM5 and WACM6 reduce financing and liquidity impacts through lower OTCF levels, project-specific caps and/or earlier disapplication of the mechanism but may deliver less improvement in queue quality.
- WACM2 sits between the Original Proposal and lower-intervention options by retaining most of the Original Proposal's commitment signal whilst reducing exposure for projects that reach Milestone 8.

5.17 The IIA identifies potential risks relating to liquidity constraints, competition impacts and over-correction. We have considered these carefully. However, the available evidence suggests that any competition impacts are likely to be limited, while the risks associated with persistent oversubscription remain more material.

ACO (iii) Compliance with the Electricity Regulation

Ofgem Assessment

All Options

5.18 Neither the Original Proposal nor any of the WACMs appear to give rise to material impacts on compliance with the Electricity Regulation or relevant legally binding decisions.

5.19 Our provisional assessment is that the Original Proposal, all WACMs and the baseline are neutral against ACO (iii).

ACO (iv) Efficient implementation and administration of the CUSC

Ofgem Assessment

5.20 We have considered whether CMP470 improves the operation and administration of the CUSC and the connections regime. In particular, we have considered the extent to which each option improves queue quality, reduces the volume of projects requiring ongoing administration and supports the efficient implementation of Connections Reform.

5.21 NESO is currently managing a BESS Gate 2 queue that significantly exceeds likely system requirements. This increases the volume of connection agreements, queue-management activity and planning assumptions that must be maintained despite evidence that a substantial proportion of projects may ultimately not connect. We consider that reducing oversubscription would improve the credibility of the queue and allow resources to be focused on projects that are more likely to progress.

5.22 The IIA indicates that significant oversubscription can lead to inefficient planning and administrative outcomes because NESO and TOs are required to manage and plan on the assumption that all Gate 2 projects may connect. The IIA provides an indicative estimate of the inefficient network costs generated if all current projects exit the queue of at least £460 million,[35] before accounting for wider impacts on resource allocation, supply chains and strategic planning. While subject to uncertainty, this demonstrates that the issue is not merely administrative in nature and may give rise to material consumer and system impacts if oversubscription persists over an extended period.

5.23 We consider that options which bring forward attrition are more likely to facilitate ACO (iv). Earlier developer project viability decisions improve queue quality sooner, reduce the volume of speculative or less viable projects being administered, and allow connections planning and administration resources to be utilised more efficiently, based on a more credible set of projects.

[35] Using average Zonal Unit Charges from the Wider Cancellation Charges mechanism.

Provisional assessment of options under ACO (iv)

Table 5: Overall Assessment against ACO (iv)

Option	Assessment against ACO (iv)	Rationale
Baseline	Weaker	Oversubscription remains largely unchanged and administrative inefficiencies persist.
Original Proposal	Very Strong	Expected to materially improve queue quality and reduce administrative inefficiencies.
WACM1	Moderate	Weaker commitment signal and expected queue-management benefits compared to the Original Proposal.
WACM2	Strong	Retains most of the queue-management benefits of the Original Proposal while reducing project exposure after Milestone 8.
WACM3	Weaker	Lower commitment levels are less likely to materially improve queue quality.
WACM4	Very Strong	Applies to the largest proportion of oversubscribed capacity and is expected to deliver the greatest reduction in oversubscription.
WACM5	Weaker	Reduced project exposure but substantially reduced queue-management benefits.
WACM6	Strong	Broadens coverage relative to WACM1 but remains less effective than WACM4 due to the cap.

5.24 Our provisional assessment is that WACM4 and the Original Proposal perform most strongly against ACO (iv), as both are expected to deliver significant improvements in queue quality and administration of the connections regime. WACM4 is likely to deliver the greatest reduction in oversubscription because it applies the OTCF to the largest proportion of oversubscribed capacity.

5.25 However, this additional effect arises from removing the co-location exemption. As discussed in Section 4, the exemption applies only where the oversubscribed technology does not increase TEC and requires limited additional network works. Consequently, the additional projects captured by WACM4 contribute less directly to the planning inefficiencies that CMP470 seeks to address.

5.26 The evidence also indicates that the exemption is likely to apply to only a relatively small proportion of the overall BESS queue. The Workgroup noted that it could apply to a maximum of around 6GW of co-located BESS capacity and is likely to apply to a smaller subset once the additional exemption criteria are considered. We therefore consider that, while WACM4 may deliver greater attrition, the incremental planning benefits associated with removing the exemption are less certain than the additional attrition itself.

5.27 While all options improve outcomes relative to the baseline, weaker options reduce the proportion of projects materially affected by the OTCF, either through lower OTCF levels, project-specific caps or earlier disapplication. The IIA indicates that the Original Proposal, WACM2 and WACM4 affect approximately 78% of projects initially and up to 97% if the OTCF reaches its maximum level, compared with around 64% under WACM1 and fewer than 70% under WACM6. [36] While behavioural responses remain uncertain, this evidence suggests that stronger options are more likely to deliver the scale of attrition required to address the identified issue.

Summary assessment against the Applicable CUSC Objectives

Table 6: High-Level Summary of Option Performance

Option	ACO (i) Network planning	ACO (ii) Queue quality	ACO (ii) Financing & Liquidity Impacts	ACO (iv) Administration
Baseline	🔴 Weaker	🔴 Weaker	🟢 Very Strong	🔴 Weaker
Original	🟢 Very Strong	🟢 Strong	🟠 Moderate	🟢 Very Strong
WACM1	🟠 Moderate	🟠 Moderate	🟢 Strong	🟠 Moderate
WACM2	🟢 Strong	🟢 Strong	🟢 Strong	🟠 Strong
WACM3	🔴 Weaker	🔴 Weaker	🟢 Strong	🔴 Weaker
WACM4	🟢 Very Strong	🟢 Very Strong	🟠 Moderate	🟢 Very Strong
WACM5	🔴 Weaker	🔴 Weaker	🟢 Very Strong	🔴 Weaker
WACM6	🟠 Moderate	🟠 Moderate	🟢 Strong	🟠 Strong

Legend:

🟢 Strong performance against the objective
🟠 Moderate or mixed performance against the objective
🔴 Weak performance against the objective

5.28 Our provisional assessment, against the ACOs, is that the strongest-performing options are the Original Proposal, WACM2 and WACM4. Across ACO (i) and ACO (iv), stronger commitment signals are more likely to bring forward viability decisions, improve queue quality and support efficient administration of the connections regime.

[36] As set out in Ofgem's CMP470 Initial Impact Assessment figure 7

5.29 WACM2 reduces commitment requirements for projects that have reached Milestone 8. However, projects continue to influence queue management and network planning assumptions until they energise or exit the queue. As a result, ending the OTCF at Milestone 8 weakens the commitment signal relative to the Original Proposal. While Milestone 8 demonstrates that construction has commenced, it does not guarantee completion or connection and may occur before significant contractual commitments have been made. While Milestone 8 demonstrates that construction has commenced, it does not necessarily demonstrate that a project will complete construction and connect. WACM2 may reduce financing and liquidity impacts for some projects, but we have seen limited evidence that it would deliver material additional benefits relative to the Original Proposal.

5.30 WACM4 may deliver the greatest reduction in oversubscription, but this arises from removing the co-location exemption and extending the intervention to projects that are less closely linked to the planning inefficiencies the OTCF is intended to address.

5.31 Under ACO (ii), competition impacts appear limited and do not materially distinguish the options. The principal trade-off is therefore between queue quality benefits and financing and liquidity impacts.

5.32 On balance, we consider that the Original Proposal provides the strongest combination of effectiveness and consumer benefit. It is expected to deliver substantial improvements in queue quality, planning certainty and administration of the connections regime. Accordingly, **our provisional assessment is that the Original Proposal best facilitates the Applicable CUSC Objectives overall**.

The Authority's Principal Objective and wider statutory duties

5.33 The Authority's principal objective is to protect the interests of existing and future consumers. In the context of CMP470, consumer benefits arise not only from reducing the risk of inefficient network development and avoidable costs associated with persistent oversubscription, but also from supporting the objectives of Connections Reform and facilitating a more credible and deliverable connections queue capable of supporting CP30 and the transition to Net Zero.

5.34 he IIA indicates that persistent oversubscription can create material planning and development externalities because NESO and TOs must plan on the assumption that all Gate 2 projects may connect, even where developers do not bear the full costs of inefficient planning outcomes. Although the scale of these impacts is uncertain, the analysis suggests consumer and system costs could be significant.

We therefore consider that intervention is justified to reduce these externalities and bring forward viability decisions. The FMR estimates that the initial OTCF could create around £230 million of additional security requirements across affected projects when activated at £3,000/MW, and we have considered these costs alongside the expected consumer benefits.

5.35 We have also considered our wider duties, including promoting effective competition, supporting economic growth and facilitating the transition to Net Zero. On balance, our provisional assessment is that the Original Proposal best aligns with these duties and the Authority's principal objective by improving queue quality, supporting more efficient network development and reducing the risk of avoidable consumer costs arising from persistent oversubscription.

6. Ofgem's Minded-to Decision

This section sets out Ofgem's minded-to position on CMP470. It brings together the evidence from the IIA, stakeholder views and our assessment against the ACOs. The section explains why we consider intervention to be justified, how we have balanced the benefits and risks of the available options, and why the Original Proposal is our preferred option. It also explains how our assessment reflects both the quantified impacts identified in the IIA and wider considerations relating to queue quality, consumer outcomes and the effective operation of the connections regime.

Conclusion

6.1 Our provisional assessment is that:

- a material BESS oversubscription issue exists;
- intervention is justified;
- earlier and more significant attrition is required; and
- **the Original Proposal best facilitates the Applicable CUSC Objectives and most appropriately aligns with the Authority's principal objective and wider statutory duties**

6.2 The evidence demonstrates that the oversubscription issue is significant and that intervention is justified. Around 90GW of operational and Gate 2 BESS capacity currently exists compared with an estimated requirement of around 29GW. The IIA indicates that persistent oversubscription can create material consumer and system impacts because NESO and TOs are required to plan and invest on the assumption that all Gate 2 projects may connect.

6.3 While market forces and existing User Commitment arrangements are expected to reduce oversubscription over time, the key issue is whether viability decisions occur early enough to improve network planning and investment decisions. The IIA indicates that approximately 58% of BESS capacity currently has low liabilities or securities exposure: only around 16% has both passed the securities trigger date and secured planning consent, and half of projects have posted less than £800/MW of securities and assumed less than £1,500/MW of liabilities. This suggests that a substantial proportion of projects currently face limited commitment obligations during what is, following G2tWQ, the period most relevant to network planning.

6.4 NESO has no mechanism to directly reduce the queue or select the projects most likely to proceed to connection, meaning resolution of the issue relies largely on

market-led attrition and existing User Commitment arrangements. The IIA also indicates that developers do not bear the full costs associated with inefficient network planning outcomes, with consumers continuing to bear part of the resulting risk through network charges. While subject to uncertainty and dependent on a number of assumptions, the IIA's indicative analysis estimates that persistent oversubscription could result in approximately £460 million of network planning and development externalities.[37] We therefore consider that intervention is justified to bring forward project viability decisions and reduce the consumer and system impacts associated with persistent oversubscription.

6.5 We recognise that the OTCF is not costless. The FMR estimates that the initial OTCF level (£3,000/MW) could result in approximately £230 million of additional security requirements across affected projects. However, securities are returned where projects proceed to connection and therefore primarily create financing and liquidity impacts rather than equivalent increases in project expenditure. The IIA indicates that the initial OTCF level represents very low percentage of capex for projects, increasing to around 27% and 7% respectively if the OTCF reaches its maximum level(£25,000/MW).[38] We have therefore carefully weighed these project impacts against the anticipated consumer and system benefits and consider that the Original Proposal strikes an appropriate balance between them.

6.6 We recognise that stronger intervention options give rise to risks, including greater attrition than anticipated, financing and liquidity constraints affecting some projects, and potential competition impacts. However, we consider that these risks are mitigated by the design of the OTCF, including the activation and deactivation thresholds, staged escalation framework and governance arrangements. While behavioural responses remain inherently uncertain, we consider that these safeguards materially reduce the risk of unintended outcomes.

6.7 The IIA concluded that all OTCF options, other than the baseline, would help remove low-commitment projects from the queue. Among the options considered, the Original Proposal aligned most closely with the preferred design parameters, including a higher OTCF level, no cap linked to existing security exposure, return at energisation and retention of the co-location exemption, and was therefore expected to deliver the greatest consumer and system benefits.[39]

[37] As set out in Ofgem's CMP470 Initial Impact Assessment page 16
[38] As set out in Ofgem's CMP470 Initial Impact Assessment figure 10
[39] As set out in Ofgem's CMP470 Initial Impact Assessment section 7

6.8 On balance, we consider that the Original Proposal provides the strongest overall balance of effectiveness and consumer benefit, delivering substantial improvements in queue quality and confidence in future connection outcomes.

6.9 We recognise that CMP470 has been developed in response to a specific oversubscription issue affecting BESS following implementation of the Connections Reform protections framework. As discussed in Section 3, the OTCF includes governance safeguards that allow prevailing market conditions and available evidence to be considered before activation or escalation occurs. These arrangements provide an additional safeguard against unintended outcomes while preserving the effectiveness of the mechanism.

6.10 Accordingly, **our provisional view is that the Original Proposal represents the most appropriate response to the oversubscription issue identified by CMP470 and best facilitates the Applicable CUSC Objectives.**

Consultation Questions

Minded-to decision:

Q1. Do you agree with our minded-to position that intervention is justified? Please provide reasons for your answer.

Q2. If so, do you agree that the Original Proposal is the most appropriate option to address the oversubscription issue? If you do not agree that the Original Proposal is the most appropriate, do you have a preferred alternative? Please provide reasons and evidence for your answer.

Initial Impact Assessment:

Q3. Do you have any comments, evidence or concerns regarding our assessment of the rationale, benefits, risks and implementation of the OTCF in the IIA, including i) the treatment of negative externalities arising from later queue exits; ii) the likely behavioural response of projects (including any potential for gaming); and iii) our assessment of the relative merits of the options considered, including the preference for the wider considerations approach and the Original Proposal?

Both:

Q4. Do you have any further comments, evidence or concerns regarding our minded-to position or the accompanying IIA? In particular, we welcome evidence on the likely behavioural response to the OTCF, its impacts, and any implementation considerations.

Next Steps

6.11 This document sets out the Authority's minded-to position and is not a final decision. We welcome stakeholder views and evidence in response to the consultation questions above.

6.12 Following consultation, we will consider all responses received, together with any additional evidence submitted. We will then undertake a final assessment of the Original Proposal and WACMs against the Applicable CUSC Objectives, the Authority's principal objective and wider statutory duties.

6.13 The Authority will subsequently publish its final decision, setting out its conclusions and the reasons for its decision.

Send us your feedback

We believe that consultation is at the heart of good policy development. We are keen to receive your comments about this consultation. We would also like to get your answers to these questions:

- Do you have any comments about the quality of this document?
- Do you have any comments about its tone and content?
- Was it easy to read and understand? Or could it have been better written?
- Are its conclusions balanced?
- Did it make reasoned recommendations?
- Do you have any further comments?

Please send your feedback to stakeholders@ofgem.gov.uk.

Privacy policy

Personal data

The following explains your rights and gives you the information you are entitled to under the General Data Protection Regulation (GDPR).

Note that this section only refers to your personal data (your name address and anything that could be used to identify you personally) not the content of your response to the consultation.

1. The identity of the controller and contact details of our Data Protection Officer

The Gas and Electricity Markets Authority is the controller, (for ease of reference, "Ofgem"). The Data Protection Officer can be contacted at dpo@ofgem.gov.uk

2. Why we are collecting your personal data

Your personal data is being collected as an essential part of the consultation process, so that we can contact you regarding your response and for statistical purposes. We may also use it to contact you about related matters.

3. Our legal basis for processing your personal data

As a public authority, the GDPR makes provision for Ofgem to process personal data as necessary for the effective performance of a task carried out in the public interest. i.e. a consultation.

4. With whom we will be sharing your personal data

Your personal data will not be shared with any organisation outside of Ofgem.

5. For how long we will keep your personal data, or criteria used to determine the retention period.

Your personal data will be held for up to six months after the programme is closed.

6. Your rights

The data we are collecting is your personal data, and you have considerable say over what happens to it. You have the right to:

- know how we use your personal data
- access your personal data
- have personal data corrected if it is inaccurate or incomplete
- ask us to delete personal data when we no longer need it
- ask us to restrict how we process your data
- get your data from us and re-use it across other services

- object to certain ways we use your data
- be safeguarded against risks where decisions based on your data are taken entirely automatically
- tell us if we can share your information with 3rd parties
- tell us your preferred frequency, content and format of our communications with you
    - to lodge a complaint with the independent Information Commissioner (ICO) if you think we are not handling your data fairly or in accordance with the law. You can contact the ICO at https://ico.org.uk/ or telephone 0303 123 1113.

7. Your personal data will not be sent overseas.

8. Your personal data will not be used for any automated decision making.

9. Your personal data will be stored in a secure government IT system.

10. More information For more information on how Ofgem processes your data, view our Ofgem privacy policy.