Public

Draft Final Modification Report

CM095: Implementing Connections Reform

Overview: The current connections process is not enabling the timely connection of projects to meet net zero. A wholesale revision is needed to the connections process to meet those targets and the needs of project developers and consumers. This proposal introduces new processes and definitions that will update the existing processes and enable projects that are most ready to progress more rapidly, to achieve connection.

Modification process & timetable

1. **Proposal Form**
   19 April 2024
2. **Workgroup Consultation**
   25 July 2024 - 06 August 2024
3. **Workgroup Report**
   05 November 2024
4. **Code Administrator Consultation**
   08 November 2024 - 26 November 2024
5. **Draft Final Modification Report**
   13 December 2024
6. **Final Modification Report**
   20 December 2024
7. **Implementation**
   Q2 2025

Have 20 minutes? Read our Executive summary
Have 180 minutes? Read the full Draft Final Modification Report
Have 1 Business Day? Read the full Draft Final Modification Report and Annexes

Status summary: The Draft Final Modification Report has been prepared for the recommendation vote at Panel.

Panel recommendation: The Panel will meet on 20 December 2024 to carry out their recommendation vote

This modification is expected to have a: High impact on Transmission Owners and National Energy System Operator

[It is anticipated that CM095 could indirectly impact the following parties: Interconnectors, Generators (including embedded generators), Demand, Distribution Network Operators and Independent Distribution Network Operators as detailed in CMP434.]

Governance route	Urgent modification proceeding under a timetable agreed by the Authority (with an Authority decision)	
Who can I talk to about the change?	**Proposer:** Graham Lear, NESO graham.lear@nationalenergyso.com 07709835895	**Code Administrator Chair**: Lizzie Timmins elizabeth.timmins@nationalenergyso.com 07840708429

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Executive summary

This code modification was raised under the ESO's Connections Reform programme, with proposals to reform the electricity transmission connections process as set out in the System Operator Transmission Owner Code (STC).

What is the issue?

The current Great Britain (GB) transmission connections process is not enabling the timely connection of projects to meet net zero. A wholesale revision is needed to the connections process to meet those targets and the needs of project developers and consumers. Changes to the STC are required to facilitate such wholesale revision.

What is the solution and when will it come into effect?

Proposer's solution: To facilitate Connection and Use of System Code (CUSC) modification CMP434, this proposal outlines the following:

- To define the obligations and timing changes between the National Energy System Operator (NESO) and TOs in the STC) so that NESO can facilitate the combined Gate 1 and Gate 2 process[1] in the required timescales for in scope projects (Component A).
- To propose a Connections Network Design Methodology (Component B).
- Introducing project specific and non-project specific processes through which NESO can reserve connection (or interface) points and/or capacity in the combined Gate 1 and Gate 2 process (Component C).

Implementation date: Aligned with CUSC modification CMP434

Summary of alternative solutions and implementation dates:

ASM1: Obligation to Codify the Methodologies and Guidance Documents under Connection Reform
This option is in line with the Original proposal however also places an obligation on NESO to conduct a review of methodologies developed alongside CM095, and the TOs to provide any information to NESO to support in this review. The review will be presented to the STC Modification Panel to seek guidance on whether NESO should raise a code modification to incorporate relevant methodologies into the STC, taking into account any improvements identified following the review. This option should only be implemented if CMP434 WACM6 is implemented.
The implementation of this Alternative STC Modification (ASM) is in line with the Original proposal.

Workgroup conclusions: The Workgroup concluded by majority that the Original and ASM1 better facilitated the Applicable Objectives than the Baseline.

Panel recommendation: The Panel will meet on 20 December 2024 to carry out their recommendation vote.

What is the impact if this change is made?

A reformed connections process (with different process timescales and policies) will be in place to facilitate new connection applications and 'Gated modification applications' being submitted to NESO from developers (including via the relevant Distribution Network Operator (DNO) and/or transmission

[1] Note that for projects which are not in scope the existing processes and timescales will remain in place.

connected Independent Distribution Network Operator (iDNO) in the case of relevant small and medium generators). Applying CM095 will facilitate broader delivery of the benefits to wider industry as articulated in the CMP434 proposal.

Interactions

This code modification directly interacts with a change to the Connection and Use of System Code, CMP434.

Consequential System Operator Transmission Owner Code Procedures (STCP) changes will be required in future to facilitate the changes associated with CMP434 and CM095.

There is also an interaction with the separate (but related) modification addressing Application of Gate 2 criteria to existing contracted background: CMP435. STC modification CM096 had been raised in conjunction with CMP435 but was subsequently withdrawn.

There are also further interactions with the following wider developments:

- Clean Power 2030 Plan
- NESO Methodologies under development:
  - Gate 2 Criteria Methodology
  - Connections Network Design Methodology
  - Project Designation Methodology
- OFGEM Licence Consultation(s)
- OFGEM End to End Connections Consultation

What is the issue?

The STC does not currently facilitate/reflect the wholesale revision of the connections process proposed within CUSC modification CMP434.

Scope

The scope of this proposal is to facilitate the proposal set out in CMP434. This will be done by amending the relevant NESO/TO processes within the STC in relation to connections.

Why change?

The overall reason for changing the connections process can be found within CMP434. The reason for changing the STC specifically is to allow NESO and TOs to facilitate the delivery of the reformed connections process proposals as set out within CMP434. Without the changes to the STC set out in this proposal the reformed connections process cannot be delivered (due to the importance of NESO/TO processes in the overall connections process).

What is the solution?

Proposer's solution

In respect of the Proposals within CMP434 there are several notable STC specific areas of the Proposals as follows, which are further explained in the sections below.

- To define the obligations and timing changes between NESO and TOs in the STC) so that NESO can facilitate the combined Gate 1 and Gate 2 process[2] in the required timescales for in scope projects (Component A).
- To propose a Connections Network Design Methodology (Component B).
- Introducing project specific and non-project specific processes through which NESO can reserve connection (or interface) points and/or capacity in the combined Gate 1 and Gate 2 process (Component C).

Component A: Proposed Reformed Connections Process and Timescales, including NESO/TO obligations.

The diagram in **Annex 4** provides a high-level overview of the current intent for the proposed combined Gate 1 and Gate 2 Process from a NESO and Applicant perspective (with an overlay for aspects of Component A). It is provided in **Annex 4** only for information as it is subject to licence change and proposed Methodologies. The current codified process timescales are derived from the ESO and TO transmission licences so process frequency and duration will in part depend upon changes to licence. The Proposer therefore plans to keep the frequency and duration of the process, as well as the process steps, under review.

However, from a NESO/TO perspective, a much simpler process is proposed to facilitate the bi-annual combined Gate 1 and Gate 2 Process, when compared to NESO/Developer perspective. This simpler

[2] Note that for projects which are not in scope the existing processes and timescales will remain in place.

process effectively treats all applications from NESO to Onshore/Offshore TOs (referred to as 'TOs' going forward – i.e., not including Competitively Appointed Transmission Owner (CATOs)) triggered by applications coming through the gated process set out in the CUSC in substantially the same baseline end-to-end process, except for changes to specific process steps and timescales and incorporation of the Connection Network Design Methodology (CNDM), as per Component B below.

This proposed process is set out (at a high-level) as follows.

By default, TOs will not be involved in the Gate 1 Process. There will therefore not be a requirement for TOs to receive data in relation to, or create individual Transmission Owner Construction Offer (TOCOs) for, Gate 1 projects. However, TOs will be indirectly involved in the Gate 1 Process where there is Reservation planned by NESO for Gate 1 projects. Importantly, however, NESO will (for the purpose of the STC) treat such applicants as though they are Gate 2 projects, and any such applications from NESO will therefore follow the same process (in the same way) as Gate 2 projects, subject to the CNDM.

From a TO perspective subject to Ofgem's confirmation of System Operator/Transmission Owner transmission licence conditions related to connections, a single batched network design process will commence on a six-month frequency (i.e., bi-annually). This will be set out in a Gated Timetable periodically published by NESO (and NESO will liaise with TOs prior to each being published) to indicate key process dates (associated with key process steps), including application window opening and closing for developers and the latest date by which final TOCOs need to be provided to NESO.

There will be an application window stage in which all necessary applications and competency checks (including technical effectiveness checks) will be carried out by NESO and TOs.

The next stage of this process will be the Construction Planning Assumption and network design (as per CNDM) and Offer (to NESO) stage. Receipt of offers from the TOs (TOCOs and ATOCOs) will allow NESO to make offers to applicants under the combined Gate 1 and Gate 2 process.

Change to Scheme Briefing Notes (SBNs)

SBNs are proposed to be submitted within 5 business days of receipt of the User's Gate 2 Application by NESO, and each Scheme Briefing Note will commence (as per baseline) a TO technical effectiveness check. (NB there are expected process differences at this stage in respect of small and medium embedded generation projects and Gate 1 Reservation projects; this is set out further in the paragraphs below.)

Where further information is required from the applicant prior to technical effectiveness being declared by the TO, NESO will be required to obtain such information from applicants up to an agreed deadline within the application window. Whilst applications from NESO to the TOs will be periodically made, and technical effectiveness will be periodically declared (as per the updated STC Section D), NESO will provide a full list of effective applications within the batch i.e., those applications/reservations upon which the Construction Planning Assumptions are to be based when being developed for subsequent provision to the TOs[3].

[3] Whilst Construction Planning Assumptions are to be utilised, no changes are required to the code in this regard as a result of the Proposal.

Small/Medium Embedded applicants

DNOs and Transmission Connected iDNOs applying on behalf of Small/Medium Embedded Generators into Gate 2 via a Modification Application (Transmission Evaluation Application) do have to provide additional information as part of their application. They will have up to 5 business days following the closure of the Gate 2 application submission deadline to submit the minimum required DRC/technical data to NESO for the creation of Construction Planning Assumptions (CPAs). They have up to a maximum of 15 business days after the closure of the Gate 2 application submission deadline to submit this information as full and final. As a result, SBNs and technical data will continue to be provided to the TOs up to 10 weeks of an Application Window being opened (assuming a six-week period in which Users can submit their applications to NESO) in respect of small and medium EG as compared to other in-scope applications.

The Request for a Statement of Works is no longer applicable. As a consequence of The Reformed Connections Process Proposals (TMO4+), the materiality trigger applicable under the TIA process (also known more commonly as the Appendix G process) will also be removed.

Gate 1 Projects for Reservation

Where NESO reserves for projects applying to Gate 1 the SBNs will be submitted to TOs within 10 business days of receipt of the User's Gate 1 Application by NESO. This takes account for additional activity required by NESO to review and confirm the suitability of the project to be considered for this route.

Provision of TOCOs

Full offers will be provided by the relevant TO(s) to NESO for all effective applications. The components and processes to produce these TO Connection Offers will be largely equivalent to existing full agreements (i.e., not as per two-step or transitional type offers). These offers will incorporate the scope and cost of works identified by the CNDM process (set out in Component B) and will be produced as soon as reasonably practicable for the relevant TO, but for draft TOCOs no later than 11 business days before NESO is due to begin issuing its associated connection agreement to Users (as per the gated timetable). In the case of final TOCOs, no later than 1 business day before NESO is due to begin issuing its agreements out to Users; and be open for acceptance for a period of five months from the date the final TOCO is issued to NESO (unless otherwise agreed between the parties).

For the avoidance of doubt, as per the existing arrangements, where a User wishes to apply for User-choice (i.e., enduring and/or interim non-firm) connections, they will do this as part of their Gate 2 application (to NESO), and this will be communicated to the TO by NESO within the SBN process.

Component B: Connections Network Design Methodology

This Proposal will require a new process for network design activities needed to deliver connection offers. NESO is developing a new 'Connection Network Design Methodology' with the TOs to do this. This proposal will set out the relevance of this Methodology at a high level in the context of the new process. This is on the basis/assumption that the Authority introduces a licence obligation for NESO/TOs to have this proposed Methodology in place that they must comply with, and that the Authority also set out in licence the consultation, governance, and approvals process(es) in relation to such a proposed CNDM. Further information can be found within the recent Ofgem open letter.

Component C: Connection/Interface Point and Capacity Reservation

This proposal introduces project specific and non-project specific processes through which NESO can reserve connection (or interface) points and/or capacity within a combined Gate 1 and Gate 2 process.

The project specific reservation process will result in TOs issuing full TOCOs/ATOCOs to NESO in relation to Gate 1 Applicants (including Reservation). These applications will follow the process outlined in Component A.

The non-project specific reservation process is already defined within STCP16-1 and this proposal only adds a reference to the non-project specific reservation concept to the STC and points to STCP16-1 for details (to differentiate it from the project specific route being introduced into the STC by this proposal, as above).

Workgroup considerations

The Workgroup convened 10 times to discuss CM095, as part of the 36 joint Workgroups with the CMP434 Workgroup. These Workgroups were to discuss the perceived issue, detail the scope of the proposed defect, devise potential solutions and assess the proposal in terms of the Applicable Code Objectives. The vast majority of these Workgroups were spent discussing CMP434 due to the complexity of the solution for this modification.

Workgroup Consultation summary

The Workgroup held their Workgroup Consultation between 25 July 2024 – 06 August 2024 and received 10 non-confidential responses and 1 confidential response. The full non-confidential responses and a summary of the responses can be found in **Annexes 5** and **6**. Key general points are summarised below, however points relating specifically to the components of the Proposer's solution can be found under the relevant component subheading.

- The following numbers of respondents indicated that the Proposer's solution better facilitated the Applicable Objectives than the Baseline: 6 for (a), 4 for (b), 5 for (c), 1 for (d), 5 for (e), 6 for (f) and 1 for (g).

- 8 respondents agreed with the implementation approach, whilst 2 disagreed. Concerns included the need for guidance, methodologies, and processes to be in place and communicated to industry before implementation, and the limited time available to do this. One respondent that there is not enough time for TOs to embed the new processes following Authority decision, before the go-live date. Another respondent noted the need for NESO to work proactively with TOs, noting that NESO's proposal is heavily dependent on methodologies which will require TO input and feedback. As a result of concerns raised within the Workgroup Consultation, NESO agreed to change the Go-Live date, and to build in additional Workgroup discussion time within an extended timeline.

- 5 out of 10 respondents agreed that the Proposer has fully identified the high-level impacts on the STC and STCPs as a result of the CMP434 Proposal, with some respondents noting that the consultation provided insufficient detail on the reformed process, obligations and timings.

- 7 out of 10 respondents agreed that there were potential risks for implementation of CM095 which may also impact CMP434, CMP435 or CM096. Comments regarding this included the Methodologies relating to CMP434 and the risk of delay of these, given the timeline.

Consideration of the Proposer's solution

Discussions on the context of the Proposer's solution relating to CUSC modification CMP434 can be found within the Workgroup Considerations section of the CMP434 Workgroup Report. The below section outlines the discussions specific to the STC that have been discussed within the Workgroups.

The Proposer advised that CM095 is looking at the same defect and solution associated with CUSC modification CMP434. The Proposer also advised that the scope of CM095 is to facilitate CMP434, with the STC modification focusing mostly on timings and communications between NESO and TOs.

Component A: Proposed Reformed Connections Process and Timescales, including NESO/TO obligations.

When asked in the Workgroup Consultation, 7 respondents were in favour of this element, whilst 3 disagreed.

Several respondents asked for further detail on timescales for the proposed reformed process, including clarification of NESO/TO involvement. All Transmission Owner respondents highlighted the need for timescales to be more realistic, with NESO working with TOs to address the duration of each stage, and to avoid crossover between assessment and offer periods. They highlighted significant issues if this is not addressed.

NESO considered the feedback from the Workgroup Consultation, noting changes to the Proposal regarding the Gate 1 and Gate 2 process and removal of Distribution Forecasted Transmission Capacity (DFTC). They clarified that these changes were because of changes to the CMP434 Proposal due to feedback received in the Workgroup Consultation and also added more detail to their Proposal.

Following feedback from the Workgroup regarding the timings, the Proposer changed their Proposal to have all timings in business days, rather than calendar days.

Component B: Connections Network Design Methodology

The Proposer outlined that the CNDM is the proposed process by which NESO and TOs will assess connection applications and define the roles and responsibilities of NESO and TOs in conducting these activities.

The Proposer initially noted that they believe the following should be codified in relation to the CNDM:

- The requirement for NESO and the TOs to have a CNDM;
- An obligation on NESO to publish the CNDM; and
- An obligation to engage with industry on the content of the CNDM.

The Proposer subsequently confirmed to the Workgroup that these requirements for CNDM need to be first set out in the licence and subsequently they did not intend to codify these three items.

Workgroup members supported these points being codified. In addition, one Workgroup member noted that they believed it was a legal requirement, in respect of connections, to be codified as the Authority need to approve the content of the document.

Multiple Workgroup members expressed concerns about the Proposer's intention not to codify the proposed new capacity reallocation mechanism, instead including it in the non-codified CNDM document.

Multiple Workgroup members stated their view that capacity reallocation mechanism (which forms part of the intended CNDM process) is so central to this proposal that, if the Proposer was not proposing to codify it, then, in their opinion, there would be good arguments for the Authority to reject or send back this Modification, which would delay the entire Connections Reform programme.

The Proposer noted that they do not anticipate changes to the current exchange of data between NESO and TOs, as CPAs and TOCOs will still be part of the connections arrangements. One Workgroup member noted that there would be changes required within the STC and STCPs to outline the CNDM requirements.

When asked in the Workgroup Consultation, 7 respondents were in favour of this element, whilst 2 disagreed. One respondent was not able to answer this question.

Several respondents noted the CNDM approval date risk and highlighted that the CNDM should be codified within the STC, with more detail shared on this by NESO. One respondent noted the need to enhance codification of capacity reallocation mechanism.

NESO considered the feedback from the Workgroup Consultation and did not think that a change was necessary to their Proposal.

Component C: Connection Point and Capacity Reservation

The Proposer outlined that the STC currently has provision for substation bay reservation under STCP 16-1 4.3.4. The Proposer noted that they plan to continue to use this right under these proposals, separate to the Gate 2 criteria, and in limited circumstances e.g., planned to be to facilitate Network Service Procurement (previously known as Pathfinders), future network competition processes and offshore co-ordination activities. However, the Proposer noted that they planned to extend the bay reservation approach to become a broader connection point and capacity reservation approach within these proposals.

Several Workgroup members highlighted that the change to STCP 16-1 to include 4.3.4 under PM0121 was not intended for this extended purpose (as outlined in the Ofgem letter at the time[4]) and noted that a change to how this is used should be done under the appropriate Governance route, with approval from the STC Panel. The Proposer noted that they will consider changes to legal text within both the STC and STCPs when legal text drafting commences to ensure the proposal is appropriately reflected in the code via CM095.

The Proposer noted that the Gate 2 criteria would continue to apply to any project which is allocated a connection point (and capacity) which had previously been reserved, and that anything unallocated would be released for reallocation. Several Workgroup members noted that they had concerns with this process happening at or before Gate 1 and requested further information to address their concerns. Workgroup members expressed the concern that the inclusion of Competitively Appointed Transmission Owners (CATOs) as part of network competition is not a customer connection and therefore should be out of the scope of this proposal.

[4] Direction to relieve National Grid Electricity Transmission Limited of obligation to comply with Section D Part 2 of the SO-TO Code for Pathfinder connections (ofgem.gov.uk).

In respect of codifying NESO's enhanced capacity/bay reservation right, a Workgroup member stressed the importance of progressing the identified amendments to STCP 16-1 (and any other necessary STCP changes to facilitate CM095 and CMP434 proposals) in a timely manner (as this cannot be done via CM095). Whilst they acknowledged that the STC main body text supersedes the STCPs where there is any contradiction/confusion, they raised the importance to STC Parties of the procedures for specifying operational detail. They also flagged the STCP Governance requirements to consider materiality. As the Workgroup member believed the changes to be 'material' (potentially requiring Ofgem approval instead of the Panel's), they recommended that the Proposer consider what can be done proactively. This could include pre-emptive proposal drafting and/or seeking direction from STC Panel and Ofgem for consideration on approval (e.g., within the package of modification proposals for TMO4+). The Proposer agreed to consider this and agreed to try to inform the Workgroup prior to the end of the Workgroup phase.

When asked in the Workgroup Consultation, 8 respondents were in favour of this element, whilst 2 disagreed.

One respondent noted that further information is needed on how Capacity Reservation would operate, noting that it needs to be transparent and developed with STC parties. Several respondents noted the possibility of a negative impact on other parties as a result of this part of the Proposal. Several respondents noted they did not think CATOs should be included in the Proposal. Concerns were raised regarding how the reservation process will be implemented and managed, noting that it should not create inefficiencies or disadvantage onshore projects.

When the Workgroup Consultation responses were discussed with the Workgroup, a Workgroup member noted that NESO need to consider a possible negative impact on Users of Connection Point and Capacity Reservation, as raised within the Workgroup Consultation. They stated that CM095 should only be facilitating CMP434 and outlining NESO/TO interface, rather than having an impact on Users.

NESO considered the feedback from the Workgroup Consultation and noted that they would possibly look to broaden the usage of Component C, in line with their Proposals for Element 10 of CMP434. They clarified that this was linked to the Gate 1 process becoming optional and that Component C/Element 10 could continue to incentivise the use of the Gate 1 process.

Legal Text Discussions

The Proposer presented a list of Sections within the STC they thought may potentially need to change. One Workgroup member queried the extent of the proposed legal text changes, to clarify if they were the only obligations being put on Transmission Owners. NESO confirmed that some obligations may be defined within NESO and TO licences and not within the STC. One Workgroup member believed that all obligations should be captured within the STC and not within NESO and TO licences.

The Workgroup reviewed the proposed changes to STC Section D. Several Workgroup members requested further detail on the CNDM within Section D to provide clarity to stakeholders. The Proposer confirmed that after considering this feedback they felt the legal drafting was sufficient in respect of CNDM but would add additional text to call out the relevance more clearly of the CNDM to the offer process. A Workgroup member noted that the text should make clear the relevance of CNDM within the context of the new gated processes only, and the Proposer agreed, adding additional wording to clarify this. The Workgroup also debated whether OFTOs should be included within the legal text; several Workgroup members did not believe OFTOs were in the scope of CM095, however one Workgroup member noted that OFTOs should be consulted if they are to be included. The Proposer considered this and felt that OFTOs were impacted by the Proposal and the draft legal text. The

proposer considered requirements with respect to OFTOs further and concluded NESO should send SBNs resulting from applications through the gated process to OFTOs in accordance with the same timescales for onshore TOs. The Workgroup also requested further clarity within the legal text on dates for milestones within the TOCO process. The Proposer considered this and adapted the proposal and the legal text to include reference to the gated timetable. The Workgroup debated whether NESO should retain the right to amend Construction Planning Assumptions in the new gated process as this poses a risk to the TOs ability to produce offers in the required timescales. The Proposer put forward the risk posed by the inflexibility of not having the option to amend Construction Planning Assumptions, and suggested a compromised approach whereby NESO and TOs can discuss and agree how to proceed should a need to update them be identified.

When reviewing STC Section J, Workgroup members requested that Engineering Charges be better explained by NESO. It was also suggested to amend some definitions for clarity and to add definitions for other new terms introduced within Section D; this was reflected and agreed within the legal text. It was noted that some additional definitions from CMP434 legal text were required for use in the CM095 text, and these would be added, noting that they would reference CUSC for the definition.

One Workgroup member highlighted the need to align the STC Legal Text with the CUSC for consistency. A change to CUSC Section 6.5.5.6 was reflected in Section D of the STC as a result of this discussion.

Discussion on Alternative Options

The Workgroup discussed the WACMs raised under CMP434: Implementing Connections Reform to identify whether any would have an STC impact. It was agreed with the Workgroup that WACMs 2, 3 and 4 would not have any STC impact. One Workgroup member queried whether WACMs 1, 5, 6 and 7 would have an STC impact, which NESO agreed to investigate.

- CMP434 WACM1: Clarification of Embedded Definition
    - Workgroup members were concerned that this WACM may have an STC impact, however it was confirmed by NESO that NESO/TO processes would not be impacted by the change in definition.
- CMP434 WACM2: DNO Submission Requirement
    - The Workgroup did not believe this WACM would have an STC impact.
- CMP434 WACM3: Capacity Reallocation Codification
    - The Workgroup did not believe this WACM would have an STC impact.
- CMP434 WACM4: Codifying restrictions on changes to project site location – “Red Line Boundary” (RLB) – post-Gate 2
    - The Workgroup did not believe this WACM would have an STC impact.
- CMP434 WACM5: Remove Project Designation
    - Workgroup members were concerned that this WACM may have an STC impact, however it was confirmed by NESO that TOs will be required to produce a normal Gate 2 Offer for designated projects, and that any differences in relation to designated projects (from the TO perspective) would be captured within the CNDM.
- CMP434 WACM6: Obligation to Codify the Methodologies and Guidance Documents under Connection Reform
    - An STC impact was identified as a result of this WACM, so NESO raised an Alternative which was voted through as ASM1.

- CMP434 WACM7: Introduction of a pause for market self-regulation before NESO/TO undertake the network assessment.
    - Workgroup members were concerned that this WACM may have an STC impact, however NESO confirmed that the process timescales which are being amended by CMP434 WACM7 are not in the STC and so there would be an indirect impact on process step/timescales, rather than a direct impact (requiring an ASM). NESO advised that the potential approval of CMP434 WACM7 may therefore need to be considered when developing the revised STCPs related to this code modification.

Discussions on ASM1

ASM1 was raised to align with CMP434 WACM6 by obligating NESO to perform a review of Methodologies and Guidance Documents that won't be codified under the Original Proposal. ASM1 also obligates TOs to support with any required information NESO needs in order to carry out this review. The review will commence 12 months after the start of the first gated process, and the outputs will be published within the next 4 months and presented to the STC Modification Panel within the next 2 months to seek guidance on whether NESO should raise a subsequent code modification to codify the relevant Methodologies and Guidance Documents, taking into account any suggested improvements.

When discussing Alternative 1 prior to the Alternative Vote, it was clarified by the Proposer that the intention is to facilitate CMP434 WACM6 only. One Workgroup member queried whether the Authority could approve ASM1 without WACM6. It was clarified by the Proposer and agreed with the Workgroup that ASM1 should only be implemented if CMP434 WACM6 is also implemented.

When discussing CMP434 WACM6, one Workgroup member queried the STC equivalent of a Standing Group. The Workgroup agreed that it would be more appropriate for the STC Panel to consider the output of the review of Methodologies and Guidance Documents.

The Workgroup reviewed the proposed ASM1 legal text. The proposer noted that the times for the Gated Review would align with those given in the CMP434 WACM6 and as such did not need to be reiterated in the ASM1 legal text. The workgroup debated whether a requirement to take the outputs of the Gated Review to the STC Modification Panel should be explicit in the legal text, as a decision to codify text within CUSC resulting from WACM6 would likely lead to a need for an STC modification. The Workgroup agreed that the requirements for codification within the STC should not be subordinate to requirements imposed by the CUSC, and legal text was included requiring NESO to present the Gated Review outputs to the STC Modification Panel.

Other Workgroup discussions

The Workgroup discussed how the CM095 solution fits in with and facilitates the solution for CMP434.

When discussing the Terms of Reference, the Workgroup agreed that the accessibility and transparency of new processes for Users was only relevant in terms of the transparency of reservation within CM095, as the process for reservation will be defined within the STC. The Proposer agreed that NESO needed to consider how best to ensure transparency with respect to reservation but advised that this would not be addressed directly within the CM095 code modification, as the modification only deals with the process between NESO and TOs for carrying out reservation and does not govern how or what NESO decides to reserve for. The Workgroup were satisfied that all other aspects of the solution would not have an impact on Users as the STC defines the interface between the SO and TO, with CMP434 having a direct impact on Users.

The Workgroup considered the scope of application for the proposed solution by technology/project type, however agreed that this Term of Reference had been discharged through CMP434 and therefore they did not believe it was relevant for CM095.

When discussing mechanisms to ensure projects progress from Gate 1 to Gate 2, the Workgroup noted that they had covered this within discussions on CMP434; they did not believe this was relevant for CM095.

The Workgroup considered the impact of NESO designation of Gate 2 status, noting that this was covered under CMP434; the Workgroup did not believe this was relevant to CM095.

The Workgroup considered how the solution confirms with the statutory rights with respect to terms and conditions for connection but believed that this was not relevant for CM095 as the solution should only cover the SO/TO interface and not impact Users.

The Workgroup discussed the need for future STCP modifications, which are to subsequently be raised by the Proposer, and which must be in place prior to the implementation date to facilitate CM095.

Discussion on Annex B of the Open Letter on Connections Reform

The Workgroup considered in collaboration with the CMP434 Workgroup the relevant content of Annex B of the Authorities Open letter on connections reform, sent 19th April 2024[5].

The Chair advised that within the Open letter, the Authority had laid out a number of points that they expected the ESO to consider when developing the TMO4+ proposal, acknowledging the need for appropriate support from industry during the code modification process. Some CMP434 Workgroup members had varying interpretations of the ask of the Authority from within the open letter. Workgroup members also stated that some of these points should be discharged by other parties outside of the Workgroup. The points below from the open letter were considered by the CMP434 Workgroup which also relate to CM095, as follows:

1. *To ensure this proposal has a clear statement of forecasted benefits in line with the outcomes of the CAP (which are repeated above).*

   NESO advised that they have shared a quantitative assessment to the Workgroup in relation to RFI data and analysis. They also advised that a draft impact assessment will be published alongside the Methodologies once Workgroups have terminated. The Proposer felt that the anticipated benefits from code changes with respect to TMO4+ will be realised largely through CUSC modification CMP434, with CM095 facilitating this.

2. *To identify and understand the risks associated with this proposal (including legal risks) and develop effective mitigations as far as possible.*

   NESO advised that they believed this has been covered through Workgroup discussions throughout the Workgroup process, and that the Methodology discussions have captured conversations relating to Workgroup concerns. Several Workgroup members felt that the legal risks had not fully been considered and responded to by NESO.

3. *To evidence through a clear impact assessment that the proposal will achieve forecasted benefits.*

   Workgroup members agreed that point (3) was in the remit of NESO, to be completed outside the Workgroup process. The Workgroup noted that they have not had sight of the proposed Methodologies so felt that they were unable to endorse the Methodologies or provide judgement on them. Workgroup members noted the RFI data had been presented but the Workgroup as a whole had not conducted any assessment.

[5] 2025 Connections Reform - open letter - updated deadline

4. *To ensure the details of the proposal are developed through consultation with network owners, wider industry and connection customers.*

   NESO advised that previous and planned consultation has occurred in respect of the TMO4+ proposals, including through the code modification process. This includes Workgroup Consultations (please see the summary of CM095 Workgroup Consultation above, and also CMP434 Workgroup Consultation) and the planned Code Administrator Consultations. There are also consultations planned in relations to the proposed Methodologies and licence changes, as referenced in the Interactions section above. It is worth noting that raising CM095 was specifically with the intention of ensuring effective engagement between the transmission network owners to develop the TMO4+ proposals in collaboration with CMP434.

5. *To identify and recommend any regulatory and legislative changes required to enable or mitigate risks associated with the proposal.*

   NESO advised that a suite of code modifications have been raised (CMP434, CM095, and CMP435). They have also highlighted their high-level views on the required licence changes to Ofgem to inform their thinking on potential licence changes within the code change process. Within Workgroup discussions, NESO advised that licenced offer timescales for the Primary Process would need to be amended and reflected into the STC, and also noted that new licence obligations would need to be introduced, relating to the Connections Network Design Methodology (CNDM). This has been discussed by the Workgroup within the Workgroup Considerations. Workgroup members felt that point (5) should fall on the Authority due to their Transmission Licence consultation.

6. *To follow (and share) a robust options development and implementation plan, in line with the expectations set out in the Chancellor's statement, whilst ensuring appropriate consultation, consideration and evidence-based decision making, alongside time for regulatory changes (i.e., codes and licences) and time for process implementation and operational go-live.*

   NESO advised the Workgroup that the revised code modification plan was submitted to Ofgem on 09 September 2024 following engagement with the CUSC and STC Panels. They also advised that TMO4+ updates have regularly been provided within Workgroup meetings. Alternative options have been developed through the Workgroup (please see sections on Alternative Options and ASM1 discussions above).

7. *To consider what contingency options to bring forward at pace if this proposal does not look to deliver: a. the expected timeframe – 1 Jan 2025, as per Chancellor announcement; and/or b. the expected benefits – we expect the ESO to monitor the proposal as it develops to assess whether it will go far enough to meet the desired objectives – and if not, to recommend further measures to meet these.*

   NESO advised that they did not feel that this was relevant for the Workgroup to consider. The Workgroup agreed that point (7) was a wider issue with specific elements relevant for NESO to consider, but the Workgroup advised this should be covered outside of the Workgroup, noting that it has not been considered within the Workgroup meetings.

8. *To consider how to pragmatically prepare for the reforms and manage the expectations of existing and new customers in advance of the implementation date, particularly the connection offer terms customers hold or expect to hold. We anticipate that the ESO will engage with customers appropriately, communicating at the right time about all the changes they will experience as result of this process change.*

   The Workgroup agreed that point (8) was a wider issue than the Workgroups, with the decision to create Methodologies outside the Workgroup process being beyond the scope and

responsibility of the Workgroup as it is dependent on timescales and approach chosen by the Proposer.

Legal text

The legal text for this change which was consulted on for the Code Administrator Consultation can be found in **Annex 8**.

What is the impact of this change?

Proposer's assessment against Code Objectives

Proposer's assessment against STC Objectives	
Relevant Objective	**Identified impact**
(a) efficient discharge of the obligations imposed upon transmission licensees by transmission licences and the Act	**Positive** New gated process with defined milestones allowing for greater coordination in the production of TO Construction Offers.
(b) development, maintenance and operation of an efficient, economical and coordinated system of electricity transmission	**Positive** Greater coordination in the development of the transmission system through the coordinated gated process and utilisation of the Connection Network Design Methodology.
(c) facilitating effective competition in the generation and supply of electricity, and (so far as consistent therewith) facilitating such competition in the distribution of electricity	**Positive** Facilitates the wholesale revision of the connections process proposed within CUSC modification CMP434.
(d) protection of the security and quality of supply and safe operation of the national electricity transmission system insofar as it relates to interactions between transmission licensees	**Neutral**
(e) promotion of good industry practice and efficiency in the implementation and administration of the arrangements described in the STC	**Positive** More coordination and efficiency through new gated process and utilisation of Connection Network Design Methodology.
(f) facilitation of access to the national electricity transmission system for generation not yet connected to the national electricity transmission system or distribution system;	**Positive** Provides a more coordinated approach to processing TOCOs relating to new applicants. Provides a route for reserving connection/interface points and capacity for new applicants.

(g) compliance with the Electricity Regulation and any relevant legally binding decision of the European Commission and/or the Agency.	**Neutral**

Workgroup vote

The workgroup met on 04 November 2024 to carry out their workgroup vote. The full Workgroup vote can be found in **Annex 9**. The table below provides a summary of the Workgroup members view on the best option to implement this change.

The Applicable STC Objectives are:

a) efficient discharge of the obligations imposed upon transmission licensees by transmission licences and the Act

b) development, maintenance and operation of an efficient, economical and coordinated system of electricity transmission

c) facilitating effective competition in the generation and supply of electricity, and (so far as consistent therewith) facilitating such competition in the distribution of electricity

d) protection of the security and quality of supply and safe operation of the national electricity transmission system insofar as it relates to interactions between transmission licensees

e) promotion of good industry practice and efficiency in the implementation and administration of the arrangements described in the STC.

f) facilitation of access to the national electricity transmission system for generation not yet connected to the national electricity transmission system or distribution system;

g) compliance with the Electricity Regulation and any relevant legally binding decision of the European Commission and/or the Agency.

The Workgroup concluded by majority that the Original and ASM1 better facilitated the Applicable Objectives than the Baseline.

Option	Number of voters (out of the 11 voters) that voted this option as better than the Baseline
Original	9
ASM1	9

Code Administrator Consultation Summary

The Code Administrator Consultation was issued on 08 November 2024, closed on 26 November 2024 and received six non-confidential responses including one late response. Three confidential responses were also received. A summary of the non-confidential responses can be found in the table below, and the full responses can be found in **Annex 12**.

<table>
<tr><th colspan="2">Code Administrator Consultation summary</th></tr>
<tr><td colspan="2">Question</td></tr>
<tr><td>Do you believe that the CM095 Original Proposal or ASM1 better facilitates the STC Objectives?</td><td>The following numbers of respondents noted that the Original and ASM1 better facilitate the STC objectives:

<table><tr><th></th><th>A</th><th>B</th><th>C</th><th>D</th><th>E</th><th>F</th><th>G</th></tr><tr><td>Original</td><td>5</td><td>5</td><td>3</td><td>1</td><td>3</td><td>5</td><td>1</td></tr><tr><td>ASM1</td><td>4</td><td>5</td><td>3</td><td>1</td><td>3</td><td>5</td><td>1</td></tr></table>
Four respondents preferred the Original solution, with two respondents preferring ASM1.</td></tr>
<tr><td>Do you support the proposed implementation approach?</td><td>Five out of six respondents supported the implementation approach. The remaining respondent neither agreed nor disagreed with the implementation approach, noting that the implementation approach for CMP434, CMP435, and CM095 are interlinked and should be considered together.</td></tr>
<tr><td>Do you have any other comments?</td><td>Many respondents were supportive of the new reformed connections process.

Several respondents noted concern over the timelines for implementation and the expected increase in work required, particularly if the CMP435 implementation overlaps with the new application windows introduced within CMP434/CM095.

Some respondents noted that the STCP changes associated with this modification have not yet been drafted.</td></tr>
<tr><td colspan="2">Legal text issues raised in the consultation</td></tr>
<tr><td colspan="2">Three respondents highlighted legal text related issues as part of the Code Administrator Consultation. These concerns were generally around clarity of the legal text or were minor typographical changes, however there were also comments that NESO legal concluded were not part of the solution for CM095. A summary of the legal text queries and proposed changes can be found in Annex 14.

Queries considered to be typographical changes have been updated in the legal text. These can be found in Annex 13.</td></tr>
</table>

Panel Recommendation Vote

The Panel will meet on 20 December 2024 to carry out their recommendation vote.

They will assess whether a change should be made to the STC by assessing the proposed change and alternative against the Applicable Objectives.

Panel comments on Legal text

Ahead of the vote taking place, the Panel will consider the legal text amendments proposed as part of the Code Administrator Consultation and agree next steps. A summary of the legal text queries and proposed changes can be found in **Annex 14**.

Vote 1: Does the Original or ASM1 facilitate the Applicable Objectives better than the Baseline?

Panel Member: **Claire Newton, National Energy System Operator**

	Better facilitates AO (a)?	Better facilitates AO (b)?	Better facilitates AO (c)?	Better facilitates AO (d)?	Better facilitates AO (e)?	Better facilitates AO (f)?	Better facilitates AO (g)?	Overall (Y/N)
Original								
ASM1								
Voting Statement								

Panel Member: **Gareth Williams, Scottish Power Transmission**

	Better facilitates AO (a)?	Better facilitates AO (b)?	Better facilitates AO (c)?	Better facilitates AO (d)?	Better facilitates AO (e)?	Better facilitates AO (f)?	Better facilitates AO (g)?	Overall (Y/N)
Original								
ASM1								
Voting Statement								

Panel Member: **Harriet Eckweiler, Scottish Hydro Electric Transmission plc.**

	Better facilitates AO (a)?	Better facilitates AO (b)?	Better facilitates AO (c)?	Better facilitates AO (d)?	Better facilitates AO (e)?	Better facilitates AO (f)?	Better facilitates AO (g)?	Overall (Y/N)
Original								
ASM1								

Voting Statement

Panel Member: **Mike Lee, Offshore Transmission Owner**

	Better facilitates AO (a)?	Better facilitates AO (b)?	Better facilitates AO (c)?	Better facilitates AO (d)?	Better facilitates AO (e)?	Better facilitates AO (f)?	Better facilitates AO (g)?	Overall (Y/N)
Original								
ASM1								
Voting Statement								

Panel Member: **Richard Woodward, National Grid Electricity Transmission**

	Better facilitates AO (a)?	Better facilitates AO (b)?	Better facilitates AO (c)?	Better facilitates AO (d)?	Better facilitates AO (e)?	Better facilitates AO (f)?	Better facilitates AO (g)?	Overall (Y/N)
Original								
ASM1								
Voting Statement								

Vote 2 – Which option best meets the Applicable Objectives?

Panel Member	**Best Option**	**Which objectives does this option better facilitate? (If baseline not applicable).**
Claire Newton		
Gareth Williams		
Harriet Eckweiler		
Mike Lee		
Richard Woodward		

Panel conclusion

Panel will meet on 20 December 2024 to carry out their recommendation vote.

When will this change take place?

Implementation date

Q2 2025

Date decision required by

Q1 2025

Implementation approach

The implementation approach can be summarised as follows:

- Any new applications from in scope projects submitted to NESO (and so NESO to the TOs) on or after the implementation date will need to be submitted within a combined Gate 1 and Gate 2 Process.
- Any Gated Modification Applications submitted to NESO (and so NESO to the TOs) from in scope projects on or after the implementation date will need to be submitted within a combined Gate 1 and Gate 2 Process.
- Any projects with existing connection contracts which do not meet the Gate 2 criteria and become Gate 1 projects under CMP435 will need to submit an application to NESO (and so NESO to the TOs) within a future combined Gate 1 and Gate 2 Process (if and when those projects meet the Gate 2 criteria).
- The above anticipated implementation date also assumes relevant licence changes and new methodology approvals have occurred in timescales which allow the new arrangements to commence for new applications and Gated Modification Applications.
- STCP changes required as a result of CM095 (and CMP434) will be raised once there is further certainty on the determination of the Connections Reform changes.

Interactions

☐Grid Code	☐BSC	☒ CUSC	☐SQSS
☐European Network Codes	☐ EBR Article 18 T&Cs[6]	☒ Other modifications	☒ Other – Transmission Licence Changes

[6] If the modification has an impact on Article 18 Terms and Conditions (T&Cs), it will need to follow the process set out in Article 18 of the Electricity Balancing Regulation (EBR – EU Regulation 2017/2195) – the main aspect of this is that the modification will need to be consulted on for 1 month in the Code Administrator Consultation phase. N.B. This will also satisfy the requirements of the NCER process.

This modification directly interacts with CMP434. There is also an interaction with the modification addressing Application of Gate 2 criteria to existing contracted background: CMP435.

Consequential STCP changes will be required before the implementation date to facilitate the changes associated with CMP434 and CM095. For the avoidance of doubt, the CM095 Workgroup has not considered the STCP changes. The Proposer confirmed that they expect the STCP18- suite of STCPs and STCP16-1 to be consequentially impacted by this code modification. The Authority have confirmed that they will make a decision on the associated STCP changes, rather than the STC Panel making a decision.

Changes will be required to the ESO licence to facilitate this modification; this has been discussed within the Workgroup and NESO have been engaging with the Authority regarding this to provide a high-level view to help inform the potential changes. These include:

- Changes to licenced offer timescales for the Primary Process
- New licence obligations relating to (i) the Connections Network Design Methodology (CNDM), (ii) the Gate 2 Criteria Methodology and (iii) the Project Designation Methodology.

The Proposer does not foresee the need for Grid Code changes for their Minimum Viable Product and they have verified this with industry.

Acronyms, key terms and reference material

Acronym / key term	Meaning
ASM	Alternative STC Modification
BEGA	Bilateral Embedded Generation Agreement
BELLA	Bilateral Exemptible Large Licence Exempt Generator Agreement
BSC	Balancing and Settlement Code
CATO	Competitively Appointed Transmission Owner
CMP	CUSC Modification Proposal
CNDM	Connections Network Design Methodology
CPA	Construction Planning Assumptions
CSNP	Centralised Strategic Network Plan
CUSC	Connection and Use of System Code
DCUSA	Distribution Connection and Use of System Agreement
DESNZ	Department for Energy Security and Net Zero
DFTC	Distribution Forecasted Transmission Capacity
DNO	Distribution Network Operator
EBR	Electricity Balancing Regulation

iDNO	Independent Distribution Network Operator
MVP	Minimum Viable Product
NESO	National Energy System Operator
NETS	National Electricity Transmission System
OHAs	Offshore Hybrid Assets
SSEP	Strategic Spatial Energy Plan
STC	System Operator Transmission Owner Code
STCP	System Operator Transmission Owner Code Procedures
SQSS	Security and Quality of Supply Standards
TMO4+	The Reformed Connections Process Proposals
TOCA	Transmission Owner Construction Agreement
TOCO	Transmission Owner Construction Offer
T&Cs	Terms and Conditions
WACM	Workgroup Alternative CUSC Modification

Annexes

Annex	Information
Annex 1	Proposal documents
Annex 2	Terms of reference
Annex 3	Urgency letters
Annex 4	Indicative Process Timeline
Annex 5	Non-confidential Workgroup Consultation Responses
Annex 6	Workgroup Consultation Summary
Annex 7	Alternative and ASM Forms
Annex 8	Code Administrator Consultation Legal Text
Annex 9	Alternative and Workgroup Vote
Annex 10	CMP434 and CM095 Actions Log
Annex 11	Workgroup member Attendance Record
Annex 12	Code Administrator Consultation Responses and Summary

Annex 13	Legal Text Updated with Typographical Changes
Annex 14	Code Administrator Consultation Legal Text Queries