Public

Workgroup Report

CMP446:
Increasing the lower threshold in England and Wales for Evaluation of Transmission Impact Assessment

Overview: The current connections process can be improved to facilitate the timely connection of distribution projects that have minimal impact on the Transmission Network to help meet net zero and Clean Power 2030 Action Plan. This proposal raises the lower threshold at which an Evaluation of Transmission Impact Assessment[1] must be undertaken[2] in England and Wales.

Modification process & timetable

1. **Proposal Form**
   17 January 2025
2. **Workgroup Consultation**
   06 February 2025 to 13 February 2025
3. **Workgroup Report**
   05 March 2025
4. **Code Administrator Consultation**
   10 March 2025 to 17 March 2025
5. **Draft Modification Report**
   24 March 2025
6. **Final Modification Report**
   28 March 2025
7. **Implementation**
   02 May 2025

Have 5 minutes? Read our Executive summary
Have 90 minutes? Read the full Workgroup Report
Have 120 minutes? Read the full Workgroup Report and Annexes.

Status summary: The Workgroup have finalised the Proposer's solution as well as 5 alternative solutions. They are now seeking approval from the Panel that the Workgroup have met their Terms of Reference and can proceed to Code Administrator Consultation.

This modification is expected to have a: High impact on Transmission Owners, Distributed Connected Generators, Distribution Network Operators, Independent Distribution Network Operators, Electricity System Operator and Consumers.

Governance route	Urgent modification to proceed under a timetable agreed by the Authority (with an Authority decision).	
Who can I talk to about the change?	**Proposer:** Martin Cahil, NESO Martin.Cahill1@nationalenergyso.com Phone: 07840722302	**Code Administrator Chair**: Milly Lewis milly.lewis@nationalenergyso.com

[1] https://www.ofgem.gov.uk/sites/default/files/2024-11/Connections_Reform_TMO4%2B_Licence_Changes_Policy_Consultation.pdf - see para 5.6, This modification is made against the current CUSC baseline.

[2] Link to 6.5.1(e) in the CUSC identifies what requires an Evaluation of Transmission Impact Assessment https://www.neso.energy/document/300876/download

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Contents

Contents 2

Executive Summary 3

What is the issue? 5

Why change? 5

What is the solution? 8

Proposer's solution 8

Workgroup considerations 10

What is the impact of this change? 38

Proposer's assessment against Code Objectives 38

When will this change take place? 45

Interactions 45

Acronyms, key terms and reference material 45

Annexes 47

Executive Summary

This modification proposes to raise the lower threshold at which an Evaluation of Transmission Impact Assessment (TIA) must be undertaken in England & Wales only.

What is the issue?

Since the publication of the UK Government / Ofgem Connections Action Plan[3] (CAP) in November 2023, the Transmission and Distribution Connection queue in GB has continued to grow; the combined queue has increased from 574GW in November 2023 to 739GW by October 2024. While the NESO's TM04+ 'Connections Reform'[4] will address these challenges and put customers and stakeholders at the heart of change, there is an opportunity to improve the connection process for smaller Distributed Generation (DG) who have minimal impact on the Transmission System.

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

Proposer's solution: It is proposed that the lower Transmission Impact Assessment threshold will be raised from 1MW to 5MW[5] in England and Wales using Registered Capacity for measuring the threshold.

WACM1 ('Export Capacity' instead of 'Registered Capacity' for measuring the Threshold): As per the Original but using 'Export Capacity' instead of 'Registered Capacity' for measuring the threshold.

WACM2 (Obligation on NESO to publish a list of each GSP and actively state the TIA threshold to be used as agreed between the NESO, DNO and TO – using Registered Capacity for measuring the threshold): As per the Original Solution, the default TIA threshold will be set at 5MW unless otherwise stated in the published list.

WACM3 (Capping the capacity of projects benefitting from the higher threshold, per GSP, per 5-year period – using Registered Capacity for measuring the threshold): Limiting the total of 1-5MW projects that can connect without a TIA in England and Wales to 25MW per GSP per 5-year period

WACM4 (Capping the capacity of projects benefitting from the higher threshold, per GSP, per 5-year period, – using Export Capacity for measuring the threshold) : As per WACM3 but using 'Export Capacity' instead of 'Registered Capacity' for measuring the threshold

[3] Connections Action Plan, a joint publication by The Department for Energy Security and Net Zero and Ofgem
[4] Via CUSC modifications CMP434 and CMP435 and STC modification CM095
[5] For the changes proposed in CMP446 5MW is a project 4.95MW or above

WACM5 (Obligation on NESO to publish a list of each GSP and actively state the TIA threshold to be used as agreed between the NESO, DNO and TO – using Export Capacity for measuring the threshold): As per WACM2 but using 'Export Capacity' instead of 'Registered Capacity' for measuring the threshold

Implementation date: 02 May 2025

What is the impact if this change is made?

The high impact of the modification is due to process change and contractual changes required through multiple parties, alongside the associated impact with TM04+ Connection Reform and Clean Power 2030 Action Plan. and time critical nature of CMP446.

Workgroup conclusions: The Workgroup concluded by majority that the Original, WACM1, WACM2, and WACM5 better facilitated the Applicable Objectives than the Baseline.

Interactions

There are interactions between CMP446 and the Connections Reform[4] modifications.

What is the issue?

The Connections Action Plan[3] (CAP) is a joint publication by the Department for Energy Security and Net Zero (DESNZ) and Ofgem. It sets out ambitious plans to significantly accelerate connections. The CAP highlights that over the last five years the volume of connection applications to the Transmission Network has grown approximately tenfold.

Within the CAP, there is a request for networks (under section 3.5b) to "*assess and review the thresholds for Transmission Impact Assessments (TIA)s; to accelerate connection timescales for distribution customers*". This is because distribution connections are increasingly dependent on Transmission reinforcements, resulting in the conditional connection dates offered (which only cover Distribution Network aspects) being revised once the Transmission impacts are identified and factored into the connection dates. These revisions can sometimes change dates by as much as 10 years, frequently making such projects unviable. This uncertainty creates risk for project developers and investors.

Since publication of the CAP in November 2023, the Transmission and Distribution Connection queue has continued to grow; the combined queue has increased from 574GW in November 2023 to 739GW by October 2024. While connections reform[4] will address these challenges and put customers and stakeholders at the heart of change, there is an opportunity to improve the connection process for smaller Distributed Generation (DG) who have minimal impact on the Transmission System.

CUSC Section 11[6] defines the classification of Embedded Power Stations by size (small/medium/large), linking each size to specific requirements. It then identifies by classification as "relevant" that small and medium DG are required to go through an Evaluation of Transmission Impact Assessment ahead of connection. This process assesses the DG impact on the Transmission Network and identifies whether reinforcement is required. Under CUSC the default position for DG to go through an Evaluation of Transmission Impact Assessment for 1MW in England and Wales (E&W) unless notified otherwise. Networks have recently reviewed the suitability of this lower threshold for this process and have concluded that improvements can be made.

Why change?

National Grid Electricity Transmission (NGET), with support from National Energy System Operator (NESO), has analysed the impact on the E&W Transmission Network of

[6] CUSC Section 11 – Interpretation and Definitions – definition of Distributed Generation

increasing the lower threshold for the Evaluation of Transmission Impact Assessment process. A paper was taken to the Connections Delivery Board (CDB)[7] and the Connections Policy Advisory Group (CPAG)[8] reviewing the current lower limit. This paper is included in the Reference Material section of this Proposal. The CDB paper sets out the impacts of changing the lower threshold and analyses the effects on the Transmission Network. It explains that the original 1MW threshold has been in place since 2016. This has given Networks increased visibility and experience of these smaller projects going through the Connection Process. This has resulted in greater confidence in the relevant attrition rates and trends. Further there have also been significant changes to the assumptions now being used to assess the impact on the Transmission Network.

The paper concludes that NGET and NESO support increasing the lower threshold from 1MW to 5MW for E&W DG. This would mean that DG projects in E&W between 1MW and 5MW would sit outside the Evaluation of Transmission Impact Assessment process which would likely allow them to connect earlier as they would no longer be linked to Transmission System reinforcement. This would improve the efficiency of the process by allowing the TOs to focus on the projects that have the biggest Transmission impact. It would also improve the customer (both DNO/IDNO and EG) experience as these smaller projects would no longer have to go through the process and wait for an assessment to conclude or pay for this assessment. This means they would not have the risk associated with Transmission Network build delaying their connection date and adding cost.

Note that while the CDB paper did review lower-level limits across all of GB, the conclusions for the Scottish networks differ. This reflects the differences between the networks (Scotland compared with E&W) as the system voltage at the Transmission / Distribution (T/D) interface are different, the relative size of Grid Supply Points (GSPs) are different and the relative demand requirements at the load centres are different. This impacts the requirements for the Scottish TOs to plan, develop and maintain an efficient, coordinated and economical system of Electricity Transmission. If the same lower limit threshold was set in Scotland, it could mean that Network assets were constructed that were oversized for the demand that they were required to supply. This would be uneconomic and inefficient – and therefore not be in the best interests of customers who ultimately have to bear the costs of this investment. Therefore, it is not proposed to include changes to these limits for DG in Scotland within this CUSC change proposal. The CDB paper explains that:

[7] The ENA publish the Connections Delivery Board minutes here CDB minutes 31/10/24
[8] NESO publish the Connections Policy Advisory Group minutes here CPAG minutes 12/09/24

- Scottish Power Transmission (SPT) / Scottish Power Distribution (SPD) believe that the current lower threshold of 200kW in their area strikes the right balance between accelerating connections ahead of Transmission reinforcements while maintaining a manageable level of risk in both the SPD Distribution and SPT Transmission Scottish Transmission Networks. This is subject to regular review by SP Energy Networks.
- Scottish and Southern Electricity Networks (SSEN) Transmission, working in collaboration with SSEN Distribution, have undertaken a review of the Transmission Impact Assessment threshold across the north of Scotland Transmission Area. The review concluded that the threshold can be raised to 200kW for the majority of GSPs in the SSEN Transmission Network. A four-fold increase in the threshold – from 50kW to 200kW – will see more projects being able to connect without the cost and delay that comes with this assessment needing to be carried out. SSEN Transmission will continue to review the lower limit threshold and assess any future opportunities to further increase it or identify any emerging concerns around network security that might require it to be adjusted.

Interaction with the TM04+ Connections Reform [9]

CMP434 'Implementing Connections Reform'[10] and CMP435 'Application of Gate 2 Criteria to existing contracted background'[11] propose the implementation of a new connections process based on an annual application window and two formal, distinct, Gate processes. Under this approach, Gate 1 will provide each applying project with an indicative connection date and location following batched assessment. Gate 1 would also give that project the right to the capacity and technology applied for. Subject to the applicant meeting the Gate 2 criteria; Gate 2 will be used to determine project specific queue position, confirm connection date and location in a connection offer.

- To realise the full benefit of CMP446, it would need to be implemented into the CUSC before the proposed Gate 2 window opens for CMP435. This would remove the need for those existing Distributed Generators projects that are less than 5MW in E&W to go through the Evaluation of Transmission Impact Assessment process.

[9] Ofgem published their 'minded to' position on 14 February Statutory consultation on connection reform (TM04+) enablers, including modifications to standard licence conditions | Ofgem

[10] CMP434 Implementing Connections Reform Modification page

[11] CMP435 Application of Gate 2 Criteria to existing contracted background Modification page

- If CMP434 and CMP435 are not approved or delayed then CMP446 would still progress
- CMP434 and CMP435 proposes that any projects which are under the lower limit Evaluation of Transmission Impact Assessment thresholds (currently set at 1MW in E&W, raising to 5MW if CMP446 is approved) will not have to go through any Gate 2 process and therefore, will not need to align with the Clean Power Action Plan 2030 targets.
- According to analysis undertaken by NESO and NGET, and presented to the Workgroup, it is anticipated that implementation of this CMP446 modification before the Gate 2 window opens (in Q2 2025) will release around 390 DG projects (totalling ~852MW) from having to demonstrate Gate 2 compliance or alignment with Clean Power Action Plan 2030 targets.

What is the solution?

Proposer's solution

It is proposed that the lower Transmission Impact Assessment threshold will be raised from 1MW to 5MW and codified within the CUSC for E&W.

Throughout this document the practical application of the referenced threshold is based on the current approach to the 1MW threshold which is to one decimal place (a project which is 0.95MW or above would require a TIA) and this one decimal place approach will therefore apply to the proposed new 5MW threshold (a project which is 4.95MW or above would require a TIA).

Doing so will significantly accelerate the connection of DG sized below 5MW as they would no longer have to go through an Evaluation of Transmission Impact Assessment or wait for the completion of any Transmission reinforcement identified in the process.

A 5MW lower limit of Evaluation of Transmission Impact Assessment[12] threshold has been identified[13] as having an appropriate balance between improving the efficiency of the process for smaller DG and minimising the risk of impact on the Transmission System in E&W.

[12] For the purpose of this document Evaluation of Transmission Impact Assessment is the same as Transmission Evaluation Assessment (TEA) as proposed in CMP434

[13] By NGET and NESO

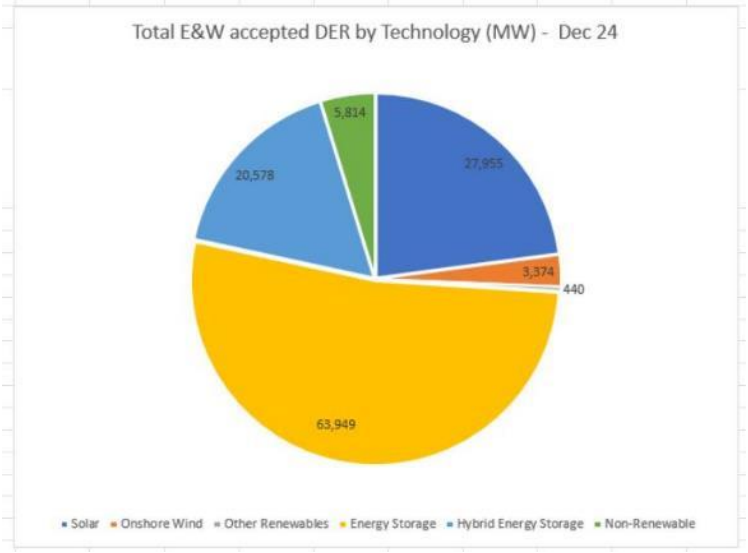

Figure 1 - Updated DER from TIA analysis

If CMP446 is approved there will be three categories of projects:

- Any new connection application going forward would not require an Evaluation of Transmission Impact Assessment under 5MW.
- Current projects within the connections queue under 5MW who have gone through the Evaluation of Transmission Impact Assessment will no longer be subject to the assessment or any associated requirements. These projects will effectively be removed from the agreements and updated as required to reflect this.
- Already connected projects that have energised would remain in an existing Bilateral Connection Agreement (BCAs) and their existing terms and conditions would be unchanged.

Workgroup considerations

The Workgroup convened 10 times to discuss the identified issue within the scope of the defect, develop potential solutions, and evaluate the proposal in relation to the Applicable Code Objectives.

Consideration of the Proposer's solution

Modification Defect and Scope

The Proposer stated that the defect intentionally focused on changing the threshold in England and Wales and excluded Scotland as there was already a difference in how these are codified, with a 1MW limit only appearing in CUSC Schedule 2 Exhibit 1A, and until recently the Appendix G process was only applied to England and Wales.

Whilst the 1MW limit for England and Wales appears in the CUSC, there is nothing which refers to the Scottish limits. It was also raised that while the threshold used for most of Scotland is 200kW both SP Energy Networks and Scottish & Southern Electricity Networks have some GSPs where they apply a lower limit than this, so it would not be possible to codify a single limit for Scotland. However, a Workgroup Member noted that if this was the case then there could, for example, be a different codified level in northern Scotland to southern Scotland and, say, between the Scottish islands and the mainland.

The Proposer informed the Workgroup that SP Energy Networks plan to review their minimum TIA thresholds. The Proposer's view was that codifying the current limit that are applied in southern Scotland could potentially delay the practical implementation of any different thresholds which may be decided on following the review. SSEN have stated that they are currently reviewing the impact on their recent increase in northern Scotland and will keep the threshold under review.

However, Workgroup Members noted that the simple codification of these existing limits (for southern and northern Scotland respectively) would ensure a consistent approach across GB (rather than a discriminatory approach between E&W and Scotland, where one is codified, the other not). The proposal for CMP446 is very clear in the aim to accelerate the connection of smaller generators within England and Wales.

Some Workgroup Members did not agree with the Proposer's ascertain that as the modification defect states England and Wales exclusively that there is no need to codify Scotland as part of CMP446.

A Workgroup Member; noting item (g)[14] of the Terms of Reference; identified the legal obligations that applies to the NESO and the Authority, with respect to generator connections, for harmonisation, as summarised in Recital (3) of the Requirement for Generator connections (which is retained applicable law[15] in GB post Brexit):

"Harmonised rules for grid connection for power-generating modules should be set out in order to provide a clear legal framework for grid connections, facilitate Unionwide trade in electricity, ensure system security, facilitate the integration of renewable electricity sources, increase competition and allow more efficient use of the network and resources, for the benefit of consumers."

There was concern that by not codifying the existing threshold limits this would be at odds with the need for harmonisation.

The Proposer's view is that this regulation does not require full alignment in every case, and that there are clear technical and practical reasons to not codify a limit in Scotland at this point in time. The following is included under (27):

> *"The regulatory authorities, Member States and system operators should ensure that, in the process of developing and approving the requirements for network connection, they are harmonised to the extent possible, in order to ensure full market integration. Established technical standards should be taken into particular consideration in the development of connection re-quirements."*

The Proposer added that:

- There are specific technical reasons around why the value of the threshold needs to be considered separately in Scotland to England and Wales
- A new threshold has already been assessed for England and Wales, and has been discussed at the Connections Delivery Board (CDB) and Connections Policy Advisory Group (CPAG), here support was gained for codifying for England and Wales only, within urgent timescales
- The threshold for Scotland is being reviewed by at least one of the Scottish TOs. Therefore, codifying at the current limit has the potential to slow down any potential future increases to Scottish limits, and could therefore be a disadvantage to Generators based in Scotland

[14] *"Consider how CMP446 would be compatible with the requirement for harmonised rules for generator connections in GB"*

[15] Commission Regulation (EU) 2016/631 of 14 April 2016 establishing a network code on requirements for grid connection of generators (Text with EEA relevance)

- Codifying a limit in Scotland that may need to change in the near future does not promote efficiency in the governance process
- Scottish codification is a separate defect which can be addressed by a separate future modification

In addition a Workgroup Member; noting item (f)[16] of the Terms of Reference; identified the separate (to harmonisation) legal obligations that applies to the NESO to not act in an unduly discriminatory manner as, for example, is set out in conditions B3[17] and B6[18] of the NESO's Electricity licence[19], and suggested that the justification proffered by the NESO[20] may not meet the legal standard for justifying the unduly discriminatory treatment of a generator in E&W and an identical generator in Scotland as regards the application of a TIA threshold.

Furthermore, along similar grounds, a Workgroup Member also highlighted the existing CUSC definition of 'Good Industry Practice[21]' and wondered if the NESO / TO(s); in engaging "*in the same type of undertaking under the same or similar circumstances*" (in this case of applying a TIA threshold to generators seeking a connection to the NETS); would be acting in accordance with 'Good Industry Practice' if it applied a different type of undertaking under the same or similar circumstances to parties in Scotland compared to E&W.

When asked for a comment the Authority Representative shared their view as

> "*We welcome discussions in the workgroup meetings regarding the threshold in Scotland. We note there are specific technical reasons around why the value of the threshold needs to be considered separately in Scotland to England and Wales. We also note that work is underway separately to review those thresholds, which we welcome and will continue to push on.*
> *In summary though, we note this modification relates to England and Wales only, and do not see merit in progress not being made in England and*

[16] "*Consider how CMP446 would be compatible with the requirement for the NESO acting in a non-discriminatory manner*"
[17] B3.1 "*The purpose of this condition is to establish the licensee's obligations in respect of the conduct of its ISOP Business relating to discriminatory and preferential behaviour.*"
[18] B6.1 "*The purpose of this condition is to set out the prohibition on the licensee on unduly discriminating between users of the National Electricity Transmission System*"
[19] ESO Licensing Direction and Licence Terms and Conditions
[20] See slide 19 of the Workgroup 2 updated slide deck: '*Action 7/8 Scottish Codification*'.
[21] Section 11 of the CUSC: "*in relation to any undertaking and any circumstances, the exercise of that degree of skill, diligence, prudence and foresight which would reasonably and ordinarily be expected from a skilled and experienced operator engaged in the same type of undertaking under the same or similar circumstances*"

Wales due to a necessarily different assessment being required to review the threshold in Scotland."

A Workgroup Member noted that this helpful comment from the Authority Representative was silent as to why the existing limits (in southern and northern Scotland respectively) could not be codified.

England & Wales DNO Application Process

CMP446 is not seeking to amend the current process other than by increasing the existing threshold at which a TIA assessment is required. The high-level overview of the current DNO process shows that DNOs currently undertake and will continue to undertake, if CMP446 is approved, assessments on all DG irrespective of whether they undergo a TIA or not.

Based on the following eight high level steps set out below[22], steps 1- 3 will be undertaken in each application, steps 4 onward are dependent on the threshold (which would be set at 5MW):

1. Customer Application.
2. DNO assesses the project's impact on the distribution network (DNO assessments includes, but are not limited to, thermal, fault level, voltage studies) and identifies any required connection conditions and Distribution reinforcement works.
3. An Offer is sent by the DNO to the customer which may be subject to a TIA (where applicable) and the customer accepts that Offer.
4. DNO initiates TIA to NESO.
5. NESO considers TIA and engages with the TO.
6. TO identifies any physical works to facilitate the customer's project connection.
7. NESO reflects any work in a GSP BCA variation, which it issues to DNO.
8. DNO reflects the outcome of the TIA process as a variation to the DG customer's connection offer. DG customer accepts their variation offer following which the DNO then accepts the NESO's offer (to the DNO).

[22] https://www.energynetworks.org/publications/new-distribution-queue-entry-requirements

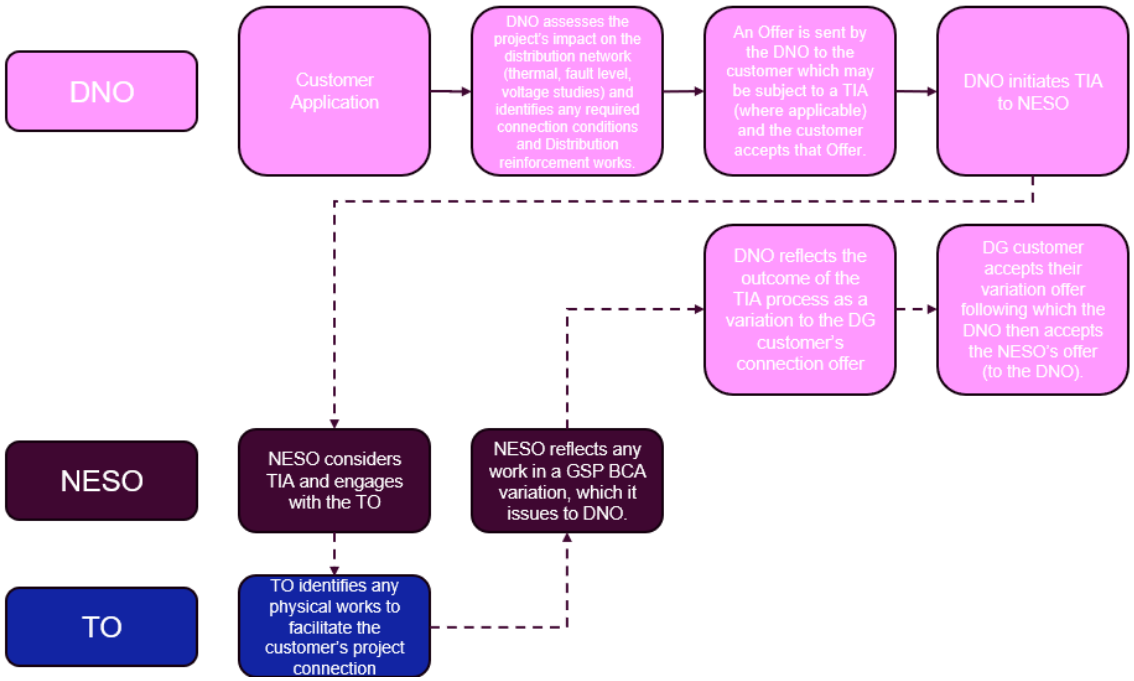

Figure 2 DNO Application Process (Annex 09)

A Workgroup Member queried whether Independent Distribution Network Operators (IDNOs) in E&W were captured under the same process. The NGET Workgroup Member confirmed that there are a number of relevant embedded power stations in England and Wales connected through an IDNO that are included in Appendix G. The precedence has therefore been set that if a power station has been connected through an IDNO and it is deemed relevant (i.e. 1MW and above currently) then it will be included in Appendix G and will be subject to the TIA process. This has not been changed as part of CMP446.

Therefore, if CMP446 is approved, a 5MW or above project connecting via an IDNO would be subject to the TIA process, while a project under 5MW connecting via an IDNO would not be subject to the TIA process (assuming Fault Level Headroom availability).

Fault Level Headroom

Whilst discussing the generic scenarios in Figure 3 below, the Workgroup discussed whether the amount of fault level headroom at a GSP should be considered. The Workgroup agreed that the amount of fault level headroom should impact whether or not a project needs to complete a TIA as part of the proposed changes in CMP446.

The proposal is not looking to change the way fault level headroom is considered for an application. This means that, as per current process, any Generator above 1MW applying to connect at a GSP with no fault level headroom should be included within a TIA. This ensures the safe operation and maintenance of the transmission system and

therefore additional requirements are placed on all DG accepting offers to which are connected to any of these GSPs.

Following the Workgroup Consultation, the Workgroup discussed the indirect impact of changing the threshold on treatment of fault level headroom, outlining some further scenarios and clarifying further in the legal text. This is included in the Impact of Fault Level Headroom on CMP446 section.

Change in MW Level and the Impact on Whether a TIA is Required

To understand the impact of CMP446 the Workgroup discussed different scenarios such as:

- Differences between 'Installed' Capacity and 'Export' Capacity;
- Where already connected sites incrementally increase their capacity; and
- Sites with Generation and Demand

It was agreed by the Proposer that the new 5MW threshold should be applied based on the cumulative capacity at a Generator site, and should only take into account netting off of Demand used to run the power station or component parts or the power station. It should not take into account netting off other demand such as an Industrial connection at that site. This is consistent with the current process which uses cumulative capacity and avoids a gaming route whereby a project could gradually move above the TIA threshold in small increments (each of less than 5MW) without needing to be studied at any point.

Figure 3 below (and **Annex 07**) outline these scenarios at a high level. These examples assume that there are no fault level headroom issues at the GSP, please see the Impact of Fault Level Headroom on CMP446 section of this report for more information on how the process changes when there are fault level headroom issues. It includes the existing capacity (with 0MW for completely new connection examples), and two different definitional ways of assessing whether the project meets the requirement for a TIA:

- 'Installed Capacity' - Threshold applied based on the Installed Capacity definition; i.e. total generation capability of the Power Station. This is how the Proposer's solution would work where installed capacity more similar to the Registered Capacity definition in Grid Code
- 'Export Capacity' - Threshold applied based on Export Capacity; i.e. the maximum amount that the power station can export to the Distribution Network. This is the how WACM1 would work

Category		Example Scenarios	Existing		New		TIA Required?		Outcome check
			Installed Capacity (Original Proposal)	Export Capacity (WACM1)	Installed Capacity (Original Proposal)	Export Capacity (WACM1)	Installed Capacity (Original Proposal)	Export Capacity (WACM1)	
A new generation connection	1	New generation connection with 0MW export capacity	N/A	N/A	4MW	0MW	No	No	Same
	2	New generation connection with 6MW installed capacity and 0 MW export capacity	N/A	N/A	6MW	0MW	Yes	No	Different
Changes to an existing connection with 0 MW export and installed capacity **below** the 5MW threshold	3	Existing connection with 2MW installed capacity increasing to 4MW	2MW	0MW*	4MW	0MW	No	No	Same
	4	Existing connection with 2MW installed capacity increasing to 6MW	2MW	0MW*	6MW	0MW	Yes	No	Different
Changes to an existing connection with 0 MW export capacity and installed capacity **above** the 5MW threshold	5	Existing connection with 6MW installed capacity increasing to 12MW	6MW	0MW*	12MW	0MW	Yes	No	Different
A new generation connection	6	New generation connection with 4MW installed capacity and 4MW export capacity	N/A	N/A	4MW	4MW	No	No	Same
	7	New generation connection with 6MW installed capacity and 6MW export capacity	N/A	N/A	6MW	6MW	Yes	Yes	Same
	8	New generation connection with 6MW installed capacity but only 3MW export	N/A	N/A	6MW	3MW	Yes	No	Different
Changes to an existing connection with both export and installed capacities **below** the 5MW threshold	9	Existing connection with 2MW installed capacity and 2MW export capacity increasing to 4MW installed capacity and 4MW export capacity	2MW	2MW	4MW	4MW	No	No	Same
	10	Existing connection with 2MW installed capacity and 2MW export capacity to increasing to 6MW installed capacity and 6MW export capacity	2MW	2MW	6MW	6MW	Yes	Yes	Same
	11	Existing connection with 2MW installed capacity and 2MW export capacity increasing to 6MW installed capacity and 4MW export capacity	2MW	2MW	6MW	4MW	Yes	No	Different
	12	Existing connection with 4MW installed capacity and 4MW export capacity increasing to 6MW installed capacity and 4MW export capacity	4MW	4MW	6MW	4MW	Yes	No	Different
Changes to an existing connection with both export and installed capacities **above** the 5MW threshold	13	Existing connection with 6MW of installed capacity and 6MW of export capacity increasing to 8MW of installed capacity and 8MW of export capacity	6MW	6MW	8MW	8MW	Yes	Yes	Same
Changes to an existing connection with installed capacity only above the 5MW threshold	14	Existing connection with 6MW installed capacity with 2MW export capacity increasing to 4MW export capacity	6MW	2MW	6MW	4MW	Yes	No	Different
	15	Existing connection with 6MW installed capacity with 2MW export increasing installed capacity to 8MW and export capacity to 4MW	6MW	2MW	8MW	4MW	Yes	No	Different
	16	Existing connection with 6MW installed capacity with 2MW export, increasing installed capacity to 8MW and export capacity to 6MW	6MW	2MW	8MW	6MW	Yes	Yes	Same
Changes to an existing connection wanting to reduce capacity	17	Existing connection with 6MW of installed capacity and 6MW of export capacity reducing to 4MW of installed capacity and 4MW of export capacity	6MW	6MW	4MW	4MW	No	No	Same
	18	Existing connection with 6MW of both export and installed capacity reducing export capacity to 4MW with no change to installed capacity	6MW	6MW	6MW	4MW	No	No	Same

Assumptions:

- The term "existing connection" means sites which are already energised or are have a contracted DNO connection offer but not yet energised
- All of the scenarios listed assume that there are no fault level issues at GSP, where fault level issues are known a TIA must take place
- All of the scenarios listed also apply to existing demand connections seeking to add generation
- Where the installed capacity is greater than the export capacity, export limiting schemes will be installed to limit the export from the Customer's site.

Figure 3 - TIA Threshold Scenario (Annex 07)

Interaction with Clean Power 2030 Action Plan

The Workgroup discussed the interaction between adjusting the England & Wales TIA threshold and the minimum compliance levels for generation projects to be in scope of the regional capacity limits set by the Clean Power 2030 Action Plan[23]:

> *"Similarly, it is important that smaller projects are treated proportionately and are not unduly caught up in transmission processes. Projects connecting to the distribution network that are below regional thresholds for Transmission Impact Assessment (TIA) will not be constrained by the capacity ranges set out in this plan. Currently, the lower threshold for TIA is 1 MW in England and Wales, 200 kW in mainland Scotland, and 50 kW in the Scottish Islands."*

When the Clean Power 2030 Action Plan annex document was published in December 2024, CMP446 and the associated proposed solution(s) were included within a footnote of the document. It may/may not have been fully considered with the full scope of the modification to be discussed through the codes process. It is therefore important that the Authority is aware of this in their determination of CMP446 to avoid adverse consequences, including any potential misalignment, with the intended strategic direction provided by DESNZ in the Clean Power 2030 Action Plan.

If a project applies for a connection at a GSP where there are fault level concerns (and NESO have included that GSP in there published list), that project would be required to go through the Evaluation of Transmission Impact (TIA). Every project that goes through a TIA is that automatically captured within the Clean Power 2030 Action Plan buckets and criteria. Each DNO has its own bucket and technology requirements[24], as listed below.

Table 4: Regional capacity breakdowns for distribution connected technologies required for 2030[25] and 2035[26]

Distribution network region	Solar (MW) 2030	Solar (MW) 2035	Onshore wind (MW)[27] 2030	Onshore wind (MW) 2035	Batteries (MW) 2030	Batteries (MW) 2035
Scottish and Southern Electricity Networks (SSEN) – Scottish Hydo Electric Power Distribution (SHEPD)	1,100	1,700	3,500	-	900	900
SP Distribution (SPD)	1,100	1,800	2,700	-	800	900
Northern Powergrid (NPg)	4,400	6,500	1,900	-	1,900	2,100
Electricity North West (ENWL)	1,500	2,300	700	-	900	1,000
SP Manweb	1,500	2,200	1,000	-	400	500
National Grid Electricity Distribution (NGED)	13,900	19,900	2,400	-	3,000	3,600
UK Power Networks (UKPN)	8,100	11,800	900	-	2,100	2,400
SSEN – Southern Electric Power Distribution (SEPD)	4,800	6,200	100	-	1,200	1,400
GB total	36,200	52,400	13,200	-	11,200	12,800

Figure 4 - Distribution connected technologies

[23] Clean Power 2030 Action Plan: A new era of clean electricity: Connections reform annex

[24] A live working model on how this will work can be seen on this external webpage provided by regen: https://www.arcgis.com/apps/dashboards/5e88bf050bba4c77b07bb7d8f9238971

MW Capacity Definition

The Workgroup, noting item (h)[25] of the Terms of Reference, queried what type of MW *capacity* the Proposer intended to capture within the increased threshold, was it, for example, 'installed' capacity, 'export' capacity, 'registered' capacity or 'developer' capacity.

The Proposer confirmed that the proposal did not initially include any definition for capacity, as the Proposer's view was that this should be agreed between the DNOs and Generators, and the modification was only looking to increase the threshold, not change the way that the number was calculated,

However, following feedback from Workgroup Members that there was some ambiguity in the current process which should be addressed by CMP446, the Proposer agreed to choose a definition of capacity to include in the legal text.

The Proposer initially chose *Registered Capacity* as defined in the Distribution Code[26] :

> *"The normal full load capacity of a Power Generating Module as declared by the Generator less the MW consumed when producing the same; ie for all Generators, including Customer With Own Generation, this will relate to the maximum level of Active Power deliverable to the DNO's Distribution System. For Power Generating Modules connected to the DNO's Distribution System via an inverter, the inverter rating is deemed to be the Power Generating Module's rating."*

The Proposers' reasoning for this was based on NGET feedback that the Registered Capacity is what they use for network planning purposes. It was also raised that G99 requests Registered Capacity, and therefore it is expected that this should be the figure that is declared by the Generator and flows through to the process for determining if a TIA is required, and where relevant, inclusion in Appendix G.

The Proposer's reasoning also included:

- It is not clear how the definition of "Developer Capacity" would be applied in the context of TIA thresholds; and
- There is no CUSC, Grid Code, or Distribution Code definition of "Export Capacity".

The majority of the Workgroup were not supportive of the Proposer's choice to use Registered Capacity as defined by the Distribution Code, preferring an alternate suggestion of Export Capacity.

[25] *"Consider what the MW capacity relates to: for example, export capacity or installed capacity or developer capacity?"*
[26] THE DISTRIBUTION CODE

The Workgroup voted for this alternate and it became WACM1 (**Annex 06**), where 'Export Capacity' is used when measuring the 'MW' threshold for whether a TIA will be required, in order to enable industry to choose their preferred solution to the issue. The definition for 'Export Capacity' is broadly based on an amended version of the existing, related, definition within the Grid Code (as follows):

> **"Export Capacity** – For the purpose of paragraph 6.5.1(f) **Export Capacity** is the maximum continuous **Active Power** expressed in MW which is permitted to flow from a **Power Station** to a **Distribution System"**

Post Workgroup Consultation the Proposer confirmed that the Original Proposal, would instead use the Grid Code definition, stating this was because:

- This is the definition used in SQSS chapter 2 Generation Connection Criteria Applicable to the Onshore Transmission System
- Aligns with existing definitions for Small/Medium/Large
- Clarity in approach to rounding (Grid Code states that figures should be rounded to 1 decimal place and clarifies when to round up/down)
- CUSC Section 11 already includes Grid Code definition for Registered Capacity

However, the Proposer also noted that GC0117: Improving transparency and consistency of access arrangements across GB by the creation of a pan-GB commonality of power station requirements[27] Workgroup identified the Grid Code definition not always being universally applied in the same way. It was confirmed that the definition is designed to define the MW send out at the connection point to the System less the demand used to run the power station or component parts of that power station or power generating module alone. It does not cater for a power station netting off other types of demand e.g. CHP plant or Industrial demand. GC0117 proposed to update the Grid Code legal text to clarify this further (without changing the intention of the Registered Capacity definition) but this could also be updated by another modification if GC0117 is not approved.

[27] https://www.neso.energy/industry-information/codes/gc/modifications/gc0117-improving-transparency-and-consistency-access-arrangements-across-gb-creation-pan-gb-commonality-power-station-requirements

Potential Risks and Impacts of Changing the Threshold

The Workgroup noted the analysis included within the proposal form that NGET has estimated that if CMP446 is approved that ~390 projects, with a total size of ~852MW, would be positively affected – that is they should avoid the need to be subject to a TIA. Following an additional piece of analysis accounting for GSPs with fault level headroom issues, this was updated to 682MW (337 projects), included in Impact of Fault Level Headroom on CMP446 section.

The Workgroup discussed potential risks and impacts of the proposed threshold change to 5MW including the possible interaction with the UK Government's December 2024 Clean Power 2030 Action Plan. Some Workgroup Members noted that there is the possibility of increased applications (due to the threshold change) than the identified projects and suggested that this could lead to a higher volume coming forward, under the revised threshold, and if this were to occur it could potentially impact on the Transmission Network and affect other Transmission and Distribution connecting projects.

To aid the Workgroup deliberations, a Workgroup Member shared several scenarios (**Annex 08**), and the Workgroup agreed with the outcomes noted in Scenario 1. This suggested that more 'Example B' sites could be connected (due to the threshold change) which, in turn, would be impacting on the technical limits for 'Example A' sites and the whole queue will change, so technical limits will need to change.

It was reiterated by the Proposer and several Workgroup Members that the purpose of CMP446 is to enable smaller capacity projects[28] to go through the connections process without being subject to a significant wait and costs (which arises if they were subject to the TIA approach). With a Workgroup Member noting that projects seeking to connect that are not strategically aligned with the Clean Power 2030 Action Plan would not receive a Gate 2 transmission offer[29], but could still instead have a distribution offer if CMP446 was approved and the project was sized at less than 5MW.
As the Last In First Out (LIFO) stack will still apply at Distribution this would have the effect of preventing queue jumping (by that project) over other Transmission connecting projects.

Several Workgroups Members stated that there will be projects who aren't in a ANM system, and that the ENA had communicated that due to the Clean Power 2030 Action Plan restacking would be taking place, projects would technically be advantaged by jumping ahead at Transmission.

[28] Those that are below 5MW.
[29] Assuming CMP434 and / or CMP435 are approved.

A Workgroup Member highlighted a situation where CMP446 could be used as a loophole, to get a project through the connections process that has previously not met the Clean Power 2030 Action Plan criteria, such as by splitting a larger project into a number of smaller Distribution connections at less than the 5 MW threshold, e.g. splitting a 25MW project into five separate 4.9MW Distribution connections.

A Workgroup Member highlighted that CMP446 could be the catalyst for a significant amount of (i) new below 5MW Distribution / IDNO applications and / or (ii) a significant number of accepted to connect above 5MW projects reducing their capacity to below 5MW If a considerable number of projects (and the associated MW volume) either made new applications or changed to below the 5MW threshold proposed in CMP446 then there could be an impact on the Transmission Network. The Workgroup Member then raised WACM3 and WACM4 to mitigate against this.

The Workgroup agreed that there is a need for stakeholder visibility and tracking, by NGET and NESO, of 1MW to 5MW projects to monitor their potential cumulative impact with DNO's providing the total MW per technology of these projects on the technical data application, including whether there should be any action taken if too many projects connect and the cumulative impact is too great.

The Workgroup believed that this issue would be monitored by DNOs, so it is unlikely to have a negative effect, but acknowledged that were it to arise then a new modification could be raised to alter the MW threshold (below 5MW) in the future.

NGET Workgroup Member has stated their preference would be to include the additional data requirements of total MW per technology of projects between 1MW to 5MW, not just in the technical data application of Project Progression (Transmission Evaluation Assessment) but also captured within the Appendix G.

Interaction with Active Network Management and Technical Limits

Workgroup Members queried the interaction with how DNOs will treat projects in the 1MW and 5MW bracket with regards to the Embedded Capacity Register (ECR) and Last in First Out (LIFO) queue (or any other appropriate mechanism) used for Active Network Management (ANM) schemes and how constraints will be managed.

The Embedded Capacity Register [30](ECR) is a register published by each DNO/IDNO on their websites, and under provision 35C.2.1 of the ECR states:

> "[…] lists those sites which are connected to the Company's Distribution System (or which are the subject of an accepted connection offer to be connected to the Distribution System), and which (A) have a Maximum Import Capacity of any size and are subject to a DSR Contract of 50kW or more; and/or (B) have a Maximum Export Capacity of any size and generation equipment with a Registered Capacity of 50kW or more;[…]"

A DNO Workgroup member confirmed that the between 1MW and 5 MW projects will continue to be published on the ECR by DNOs and IDNOs as per the DCUSA requirements.

The DNO Workgroup Member stated that the proposed increase of the TIA threshold to 5MW would not mean DNOs stop undertaking network impact assessments on below 5MW applications. These assessments will continue (as per the England & Wales DNO Application Process section) and if there are distribution constraints, as highlighted in step 3 of the E&W DNO Application Process (including fault level headroom constraints at GSPs) they will need to be addressed to facilitate the embedded generation connection. This can either be via distribution network reinforcement or if the embedded generation customer opts for a Distribution Energy Resource Management (DERMS) Flexible Connection, they will be managed actively and will form part of the distribution LIFO queue as per current practice.

The change envisioned by CMP446 is that the less than a 5 MW project will not be subject to Transmission Network constraints, namely the Super Grid Transformers "SGT" Reverse (and Forward) Power Flow constraints (i.e. Technical Limits) and although they will still form part of the distribution constraints LIFO queue, connections below 5MW will not be used to manage the SGT constraints limits. Furthermore, they will not be contributing towards SGT capital costs at GSPs where such mitigation is required.

Technical Limits[31] is a new tool which looks to accelerate projects on a non-firm basis connecting before there Transmission Works have completed. Once their associated works are completed, they could connect on a firm basis however Transmissions reinforcement works could no longer be deemed required. This is enabling ready projects to connect earlier.

[30] Example of the ECR on the National Grid website National Grid - Embedded capacity register

[31] Technical Limits Rulebook

The way the calculation is done to create a Technical Limit is based on projects captured within an Appendix G. If CMP446 was to be approved, NESO would as part of its recommendation will have to remove projects not yet connected under the threshold from a NESO BCA and Appendix G.

While Technical Limits could potentially change due to connections reform, if this proposal was to be approved, removing projects out of the Appendix G that haven't connected yet could reduce the Technical Limits that other projects above the TIA threshold must comply with.

This could also mean less / more curtailment if projects that are being removed from the agreement are higher / lower in the LIFO stack. There are other considerations that could impact projects being taken out of the Appendix G which includes Clean Power 2030 Action Plan and Connections Reform Readiness Criteria. Enduring non-firm technical limits could be an option going forward on a case-by-case basis. The purpose of Technical Limits was to allow projects to connect before their Transmission reinforcement works are completed. Once those associated works are completed or removed, projects could connect on a firm basis

As a DNO Workgroup Member stated, DNO's have assessed this impact with the potential reduction of Technical Limits. With roughly 150 GSPs now with Technical Limits across England and Wales, 682MWs across there GSPs would have marginal impact with the Technical Limits.

Interaction with CMP434 and CMP435

It was clarified by the Proposer that CMP446 is not dependant on CMP434 and CMP435 being approved. However, if all three modifications are approved, then the full benefit of CMP446 will only be realised if it is implemented in time for the Gate 2 window (being introduced by CMP434 and CMP435) opening, which is currently anticipated to occur in Q2 2025. Alignment with this deadline has caused CMP446 to have an urgent timeline.

The Workgroup requested clarity from the Proposer on how the timelines for decisions and implementation worked together and what the impact would be to CMP446 depending on the approved solutions. The key points to note are:

- CMP446 can be implemented after the implementation dates of CMP434 and CMP435 but must be before the Gate 2 window opens.
    - If CMP446 is implemented before CMP434/CMP435 implementation, the impacted Distributed Generation projects (that is those, in E&W, that fall

between 1MW and 5MW) would be removed as part of the CMP435 process from the NESO BCAs and BEGA Contracts (as per the TEC Register for England and Wales, no BEGA contracts are identified as under 5MWs).

- If CMP446 is not implemented before the Gate 2 window opens, prospective projects (that is those, in E&W, that fall between 1MW and 5MW) would still be part of an evaluation of Transmission Impact Assessment, with associated costs and delays.

- CMP434 WACM1 introduces specific MW sizes under categories to legal text, if taken forward then CMP446 may have to amend this text to reference <5MW generators in E&W being exempt from process.
- If CMP446 is approved and implemented after CMP434/CMP435, NESO would still use the mechanics of CMP435 to remove these DG projects (that is those, in E&W, that fall between 1MW and 5MW) from the NESO BCAs.

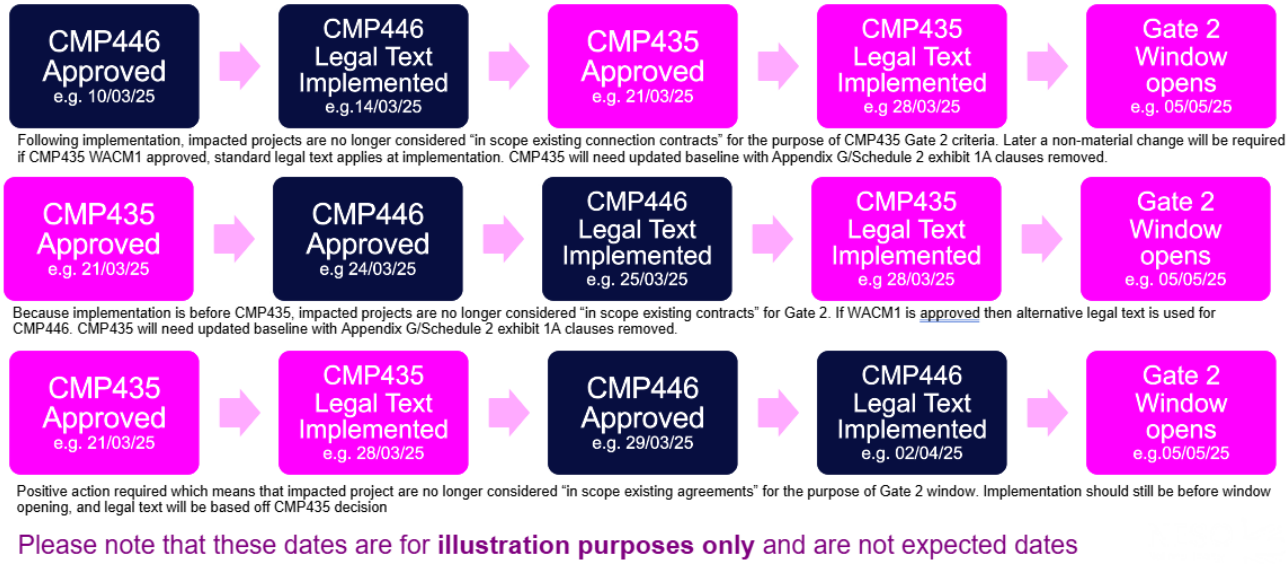

Figure 5 Timeline interactions with TM04+ modifications

Cross-code Impact

The Proposer took an action to keep the Workgroup of Modification GC0139: Enhanced Planning-Data Exchange to Facilitate Whole System Planning[32] updated on the progress of CMP446 in case there is any cross over.

[32] https://www.neso.energy/industry-information/codes/gc/modifications/gc0139-enhanced-planning-data-exchange-facilitate-whole-system-planning

Workgroup Consultation Summary

The Workgroup held their Workgroup Consultation between 06 February 2025 – 13 February 2025 and received 21 non confidential responses and 1 confidential response. The full non-confidential responses and a summary of the responses can be found **Annex 10**.

Support for CMP446 Implementation approach: The majority of respondents expressed support for the urgency of implementing CMP446 to facilitate quicker and more efficient connections for small-scale energy projects, particularly solar, to contribute to climate targets.

However, there were concerns raised by respondents about potential circumvention by splitting larger generation projects into smaller ones to fall below the 5MW threshold.

One respondent called out a request that community projects to have specific thresholds outside that of the rest of industry.

Workgroup feedback: The Workgroup did not show significant support for having a different threshold for community projects. The general agreement was to keep the threshold uniform across all project types.

Codification of Scotland Threshold and Harmonised Approach: The majority of respondents did not believe that Scotland needed to be codified for CMP446 to be implemented, as to do so would cause delays.

However, there was a majority preference for a harmonized approach across Great Britain, with consistent thresholds and procedures to avoid regional disparities and ensure efficient network use.

Workgroup feedback: The Workgroup acknowledged the preference for a harmonised approach, noting that codification for Scotland could be considered in a separate modification or by the Scottish DNOs. This modification will address the current defect in England and Wales

5MW as the new TIA threshold: If including agree with caveats the majority of respondents agreed that 5MWs was the correct threshold.

The other proposed thresholds were no change to the existing threshold, raising to 7MW to make it broadly align with the Connection being made to the HV distribution network, raising to 10MWs to capture community energy projects, commercial rooftop solar, other behind the meter generation for energy-intensive users.

There was one suggestion of raising to 10MW on the High Voltage networks only.

Workgroup feedback: The Workgroup discussed the possibility of altering the threshold in the future but agreed that as part of the urgent timeline of the modification the threshold should be 5MW. And there was a need for clear legal text to avoid confusion, particularly around the exact definition of the threshold (e.g., 4.95 MW vs. 5MW), was highlighted.

Registered Capacity vs Export Capacity: The difference between the Original and Alternative Request 1 pivots around the chosen definitions. Whilst the majority of respondents agreed that both better met the Applicable Objectives than the baseline (as detailed below) there was a preference for Alternative Request 1 (now WACM1 - Export Capacity) as it aligns more closely with industry practice and provides greater benefits

- Original solution: a) 19 b) 16 c) 8 d) 18
- Alternative Request 1: a) 18 b) 17 c) 5 d) 15

Workgroup feedback: The Workgroup voted in favour of Alternative Request 1 which became WACM1 and the Proposer confirmed that the Original Proposal, which at Workgroup Consultation used the Distribution Code definition of Registered Capacity, would be using the Grid Code definition instead. The Proposer noted the following advantages of using the Grid Code definition (see the MW Capacity Definition section for further details)

Concerns About Fault Level Headroom: Several respondents, expressed concerns about the transparency and management of fault level headroom, suggesting that affected GSPs should be clearly identified and monitored

Workgroup feedback: The Workgroup Report has been updated to ensure transparency, see Impact of Fault Level Headroom on CMP446 section

Impact on Transmission Network and Technical Limits: The majority of respondents agreed that CMP446 will not significantly impact the Transmission Network, as most projects under 5MW are expected to be well-dispersed and at lower voltages.

However some respondents, suggested additional mitigation measures, such as monitoring the number of 1-5MW projects and ensuring consistent procedures among network parties.

The majority of respondents believe that CMP446 might impact curtailment assumptions for accepted Technical Limits offers, with some respondents noting concern that this would potentially disadvantage contracted customers.

Workgroup feedback: The Workgroup discussed again and updated the report to ensure transparency, see Interaction with Active Network Management and Technical Limits section

Draft Legal Text Amendments: Whilst the majority of respondents felt that the draft legal text satisfied the intent of the modification there were requests for clarification around the interaction of fault level headroom and the cumulative impact of CMP446 and its link to DNOs.

Workgroup feedback: The Proposer updated the legal text to provide additional clarification, the steps taken can be found in the Legal Text section.

TIA Threshold Scenarios: The majority of respondents believed that the Workgroup had captured the generic scenarios. However, there were 5 additional scenarios suggested for inclusion.

Workgroup feedback: Workgroup members did not consider that any changes should be made to the list of scenarios already captured, either because the additional scenarios are already covered, they don't make a difference to the scenario outcomes. However, whilst in essence already captured in Figure 3 scenarios 3 to 5 an additional scenario was added as scenario 12 to show where installed capacity increased whilst export capacity remained the same.

Following consultation responses, adding existing technology or incorporating new technologies to existing agreements was discussed. This would be classed as a new project entering the queue as per current arrangements and go to the back of the queue. This is current BAU process and was deemed out of scope of this work.

Identified risks and potential mitigations: The majority of respondents felt that the Workgroup had captured the key risks linked to the modification. However additional risks were geographically connections, fault level headroom, reinforcement contribution, customer contracting, and system accommodation.

Suggested mitigations included codification across GB; transparency on the identification of impacted projects

Workgroup feedback: The Workgroup agreed that the risks around different thresholds in England and Wales compared to Scotland had been adequately captured by the Proposal Form.

The Workgroup agreed that fault level headroom is a known risk and had been adequately covered by earlier discussions, see Impact of Fault Level Headroom on CMP446 and Legal Text sections for additional clarity.

The Workgroup agreed that SGT Reinforcement Contribution was a known defect in the CUSC and there is support for it being resolved, but it is outside the scope of this modification.

The Workgroup agreed that customer contracting is addressed by an WACM1 which is based on Export Capacity rather than Registered Capacity.

The Workgroup discussed risks related to system accommodation and included additional clarity within the Potential Risks and Impacts of Changing the Threshold section.

The Workgroup agreed that while there is a risk of Connection Reform delay, given the 'Minded To' position has been shared, there is now less of a risk.

Post Workgroup Consultation Discussion

Communications

The Workgroup considered what communications would be in place should this modification be approved to notify eligible projects that they wouldn't have to prove compliance at Gate 2. It was noted that the communications around Clean Power 2030 Action Plan will include information on the TIA change. These communications are planned to be wide-reaching and will include updates on multiple platforms, seminars and forums.

The Workgroup noted that there should also be engagement with Trade Associations, to ensure wider dissemination of information.

Impact of Fault Level Headroom on CMP446

NESO had reached a view regarding the interaction between projects between 1 and 5MW at GSPs with no fault level headroom and Clean Power 2030 Action Plan. Under the proposal, these projects will be classed as Relevant Power Stations, included in Appendix G and therefore included in the Clean Power 2030 Action Plan buckets. Some Workgroup Members questioned whether this was the right approach.

The Proposer confirmed that the legal text had been updated to clarify the process for power stations connecting at GSPs with low/no fault level headroom following feedback from the Workgroup.

The Workgroup agreed that the treatment of projects at varying fault level headroom scenarios should be consistent and are shown in Figure 6 below.

The Workgroup agreed that there are provisions in the legal text drafting for CMP434 under 6.5.5.6 to conclude the Transmission Evaluation Application if no works are required nor any site specific requirements. There may therefore be circumstances where a project which has to go through a TIA can still be connected on a faster timeline.

	Current CUSC Baseline - less than 1kA Headroom	CMP446 - less than 1kA Headroom	Current CUSC Baseline – more than 1kA Headroom	CMP446 – more than 1kA Headroom
Less than 1MW	No TIA required, not included in Appendix G. Note may be subject to other mitigations set by DNO e.g. delay until works to address fault level completed	No TIA required, not included in Appendix G. Note may be subject to other mitigations set by DNO e.g. delay until works to address fault level completed	No TIA required, not included in Appendix G.	No TIA required, not included in Appendix G.
Above 1MW and less than 5MW (4.94MW max)	Must go through TIA process before connecting, included in Appendix G* and classed as Relevant Power Station	Must go through TIA process before connecting, included in Appendix G* and classed as Relevant Power Station	Must go through TIA process before connecting, included in Appendix G* and classed as Relevant Power Station	No TIA required, not included in Appendix G.
Equal to or greater than 5MW	Must go through TIA process before connecting, included in Appendix G and classed as Relevant Power Station	Must go through TIA process before connecting, included in Appendix G and classed as Relevant Power Station	Must go through TIA process before connecting, included in Appendix G and classed as Relevant Power Station	Must go through TIA process before connecting, included in Appendix G and classed as Relevant Power Station

Figure 6 Fault level headroom scenarios

Fault Level Headroom at GSPs

To aid the Workgroup deliberations ahead of the Workgroup Consultation, NGET provided some examples of existing GSPs (those at Sundon, Rugeley, Harker and East

Claydon) where fault level headroom is already at 0kA or negative and therefore are carefully operated/maintained by NGET.

After the Workgroup Consultation, NESO provided data to the Workgroup showing that currently 39 out of 225 GSPs with Appendix Gs[33] in E&W (about 17.3%) have fault level headroom limitation issues. Out of the 39 GSPs identified by NESO, this was cross referenced with the 337 out of 390 projects that were identified to benefit from CMP446. 170MW out of 852MW would then still be captured and required to undertake a TIA, even if CMP446 were approved. Concerns were raised over the impact on 1MW to 5MW projects due to fault level headroom issues and the need for accurate and timely information.

The list of GSPs with fault level headroom below 1kA, at the point of publishing, has been included below.

ENWL	NGED		NPG	SEPD	SPManweb	UKPN	
Harker	Aberthaw	Melksham	Blyth	East Claydon	Capenhurst	Biggleswade	Sundon
Heysham	Abham	Pembroke	Drax	Melksham	Kirkby	Bolney	Walpole
Hutton	Alverdiscott	Rugeley	Poppleton	Minety		Braintree	West Weybridge
Kearlsey	Cellarhead	Shrewsbury	Thorpe Marsh			Canterbury North	
South Manchester	East Claydon (WM)	Walpole				Eaton Socon	
Stalybridge	East Claydon (EM)	West Burton				Norwich	
	Ironbridge	Willington				Rayleigh	

Figure 7 GSPs with fault level headroom below 1kA (as of February 2025)

Workgroup Members noted that transparency, of which GSPs this limitation (of 1MW) applied to, would be required, if CMP446 was approved.

The Proposer informed the Workgroup that going forward the data would be published by NESO on an ongoing basis, provided a month before the gated window opens. This would not be needed for WACM2 or WACM5 as the solution already includes a requirement to publish the threshold which applies at each individual GSP.

[33] There are additional GSPs which do not have an Appendix G

The Workgroup discussed the benefit of completing analysis showing the impact of the Gate 2 to whole queue process, to identify any possible improvements to fault level headroom (and therefore any additional 1-5MW projects could progress without a TIA due to the associated GSP no longer being below 1kA fault level headroom). However it was agreed that due to the complexity of interactions with the other elements of connection reform it was not possible.

Alternative Requests

Following the Workgroup Consultation a number of Alternative Requests were submitted by consultation respondents and Workgroup members (**Annex 06**).

These Requests set out the case as to why the party or Workgroup member who submitted them wished to amend parts of the Original Proposal.

The Workgroup reviewed all of these Requests and the table below provides an overview of each Request (and who raised it) along with its status:

Solution and Outcome of Alternative Vote	***Party***	***Characteristic***	***Mechanism of Workgroup Vote***
Alternative Request 1 ***(WACM1)***	*SSE Generation*	*Export Capacity used for measuring the threshold*	*Voted in by Workgroup*
Alternative Request 2	*Centrica*	*Threshold to 10MW at 11kV*	*Not saved by the Workgroup Chair*
Alternative Request 3 ***(WACM2)***	*Lightsource bp*	*TIA threshold at GSPs with Registered Capacity used for measuring the threshold*	*Voted in by Workgroup*
Alternative Request 4	*Centrica*	*Threshold to 10MW at 11kV with Export Capacity used for measuring the threshold*	*Not saved by the Workgroup Chair*
Alternative Request 5 ***(WACM3)***	*Low Carbon*	*Capping the capacity of projects per GSP*	*Saved by the Workgroup Chair*
Alternative Request 6 ***(WACM4)***	*Low Carbon*	*Capping the capacity of projects per GSP combined with Export Capacity used for measuring the threshold*	*Saved by the Workgroup Chair*
Alternative Request 7 ***(WACM5)***	*Lightsource bp*	*TIA threshold at GSPs (as WACM2) with Export Capacity used for measuring the threshold*	*Voted in by Workgroup*

WACM1 – 'Export Capacity' instead of 'Registered Capacity' for measuring Threshold

Overview: As per the Original, but using 'Export Capacity' rather than the 'Registered Capacity' in relation to measuring the 5MW threshold.

Workgroup discussion: The Workgroup requested scenarios be available to best support industry to understand the differences between the outputs of the Original and WACM1 – these can be found in both the WACM1 Proposal form and in **Annex 07**.

WACM2 - Obligation on NESO to publish a list of each GSP and actively state the TIA threshold to be used as agreed between the NESO, DNO and TO – using Registered Capacity for measuring the threshold

Overview: This alternative seeks to revise the Original proposal by improving the transparency of the TIA thresholds used by the connection process as well as future proofing the process to allow future revisions to the TIA thresholds (if required). This will be done by placing an obligation on NESO to publish a list of each GSP and actively state the TIA threshold to be used as agreed between the NESO, DNO and TO.

Workgroup discussion: Although voted in my majority as a WACM some Workgroup Members queried the operability and improvement over the baseline of the solution, suggesting that a default threshold should be included in the legal text.

The Proposer of WACM2 addressed these concerns by incorporating a threshold of 5 MW when no specific threshold is published.

WACM3 - Capping the capacity of projects benefitting from the higher threshold, per GSP, per 5-year period – using Registered Capacity for measuring the threshold

Overview: Introducing a limit to total capacity, as defined in the Original (based on 'Registered Capacity'), of 1-5MW projects that can connect under a GSP per 5-year without a Transmission Impact Assessment in England and Wales. This solution proposes a cap of 25MW per GSP per 5-year period.

Workgroup discussion: The Workgroup requested further rationale of how the 25MW cap was calculated, which is included in the WACM3 Proposal form. Some Workgroup members raised concerns that the cap was so low that if approved there would be a high proportion of GSPs impacted and the consequences this would have on the existing queue had not been fully understood. The Workgroup acknowledged that the 25MW cap could be adjusted in the future based on further analysis and the impact on the Transmission network.

The Proposer of WACM3 acknowledged that they would have preferred to complete additional analysis on whether 25MW was the right level, believing that ahead of completing this analysis there would need to be a methodology to understand what the definition of a significant impact on the Transmission network would be. However they were comfortable that their rationale for 25MW was reasonable due to the urgent timeline. They declined the opportunity to raise the 25MW cap until more data became available, outside the urgent timeline of this modification.

After Workgroup Members queried projects connecting in 2025 would be captured by WACM3, the Proposer for WACM3 updated the legal text to include the date CMP446 implementation to 31 December 2025 as they first capacity capping period and then outlined the 5-year periods thereafter.

WACM4 - Capping the capacity of projects benefitting from the higher threshold, per GSP, per 5-year period, – using Export Capacity for measuring the threshold

Overview: Introducing a limit to total capacity, as defined in WACM1 (based on 'Export Capacity'), of 1-5 MW projects that can connect under a GSP per 5-year without a Transmission Impact Assessment in England and Wales. This solution proposes a cap of 25MW per GSP per 5-year period.

Workgroup discussion: The same points raise for WACM3 were raised for WACM4.

WACM5 - Obligation on NESO to publish a list of each GSP and actively state the TIA threshold to be used as agreed between the NESO, DNO and TO – using Export Capacity for measuring the threshold

Overview: This Alternative Request modifies WACM2 by changing how the TIA thresholds are published (not how they are determined) to improve the transparency of the thresholds and ease of future revisions. It seeks to codify an obligation in the CUSC for NESO to publish a document which lists the TIA threshold in effect for each GSP. This could be a complete list of GSPs or a listing of GSPs by exception where they deviate from the national norm. This solution also uses 'Export Capacity' rather than 'Registered Capacity' in relation to measuring the 5MW threshold.

Workgroup discussion: The same points raise for WACM2 were raised for WACM5.

Consideration of other options

High Voltage Connections

A Workgroup Member asked if the Proposer would consider adding wording to the legal text that specifies what voltage projects should connect at (e.g. 11kV etc.) to be captured by the change in threshold. They believed this would ensure the most efficient use of connection assets / bays on the network and to avoid developers exploiting a loophole in the legal text. Other Workgroup Members did not support the idea of additional restrictions to the legal text, as it would increase complexity and potentially penalise other projects who were being efficiently connected, by the DNO, at a different voltage level.

Some Workgroup Members also highlighted that in order for networks to operate an efficient and effective network they need to carry out the network study following all relevant governance to identify the most appropriate voltage level for any connection.

Terms of Reference Discussion

a) Consider EBR implications The Workgroup does not believe that the modification has any EBR implications as the legal text does not amend the EBR mapped sections as illustrated in Exhibit Y.
b) Consider the scope of work identified and whether this is achievable within the timeframe outlined in the Ofgem Urgency decision letter. To adhere to the urgent timeline the Workgroup did not pursue additional data analysis on GSP fault level headroom ahead of Gate 2, or additional analysis on the outputs of WACMs 3 and 4.
c) Consider the legal and practical implementation of this modification alongside CMP434/CMP435 and any other relevant in flight CUSC modifications. Alongside Workgroup discussion around timeline interaction, the proposed CMP446 solutions have intentionally avoided clauses which are altered by CMP434 and CMP435.
d) Consider any cross-code impacts. The Workgroup considered two Grid Code modifications, GC0117 and GC0139 but did not believe there were interactions which should affect the solution refinement of CMP446.
e) Consider data and any other requirements from DNOs to implement The Workgroup discussed at length the existing DNO processes and the proposed solutions do not require additional data to implement.

f) Consider how CMP446 would be compatible with the requirement for the NESO acting in a non-discriminatory manner Outside the discussion around the codification of thresholds in England and Wales not Scotland, the proposed solutions for CMP446 are technology agnostic.
g) Consider how CMP446 would be compatible with the requirement for harmonised rules for generator connections in GB. The Proposal's defect is for England and Wales only, the Workgroup Consultation respondents agreed that whilst it would be preferable to have consistent set of arrangement across GB that the codification for Scotland was not required for CMP446.
h) Consider what the MW capacity relates to: for example, export capacity or installed capacity or developer capacity? Through Workgroup discussion there are two different capacity definitions, one set based off Registered Capacity (Original, WACM2, and WACM3) and Export Capacity (WACM1, WACM4 and WACM5).
i) Consider if the change applies only to new projects (up to 5MW) or also to existing D connected projects that increase their capacity by up to 5MW (4MW to 6MW), and projects that reduce to be below the threshold. As CMP446 was granted urgency to be implemented alongside CMP434 and CMP435, all the proposed solutions are applicable for new and existing projects.
j) Consider potential for interlinked impact of cumulative/aggregated <5MW projects which would otherwise breach the proposed 5MW threshold. The Workgroup discussed the likely scenarios and risks of the change in threshold. WACM3 and WACM4 were raised due to a concern around the cumulative risk to the Transmission Network.
k) Consider the interaction with Technical (Planning) limits and Distribution (DNO) managed Active Network Management (ANM) schemes The Workgroup discussed the likely impact on Technical Limits, noting that curtailment is likely to differ on a case by case basis and the Technical Limits will be reviewed as part of connections reform.

Legal Text

The legal text for this change can be found in **Annex 05** and Figure 8 below (further detail in **Annex 11**) illustrates the differences between each of the solutions.

	Schedule 2 Exhibit 1A 2.5	Schedule 2 Exhibit 1A Appendix G Section 10 paragraph 3	Section 6.5.1(a)	Section 6.6.5.1(f)	Section 11 definitions
Original	Old threshold clause removed	Old threshold clause removed		New Registered Capacity threshold clause added	
WACM1	As per the Original	As per the Original		New Export Capacity threshold clause added	Export Capacity definition added
WACM2	As per the Original	As per the Original	New clause added for NESO to publish Registered Capacity threshold per GSP		
WACM3	As per the Original	As per the Original		New Registered Capacity threshold and 25MW cap per GSP every 5 years clause added	
WACM4	As per the Original	As per the Original		New Export Capacity threshold and 25MW cap per GSP every 5 years clause added	As per WACM1
WACM5	As per the Original	As per the Original	New clause added for NESO to publish Export Capacity threshold per GSP		As per WACM1

Figure 8 - Legal text comparison (Annex 11 for more detail)

The following considerations were taken into account when creating the legal text:

- Location of new text: While TIA is initially referred to in 6.5.1(a), a new paragraph 6.5.1(f) was identified as a suitable place for the text which would not conflict with potential changed under CMP434
- Ensuring text accounts for medium embedded generation: The legal text specifically focuses on small embedded power stations because there is already text in CUSC to confirm that medium should be treated as relevant

- Decimal place/rounding: It is the view of the Proposer that the capacity should be given to one decimal place as per the arrangements already in place between NESO and DNOs for applying the existing 1MW threshold. This would mean a 4.95MW generator would have a declared capacity of 5.0MW after rounding and therefor be subject to a TIA. A 4.94MW Generator would be rounded down to 4.9MW and therefore not be subject to a TIA. This is clearly stated in the Grid Code Registered Capacity definition which was chosen for the Original solution. WACMs 1 and 4 do not use any rounding.
- Fault level headroom: The initial legal text used the 5MW limit, with an exception to this where needed to account for fault level headroom. Following Workgroup feedback and the analysis showing 40 GSPs with fault level headroom issues, the Proposer agreed to make the legal text more specific, so that it would be clear when the higher limit of 5MW would not apply
- Capacity definition: The Grid Code definition of Registered Capacity was chosen as this is what NGET use for network planning purposes, it is used in the SQSS and CUSC section 11 definitions, and is consistent with categorisation of power stations to Small/Medium/Large.

What is the impact of this change?

High impact due to process change and contractual changes required through multiple parties, with a high impact associated with TM04+ Connection Reform and time critical nature of CMP446.

This change should reduce the number of projects (and the associated MW volume) that have to go through the TIA process thereby reducing the administrative burden for network companies. For Distributed Generators sized under the proposed 5MW threshold, wishing to connect to the network, they would not have to go through the TIA process thereby saving costs and time delays. In particular, for existing 'contracted but not yet connected' Distribution projects, it will simplify the assessment process of applying the TMO4+ approach to the existing queue.

Original Proposer's assessment against CUSC Non-Charging Objectives	
Relevant Objective	**Identified impact**
(a) the efficient discharge by the licensee of the obligations imposed upon it under the Electricity Act 1989 and by this licence[34];	Positive A more efficient Transmission/Distribution interface will help the efficient discharge of network licence obligations (NESO, NGET and DNOs)
(b) Facilitating effective competition in the generation and supply of electricity, and (so far as consistent therewith) facilitating such competition in the sale, distribution and purchase of electricity;	Positive Quicker connections for viable projects needed to deliver Net Zero. Currently project developers are waiting to connect, and this is hindering progress to deliver Net Zero.
(c) Compliance with the Electricity Regulation and any relevant legally binding decision of the European Commission and/or the Agency[35]; and	Neutral
(d) Promoting efficiency in the implementation and administration of the CUSC arrangements.	Positive The existing process imposes obligations on 1MW –to 5MW DG that are disproportionate to their impact on the Transmission System

[34] See Electricity System Operator Licence

[35] The Electricity Regulation referred to in objective (c) is Regulation (EU) 2019/943 of the European Parliament and of the Council of 5 June 2019 on the internal market for electricity (recast) as it has effect immediately before IP completion day as read with the modifications set out in the SI 2020/1006.

Relevant Applicable Objective	WACM1 Proposer's assessment	WACM2 Proposer's assessment	WACM3 Proposer's assessment	WACM4 Proposer's assessment	WACM5 Proposer's assessment
(a) the efficient discharge by the licensee of the obligations imposed upon it under the Electricity Act 1989 and by this licence[36];	Positive As per the Original, but by linking it to usage of the NETS this is more a more efficient approach to the discharging (than the Original, or the Baseline).	Positive Same as the Original	Neutral Per the Original Proposal.	Positive WACM 3 elements: Per the Original Proposal. WACM 1 elements: As per the Original, but by linking it to usage of the NETS this is more a more efficient approach to the discharging (than the Original, or the Baseline).	Positive Same as the WACM1
(b) Facilitating effective competition in the generation and supply of electricity, and (so far as consistent therewith) facilitating such competition in the sale, distribution and purchase of electricity;	Positive As per the Original, but by linking it to usage of the NETS this is more a more efficient approach to competition (than the Original, or the Baseline).	Positive Same as the Original but with the additional benefit of being more transparent on the TIA threshold in effect at a local level.	Positive This Alternative better facilitates competition as the Original Proposal allows for a negative impact on larger generation schemes which are subject to Technical Limits Transmission ANM which would have a detrimental effect on investor confidence.	Positive WACM 3 elements: This Alternative better facilitates competition as the Original Proposal allows for a negative impact on larger generation schemes which are subject to Technical Limits Transmission ANM which would have a detrimental effect on investor confidence. This Alternative also scores positively on this metric as	Positive Same as the WACM1 but with the additional benefit of being more transparent on the TIA threshold in effect at a local level.

[36] See Electricity System Operator Licence

			This Alternative also scores positively on this metric as it reduces the potential for gaming, i.e. unfair competition from Users exploiting loopholes in the Original Proposal.	it reduces the potential for gaming, i.e. unfair competition from Users exploiting loopholes in the Original Proposal. WACM 1 elements: As per the Original, but by linking it to usage of the NETS this is more a more efficient approach to competition (than the Original, or the Baseline).	
(c) Compliance with the Electricity Regulation and any relevant legally binding decision of the European Commission and/or the Agency[37]; and	Neutral Per the Original Proposal.	Neutral Same as the Original	Neutral Per the Original Proposal.	Neutral Per the Original Proposal.	Neutral Same as the WACM1

[37] The Electricity Regulation referred to in objective (c) is Regulation (EU) 2019/943 of the European Parliament and of the Council of 5 June 2019 on the internal market for electricity (recast) as it has effect immediately before IP completion day as read with the modifications set out in the SI 2020/1006.

(d) Promoting efficiency in the implementation and administration of the CUSC arrangements.	Positive As per the Original, but by linking it to usage of the NETS this is more a more efficient approach to implementation and administration (than the Original, or the Baseline).	Positive Same as the Original but the with additional benefit of being easier to revise the TIA threshold in future if needed.	Positive Additional benefit of placing a limit pre-emptively, rather than having to apply for a retrospective Code Modification if the risks identified in the Workgroup and Workgroup Consultation become reality.	Positive WACM3 elements: Additional benefit of placing a limit pre-emptively, rather than having to apply for a retrospective Code Modification if the risks identified in the Workgroup and Workgroup Consultation become reality. WACM1 elements: As per the Original, but by linking it to usage of the NETS this is more a more efficient approach to implementation and administration (than the Original, or the Baseline).	Positive Same as the WACM1 but the with additional benefit of being easier to revise the TIA threshold in future if needed.

Original Proposer's assessment of the impact of the modification on the stakeholder / consumer benefit categories	
Stakeholder / consumer benefit categories	**Identified impact**
Improved safety and reliability of the system	Neutral NGET analysis shows the limited Transmission System impact of 1-5MW DG within the design and connection process.
Lower bills than would otherwise be the case	Positive This reduces the risks (and hence costs) on 1-5MW DG developers when developing their projects which will ultimately benefit end consumers by reducing their bills.
Benefits for society as a whole	Positive This societal benefits include lowering bills and reducing environmental damage by reducing the risk on 1-5MW DG developers when developing their projects and speeding up their connection. This would also facilitate the connection of E&W community energy projects which are typically under 5MW.
Reduced environmental damage	Positive The proposal will support quicker connections for viable projects needed to deliver Net Zero. Currently project developers are waiting to connect, and this is hindering progress to deliver Net Zero.
Improved quality of service	Positive This means that 1-5MW DG developers will no longer have to go through the Evaluation of Transmission Impact Assessment process. This will improve their connection journey and make it considerably quicker for them to connect and they will have an improved quality of service.

Workgroup Vote

The Workgroup met on 26 February 2025 to carry out their Workgroup Vote. The full Workgroup Vote can be found in **Annex 12**. The table below provides a summary of the Workgroup Members view on the best option to implement this change.

For reference the Applicable CUSC (non-charging) Objectives are:

a. *The efficient discharge by the Licensee of the obligations imposed on it by the Act and by this licence*;*
b. *Facilitating effective competition in the generation and supply of electricity, and (so far as consistent therewith) facilitating such competition in the sale, distribution and purchase of electricity;*
c. *Compliance with the Electricity Regulation and any relevant legally binding decision of the European Commission and/or the Agency **; and*
d. *Promoting efficiency in the implementation and administration of the CUSC arrangements.*

** See Electricity System Operator Licence*

***The Electricity Regulation referred to in objective (c) is Regulation (EU) 2019/943 of the European Parliament and of the Council of 5 June 2019 on the internal market for electricity (recast) as it has effect immediately before IP completion day as read with the modifications set out in the SI 2020/1006.*

The Workgroup concluded by majority that the Original, WACM1, WACM2, and WACM5 better facilitated the Applicable Objectives than the Baseline.

Option	Number of voters that voted this option as better than the Baseline
Original	13
WACM1	12
WACM2	10
WACM3	5
WACM4	6
WACM5	9

When will this change take place?

Implementation date

02 May 2025

Date decision required by

29 April 2025

Implementation approach

This Proposal would benefit from being implemented prior to the proposed Gate 2 window in CMP435 to allow the existing 1-5MW DG currently in the queue to benefit as connections reform is implemented.

Interactions

☐Grid Code ☐BSC ☐STC ☐SQSS
☐European Network Codes ☐EBR Article 18 T&Cs[1] ☒Other modifications ☐Other

See the Interaction with CMP434 and CMP435 section

Acronyms, key terms and reference material

Acronym / key term	Meaning
ANM	Active Network Management
BCA	Bilateral Connection Agreement
BEGA	Bilateral Embedded Generation Agreement
BSC	Balancing and Settlement Code
CAP	Connections Action Plan
CDB	Connections Delivery Board
CMP	CUSC Modification Proposal
CPAG	Connections Process Advisory Group
CUSC	Connection and Use of System Code
DCode	Distribution Code
DCUSA	Distribution Connection and Use of System Agreement

DERMS	Distribution Energy Resource Management
DESNZ	Department for Energy Security and Net Zero
DG	Distributed Generation
DNO	Distribution Network Operator
E&W	England and Wales
EBR	Electricity Balancing Regulation
ECR	Embedded Capacity Register
EG	Embedded Generation
GSP	Grid Supply Point
GW	Gigawatt
IDNO	Independent Distribution Network Operator
LIFO	Last in First Out
MW	Megawatt
NESO	National Energy System Operator
NGET	National Grid Energy Transmission
SPD	Scottish Power Distribution
SPT	Scottish Power Transmission
SQSS	Security and Quality of Supply Standards
SSEN	Scottish and Southern Electricity Networks
STC	System Operator Transmission Owner Code
T&Cs	Terms and Conditions
T/D	Transmission/Distribution
TEC	Transmission Entry Capacity
TIA	Transmission Impact Assessment
TO	Transmission Owner

Reference material

- Policy Consultation on Required Licence Changes for TMO4+ Connections Reform
- Connections Action Plan, a joint publication by The Department for Energy Security and Net Zero and Ofgem
- Connections Process Advisory Group Minutes – 12/09/2024
- Connections Delivery Board Minutes - 31/10/2024
- CMP434: Implementing Connection Reform
- CMP435: Application of Gate 2 Criteria to existing contracted background
- GC0117: Improving transparency and consistency of access arrangements across GB by the creation of a pan-GB commonality of Power Station requirements
- GC0139: Enhanced Planning-Data Exchange to Facilitate Whole System Planning
- National Grid - Embedded capacity register
- Grid Supply Point Technical Limits for accelerated non-firm connections – Energy Networks Association (ENA)
- Statutory consultation on connection reform (TM04+) enablers, including modifications to standard licence conditions | Ofgem
- Clean Power 2030 Action Plan: A new era of clean electricity: Connections reform annex
- https://www.arcgis.com/apps/dashboards/5e88bf050bba4c77b07bb7d8f9238971
- New Distribution Queue Entry Requirements

Annexes

Annex	Information
Annex 01	CMP446 Proposal form
Annex 02	CMP446 Terms of reference
Annex 03	CMP446 Urgency letters
Annex 04	Transmission Impact Assessment Threshold position Paper
Annex 05	Legal Text
Annex 06	CMP446 WACM and Alternative Request Forms
Annex 07	CMP446 TIA Threshold Scenarios
Annex 08	Risk Impacts of Changing the Threshold Risks

Annex 09	DNO Application Process Flow Diagram
Annex 10	CMP446 Workgroup Consultation Responses and Summary Spreadsheet
Annex 11	Legal Text Comparison Table
Annex 12	Workgroup Vote
Annex 13	Workgroup Attendance Record
Annex 14	Workgroup Action Log