

## **Workgroup Consultation**

## 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. This proposal raises the lower threshold at which an Evaluation of Transmission Impact Assessment<sup>1</sup> must be undertaken<sup>2</sup> in England and Wales.

#### Modification process & timetable

	Proposal Form
1	17 January 2025
$\bigvee$	Workgroup Consultation
2	06 February 2025 to 13 February 2025
3	Workgroup Report
\ <sup>°</sup> /	05 March 2025
	Code Administrator Consultation
	10 March 2025 to 17 March 2025
	Draft Modification Report
5	24 March 2025
$\mathbf{N}$	Final Modification Report
6	28 March 2025
$\sum$	Implementation
7	02 May 2025

Have 5 minutes? Read our <u>Executive summary</u>

Have 60 minutes? Read the full Workgroup Consultation

Have 120 minutes? Read the full Workgroup Consultation and Annexes.

**Status summary:** The Workgroup are seeking your views on the work completed to date to form the final solutions to the issue raised.

**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?	<b>Proposer:</b> Martin Cahil, NESO <u>Martin.Cahill1@nationalenergyso.com</u> Phone: 07840722302	<b>Code Administrator Chair</b> : Milly Lewis <u>milly.lewis@nationalenergyso.com</u>			
How do I respond?    Send your response proforma to cusc.team@nationalenergyso.com      13 February 2025					

<sup>1</sup> https://www.ofgem.gov.uk/sites/default/files/2024-11/Connections\_Reform\_TMO4%2B\_Licence\_Changes\_Policy\_Consultation.pdf - see para 5.6, This mod is made against the current CUSC baseline.

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



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## NESO National Energy System Operator

## Public 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<sup>3</sup> (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'<sup>4</sup> 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 IMW to 5MW<sup>5</sup> and codified<sup>6</sup> within the CUSC for England and Wales.

#### Implementation date: 02 May 2025

#### Summary of potential alternative solution and implementation date:

An alternative solution, based upon using 'Export Capacity' rather than 'Registered Capacity' (as per the Original proposal) has been identified.

#### 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. and time critical nature of CMP446.

#### Interactions

There are interactions between CMP446 and the Connections Reform<sup>4</sup> modifications.

<sup>&</sup>lt;sup>3</sup> Connections Action Plan, a joint publication by The Department for Energy Security and Net Zero and Ofgem

 $<sup>^{\</sup>rm 4}$  Via CUSC modifications CMP434 and CMP435 and STC modification CM095

 $<sup>^{\</sup>rm 5}$  For the changes proposed in CMP446 5MW is a project 4.95MW or above

<sup>&</sup>lt;sup>6</sup> Section 6.5 of the CUSC



## Public What is the issue?

The Connections Action Plan<sup>3</sup> (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<sup>4</sup> 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<sup>7</sup> 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 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

<sup>&</sup>lt;sup>7</sup> 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)<sup>8</sup> and the Connections Policy Advisory Group (CPAG)<sup>9</sup> 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 IMW 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 IMW to 5MW for E&W DG. This would mean that DG projects in E&W between IMW 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:

• Scottish Power Transmission (SPT) / Scottish Power Distribution (SPD) believe that the current lower threshold of 200kW in their area strikes the right balance

<sup>&</sup>lt;sup>8</sup> The ENA publish the Connections Delivery Board minutes here <u>CDB minutes 31/10/24</u>

<sup>&</sup>lt;sup>9</sup> NESO publish the Connections Policy Advisory Group minutes here CPAG minutes 12/09/24



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 <sup>10</sup>

CMP434 'Implementing Connections Reform'<sup>11</sup> and CMP435 'Application of Gate 2 Criteria to existing contracted background <sup>12</sup> 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.
- If CMP434 and CMP435 are not approved or delayed then CMP446 would still progress

<sup>&</sup>lt;sup>10</sup> This consultation document has been written ahead of any Ofgem 'minded to' document relating to the TM04+ package (which includes CMP434, CMP435, and Methodologies) which may provide clarification on timeframes <sup>11</sup> <u>CMP434 Implementing Connections Reform Modification page</u>

<sup>&</sup>lt;sup>12</sup> CMP435 Application of Gate 2 Criteria to existing contracted background Modification page



- CMP434 and CMP435 proposes that any projects which are under the lower limit Evaluation of Transmission Impact Assessment thresholds (currently set at IMW 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 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 2030 targets.

## What is the solution?

## **Proposer's solution**

It is proposed that the lower Transmission Impact Assessment threshold will be raised from IMW to 5MW and codified<sup>6</sup> within the CUSC for E&W.

Throughout this document the practical application of the referenced threshold is based on the current approach to the IMW 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 between 1MW - 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 <sup>13</sup>threshold has been identified<sup>14</sup> 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.

<sup>&</sup>lt;sup>13</sup> For the purpose of this document Evaluation of Transmission Impact Assessment is the same as Transmission Evaluation Assessment (TEA) as proposed in CMP434

<sup>&</sup>lt;sup>14</sup> By NGET and NESO



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 sub 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 BCAs and their existing terms and conditions would be unchanged.

## Workgroup considerations

The Workgroup convened 6 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 IMW 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)<sup>15</sup> 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<sup>16</sup> 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 requirements."

<sup>&</sup>lt;sup>15</sup> "Consider how CMP446 would be compatible with the requirement for harmonised rules for generator connections in GB"

<sup>&</sup>lt;sup>16</sup> Commission Regulation (EU) 2016/631 of 14 April 2016 establishing a network code on requirements for grid connection of generators (Text with EEA relevance)



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
- 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)<sup>17</sup> 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<sup>18</sup> and B6<sup>19</sup> of the NESO's Electricity licence<sup>20</sup>, and suggested that the justification proffered by the NESO<sup>21</sup> 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<sup>22'</sup> 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);

<sup>&</sup>lt;sup>17</sup> "Consider how CMP446 would be compatible with the requirement for the NESO acting in a non-discriminatory manner"

<sup>&</sup>lt;sup>18</sup> 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."

<sup>&</sup>lt;sup>19</sup> 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"

<sup>&</sup>lt;sup>20</sup> ESO Licensing Direction and Licence Terms and Conditions

<sup>&</sup>lt;sup>21</sup> See slide 19 of the Workgroup 2 updated slide deck: 'Action 7/8 Scottish Codification'.

<sup>&</sup>lt;sup>22</sup> 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"



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 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.

Workgroup Consultation question 7: Do you believe that a codification of Scotland threshold is required for CMP446?

#### **E&W 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.

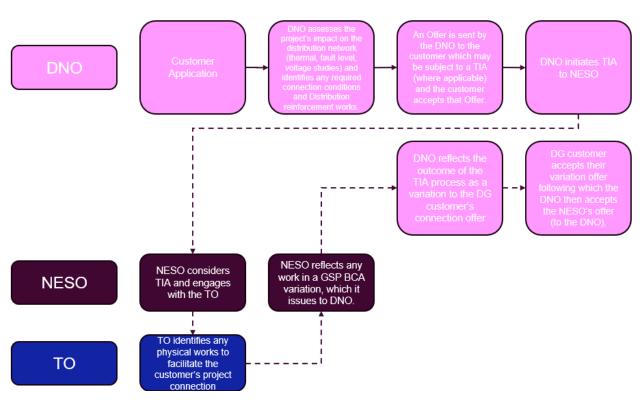
Based on the following eight high level steps set out below<sup>23</sup>, steps 1- 3 will be undertaken in each application, steps 4 onward are dependent on the threshold (which would be set at 5MW):

- 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.

<sup>&</sup>lt;sup>23</sup> <u>https://www.energynetworks.org/publications/new-distribution-queue-entry-requirements</u>



- 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).



# **DNO Application Process**

Figure 1 DNO Application Process (Annex 9)

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. 1 MW 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 the Original Proposal.

Therefore, if CMP446 is approved, a 5MW or above project connecting via an IDNO would be subject to the TIA process, while a <5MW project connecting via an IDNO would not be subject to the TIA process.

#### **MW Capacity Definition**

The Workgroup, noting item (h)<sup>24</sup> 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 not looking to change the current process as explained above.

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 chose Registered Capacity as defined in the Distribution Code<sup>25</sup>:

"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 included:

- NGET feedback that the Registered Capacity was most appropriate definition to use for applying the threshold:
  - Rating of the power generating modules i.e. what the Power Station is fully capable of doing is how NGET designs the system. This is set out in the SQSS
  - Existing definitions of small, medium and large are based on Registered Capacity

 <sup>&</sup>lt;sup>24</sup> "Consider what the MW capacity relates to: for example, export capacity or installed capacity or developer capacity?"
 <sup>25</sup> THE DISTRIBUTION CODE



- G99 form is clear that Registered Capacity should be provided. This should then be included in the agreement between the DNO and Generator, and the same value should flow through to the Appendix G
- 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 DCode, preferring an alternate suggestion of Export Capacity.

An Alternative Request has been raised, but not yet voted upon (**Annex 5**), 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' would be broadly based on an amended version of the existing, related, definition within the Grid Code (as follows):

"Maximum Export Capacity - The maximum continuous Apparent Power expressed in MVA and maximum continuous Active Power expressed in MW which can flow from a power station -Offshore Transmission System connected to a Network Operator's User System, which is connected to the NETS to that User System."



#### 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 not take into account any netting off of any associated Demand 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 2 and Figure 3 below (and **Annex 7**) outline these scenarios at a high level. 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 is equivalent to the Registered Capacity definition in Distribution Code
- 'Export Capacity' Threshold applied based on Export Capacity; i.e. the maximum amount that the Power Station can export to the Distribution Network.

Category				Existing		New		TIA Required?	
		mple Scenarios	Installed Capacity	Export Capacity	Installed Capacity	Export Capacity	Installed capacity	Export	Outcome check
	1	New generation connection with 0MW export capacity	N/A	N/A	4MW	0MW*	No	No	Same
A new generation connection	L 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	3	Existing connection with 2MW installed capacity increasing to 4MW	2MW	0MW*	4MW	0MW*	No	No	Same
and installed capacity <b>below</b> the 5MW threshold		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 <b>above</b> the 5MW	15	Existing connection with 6MW installed capacity increasing to 12MW	6MW	0MW*	12MW	0MW*	Yes	No	Different

NOTE: \* An ENA Engineering Recommendation G100 (EREC G100) Export Limiting Scheme will be installed to limit the export from customer's site to 0 MW.

#### Assumptions:

All of the scenarios listed assume that there are no fault level issues at GSP, where fault level issues are known the connection cannot be energised until such time as rectified All of the scenarios listed also apply to existing demand connections seeking to add generation

Figure 2 Zero Export Capacity Threshold Scenarios (Annex 7)

The term "existing connection" means sites which are already energised or are have a contracted DNO connection offer but not yet energised



			Exis	ting	Ne	w	TIA Rec	uired?	
Category	Exa	mple Scenarios	Installed Capacity	Export Capacity	Installed Capacity	Export Capacity	Installed capacity	Export capacity	Outcome check
	1	New generation connection with 4MW installed capacity and 4MW export capacity	N/A	N/A	4MW	4MW	No	No	Same
A new generation connection	2	New generation connection with 6MW installed capacity and 6MW export capacity	N/A	N/A	6MW	6MW	Yes	Yes	Same
	3	New generation connection with 6MW installed capacity but only 3MW export	N/A	N/A	6MW	змw	Yes	No	Different
	4	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
Changes to an existing connection with both export and nstalled capacities <b>below</b> the 5MW threshold	5	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
	6	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
Changes to an existing connection with both export and nstalled capacities <b>above</b> the 5MW threshold	7	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	68MW	8MW	Yes	Yes	Same
	8	Existing connection with 6MW installed capacity with <del>but only</del> 2MW export capacity increasing to 4MW export capacity	6MW	2MW	6MW	4MW	Yes	No	Different
Changes to an existing connection with installed capacity only above the 5MW threshold	9	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
		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		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
		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

Figure 3 Additional TIA Threshold Scenarios (Annex 7)

Whilst the Workgroup have discussed the type of capacity that could be used, there has not been extensive discussion, within the Workgroup, on whether 5MW is the correct threshold.

Workgroup Consultation question 8: Is it clear that the change in threshold is cumulative not incremental?

Workgroup Consultation question 9: Do you believe 5MW is the correct threshold and if not why and to what threshold level should it be? (Providing rationale and justification for any alternative MW threshold)

Workgroup Consultation question 10: Are there any other generic scenarios (over and above those shown in Figure 2 and Figure 3 that need to be considered by the Workgroup, please provide details of them and explain why they are relevant?

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#### Fault level headroom

Whilst discussing the generic scenarios in Figure 2 and Figure 3, the Workgroup discussed whether the amount of fault level headroom at a GSP should be considered relevant. 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 Workgroup discussed that there were GSPs that have no fault level headroom. NGET was asked if it was possible to provide with Workgroup with a list of such locations. NGET advised the Workgroup they would make this list available following the Workgroup Consultation. But to aid the Workgroup deliberations ahead of this 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.

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 IMW 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.

Workgroup Members noted that transparency, of which GSPs this limitation (of 1MW) applied to, would be required, if CMP446 was approved. NGET advised the Workgroup that the list of the relevant GSPs would be available ahead of the Code Administrator Consultation. The Proposer took an action to assess what data could be provided on an ongoing basis.

Workgroup Consultation question 11: It is intended that where there is a fault level headroom that is less than 1kA or zero as stated by NGET at a GSP, then a project is required to go through the TIA irrespective of the change in threshold (from 1MW to 5MW) – do you agree with this and if not, why?

#### 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.

The Workgroup discussed potential risks and impacts of the proposed threshold change from 1MW 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 ~390 projects and suggested that this could lead to a higher volume (than the ~852MW so far identified) 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 8**) 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<sup>26</sup> 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<sup>27</sup>, 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 CP30 restacking would be taking place, projects would technically be advantaged by jumping ahead at Transmission.

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 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 5MW Distribution connections.

A Workgroup Member highlighted that CMP446 could be the catalyst for a significant amount of (i) new <5MW Distribution / IDNO applications and / or (ii) a significant number of accepted to connect >5MW projects reducing their capacity to <5MW< If a

 $^{\rm 26}$  Those that are below 5MW.

<sup>&</sup>lt;sup>27</sup> Assuming CMP434 and / or CMP435 are approved.



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 agreed that there is a need for stakeholder visibility and tracking, by NGET and NESO, of 1MW - <5 MW projects to monitor their potential cumulative impact with DNO's providing the total MW per technology of projects 1MW - < 5MW on the technical data application, including whether there should be any action taken if too many sub 5MW 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 (downwards from 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 1MW - <5MW not just in the Technical data application of Project Progression (Transmission Evaluation Assessment) but also captured within the Appendix G.

Workgroup Consultation question 12: Do you agree that the Workgroup has identified the relevant risks if CMP446 is approved. If not, what further risks haven't been identified yet, and why are they relevant?

Workgroup Consultation question 13: Do you believe that as consequence of CMP446 there will be an increase in <5MW projects which is likely to have an impact on the Transmission Network? If so, what kind of projects could drive this?

Workgroup Consultation question 14: Do you have any suggestions for any additional mitigation measures for the identified risk?

#### 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 <sup>28</sup>(ECR) is a register published by each DNO/IDNO on their websites consisting of site-specific data items for sites which are connected to the

<sup>&</sup>lt;sup>28</sup> Example of the ECR on the National Grid website <u>National Grid - Embedded capacity register</u>



DNO/IDNO Party's Distribution System (or which are the subject of an accepted connection offer to be connected to the Distribution System), and which: (a) have an import capacity of 50kWW or more and are subject to a DSR Contract; and/or (b) have an export capacity of 1 MW or more.

A DNO Workgroup member confirmed that the 1MW - 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 (from 1MW - 5MW) doesn't mean DNOs will no longer be undertaking network impact assessments on any sub 5MW applications. These assessments will continue and if there are distribution constraints, as highlighted in step 3 of the E&W DNO Application Process outlined on within the E&W DNO Application Process section above (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 hence will form part of the distribution Last In First Out (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 hence although they will still form part of the distribution constraints LIFO queue, connections <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<sup>29</sup> 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. 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. This could reduce the technical limits that other projects above the TIA threshold must comply with and could also mean less curtailment if projects that are being removed from the agreement are higher in the LIFO stack. There are other considerations that could impact projects being

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<sup>&</sup>lt;sup>29</sup> Technical Limits Rulebook



taken out of the Appendix G which includes CP30 and Connections Reform Readiness Criteria. Enduring non-firm could be an option going forward on a case by case 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, 852MWs across there GSPs would have marginal impact with the Technical Limits.

Workgroup Consultation question 15: Do you understood that as a consequence of CMP446 that the curtailment assumptions for an accepted Technical Limits offer could be impacted?

#### Interaction with CMP434 and CMP435

It was clarified by the Proposer that CMP446 is not dependent 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 / 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.

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• 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.



Positive action required which means that impacted project are no longer considered "in scope existing agreements" for the purpose of Gate 2 window. Implementation should still be before window opening, and legal text will be based off CMP435 decision

Please note that these dates are for illustration purposes only and are not expected dates

Figure 4 Timeline interactions with TM04+ modifications

Workgroup Consultation question 16: Is the timeline of interaction understood?

#### Interaction with CP2030

The Workgroup briefly 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:

"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."

# Source: <u>Clean Power 2030 Action Plan: A new era of clean electricity</u>. <u>Connections</u> <u>reform annex</u>

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 mod to be discussed through the codes process. It is therefore important that the

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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.

#### **Cross-code impact**

The Proposer took an action to keep the Workgroup of Modification GC0139 updated on the progress of CMP446 in case there is any cross over.

#### **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.

Workgroup Consultation question 17: Do you believe it is appropriate/ within scope of CMP446 for the Workgroup to consider this further, and if so why?

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## Public Draft legal text

The draft legal text for this change can be found in **Annex 5**.

Below is a snapshot of the proposed changes:

CUSC	Summary of proposed changes
Section	
6.5.1(f) (new paragraph)	Add: (f) In England and Wales, it is acknowledged that (unless notified otherwise by The Company and on basis this should be the exception rather than the norm) only an Embedded Small Power Station which [has a Registered Capacity (as defined in the Distribution Code) of][is] 5MW or above is a Relevant Embedded Small Power Station requiring the submission of an Evaluation of Transmission Impact to The Company in accordance with Paragraph
	5.1(a) above."
Schedule 2	Remove (2) – For the purposes of CUSC Paragraph 6.5.1(b),
Exhibit 1A	Embedded Small Power Stations of []MW and above will be deemed
2.5	t <del>o be a Relevant Embedded Small Power Station unless otherwise</del> notified by The Company in accordance with CUSC Paragraph <del>6.5.1(b).</del>
Appendix G	Remove (3) - For the purposes of the Evaluation of Transmission
Schedule 2,	Impact and unless otherwise indicated by The Company under CUSC
section 10	<del>6.5.1(b), Embedded Power Stations of 1MW and above will be deemed</del> to have an impact on the National Electricity Transmission System and must be included in Appendix G Schedule 1.

## 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

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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.

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 <sup>30</sup> ;	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 <sup>31</sup> ; and	Neutral				
(d) Promoting efficiency in the implementation and administration of the CUSC arrangements.	Positive The existing process imposes obligations on 1- 5MW DG that are disproportionate to their impact on the Transmission System				

<sup>&</sup>lt;sup>30</sup> See Electricity System Operator Licence

<sup>&</sup>lt;sup>31</sup> 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.



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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.



## 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 □European Network	□BSC □EBR Article 18 T&Cs <sup>1</sup>	□STC ⊠Other modifications	□SQSS □Other
Codes			

See Workgroup Considerations above

### How to respond

#### **Standard Workgroup Consultation questions**

- 1. Do you believe that the Original Proposal and/or any potential alternatives better facilitate the Applicable Objectives?
- 2. Do you support the proposed implementation approach?
- 3. Do you have any other comments?
- 4. Do you wish to raise a Workgroup Consultation Alternative request for the Workgroup to consider?
- 5. Does the draft legal text satisfy the intent of the modification?
- 6. Do you agree with the Workgroup's assessment that the modification does not impact the European Electricity Balancing Regulation (EBR) Article 18 terms and conditions held within the Code?

#### **Specific Workgroup Consultation questions**

- 7. Do you believe that a codification of Scotland threshold is required for CMP446?
- 8. Is it clear that the change in threshold is cumulative not incremental?



- 9. Do you believe 5MW is the correct threshold and if not why and to what threshold level should it be? (Providing rationale and justification for any alternative MW threshold)
- 10. Are there any other generic scenarios (over and above those shown in Figure 2 and Figure 3 that need to be considered by the Workgroup, please provide details of them and explain why they are relevant?
- 11. It is intended that where there is a fault level headroom that is less than 1kA or zero as stated by NGET at a GSP, then a project is required to go through the TIA irrespective of the change in threshold (from 1MW to 5MW) – do you agree with this and if not, why?
- 12. Do you agree that the Workgroup has identified the relevant risks if CMP446 is approved. If not, what further risks haven't been identified yet, and why are they relevant?
- 13. Do you believe that as consequence of CMP446 there will be an increase in <5MW projects which is likely to have an impact on the Transmission Network? If so, what kind of projects could drive this?
- 14. Do you have any suggestions for any additional mitigation measures for the identified risk?
- 15. Do you understood that as a consequence of CMP446 that the curtailment assumptions for an accepted Technical Limits offer could be impacted?
- 16. Is the timeline of interaction understood?
- 17. Do you believe it is appropriate/ within scope of CMP446 for the Workgroup to consider this further, and if so why?

The Workgroup is seeking the views of CUSC Users and other interested parties in relation to the issues noted in this document and specifically in response to the questions above.

Please send your response to <u>cusc.team@nationalenergyso.com</u> using the response pro-forma which can be found on the <u>CMP446 modification page</u>.

In accordance with Governance Rules if you wish to raise a Workgroup Consultation Alternative Request please fill in the form which you can find at the above link.

If you wish to submit a confidential response, mark the relevant box on your consultation proforma. Confidential responses will be disclosed to the Authority in full but, unless agreed otherwise, will not be shared with the Panel, Workgroup or the industry and may therefore not influence the debate to the same extent as a non-confidential response.

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# Acronyms, key terms and reference material

Acronym / key term	Meaning
ANM	Active Network Management
ВСА	Bilateral Connection Agreement
BEGA	Bilateral Embedded Generation Agreement
BSC	Balancing and Settlement Code
САР	Connections Action Plan
CDB	Connections Delivery Board
СМР	CUSC Modification Proposal
CPAG	Connections Policy 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

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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
то	Transmission Owner
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#### **Reference material**

- Policy Consultation on Required Licence Changes for TMO4+ Connections Reform
- <u>Connections Action Plan, a joint publication by The Department for Energy Secu-</u> <u>rity and Net Zero and Ofgem</u>
- <u>Connections Process Advisory Group Minutes 12/09/2024</u>
- <u>Connections Delivery Board Minutes 31/10/2024</u>
- <u>CMP434: Implementing Connection Reform</u>
- CMP435: Application of Gate 2 Criteria to existing contracted background
- National Grid Embedded capacity register
- <u>Grid Supply Point Technical Limits for accelerated non-firm connections Energy</u>
  <u>Networks Association (ENA)</u>
- <u>New Distribution Queue Entry Requirements</u>

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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	Draft Legal Text
Annex 06	CMP446 Alternative Request Form 1 – Export Capacity
Annex 07	CMP446 TIA Threshold Scenarios
Annex 08	Risk Impacts of Changing the Threshold Risks
Annex 09	DNO Application Process Flow Diagram

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