

Implementing Connections Reform NGET response

August 2024

Dear Code Administrator

This document represents the views of National Grid Electricity Transmission plc (NGET) in response to the **CMP434/CM095 'Implementing Connections Reform'** and the **CMP435/CM096 'Application of Gate 2 Criteria to existing contracted background'** workgroup consultations.

NGET develops, owns, and operates the high voltage electricity transmission network in England and Wales. We are committed to playing a leading role in delivering a secure, affordable, and clean energy transition in the interest of our customers and consumers.

In summary, we support the intent of the respective code modifications to implement a new and improved connections process and apply Gate 2 criteria to the existing contracted background. However, we have concerns regarding the effectiveness of some aspects of the TMO4+ proposal in achieving the desired outcome of connection reform. We feel that the proposer's solution could be enhanced, either through collaboration and further discussions with the workgroup, or through wider supporting policy development to mitigate these concerns prior to submitting the final Modification Report to the Authority.

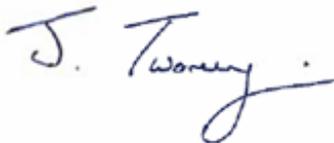
Our response, which elaborates our view above on the proposals, consists of two parts;

Part 1 - Executive summary: NGET's views on TMO4+

Part 2 - Detailed response proformas for CMP434/CM095 and CMP435/CM096

We hope this response provides helpful insight for progressing these proposals. Please contact Jade Ison or Richard Woodward if you require further information on any aspect of our response.

Sincerely,



John Twomey

Director of Customer Connections

National Grid Electricity Transmission

Part 1 - Executive summary: NGET's views on TMO4+

Our ambition for reform

As Transmission Owner for England and Wales, we develop the network infrastructure that economically and efficiently meets the evolving needs of our customers, while accelerating the transition to a net zero future. Our ambition for reform is to ensure we can continue to deliver our role by reducing connection timescales for customers and facilitating connections to support the government's mission to provide Britain with cheaper and clean power by 2030.

Whilst reforming the connection process is essential, wider reform is required to ensure its success. Aligning the connection process with the future expectations of the networks and society is vital to drive value for end consumers and deliver meaningful change. Delivering against these principles also complements governments ambition for widespread electrification of the economy and the unlocking of future industries.

What CMP434 / CMP435 code modifications need to deliver

We are committed to delivering timely connections for projects that contribute to net zero, and / or provide wider economic benefit or industrial growth (e.g. data centres, large strategic demand) in collaboration with Government, Ofgem and Industry, which will require;

1. A significant reduction of the existing contracted background, focusing on removing non-viable, speculative, or lesser-progressed projects, with a revised pipeline better reflecting expected requirements of a future network. (to be addressed by CMP435 / CM096)
2. Delivery of a new connections process (to be addressed by CMP434 / CMP095) which;
 - a. Forms part of a holistic energy strategy which recognises the importance of projects that contribute to net zero- and those that provide wider economic benefit or industrial growth to ensure they can connect to the network in a timely manner.
 - b. Better manages the size of the connections pipeline so that it continues to reflect expected capacity requirements of a future network.
 - c. Enables the strategic planning of future capacity on the transmission network and is compatible with the future direction of Strategic Spatial Energy Plan (SSEP).
 - d. Delivers connection timescales that are aligned to customers' reasonable expectations.

This view is closely aligned to that outlined within the Connections Action Plan¹ which calls for;

'Connection dates that better meet customers' reasonable needs with the difference between requested and offered dates falling significantly...' and *'A pipeline of expected projects and connection dates that is consistent with net zero targets and all parts working together (network planning, build and connections) so net zero aligned projects can connect when ready'*.

Our position on the effectiveness of TMO4+

We acknowledge and support the intent of the respective code modifications to develop and implement a new connection process and apply Gate 2 criteria to the contracted background. However, we have concerns regarding the effectiveness of the proposed TMO4+ solution, particularly

¹ [Connections Action Plan: Speeding up connections to the electricity network across Great Britain \(publishing.service.gov.uk\)](https://publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/100000/connections-action-plan-speeding-up-connections-to-the-electricity-network-across-great-britain.pdf)

how well it facilitates the desired outcome of Connection Reform. Our key concerns (along with the application to the existing contracted background via CMP435) are:

1. The proposed Gate 2 criteria with Land Rights as the sole requirement to secure firm capacity is too low a barrier to entry.

- While we agree with the proposal for developers to demonstrate tangible project viability to help reduce speculative applications, the ‘first ready, first connected’ approach applied by TMO4+ was agreed upon prior to the recommendation of a Strategic Spatial Energy Plan (SSEP) or the publication of the Connections Action Plan.
- As an industry, we should acknowledge that prioritizing firm connection offers solely on a customer’s ability to demonstrate land rights alone is no longer suitable. Much more focus should be applied on achieving governments ambitious energy decarbonisation targets, i.e. whether projects are ‘needed’, as well as being ‘ready’, and which make the most efficient use of available network capacity.
- Offering connection agreements based solely on their ability to progress may lead to the following risks;
 - **A pipeline occupied by project technologies that can easily secure land.** It is widely accepted that certain technologies (i.e. those of a small size and low impact on communities) will find it easier to secure land. We believe this could result in a significant volume of Battery Energy Storage Solutions (BESS) receiving firm offers via TMO4+. Whilst we understand the benefit battery storage can provide to the network and the transition to net zero, we do not believe that prioritising the connection of BESS projects is in the best interests of consumers and wider network decarbonisation.
 - **Creating a ‘rush for land’ or a secondary land market.** There is a considerable risk that developers proactively secure land around existing and proposed TO substations, before developing their project sufficiently to know whether it is viable and appropriate to receive a firm offer. This potential ‘land grab’ also poses a significant risk to Transmission Owners (TOs) who need to secure land for the most efficient and appropriate siting of substations and network infrastructure.
 - **Significant pressure on planning authorities.** A rush of applications to Gate 2, particularly at implementation and to the existing queue, will lead to a deluge of subsequent applications for planning within the following year. This in turn could have an impact on developer’s ability to meet relevant Queue Management milestones likely leading to mass terminations or mass exceptions requests for ESO.
 - **A significant volume of confirmed capacity in the connections pipeline.** We expect the ESO’s recent RFI activity will verify that the volume of firm connection contracts that will be offered to existing projects at TMO4+ implementation will not lead the necessary reduction in the contracted background. This will severely limit our ability to not only improve customer connection timescales, but to advance connections.

2. The proposals do not provide network licensees the tools to ensure efficient utilisation of network capacity to facilitate the transition to net zero.

- TMO4+ fails to consider the significant gap between contracted capacity and the capacity (or the distribution of associated technologies) required to meet future demand or achieve clean energy targets.
- The proposals may result in hundreds of unnecessary projects being contracted post Gate 2, mirroring the existing process. This poses challenges for TOs in designing and building an

efficient, cost-effective network, and will be reflected in the information provided in Gate 2 offers and resulting connection timescales.

- With the increasing pressure from the Government, we must revise the connections process to ensure it supports (not hinders) decarbonisation goals. Failure to consider this crucial aspect puts at risk our responsibility as GB networks to be enablers of positive societal change.
- 3. The proposed timescales between Gate 1 and Gate 2, which as proposed could overlap, do not provide sufficient time to allow TOs to study the impact of applications on the network ahead of providing final offers.**
- The timescales set out within TMO4+ do not enable sufficient modelling of the network within batched studies between Gate 1 and Gate 2. Coupled with challenges highlighted in point 1, it might be that 'firm' Gate 2 offers do not reflect the most optimised view possible for our anticipated network investment. Instead, due to the timing constraints of the application windows, we will likely be compelled to make offers similar to those of the existing connections process, which are too often oriented on short-term, individual project needs.
 - This challenge is further amplified by the possibility of customers bypassing Gate 1 and proceeding directly to Gate 2 if they meet specified criteria.
 - We do not believe that pre-emptively modelling the Gate 1 application pool (as proposed) via the Connection Network Design Methodology (CNDM) (which in our view still needs substantial definition prior to TMO4+ decisions being sought by Ofgem) is a robust enough background for the TO to construct and commit to anticipatory investment.

NGET's RECOMMENDATIONS

We propose the following improvements that we believe will enhance the effectiveness of TMO4+;

- 1. Stronger acceptance criteria for connection customers to guarantee receiving a firm offer at Gate 2.** These must include **technology considerations** - ensuring that use of network capacity is efficient and allocated in line with expected future network and societal needs (e.g. delivery of net zero, provides a wider economic benefit, or supports industrial growth) and with the ability to reject applications that are not. An additional Gate 2 criteria could be **visibility of commercial considerations** e.g. a project's route to secure capital investment ahead of FID, obtaining relevant licences, or signalling the project's 'path to market' (e.g. an application for subsidy or heads of terms for a Power Purchase Agreement). These would help demonstrate greater credibility of customer developments and provide a more onerous hurdle for receiving a firm offer.
- 2. Proactive management of the volume of contracted projects post-Gate 2 to provide greater certainty of network investment and connection timescales.** This could be achieved by;
 - a. Implementing national or regional caps on technology to act as a stepping stone to a future Strategic Spatial Energy Plan, and
 - b. Stronger levels of Queue Management (QM) obligation for developers (e.g. QM milestones converted to forward-looking from offer acceptance or additional progression milestones created) in tandem with tighter enforcement to more quickly remove non-progressing projects and better enable other projects to be advanced.
- 3. Ensuring impact of customer connections can be assessed against the network prior to Gate 2 offer.** This could be accomplished by;
 - a. Allowing more time than what is currently proposed by ESO for the to-be Connection Network Design Methodology process for comprehensive system modelling. This would not only enable a more accurate assessment of network implications but (in

conjunction with technology requirements at Gate 2) would enable the TOs to provide more definitive information to Gate 2 applications of project location (e.g. siting studies).

- b. Requiring customers to pass through Gate 1 before proceeding directly to Gate 2. This ensures that the feasibility and impact of their projects can be evaluated.

By implementing these improvements, we can enhance the effectiveness of TMO4+ and ensure that the connections process is more robust, transparent, and aligned with the objectives of optimising network capacity, supporting net zero goals and reducing connection timescales for customers. We believe these improvements can be made through further collaboration with NESO and the modification workgroups and look forward to discussing these further, prior to a decision being sought from the Authority.