

National Grid Electricity Transmission (NGET) response to Ofgem's Update on reform to the electricity connection process following proposals from ESO

May 2024

This response represents the views of National Grid Electricity Transmission plc (NGET). 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.

We support Ofgem's position and approach outlined within the open letter. However, we have concerns regarding the effectiveness of TMO4+ in achieving the desired outcome of connection reform.

Executive Summary

NGET plays a critical role in connecting projects to the transmission network in England and Wales, we have already delivered 8.9GW of generation connections and 2.1GW of additional demand capacity within the RIIO T2 period (2021 – 2026). We remain committed to our future delivery strategy and expect a further 4.5GW of generation to be connected in the year ahead. This is in line with the volumes required to deliver a fully decarbonised power system by 2035.

What is the problem we are trying to collectively solve?

Despite our ongoing efforts to deliver connections, we recognise that connection timescales currently offered to customers do not align with their expectations or business requirements, with many customers receiving connection offers beyond 2035. This is largely caused by four key interacting issues;

- (i) **Market signals are driving excessive volumes of connection applications**, far in excess of what is reasonably expected to be required to meet future demand, deliver system stability and achieve de-carbonisation of the energy system.
- (ii) **Developers are not required to demonstrate their project's viability or suitability to meet the energy needs of the network**, meaning that an energy mix that doesn't align to government strategy, or efficiency achieve de-carbonisation targets could be delivered.
- (iii) **The lack of robust contractual arrangements hinders the ability to manage the connections pipeline effectively and efficiently**, by ensuring the right customers are connecting in the right location at the right time.
- (iv) **The increase in connection applications triggers the need for a disproportionate volume of new network investment** to facilitate these connections. This need is based on customer requirements and does not take into consideration system stability or and creates a stack of network requirements to meet the energy needs of the future and leading to connections dates later than customers expect.

This has resulted in the transmission connections pipeline in England and Wales doubling to over 400GW over the last year, driving the need for urgent reform.

NGET's view is that successful reform should ensure:

- The current pipeline is reduced and reordered to reflect the mix of technologies required for both the energy system and to meet Government's decarbonisation targets.
- Creating a process which sees only viable projects entering into connection agreements and progressing through the process.

- Decouples network design and the connections process to enable strategic decisions about where to create capacity and provide connection locations.

Whilst TMO4+ is a positive step towards partly resolving these issues, we believe the proposals currently fall short on the stated aim of the proposals.

The proposed criteria to meet both Gate 1 and Gate 2 is too low and will therefore not sufficiently reduce and reorder the size of the pipeline whilst not acting as a strong enough deterrent to speculative applications in the future, meaning the pipeline will continue to grow.

Additionally, the mix of technologies which will enter the pipeline and reach Gate 2 will be disproportionately weighted towards certain technologies, particularly storage, which are flexible on location and require less land, as opposed to reflecting what the energy system requires nor aligning to Government's decarbonisation targets.

NGET's proposals to deliver on the ambition set out within the Connections Action Plan

Therefore, the TMO4+ proposal should be strengthened and complimented with further additional measures. We believe this could be achieved through the delivery of;

- **Connection arrangements that better consider security of supply, system efficiency, strategic network investment and the right energy mix required to achieve net-zero goals.** This is best achieved by aligning the connections process with future energy plans such as the Strategic Spatial Energy Plan (SSEP) and the Centralised Strategic Network Plan (CSNP). This would complement our ambition to invest ahead of need to create a connection-ready capacity-rich network with strategically located capacity hubs.
- **Stronger requirements or restrictions to immediately reduce the connections pipeline and then prevent the pipeline growing beyond what is realistically needed to meet future requirements.** Placing additional requirements at Gate 2 on a regional basis for customers to meet certain capacity or technology criteria in order to obtain a firm contract (aligned to the specific requirements to deliver a suitable energy mix for that region).
- **Exploring further initiatives which align to the key objectives we have set out on reform, such as;**
 - Exploring the implementation of a minimum threshold for a size of a connection at transmission;
 - Further consideration of cap and trade arrangements surrounding connections, which could prevent the pipeline growing further and support the most viable projects to secure earlier connection dates;
 - Update of SQSS to better align to the future network required to enable net-zero; and
 - Consideration surrounding the treatment of strategic demand connections.

We value our continued engagement with Ofgem throughout this process and would like to offer our time and engineering expertise to undertake further thinking on the idea of capacity hubs and making suggestions on where they could be located on the system to provide quicker and more strategically placed connections.

NGET response to the questions outlined in the open letter

Below is NGET's response to Ofgem's request for stakeholder views on;

1. Ofgem's position (including reference to Annex A)

Overall, we agree with Ofgem's support for proposals to be raised to implement reform by introducing a new connections process and taking action to address the size of the contracted connections pipeline.

We also support the intention for proposals to take effect from 1 January 2025, assuming the workgroup land on a well-developed and considered proposal to submit to Ofgem for approval.

We agree with Ofgem's position that *"in isolation, we consider it unlikely this proposal will fully achieve the CAP objective. Progress will continue to be needed on other actions within the CAP across all action owners, reprioritising as required. To improve connection dates, we expect to see a better connection process and for transmission owners to more efficiently deliver the network infrastructure needed to deliver these assets."* However, we note the crucial interaction between the connection process and network development plan. We have outlined within our response the need for a more directive approach on the availability of connections as part of a decisive shift towards more centralised planning and coordination and urge Ofgem and DESNZ to drive action in this space.

We outline below the expected impact of each of the proposals and its design elements.

I. The new connections process (TMO4+)

An annual application window

We welcome and highly value the introduction of an annual application window. Receiving customer applications in a consolidated manner enables us to allocate resources effectively and efficiently handle these applications. Additionally, the annual update of the background information, on which customer offers are based, allows us time to assess and utilise this information for the strategic planning of network investment. This represents a significant improvement compared to the current situation, where background information is constantly changing as and when new applications are received. However, should the triage service for projects of national significance continue to operate alongside reforms, having annualised application windows could damage investor confidence. Therefore, further discussion on how strategic customers are viewed as part of these proposals is also imperative to its success.

Requirement to provide a Letter of Authority (LOA)

We appreciate the intent of CUSC Modification Proposal (CMP)427, which aims to raise entry requirements to the transmission connections queue through the requirement of a landowner Letter of Authority (LOA). Nevertheless, we anticipate the impact of this recent change, if any, will be negligible and therefore will not provide a meaningful hurdle to enter the new process. The LOA requirements currently in place do not require exclusive use of land or for the LOA to be enduring following application, which we believe will create a very low barrier to entry for customers.

An indicative offer

Based on recent conversations with customers, we believe that they are unlikely to welcome the idea of an indicative offer. Similarly, to what is offered today, customers are likely to argue that the information provided would be insufficient in order to obtain financial backing for their development

to progress. Customers have also expressed the opinion that it would be challenging to secure land for a project, without having first confirmed the specific connection location.

Whilst we understand their frustration with this existing and proposed approach, we are allocating capacity to customers based on a connections pipeline of over 500GW, of which only 55GW is required to be connected by 2035. We therefore cannot identify specific connection points at early stages of development as this would lead to inefficient network investment, supply chain issues, use of resources etc. and would result in challenges and additional costs in re-allocating capacity when customers inevitably terminate through non-progression. In our role as TO, we must ensure the economic and efficient delivery of our network to best drive value and outcomes for end consumers. It is becoming increasingly apparent that this cannot be achieved by solely basing required network investment on customer applications.

Gate 2 criteria and progression to final offer

It is evident from recent application volumes, that customers highly prioritise and value obtaining a connection agreement. Even when customers are being offered connection dates beyond 2035, we continue to receive applications. We firmly believe that implementing a two-gated process will inevitably create a rush for Gate 2, where customers receive the valued connection offer. We would expect this rush to result in additional pressure for network companies (in developing and issuing connection offers) during the first couple of years of 'go-live' whilst the connections pipeline naturally re-orders itself. It may also burden local planning authorities, as the Gate 2 requirements would lead to a surge of planning applications being submitted within a condensed timeframe. This rush may also negate the benefit that the indicative offers provide to TO's to develop strategic network plans.

We also understand that the Gate 2 criteria as proposed is low hurdle for developers and does not necessarily confirm the validity or feasibility of a project. We are therefore concerned that this will only exacerbate the rush to obtain a Gate 2 final offer. Whilst the proposed criteria is low for Gate 2, it should be noted that demonstration of a customer's commitment or progression is not the only requirement that could be applied and this should be explored by the industry.

II. The application of Gate 2 criteria from TMO4+ to the contracted background

Alignment to the new connections process

We believe that the proposal for applying Gate 2 criteria to the pipeline is well aligned to the new process, it will ensure fair and equal treatment of all customers regardless of when they applied and removing the concept of 'first come, first served' that will not deliver the right outcomes for consumers.

We are overall supportive of applying consistent criteria to all customers and view this proposal as a positive step forward.

Whilst the two proposals are complementary to one another, and ensure consistent treatment for all customers, we urge the workgroup to be open to considering alternate options as well as developing the TMO4+ option.

Perceived ease of meeting Gate 2 criteria

As mentioned previously, the Gate 2 criteria as proposed is not a high enough hurdle for developers and does not necessarily confirm the validity or feasibility of a project. This will likely cause a rush for Gate 2, diminishing the benefits that the indicative offers could provide for strategic network planning.

Apart from the Gate 2 criteria, there are no other restrictions or requirements on post-Gate 2 offers or projects. This therefore does not ensure the pipeline does not grow to the volume as it stands today, which as a root cause of many of the challenges currently faced, needs to be considered. It is important to note that while Queue Management will be applied to Gate 2 offers, these milestones are calculated backwards from the connection date, making them applicable only to those who are scheduled to connect within the next 5-6 years.

The proposed process also assumes that network capacity allocated at Gate 2 will be readily available or planned. However, as the forward-looking connections plan expands beyond the scope of realistic network requirements, we run the risk of encountering a situation similar to the present. There could be an oversubscription of capacity (where all existing and planned connection points have been allocated), leading to customers receiving indicative connection locations at Gate 2.

The information collected from customers during the pre-application and application stage is of immense value to NGET. While we aim to facilitate swift connections for customers, it is equally important for us to proactively build the network in anticipation of future customer needs, ensuring that we effectively meet the energy demands of tomorrow, efficiently driving value for end consumers. A rush for Gate 2 applications (resulting in a quickly changing background), and an oversubscribed post-Gate 2 connections pipeline, results in the same challenges we face today in delivering connections for our customers and driving value for end consumers.

While TMO4+ is a step in the right direction, and likely an improvement on the pre-existing arrangements, the workgroup development process provides industry with an opportunity to enhance its design to ensure maximum success.

Suggested areas for further consideration in developing the proposals

Based on the views outlined so far within this response, we outline below the key considerations which need further development by Industry, Ofgem and Government;

1) Connection arrangements that better consider security of supply, system efficiency, strategic network investment and the right energy mix required to achieve net-zero goals.

This would be in line with the sentiment in Ofgem's recently published multiyear strategy and could be achieved through the design of the SSEP. The concept of creating a 'futureproof' process for reform creates great uncertainty for customers and the future requirements of their developments. If the objective is to align connection plans with SSEP in the future, it is highly likely that we would have already established a connections pipeline based on customer readiness, potentially exceeding the realistic requirements. This will then require opening customer contracts once more to appropriately align the connections plan with SSEP.

There are two considerations here;

- i) The need to move towards a more centralised approach to allocating network capacity, and;
 - ii) The appropriate time to do so, to minimise impact on developers and their projects.
- While the consideration of future network requirements may require more time to implement initially, considering this within the current proposals would facilitate a smoother transition to a new process, rather than planning on revisiting reform for a further change in a year or two.

This could also deliver the essential outcome of not allowing the contracted background to grow beyond what is realistically required to meet future network requirements.

Additionally, whilst we have concerns that the term ‘indicative offers’ may give the impression customers that they should pursue firm offers for projects which are not needed, we are keen to explore how we can effectively utilise information provided by customers prior to their application for a final connection offer (at Gate 2). This information can play a vital role in determining optimal locations for strategic connection hubs.

2) Stronger requirements or restrictions to immediately reduce the connections pipeline and then prevent the pipeline growing beyond what is realistically needed to meet future requirements.

It is crucial to ensure that customers have a clear understanding of their contribution and impact on the economic and efficient delivery of connections. Customers should only submit applications if they have a viable project and possess the necessary means to progress it towards connection.

There is a need for clearer signals (or requirements) at Gate 2 to prevent customers from progressing without a clear path towards connection, as this can result in inefficient allocation of resources and network investment. We believe this would be an appropriate stage at which to place requirements that are better aligned to SSEP to enable an appropriate energy mix for the future.

The workgroup should also consider if there are any other tests of viability that could be introduced at either application stage or at Gate 2, for example a generation licence or a requirement to start paying TNUoS (Transmission Network Use of System Charges).

3) Exploring further initiatives which align to the key objectives we have set out on reform.

Within NGET, we are keen to collaborate on additional measures which strengthen and compliment the TMO4+ proposals, whilst aligning to the ambitions set out within the Connections Action Plan. This could include;

- Exploring the implementation of a minimum threshold for a size of a connection at transmission;
- Further consideration of cap and trade arrangements surrounding connections, which could prevent the pipeline growing further and support the most viable projects to secure earlier connection dates;
- Update of SQSS to better align to the future network required to enable net-zero; and
- Consideration surrounding the treatment of strategic demand connections.

2. Ofgem’s view of next steps (including reference to Annex B)

We agree with Ofgem’s expectations on the ESO and workgroup to consider when developing the TMO4+ proposal as outlined within Annex B.

3. Whether this proposal goes far enough:

- a. Are there any other proposals that you would like to see brought forward as part of, or alongside, this reform to achieve the aim of significantly reduced connection timescales?**

We urge the workgroup to consider all options and not just what can be included as an ‘add-on’ to the TMO4+ process.

We strongly encourage the exploration of alternative proposals that align with the transition towards a strategically planned network, that is not determined by customer applications. One such proposal could involve the proactive delivery of a network development plan that aligns to the likes of SSEP and CSNP, along with the establishment of strategically located capacity hubs. Under this approach, customers could be allocated capacity based on their suitability to meet future network requirements. While this would represent a radical shift, we are open to considering and potentially supporting such an innovative approach.

b. What obligations and incentives for the ESO and network companies would you like to see introduced alongside, or as part of, the TMO4+ proposal, to ensure the intended outcomes of better customer experience and timely connection dates are delivered? (See Annex A, point CAP 3.5)

We agree reform to the current ET connections incentives is required, and closely aligned to the approved proposals for new connection arrangements.

Connection incentives should be designed to encourage TOs to deliver infrastructure fit for a low-cost transition to net zero and to develop a connection ready network. Reforms should also be made to the Timely Connections and Quality of Connections survey to improve the way they operate and better align TO interests with those of customers and ultimately consumers.

We welcome Ofgem's intention set out in the sector specific methodology for RIIO-ET3 to explore additional incentives on customer connections. We are developing our thinking on this to support Ofgem with this process.

c. Do you believe additional criteria beyond readiness are needed to deliver (i) security of supply; (ii) system efficiency; (iii) strategic network plans; and (iv) the energy mix GB needs to meet net zero? (see Annex A, point CAP 3.6)

Yes – we consider this to be a downfall of the TMO4+ proposals in that solely allocating capacity to a customer based on their readiness to connect diminishes the importance of security of supply, system efficiency, strategic network planning and ensuring the right energy mix to meet GB needs.

The main responsibilities of network companies in the UK are to deliver and operate an efficient network, ensure security of supply for end consumers, and facilitate the transition to net zero. It is not logical to redesign the connections arrangements without taking these elements into consideration.