

# Executive summary- NGETs ESO Connections consultation response



**There is an urgent need to reform the connections arrangements to deliver connections for customers within timescales that suit their needs, facilitate delivery of net-zero and drive value to end-consumers.**

We welcome the ESO's action to reform the connections process and believe that a new process, if well-designed and implemented correctly, could have a significant impact on the issues currently faced by industry.

NGET's ambition for transmission connections is to ensure the effective and efficient connection of low-carbon technologies to meet our net zero ambition.

To deliver the greatest impact, we believe that wider reform needs to deliver the following, and therefore a new connections process needs to enable these actions.

1. **De-couple network design from customer applications and invest ahead of need.**
2. **Create a standardised modular 'plug & play' connections product.**
3. **Create a need for developers to demonstrate viability before entering the connections process.**
4. **Move towards a 'connect or move' framework with first-come-first-served only applied if it is appropriate and fair.**
5. **Enable immediate benefit through effective implementation and transition.**

NGET plays a significant role in connecting new sources of low carbon and green energy to homes and businesses in support of the transition to net zero and ensuring security of supply for end consumers.

We have worked collaboratively with the ESO and industry to determine appropriate action for reform, and to assist in the development of the proposed options for a new connections process. We have also been working with the ESO and the ENA on supporting delivery of their 5-point plan and 3-point plan respectively. We are starting to see impact from these initiatives and expect to free up at least 40GW of capacity by the end of the year to accelerate contracted connections.

Recognising the need for wider reform, we thank the ESO for their efforts in developing their consultation on a new connections process.

## **We support ESO's action to reform the connections process.**

Over recent years, we have witnessed significant and rapid change in the energy landscape, in the type and volume of developments wanting to connect to the transmission network. This industry change has come with challenges, which the ESO summarise as follows in their Case for Change<sup>1</sup> report:

- *Increasing application volumes and related increase to the timescales for connection*
- *Many new types of connection customer*
- *Significant changes to the mix of technologies*
- *Greater interaction between Transmission and Distribution networks*

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<sup>1</sup> ESO Case for Change report <https://www.nationalgrideso.com/document/273021/download>

- *Greater complexity and uncertainty over network investment planning*
- *An urgent need for a holistic, whole systems approach to planning network investment*

Despite this, the connections process has remained, for the most part, the same since it was introduced. It was designed to manage the connection of a small number of large developments from a much less diverse range of technologies.

As well as changes within the industry, we also have a responsibility to respond to and enable wider economic, environmental, and societal changes such as the move to a low carbon future. NGET play a significant role in delivering the industry wide ambition to decarbonise the electricity network and deliver on Net Zero targets.

We agree with the ESO's conclusion that *'the current process is not likely to enable the connection of the necessary volume of renewable generation and other associated technologies quickly or efficiently enough – both from the perspective of project developers and in terms of securing best value for consumers and meeting Net Zero targets'*<sup>2</sup>.

### **There are three components of the connections issue that need to be addressed in a collaborative approach.**

Whilst we agree with the overview of challenges within ESO's Case for Change, we have summarised the connections issue as being a combination of three contributing factors:

There is (1) an unconstrained market for connection applications, combined with (2) a lack of contractual obligations on developers to progress to connect, subsequently driving (3) a need to build more 'sockets' (connection points) than would be required, under even the most ambitious credible energy scenarios – all causing delays for customers that want to connect.

Within our characterisation of the issue, we believe that factors (1) and (2) are largely set out by the contractual agreement held between the customer and the ESO and offered as part of the connections process. We therefore welcome the ESO's efforts to lead the reform of the connections process. We believe a well-designed connections process, applied in the correct way, and complimentary to wider reform could have a significant impact on the issues currently being faced on connections.

Reforming the connections process is not a simple task. The existing methodology and currently contracted background must be considered in the design and implementation of a new process. Whilst bold change is needed to deliver Net Zero, there is a balance to be struck with retaining investor interest in the market and rights for developers.

There is an agreement throughout industry that reform of the connections arrangements is a top priority and that changes should be implemented with urgency. We believe that the scope of reform is wider than just the connections process and that if designed in the right way, the connections process can effectively enable wider change.

As transmission owner, we need to provide three key things to customers to enable their connection to and use of our network.

- 1) Information – to enable customers to make decisions regarding when and where to connect
- 2) Connections – providing the capacity and physical assets to enable their connection
- 3) A reliable power system – giving them confidence in their operations and use of the network

The current connection arrangements provide for the design of the network, i.e. the capacity and physical assets to enable a customer's connection, to be based on individual customer requirements as outlined within their connection application. Paired with the significant volume of contracted connections, this drives an unrealistic view of required sockets, far more than is expected to be required to meet future demand and Net Zero targets.

As well as reform of the connections process, there is also an urgent need to address the process for determining timely network and substation design and delivery, and the regulatory price control framework that supports it.

De-coupling network design from individual customer applications is vital to deliver a future connection ready network. This network could be informed through information from initiatives such as the Holistic Network Design (HND) follow-up and the Centralised Strategic Network Plan (CSNP) and would enable us to engage with the supply chain earlier whilst driving efficiencies through planned outages and build strategies. This would equally deliver accelerated connection dates for contracted customers, enabling a faster transition to Net Zero. In time this would result in better information

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<sup>2</sup> ESO Case for Change report <https://www.nationalgrideso.com/document/273021/download>

provided to customers to inform their investment decisions and provide opportunities for connections via strategic capacity hubs.

In summary, we believe reform needs to deliver:

- **A connections process that has an appropriate level of entry requirements and contractual obligations** to effectively progress credible developments to connect in timescales that align to their needs. This would move away from a first-come-first-served process and towards a first-ready-first-connected approach, supported by a 'connect or move' policy.
- **Means by which network design can be de-coupled from the connections process, enabling strategic decisions about where to create capacity and provide for customer connections.** This would create a 'connection ready' network, that provides information to customers for investment decisions and reduces connection timescales through earlier engagement with the supply chain, and efficiencies through outage planning and build. This would need to be supported by an efficient connections process and a regulatory regime to ensure appropriate funding.

**Whilst there are component parts of TMO 4 (the ESO's chosen model for connections process reform) that have clear benefits, there are material concerns that still require addressing in its design.**

Whilst we are supportive of some component parts of TMO 4, we ultimately have material concerns on its overall ability to deliver the benefits that the ESO have outlined within its consultation document.

Central to these concerns are how the model interacts with a substantial contracted background that exists today. It is our understanding that the model is forward looking and therefore will only evaluate the design of the network for future applications within the proposed window. If this is the case, it will have no benefit in the network design decisions that are already established for the contracted background.

To bring this to life, today in England & Wales, we are working against a background of over 700 customer contracts, comprising a total of 269GW of generation alone, significantly more than what is required under any energy scenario to achieve net zero and deliver wider support to Europe through interconnectors. We therefore believe that in most areas across England & Wales the design of the network is already identified, it will only be in specific local situations where this could be subject to change. The more pressing issue is to enable an outcome where connection ready projects are prioritised against this already proposed network design which has already been considered.

To summarise, we believe that further development is required on the ESO's recommended TMO 4 for it to be clear it can deliver the associated benefits in the timescales that are envisaged.

We do not underestimate the challenges of implementing a new process against an existing contracted background. We are supportive of the industry efforts to deliver accelerated connections through the [ESO's 5-point plan](#) and the [ENA's 3-point plan](#) and believe this will have a positive impact on connection dates for contracted customers. However more may be needed to either (a) reduce the pipeline of connections to a more balanced view of what the energy scenarios suggest will connect, or (b) apply the elements of the new process, including Queue Management to the contracted background to ensure fair and equal treatment of all future connections. We would welcome the opportunity to work collaboratively with the ESO and industry to further develop the implementation approach needed to have the desired impact of a successful reform.

[Read the full ESO consultation document for further information here.](#)