

## Update on reform to the electricity connections process following proposals from the ESO

This response to Ofgem's Open Letter "Update on reform to the electricity connections process following proposals from the ESO" dated 19 April 2024, is from National Grid Electricity Distribution plc (NGED), on behalf of NGED's four license areas. NGED is the UK's largest electricity Distribution network and serves nearly 8 million customers in the East and West Midlands, South West and Wales, delivering essential power to millions of homes and businesses across its regions.

We thank you for this opportunity to respond to the views set out in your open letter published on 19 April 2024. We fully support Ofgem's approach of engaging with stakeholders to gather views and drive out an aligned position on whether the ESO's proposal meets expectations or whether further action is needed.

Overall, we are broadly aligned with Ofgem's position set out in Annex A of the Open Letter and the next steps outlined in Annex B. We are also supportive of the ambition to 'go live' with the new process in January 2025, recognising the urgency required to deliver a solution. However, we don't feel that the proposals as they stand go far enough, and we have outlined some additional perspectives that we believe would drive the required improvements for stakeholders. It is also important to note that this proposed change will need to be delivered alongside other Connection Action Plan actions for the reform to be successful.

### NGED's views on Ofgem's position

While significant progress has already been made to address the size of the queue, the number of projects waiting to connect is still growing faster than the ability of current proposals to remove projects from the pipeline. An additional 1,006 demand and generation projects >1MW entered NGED's queue in FY23/24, adding 16GW to the queue. This represents over a third of the existing queue which already stands at around six times more than we estimate is required to meet the Government's 2035 decarbonisation targets.

On top of this, a high volume of customers applying to connect to our network do so without consideration of the viability of their projects, in turn creating a block for those customers with viable projects. It is abundantly clear that bold and decisive action is required to have a significant and enduring impact on the queue and therefore speed up connections for viable projects.

We recognise that the proposal remains at an early stage, and the details are still being developed. We are in the process of working through the specific implications for our customers, but our early understanding of the impact of this reform is captured under the action plan headings below.

#### **CAP 3.1 - Raise entry requirements**

Meeting the proposed land rights requirement could be relatively straightforward for Distribution customers to meet, leading to a significant proportion of customers achieving this in advance of the go live date in January 2025. This is either because they have already secured land rights but haven't yet been asked to provide evidence of them, or because the lack of financial commitment and ease of obtaining land rights are relatively low thresholds. While we support the intent behind the proposal, we are uncertain how effective this proposal will be in the long-term.

We would strongly support additional conditions being applied at Distribution to overhaul the queue, with measures potentially also being reflected at the Transmission level (and vice versa) to deliver an equitable solution for customers where possible.

**CAP 3.2 - Remove stalled projects**

We support the introduction of appropriate 'hold' requirements to retain a queue position beyond Gate 2 and agree that this could be in the form of evidence of project progression and/or financial charges.

**CAP 3.3 - Better utilise existing network capacity**

We believe the proposal has the potential to deliver better utilisation of the existing network capacity. The Technical Limits initiative, aimed at accelerating projects through better utilisation of capacity at the boundary between Transmission and Distribution, delivered clear benefits with NGED already agreeing contracts to accelerate over 1.2GW by an average of 5.8 years. Following the implementation of this proposal and the removal of previously contracted, stalled projects, Technical Limits should be revisited to unlock additional capacity and accelerate even more projects. NGED are launching phase 2 of the Technical Limits work in a webinar scheduled for 7<sup>th</sup> May 2024.

However, significant work will be required to remodel the queue and we need to have confidence that these changes are driving the right outcomes. As we will be expecting customers to commit more financially, we need to provide better offers with more certainty.

**CAP 3.4 - Better allocate available network capacity**

Moving to an approach based on readiness to connect is key to efficient network design and delivery. Ensuring consistency across network operators is essential and we support Ofgem's expectation of TMO4+ to define and recommend a criterion for readiness. However, consideration should be given to the varying lead times between Distribution and Transmission sized projects and whether allocating capacity at the same planning milestone is appropriate.

Further to this, the implementation of TMO4+ will likely lead to a backwards step on progress towards adoption of Distribution Forecasted Transmission Capacity process. The proposals must therefore consider how we optimise the coordination between Transmission and Distribution.

**CAP 3.5 - Improve data and processes, and sharpen obligations and incentives**

We support the intent for data to be made available to enable Gate 1 projects to self-serve for information about how the queue and associated connection dates are developing at their preferred connection point, as they progress to Gate 2.

We agree that there is a clear need to provide customers with clarity and certainty to make the appropriate decisions. To support this, we have improved the data and reporting needed to enhance decision making and target their connections requests through our new reporting suite, [clearviewconnect](#). This brings together valuable connections data and insights for customers and developers in a single, easily accessible format. It provides access to technical capacity data and information on reinforcement works at each of our Grid Supply Points, informing developers which network area offers them the most realistic prospect of the quickest and cheapest connection. It also provides an anonymised view of the Third-Party projects already in the pipeline, enabling customers to see what their connection timeline could look like pre-application and any potential curtailment required if their connection was accelerated under a new non-firm contract.

This is an important step in making the process as transparent as possible for our customers, but we recognise there is more to do here and are supportive of any proposed changes to provide further clarity to customers. We have already shared the [clearviewconnect](#) tool with Northern Powergrid and would be very supportive of rolling this out further to all other DNOs.

We are also fully supportive of the ESO overseeing the necessary improvement to the coordination between Transmission and Distribution to drive more consistency and a better customer experience.

**CAP 3.6 - Develop longer term connections process models aligned with strategic planning and market reform**

For Gate 1 projects to inform anticipatory build, we are supportive of a low-level commitment from Gate 1 customers, as previously mentioned. This will give us a strong indication of market buoyancy in different locations, leading to greater investment confidence in the network. We also agree with Ofgem's intent to futureproof the development of the Gate 2 criteria.

**NGED's views on next steps**

We are fully supportive of the next steps laid out in Ofgem's Annex B and believe that the consultative approach outlined will deliver the best outcome all round. We recognise that in delivering this reform, collaboration across DNOs in driving the change and doing this in step with one another will be critical. We have been encouraged by the significant movement and cooperation we've already seen on connections reform between industry, government, Ofgem and customers, and we need to continue on this path.

To date, the Connections Delivery Board has been a valuable forum for collaboration and alignment on reform. However, with the growing need for urgent action, its consensus-driven approach does not always enable us to move at the pace we need to. We would therefore be supportive of a review of the governance and attendance of this forum to move it to a more directional decision-making approach, which would enable us to deliver reform at a faster pace.

Key to the success of this proposed reform is achieving the right balance of risks and benefits. A thorough and detailed impact assessment that considers customer and network provider perspectives will be critical to driving out a solution that achieves both radical and enduring change. There will be a significant level of disruption – both to customers in terms of additional commitments made of them, and to network providers in terms of any additional work required e.g., undertaking detailed analysis to remodel the queue, introducing new processes to manage the queue going forward, and engagement with currently contracted projects.

We need to be confident that the proposed changes will go far enough in addressing the challenges, and that the benefits provide sufficient counterbalance to these risks. We are supportive of an independent impact assessment being carried out to provide clarity on the impacts to the Transmission and Distribution queues in terms of those projects which may fall away, and those that progress through to connection.

Consideration must also be given towards the differences between the Transmission and Distribution contracted queues. As Distribution customers each hold individual contracts with us as their DNO, we need to understand the potential wider legal implications if the customer is in the Gate 1 holding position but continues to hold a firm Distribution offer. We are therefore supportive of Ofgem identifying and recommending any regulatory and legislative changes required to enable or mitigate risks associated with the proposal. This may require code modifications to e.g., DCUSA and/or license changes as well as modifications to CUSC, all of which will need appropriate support and to be factored into project timelines.

Inevitably, we are expecting that there will be winners and losers amongst our customers through implementing the reform. To address this, we would value Ofgem supporting a joint ESO/TO/DNO approach to customer communications to carefully manage customer expectations and provide support to minimise any confusion and disruption customers may experience.

## NGED's views on whether this proposal goes far enough

The TMO4+ proposal represents another step towards addressing the significant contracted volumes of customers with Transmission reinforcement requirements. However, we don't believe that this alone will go far enough in delivering a solution that is sufficiently radical and enduring. The current size of the pipeline necessitates fundamental change that goes above and beyond the current proposals. Implementing the right change is paramount in supporting the connection of new and existing contracted customers to drive network decarbonisation and value for end consumers.

To deliver successful reform, we will need to include mechanisms that:

- **Significantly shrink and reorder** the current pipeline, to ensure that those progressing viable developments achieve the earliest connection dates possible for their project.
- **Redesign the connections process** to ensure that only viable projects are eligible to apply for a connection at both Transmission and Distribution, and the pipeline does not grow to the volume seen today.
- **Connect an appropriately balanced mix of technologies**, aligning the connections pipeline with realistic requirements of an efficient, future network.

We therefore need to look more broadly than TMO4+ criteria, as this on its own won't go far enough. We are committed to playing a more active role in driving even greater momentum in reforming the whole of NGED's queue. We are therefore keen to explore other options alongside the Gate 2 proposal which could raise the bar further and have a more enduring and radical impact on reducing the pipeline and accelerating projects.

## Other options to consider:

### **CAP 3.1 - Raise entry requirements**

To ensure the proposed changes will deliver the reform we need, we will not only need to make the threshold higher, but also better qualify what 'shovel ready' actually means to clearly identify those projects that are purely speculative, and remove their firm connection dates, whilst improving confidence in network investment.

We support further measures applied at Distribution to shrink the queue and drive alignment across Distribution and Transmission. This could include:

1. Developing **higher hurdles** as part of the new gated process. e.g., raising the cost of obtaining a Distribution connection offer and applying a financial mechanism to holding a connection offer. This would mean that only financially committed projects apply for and hold a connection offer through to connection.
2. **Applying financial instruments** as part of the Gate 2 criteria, mitigating the risk of a disproportionately Distribution weighted queue, as larger Transmission customers may take longer to obtain the appropriate land rights, but have access to greater funding. This could be in the form of fees per MW, security deposits or cancellation fees. Alongside the higher hurdles set out above, this would create a better balance between the risks and costs compared with the rewards they receive once connected.
3. **Reforming Distribution connection offers** for impacted customer types (*noting that further code and/or license modifications may be required*), such as:
  - a. Implementing a 'Gate 1-like' indicative offer at application stage, prior to a customer meeting the Gate 2 criteria.

- b. Applying the Gate 2 criteria at entry to Distribution. This would aim to reduce the duplication of work.

### ***CAP 3.2 - Remove stalled projects***

Additionally, as customers (subject to the implementation of 3a or 3b above) will receive a full Distribution offer prior to entering Gate 1, we strongly support the addition of conditions to hold a Gate 1 position and minimise the inefficient use of resource. This would also support improved anticipatory network build e.g.:

- The financial commitment to holding a connection offer in Gate 2 needs to be much higher e.g., a £/MW charge.
- Implementing a Gate 1 time limit or financial holding charge would minimise speculative applications.

### ***CAP 3.3 - Better utilise existing network capacity***

Further ideas for consideration include:

- Post-implementation, revisit the Technical Limits to unlock additional capacity and accelerate a greater number of projects, making better use of existing network capacity.
- Carry out analysis to estimate accelerated connection dates based on expected impact of the Gate 2 criteria and understand potential benefits for customers.

### ***CAP 3.4 - Better allocate available network capacity***

At present, customers have received long connection dates due to a combination of stalled projects holding capacity and a significant volume entering the queue, reducing our ability to allocate capacity to shovel ready schemes. We agree that the proposal has potential to support a better allocation of capacity to viable projects.

However, we need to ensure that any criteria agreed under TMO4+ also consider the longer-term impacts. As part of delivering against the Connections Action Plan, the Distribution Forecasted Transmission Capacity process is aiming to achieve the following objectives:

1. Enable customers to better understand the Transmission impact (both time and cost) for firm access to their potential connection more quickly.
2. Offer customers the best outcomes that are available (e.g., they won't be artificially delayed if there is capacity available).

With the implementation of TMO4+, it is important that we understand that delivery against objective 1 above will be weakened, as timescales for firm offers are likely to be longer for customers. However, there is potential for a better outcome on objective 2.

Currently, a major barrier for Distribution customers is the significant pass-through of Transmission costs, as customers continue to hold full liability of the full costs of significant works, deeming their projects unviable. Further work is needed on connection charging methodologies to assess whether existing approaches strike the right balance between socialisation of costs and targeted price signals through the 'user pays' principle.

### ***CAP 3.5 - Improve data and processes, and sharpen obligations and incentives***

Additionally, defining clear and common evidence-based regional pathways via consistent processes, and ensuring coordination with national policy, will support targeted investments where needed and

reduce speculative connections. We also recognise that this will unlock capacity availability today for projects wanting to move forward. However, we recognise we need to do more to inform current and future availability. To address this, our DSO is committed to improving data on the visibility of network capacity, strategic planning of the system and exploring the role of compensated flexibility markets to improve network utilisation and accelerate connections.

Another area that could be further improved is the sharing of technical notes from Transmission so we can make more informed decisions around potential impacts to the Distribution queue. This lack of visibility currently creates challenges and is a barrier to more effective planning.

### ***CAP 3.6 - Develop longer term connections process models aligned with strategic planning and market reform***

Even with these additional measures, the right outcomes won't necessarily be achieved e.g., those with greater access to funding shouldn't always be the ones that are connected. We strongly encourage the exploration of alternative proposals that align with the transition towards a strategically planned network, that is not determined purely by customer applications. We consider this to be a key weakness of the TMO4+ proposals in that solely allocating capacity to a customer based on their readiness to connect potentially diminishes the importance of security of supply, system efficiency, strategic network planning and ensuring the right energy mix is realised to meet GB needs. To fulfil our obligations of delivering and operating an efficient network, ensuring security of supply for our consumers, and facilitating the transition to net zero, these additional elements need to be taken into consideration.

A more strategic view of technology and location is therefore required to inform future network design. We understand that NESO's new and expanded remit covers all of the areas listed above and is working on driving out clarity on the roles, responsibilities, and governance of the Regional Energy Strategic Planner (RESPs). We are keen to work with NESO and play a leading role in designing the necessary reform to address each of these. The role of the RESPs will be critical in driving out a more strategic approach to network development, moving away from being technology and location agnostic and driving better alignment. Nevertheless, RESPs will take time to implement, and it is important to identify whether any interim steps are needed.

We also need to take into account that the impact on the Distribution queue will be different to the Transmission queue and this needs to be considered when designing the reform. The contractual obligations we have with individual customers are different to those at Transmission level, with potential legal implications to consider. There is also a risk that if we solve for Transmission, this could have unintended consequences of negatively impacting Distribution and potentially 'flooding' our queue. We also recognise that there is more thinking to be done around the Transmission/ Distribution boundary to make this work more efficiently.

Connection incentives should be designed to encourage DNOs to deliver infrastructure fit for a low-cost transition to Net Zero and to develop a connection-ready network. We are aware of the Connections Incentives review being undertaken by Ofgem currently and would welcome this proposal and the Connections Incentives review outputs being reviewed holistically.

Finally, in proposing these changes, we would support Ofgem in being forthright. We have the opportunity to consider a radical approach and ensure that the reform delivers the change that is needed. It is better to be bold and disruptive once rather than implement several incremental changes that don't deliver what's needed and ultimately end up being more disruptive to our customers.