Connection Reform: NGET response to NESO methodologies and code modification consultations

Executive summary

2 December 2024

Introduction

This document represents the views of National Grid Electricity Transmission plc (NGET) in response to the package of Connections Reform consultations for the relevant code modifications and supporting methodologies published by NESO in November 2024. Within it, we outline our views on each of the methodologies and code workgroup recommendations as well as highlighting key risks and recommendations for Ofgem (the Authority) to consider prior to making their final determination on the proposals.

As the Transmission Owner responsible for building and maintaining network infrastructure in England and Wales, we believe that the timely delivery of definitive Connections Reform sits on the critical path to realising the Government's ambition for Clean Power by 2030 (CP2030). It is only by reducing and reordering the connections pipeline, through the combined lenses of readiness and strategic need, that we will be able to determine the full extent of the works required to achieve our clean energy targets. Doing this will not only offer our customers greater clarity on their connection locations and project timescales, it will also unlock the full potential of our RIIO-T3 business plan, providing us with the assurance we need to invest strategically in our network, delivering efficient and economical solutions for end consumers ahead of need.

NGET's overall position on the proposals consulted upon

We are supportive of the progress made on Connections Reform and believe the proposals largely align to our strategic aims. It should be stressed, however, that we retain concerns around certain methodologies, their interactions with both CP2030 and our RIIO-T3 business plan, and the implementation of reform more generally. We provide further detail, in addition to our proposed solutions, in the sections below. This figure outlines our ambitions for Connections Reform and the extent to which the proposals outlined within the code modifications and supporting methodologies achieve them:

NGET's ambition for Connection Reform	Will the proposals deliver on our ambition?
1. Reduce and re-order the connections pipeline focusing on removing non-viable, speculative and lesser-progressed projects	✔The proposals provide scope for significant pipeline reduction, combined with Gate 2 criteria, the proposals will likely reduce oversaturation and speculative works. ? However, there are significant risks regarding the timescales for implementation and treatment of demand
2. Only allow viable projects to enter the pipeline and hold connection agreements	✔ Land requirements alongside technology caps likely to ensure only viable projects receive a full connection offer. ✔ Likely to enable projects that are ready and needed to connect sooner
3. Ensure that connection decisions are made via the lens of **strategic need** in addition to **project readiness**	✔ Proposals allow for full alignment of existing connections to overall energy and system needs to reach net zero
4. Connections must be **part of a wholistic energy strategy**, **aligned to CP2030** and **compatible with future SSEP**	✔ Attempts have been made to better align required connections to future network and societal need. ? However, interaction with CP2030 needs clarity and robust governance on project designation for it to be successful.
5. Move away from incremental expansion of the network, driven by individual projects, **allowing TO's to invest strategically**	✔ CP2030 and Connections Reform will provide clarity for longer term strategic network design. ? However, timing of CP2030 may result in poor alignment with NGET's RIIO-T3 business plans. Flexibility is crucial to enable TO's to adapt to the changing landscape and invest strategically.

NGET view on the Connections Reform code modifications

Throughout the Connections Reform process, we have provided proactive expert input into the development of the proposals, as a member of the code modification working groups and an STC Panel member.

We agree that the minimum viable product 'TMO4+' gated connections process is the best option out of those considered by the workgroup and therefore should be implemented. It will apply more proportionate barriers to entry via assessments against project readiness and system need and in turn supports the ability of the network licensees to deliver timely and efficient connections. However, the benefits of the TMO4+ proposal can only be realised in conjunction with:

- **Approval and successful application of the reformed TMO4+ connection arrangements to the existing queue *prior* to convening new application windows:** The network licensees need sufficient time to restudy / recalibrate the contracted background on the basis of the new Gate 2 criteria and CNDM methodologies, plus time to ensure developers sign up to their revised offers. This must conclude before new projects are allowed to be added into the newly 'reformed' connections pipeline. **(See *NGET recommendations* – no.1 below)**

- **A robust and enforceable Gate 2 criteria methodology:** This should not only factor project readiness but the need for the project in the context of credible strategic energy policy direction. (**Note:** we believe that the current drafting of the Gate 2 criteria methodology provides this)

- **Strong post-offer Queue Management enforcement:** This would ensure that projects that are allocated firm capacity / queue positions under TMO4+ progress as anticipated to completion, or have their projects terminated to enable others to take their place, de-risking TO network investments.

- **Supporting STC Procedure documentation:** The full impact of the changes to STC needed for TMO4+ are still not fully understood as the drafts of the supporting procedures (STCPs) have yet to be shared. This will be needed to support Ofgem's determination of the package of code changes, so must be developed swifty by NESO in collaboration with other STC Parties.

NGET views on the supporting methodologies

Gate 2 criteria

Top-line view: *We support the proposals to assess project readiness alongside system need but further work must be carried out to prevent oversaturation of demand and to ensure CP2030 alignment with our RIIO-T3 business plan.*

Implementation of regional technology caps will make Gate 2 more effective, preventing oversaturation of certain technologies and delivering a more balanced network. The alignment of Gate 2 criteria with CP2030 also means that it will act as an interim strategic plan out to 2035, allowing us to coordinate works, and progress towards net zero in a more effective manner ahead of the longer-term implementation of the SSEP. However, two key risks are present:

- **Potential for misalignment with NGET's RIIO-T3 business plans**: With CP2030 scenarios still being developed as we publish our submission for the RIIO-T3 price control, there is a critical risk that our investment plans may not fully align with the Government's strategic requirements. This is why flexibility must be baked into the price control framework, ensuring that investment plans can adapt to an uncertain environment. **(See *NGET recommendations*, no.3 below)**

- **Assessment of demand connections**: As the proposals stand, transmission connected demand applications, which represent a significant proportion of contracted capacity, are subject to only land readiness criteria at Gate 2. Without a consistent strategy or explicit market signals being applied, the risk of oversaturation could become significant. **(See *NGET recommendations* – no.2 below)**

Project Designation

Top-line view: *We are supportive of the effort to enable innovative or beneficial technologies that sit beyond the scope of CP2030, but this must be underpinned by robust governance.*

The Project Designation Methodology builds in a future proofing mechanism, allowing emerging technologies, currently out of CP2030's scope, to connect, whilst also considering future network requirements and societal need. This methodology will, therefore, allow the connections process to remain flexible, evolving to meet future challenges when they arise. While are supportive of this methodology, there is a clear risk that:

- **A lack of clear governance may lead to this being a less onerous route to connection for customers:** This methodology should not allow for the bypassing of new, more stringent, requirements on generators but rather ensure a workable way to deliver connections for projects that offer significant benefit to either consumers or the wider network. **(See *NGET recommendations* – no.4 below)**

Connections Network Design Methodology (CNDM)

Top-line view: We support the overall intent, but close alignment is required with networks and more realistic implementation timelines are needed to realise its full benefit.

The methodology proposes an effective way of reordering the connections pipeline and supports the intent to coordinate the process of network studies, ensuring uniformity across industry, whilst providing transparency of study considerations for our customers. However, we see three key risks associated with the implementation of these proposals:

- **'Gate 2 to whole queue' implementation timescales could be challenging:** The proposed timescales for implementation of TMO4+ to the existing queue currently only allow network companies a few months to conduct the necessary design studies to reissue customer contracts. Clearly, effort is needed on the part of NESO and the network companies ahead of go-live to plan this workload (**see NGET recommendations no.1 below**) to de-risk the ambition to convene a window for new applications in 2025. We believe there is significant potential for inefficient network design outcomes for customers should two offer windows substantially overlap, which in turn presents a risk to efficient delivery of CP2030 ambitions.

- **Interaction of CP2030 and future strategic plans:** Whilst the CP2030 report marks a positive attempt to coordinate future energy planning, as it stands, the CNDM does not provide sufficient comfort that the future SSEP or the tCSNP2 refresh will offer conclusions that are consistent with its findings. This lack of clarity opens the possibility that we would have to revisit investments, presenting a significant delivery risk. **(See *NGET recommendations* – no.5 below)**

- **Relationship with the SQSS process:** As proposed, the CNDM does not give appropriate consideration to works that are required to maintain a resilient, secure, and compliant network and the time required to do so. As such, customers will not have complete awareness of the full scope of works required to connect their projects. **(See *NGET recommendations* – no.6 below)**

Proposition on financial instruments

Top-line view: An additional financial instrument would improve the likelihood of project completion; however, this must be done in a proportionate manner.

We agree that a financial instrument should be incorporated into the connection arrangements, ensuring that projects that have been allocated firm network capacity and a queue position at Gate 2, and are therefore subject to network investment funded by end consumers, are incentivised to progress to completion.

However, we acknowledge the early feedback from the developer community that this must not be set at a level that makes transmission connections uneconomic. The existing proposals seem to set the bar too high, explicitly favouring those developers with the deepest pockets. We are also wary of the impacts of a high financial instrument for DNOs and their embedded customers. We await the outcomes of the NESO's call for input to developers with interest to understand how these proposals could evolve.

NGET recommendations

In response to the NESO consultations on both the code modifications and supporting methodologies, we provide the following recommendations which if adopted will help mitigate the key risks that we have raised above:

Recommendation 1: There needs to be a holistic and detailed assessment of the workload to complete 'Gate 2 to Whole Queue' prior to convening the first application window.

The timescales for the implementation of Connections Reform, particularly Gate 2 to Whole Queue, must be assessed and understood in full detail prior to go-live so that the NESO and TOs can complete all required design studies, undertake deliverability assessments, and reissue updated customer contracts (including requests for advancement). We are clear that there should be no overlap between recalibrating and re-offering the existing queue and the opening of new application windows. To do so would create unnecessary confusion and ambiguity, which could prejudice the quality of connection offers in response to new applications.

Recommendation 2: Additional measures to consider for the strengthening of Gate 2 criteria.

We believe G2 criteria should expand to consider additional factors- to ensure full and fair reform to the connections process. Firstly, to avoid an oversaturation of demand that could cause a negative impact on connection timescales for generation customers, we believe that the Government's finalised CP2030 plan should consider both demand and generation in conjunction across its full scope, which could then be accounted for in G2 criteria. This would ensure that customers are treated fairly and, where they do provide a wider societal, economic or network benefit, they could be considered via the project designation route. Secondly, we also feel that there would be a clear benefit from enacting generator licensing/assurance arrangements at an earlier stage within the process. This would ensure the validity of organisations participating in the connections market, enhancing delivery confidence, and enabling greater value through viable investments for end consumers.

Recommendation 3: Flexibility needs to be granted within RIIO-T3 to ensure our business plans can adapt post CP2030 / Connections Reform implementation.

We have expressed previously our ambition to build more ahead of specific customer need to enable the efficient connection of customers. We understand that our current view of the future network may change post CP2030 / Connections Reform implementation, due to clearer guidance from Government and changes to customer's investment decisions as a result. We ask Ofgem to consider the need for a more flexible approach to delivering the required network infrastructure to enable customer connections and reflect this within their RIIO-T3 determinations.

Recommendation 4: Development of clear and robust governance arrangements to support project designation and associated bay reservation is needed.

To effectively deliver the aims of the project designation methodology, there needs to be robust governance arrangements developed. This governance and supporting guidance, needs to balance the need for project designation, delivering connections in a timely manner for only those projects that deliver a significant societal / network benefit, whilst also providing flexibility to adapt to the rapidly changing market in which we operate. More specifically, TOs charged with connecting relevant projects need clear guidance to aid the coordination of works for new technology types where necessary, as well as proactive conversations regarding the potential of reserving bays at our substations – e.g., confirming this action is economic and efficient use of network assets for end consumers.

Recommendation 5: Governance is required to outline CP2030's interaction with future energy plans.

We believe that NESO should put formal governance in place to outline the process for the transition to a longer-term strategic plan, stating with clarity that the future SSEP will be grounded in the same pathway as CP2030. The tCSNP2 refresh should also be timed to make sure that the outputs of connections reform are baked in, thus ensuring that we are not designing a post-2030 network before the pre-2030 works are known.

Recommendation 6: CNDM needs to interact fully with the SQSS process and provide transparency for customers.

Works specified as outputs to maintain network security should be given the appropriate consideration, and visibility must be provided by the NESO to customers on the required works to enable their connections, alongside those for a compliant network. Therefore, these works should either be mentioned in customer contracts, or another route provided for customers to be aware and understand the network requirements.

Conclusion

NGET are broadly supportive of the methodologies and code modifications underpinning the creation of the new connections process and, as a result, recommend that they are approved in principle by Ofgem at the end of Q1.

However, we have been clear that the risks and considerations particularly those pertaining to timescales, interaction with RIIO-T3 and CP2030, are crucial to effective implementation and must also be carefully considered in full to ensure successful delivery. NESO, Ofgem and Government must continue to work closely to address these issues. Ongoing collaboration between NGET, NESO and the other network companies throughout the coming months is also key and we are committed to ensure effective preparation and data transfer and to deliver an efficient implementation of the new connection arrangements.

Ultimately, a manageable connection pipeline and a future-proofed connections process will be crucial to securing the reliable, balanced, and cost-efficient network that will underpin the successful delivery of the Government's clean power mission. We look forward to working across industry to achieve these objectives.