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Consultation on Ofgem's Minded-to Decisions on the initial findings of the Electricity Transmission Network Planning Review

This response represents the views of National Grid Electricity Transmission (NGET) only. As NGET we own and operate the electricity transmission network in England and Wales. We are responsible for ensuring electricity is transported safely and efficiently from where it is produced, reaching homes and businesses safely, reliably, and efficiently. We facilitate the connection of supply and demand customers to the transmission system. We are investing to adapt and develop our transmission network to connect new sources of low carbon and green energy to homes and businesses.

We welcome the opportunity to respond to Ofgem's Minded-To decision on the Electricity Transmission Network Planning Review (ETNPR) consultation. Electricity networks will play a critical role in the energy transition, and it is important that the industry arrangements adapt and evolve to enable the required transformational changes across the whole energy economy to deliver net zero.

As we detailed in our response to your previous consultation on this topic, we strongly agree with the overarching aims of the ETNPR.

In particular we agree that there is a requirement for:

- A holistic and co-ordinated central view of strategic electricity network infrastructure requirements, in the context of the broader energy system, led by the FSO. We therefore fully support the overarching aims and objectives of the ETNPR as defined in this consultation although it is unclear yet if these will be achieved, given there is limited detail contained in the consultation on how the CSNP will be delivered.
- Optimisation of the design of the ET network together with other energy sectors and systems e.g., considering how renewable energy supply or hydrogen futures interact with ET.
- Holistic planning of strategic elements of onshore and offshore networks to support all stakeholders, in better understanding how these projects inter-relate, to support planning

bodies and local communities in the planning and consenting process, and to surface opportunities for coordination and innovation.

We recognise that this consultation does not include detail on how the CSNP will be developed and that further work will take place to define this. In particular, impacts on the current and future roles of the FSO and TOs in network planning need to be understood in order to understand the impact of these proposals. This is critically important in ensuring the success of any new planning process and ultimately in ensuring that we develop the right transmission infrastructure at the right time to support the net zero transition.

Pending further detail in future consultation processes, we would like to raise the following concerns from the detail provided in the minded-to decision consultation:

- The role of the FSO should be one of co-ordination of industry parties to develop the best holistic view of network development requirements, drawing on the expertise of others to supplement their own. If the FSO develop the CSNP in isolation it will stifle innovation and may result in a sub-optimal output that is not deliverable. In particular, the FSO must ensure proposals are consentable and that any CSNP output is sufficiently robust and detailed that the delivery organisations have a solid foundation on which to consult with stakeholders and ultimately consent the project.
- We do not yet have a clear definition of ‘strategic infrastructure’ (noting there will be a future consultation on this), or clarity on roles and responsibilities and how these might be expected to change under the proposals. It is therefore not yet clear what the impact of the proposals will truly be. This makes it difficult to comment on the accuracy of the Impact Assessment. In any case, irrespective of how works are categorised, consideration must be given to how transmission network planning processes are effectively integrated to ensure an optimised set of reinforcement solutions is developed.
- The scope of the CSNP is proposed to be all load-related investments and will be updated every 2-3 years. All load-related investments include major new transmission infrastructure as well as customer connection works and smaller, local system upgrades. There will be a lot of movement within customer connections and smaller network reinforcements between CSNP iterations and these require a flexible, faster decision-making process to support them progressing in a timely way. Future network planning processes must not restrict the optimal connection design and/or timing of customers works or smaller reinforcements due to the proposed timings for updating the CSNP. We believe further consideration of how to reform the connections process to ensure it best enables the net zero transition is critical when considering broader changes to network planning activities.
- The skills challenge must not be underestimated as the FSO is established and has to develop new skills and capabilities to ensure it can effectively deliver a truly whole system approach to energy system planning. Depending on the final allocation of roles and responsibilities, there is a risk that the FSO will recruit from delivery organisations such as TOs, DNOs, supply chain partners etc. to upskill in new areas to deliver the CSNP. Given these skills will still be critical in these organisations as well, this may reduce the ability of those same delivery organisations to deliver the outputs of the CSNP, along with their other duties. This challenge

needs to be addressed collectively by the industry to ensure that we are building capabilities in the right places to deliver consumer outcomes.

Our recent, collective experience of the Holistic Network Design (HND) development should form the basis of a lessons learned activity between BEIS, Ofgem, ESO, TOs and developers before any further work is done on ETNPR development. This will ensure we build on the work done to date and set ourselves up to effectively plan the transmission network required to enable the net zero transition.

Detailed responses to each of your questions are in the Appendix to this letter. If you have any questions or would like to have any discussion about the content of this letter then please contact me.

Yours faithfully

Lydia Ogilvie

Director, Network Strategy & Operations

For and on Behalf of

National Grid Electricity Transmission plc

APPENDIX: Consultation Questions & Responses

Question 1: Do you have any concerns with our minded-to decision?

We agree there is a need for a holistic and co-ordinated central view of strategic electricity network infrastructure requirements, in the context of the broader energy system requirements, and that an FSO with the right capabilities will be well-placed to facilitate this. We fully support the overarching aims and objectives of the ETNPR as defined in this minded-to decision consultation. The ability of the FSO to successfully deliver a robust, fit-for-purpose CSNP will be determined by the detailed processes that enable it. Working collaboratively across the industry to develop the detail will be critical to ensuring a robust process moving forward.

We do not however believe that all load-related work should be considered strategic and that was not the intention of the original ETNPR consultation. This is important to ensure that smaller-scale, local customer connections and system reinforcement works can be developed at the required pace to deliver net zero. While we note that the definition of strategic will be consulted on at a later date, we suggest framing a definition around increasing the boundary capacity of the Main Interconnected Transmission System (MITS) could be an appropriate way to consider defining 'strategic investment'.

Smaller, non-strategic infrastructure projects should include load-related customer connections, existing system upgrades, non-load related works, and critical works to ensure SQSS compliance and maintain security of supply. For non-SI value is derived from existing network owners being able to progress at pace and find the optimal solution, and/or for the plan to be flexed as required, when requirements locally change. The TOs should develop these projects from inception of need, providing information to the FSO as required to ensure there is effective co-ordination with strategic infrastructure planning.

We still have concerns that the role and contribution of incumbent Transmission Owners (TOs) has been underestimated and oversimplified in this consultation. This is both in terms of power system analysis and design, and in considering the physical characteristics and impacts of infrastructure, and any potential mitigations. The extent and complexity of the existing TO role must be adequately considered to ensure that the impacts of proposals are properly understood.

We strongly advocate for a collaborative approach to developing the CSNP. The learnings from the HND, Pathfinders and competition support a strong need for collaborative development of the CSNP instead of engaging purely through formal consultation. While it is possible to perform studies and plan, the delivery perspective is crucial to make it happen. We therefore advocate for delivery bodies to develop and design consentable, deliverable investments.

The proposed timescales of 2-3 years between updates is an improved position relative to current annual processes to ensure longer-term clarity on longer-term, strategic investment needs. The challenge remains that it does not work for all load-related investments, and we must be able to be more agile where customers and the network requires it e.g., local customer connections that may want to move from application to connection within the proposed 2–3-year timeframe.

Consideration should also be given to the impact of broader network planning reform when significant work is required across the industry to look at how investments are accelerated to meet Government 2030 targets. It is therefore pertinent to focus on ensuring delivery and delivering reforms that enable it.

Question 2: Do you agree with how we have estimated the scale of load related investments?

When considering the scale of load related investments, it is important to not just consider the associated CAPEX value, but also the volume of projects that need to be co-ordinated through the CSNP. These are both important when considering the overall scale and complexity.

We believe that the scale of load related investments has been underestimated. This is because investments initiated through other routes such as Uncertainty Mechanisms (UMs) and Medium Sized Investment Project (MSIP) have not been included. While these projects may not be high-value relative to LOTI schemes, they represent a much higher volume of work e.g., they include most customer connection volumes we will connect in RIIO-2.

The consultation proposes that “all load-related ET network developments are considered as part of a single strategic network planning function that includes complete oversight and coordination of all network needs and developments by a single independent body”. The extent, complexity of transferring and aggregating this work into a new CSNP organisation, the capability build required, and the time to carry out this reform should not be underestimated and presents a significant risk to delivery of outputs critical for 2030 and beyond.

The CSNP should focus on genuinely ‘Strategic Infrastructure’ (SI), which should be limited to where there is an expectation of a requirement for new, significant transmission infrastructure routes and where there are complex interactions with multiple stakeholders and/or other adjacent policy decisions (e.g., hydrogen). It is this scale of infrastructure development where the CSNP adds value, given the need for certainty of requirement, longer lead-times for delivery, complex consenting, and higher environmental and community impacts that may require mitigation. A robust and fully endorsed CSNP would be powerful in supporting these programmes of work.

For other, smaller projects, e.g., load-related customer connections, existing system upgrades, non-load related works, and critical works to ensure SQSS compliance and maintain security of supply, the balance tips. For these, value is derived from existing network owners being able to progress at pace and find the optimal solution, and/or for the plan to be flexed as required, when requirements locally change. As such we propose strongly that these should be non-SI and that any need for non-SI to be included in CSNP must be fed in directly by the TOs.

Question 3: Do you agree with the impacts of introducing the CSNP that we have identified? Do you think there are other impacts not currently addressed?

We welcome the consideration given to assessing the impacts of the proposals made. It is however difficult to establish the accuracy or otherwise of the impacts in the absence of a definition of strategic infrastructure. This is further compounded by the lack of clarity on how CSNP would be implemented. Nonetheless, we would like to draw attention to the points below:

- We do not foresee the proposal reducing the need for skills for the sector or in the TO organisations given the volume of work required in future and the different skillsets that are required by the FSO in a whole energy system planning role, and the TOs and delivery organisation who plan, design, build and operate the networks. As the FSO seeks to build new skills and capabilities for the roles they will do in future, the risk remains that the FSO will recruit critical

skills that are still needed in delivery organisations such as TOs, DNOs, supply chain partners etc. to upskill in key areas to deliver the CSNP. This may reduce the ability of the same delivery organisations to deliver the outputs of the CSNP, along with their other duties. This challenge needs to be addressed collectively by the industry and we should make sure that changes made do not exacerbate this issue unnecessarily.

- We agree that the FSO will be best placed in co-ordinating and leveraging the expertise from the various stakeholders to create a robust CSNP to minimise the overall increase in resources required across the industry to deliver it. There could be a significant impact on customer connection timescales if their connection process is linked to a 2-3 yearly update to the CSNP, given they are a load-related project. Consideration must be given to ensure the process works for all load-related projects if they are to be part of CSNP, and that there aren't any unintended consequences of developing arrangements with more of a focus on new, major transmission infrastructure. For example, Table 7 outlines an expectation of quicker connections for generators, but it is not clear how this would be the case.
- In Table 8, we believe the impact of the FSO failing to deliver quality outputs would be high. We also believe the impact of options and decision-making being worse given one organisation is leading the process is also high. While these impacts could be mitigated, unmitigated they have a significant impact on the ability of the industry to deliver our net zero targets and could result in failure to achieve planning consents or stranded investment which is ultimately paid for by GB consumers.
- When further detail is available, we would welcome an updated quantitative and qualitative assessment of the impacts of implementing CSNP to ensure that it provides consumer benefit, given the potential costs involved.

Question 4: Have we omitted any inputs, activities, outputs, or impacts that should be included?

- Our recent, collective experience of the Holistic Network Design (HND) development should form the basis of a lessons learned activity between BEIS, Ofgem, ESO, TOs and developers before any further work is done on ETNPR development. This will ensure we build on the work done to date and set ourselves up to effectively planning the transmission network required to enable the net zero transition.
- We believe further consideration of impacts on the connections process, and the need for reform of that process, is necessary when considering how to best deliver the desired outcomes in the consultation. This is critical to ensure our processes enable the net zero transition and give customers clear and timely decisions that support their investment, consenting and deliver activities.
- Under the section which focuses on future activities and next steps, the working group of BEIS & Ofgem should be extended to include other stakeholders in developing CSNP and defining strategic investments. It should go beyond simply consulting to active participation in order to be efficient in use of time, reduce uncertainty and ensure the right expertise is included to yield the expected holistic value of introducing the CSNP.

Question 5: Have we included any inputs, activities, outputs, or impacts that should be omitted?

- None that we have identified.