James Norman

Head of Connections Reform

ESO

Your ref

Our Ref

Date

28 July 2023

By email:
box.connectionsreform@nationalgrideso.com

Contact / Extension

Lynne Bryceland

0141 614 3124

Dear James,

GB Connections Reform

SP Energy Networks (SPEN) represents the distribution licensees of SP Distribution plc (SPD) and SP Manweb plc (SPM) and the transmission licensee, SP Transmission plc (SPT). We own and operate the electricity distribution networks in the Central Belt and South of Scotland (SPD) which serves two million customers, and Merseyside and North Wales (SPM) which serves one and a half million customers. We also own and maintain the electricity transmission network in Central and South Scotland (SPT). As an owner of both transmission and distribution network assets, we are subject to the RIIO price control framework and must ensure that we develop an economic, efficient and coordinated onshore electricity system.

We are strongly supportive of the Electricity System Operator (ESO's) endeavours in this area to press ahead with proposing the radical reforms which will be required to deliver this Net Zero ready system. We welcome the opportunity to respond to this Consultation on Connections Reform. This response provides SPEN's views on the immediate need for fundamental reforms to the existing connections process.

Challenges with the Current Network

Electricity networks are active enablers of the Net Zero transition and the British economy. GB network companies are at the forefront of the decarbonisation of the energy sector. As of the date of this letter, the ESO TEC register shows well in excess of400GW of contracted and installed transmission capacity, with the contracted pipeline continuing to grow on a daily basis nationally, with connection dates ranging from 2025-2037. This contracted generation is well in excess of maximum winter peak demand across the UK of 58.3GW and also in excess of all of the ESO's 2023 Future Energy Scenarios' ("FES") range of 125-143GW required for Net Zero pathway to compliance.

Industry policies such as 'Connect and Manage', the Networks Options Assessment, Electricity Ten Year Statement and supporting FES have cemented the approach of investing and reinforcing the

network at the time of complete certainty of need, rather than adopting a strategic and anticipatory investment approach to stimulate investment in anticipation of future network use, more consistent with the upwards trajectory of customers seeking to connect Low Carbon Technologies ("LCTs"). These regulatory approaches have constrained investment to the point that today major reinforcement of the transmission and distribution networks is needed quickly to allow LCTs to connect on a timely basis. The Centralised Strategic Network Plan ("CSNP") will be key to moving towards 'invest then connect' and away from the current 'connect and manage' approach across the transmission network.

The need for immediate Strategic Connections Reform

We recognise that there is a fundamental connections challenge and immediate reform is needed to support our customers and the delivery of Net Zero ambitions. It is also important that the GB system is able to deliver a Net Zero-ready system in a sustainable way, making best use of the resources that the UK has to hand. SPEN is strongly supportive of the ESO's Five Point Plan as well as the work of the ENA's Strategic Connections Group ("SCG"). In delivering strategic connections reform it will also be important to ensure that sufficient capacity headroom remains available, on the transmission network to facilitate background incremental demand growth due to societal decarbonisation. The rate of this demand growth is forecast to significantly increase based on transitioning existing fossil fuel technologies (e.g. petrol/diesel cars, natural gas cooking and heating) to electricity. The connections processes at transmission must therefore ensure that sufficient network capacity remains available for use by smaller customers as they transition to LCTs without risking network compliance, otherwise this could risk delaying the transition to LCTs and inhibit legislated decarbonisation targets. The capacity requirements and network headroom must remain coordinated at the T/D interfaces, and the work of the ENA SCG is important in this regard.

Responding to the current connections challenge will require a focus from all parties on delivering the following solutions for a reformed connections process going forwards, many of which are brought out in the ESO's TM04 model, which SPEN strongly supports.

(i) Moving to a 'First Ready, First Served' connections process at the earliest opportunity

We believe the ESO's TM04 proposal, the most radical of the proposals within this consultation, is what is required, given the extent of the current connections challenge. Having applications align with windows will not only help the ESO and TOs process the applications, but it will also bring much needed efficiencies and coordination to the system design element, whereby applications will be assessed holistically, to determine what is needed at a wider level, rather than on the current project by project basis. This approach to assessing and designing the system holistically will also aid the Centralised Strategic Network Design. Having only one window each year will by no means 'close' or 'slow down' the connection applications process to developers, rather it will provide efficiencies and more certainty of design to connections customers. This approach is used in several countries to manage applications for example, Ireland[1] and California[2] (USA).

(ii) Approve a time-bound derogation from existing licensed obligations in order to overhaul the existing queue now

Across SPEN's networks, and particularly in transmission, we are seeing a contracted pipeline for connections, growing on a daily basis. SPEN's contracted transmission pipeline is currently sitting at c.48GW, with a further 5.8GW already connected. Across Scotland, the connected and contracted transmission pipeline is currently in excess of 100GW, with a winter peak demand in Scotland of 5GW.

---

[1] *Ireland's regulator introduced connections windows in 2020: https://www.cru.ie/about-us/news/enduring-connection-policy-24-ecp-24/*

[2] *The CAISO runs an annual connections window for transmission applications every April: http://www.caiso.com/Documents/Presentation-1-InterconnectionApplicationOptions-Process.pdf*

For transmission connections, we have seen unprecedented levels of connection application 'clock starts', i.e. when the TO receives the connection application offer from the ESO for processing to licensed timescales, in the first half of 2023. As of June 2023, we have processed more transmission connection application 'clock starts' than SPEN produced in all of 2022. We believe this influx in connection applications is a reaction to the current reform work, with developers keen to 'bag' a place in the queue now, ahead of more fundamental connections reform. With strategic reform forecast for delivery in mid to late 2025 at the earliest, we expect the influx in applications to continue for the next 2 years.

Network design solutions are becoming more complex than ever, due to the interactivity of projects in the current 'first come, first served' connections queue which is exacerbated further due to developers 'bagging' capacity, as mentioned above. This is making it increasingly challenging for TOs to assess and design connection offers to the current licensed timescales, for both draft and finalised offers. At a time when the ESO and TOs are struggling to design and process the daily increase in increasingly complex connection applications, the TOs are also being asked to undertake wider reform work in reviewing the Current Planning Assumptions (CPAs), updating of Transmission Reinforcement Works (TRWs), facilitating TEC Amnesty applications and addressing the impact of the ESO's forthcoming BESS policy. Alongside wider system planning reforms under the CSNP, the HND Follow up Exercise and detailed design under the HND.

Whilst we are supportive of the need for all of these activities, it must be recognised that this wider reform work is putting significant additional workload pressures on specialised teams, who are already struggling to manage the influx in transmission connections within short licence connection timeframes. In order to allow this important work to be undertaken, which will determine whether some connections can be accelerated, we are proposing a short-term pause in the acceptance of connection applications to the transmission network which will allow for the ESO, TOs and Ofgem to streamline the current queue, ensuring a strong starting foundation, from which more fundamental connection reform can build upon.

(iii) Timely approval of the Queue Management principles proposed in CMP376

More efficient and effective management of the current and future connections queue must be part of these reforms. The Queue Management proposals, as per CUSC Modification Proposal 376 – ("CMP376"), and in particular Workgroup Alternative CUSC Modification 7 ("WACM7"), are necessary to allow for a fair and effective management of the current and future connections queue. With some customers having to wait more than 10 years for a connection, it is important that those projects which are not moving forward with their development are removed from the queue, allowing 'shovel ready' projects timely access to the network. SPT supports Reactive Queue Management + (RQM+) whereby a network capacity gap is allocated to a 'priority' project which has proven that it is progressing forward and will be 'ready' to connect to the network. This approach aligns with the 'First Ready, First Connected' approach.

To ensure the Queue Management process is as fair and effective as possible, consistent application across projects is required. Both new and existing projects should therefore be subject to Queue Management clauses, ensuring no party is prejudiced by the arrangements, and that consumer and system benefits from removing stalled projects from the queue are fully realised. Whilst no process is infallible, we believe that a robust policy on this will also strengthen other industry objectives and initiatives, most notably the work being undertaken by the ENA's SCG which is examining both queues at distribution and transmission level and is looking to effect solutions with the same principle aim as CMP376 WACM7 – freeing up capacity to allow for quicker connections.

In the unfortunate instance that the full proposals in CMP376 WACM7 are not approved, then mechanisms under the existing connection process will need to be used to look at ways in which projects not progressing forward in their development are removed from the connections queue, so as not to be a 'blocker' to those projects which are progressing. SPT is therefore strongly of the view

that the full suite of Queue Management proposals in CMP376 WACM7 is the most effective and transparent means of addressing the challenge of the scale of the existing queue.

(iv) The need for legislative reform on the existing duty to connect

As we explain in this response, the current connections regime is no longer fit for purpose and is stifling Net Zero ambitions. Whilst strategic connections reform will look to manage the connections process in the future, we are of the view that there needs to be an overhauling of the current obligations to connect on the ESO and TOs. Strategic connections reform will only be delivered in a timely and effective manner if the new processes and new ways of working do not get overwhelmed by the scale of connection applications received, as is currently the case. We therefore call upon Ofgem to progress with, and consult upon, proposals to review the way in which parties connect to the grid and to explore the options for reforming the existing licensed duties, and their associated timelines, on the ESO and TOs to connect parties to the network, in a way which complements and aligns with Net Zero aspirations.

We welcome this ESO Connections Reform Consultation as an important milestone in this connections reform process. Bold and radical solutions, with strong backing from both Government and Ofgem, are needed now. Through a transparent and consultative process of reform, and by ensuring reforms are targeted at legally binding Net Zero ambitions, we believe that policymakers and industry should be able to make bold but fair decisions to give the greatest chance of meeting Net Zero ambitions. To fix the extent of the existing problem, there will inevitably be winners and losers among parties seeking to connect to the network. However, projects with reasonable chance of connecting to the grid will be supported under a reformed connections process, and a steadfast approach to complaints that have no credible foundation will be required.

(v) Building more network capacity to ensure the network is available in a timely manner for those 'shovel ready' projects which are ready to connect.

Significant reform of the connections process, in itself, is not going to be enough to accelerate the connection of 'shovel ready' projects to the network. With the ScotWind leased capacity of 27.6GW, combined with the increased ambition set in the UK Government's British Energy Security Strategy (BESS) to deliver 50GW offshore wind by 2030, and the rapidly growing pipeline of onshore connections to support the Scottish Government's 20GW of onshore wind target, the transmission network in Scotland requires an unprecedented programme of new investment and upgrades. It is vital that opportunities to co-ordinate with new connections related requirements are aligned with the extensive new infrastructure to be delivered.

Reform of the regulatory framework allowing for anticipatory investment is needed. The forward looking approach adopted by Ofgem in its proposed Accelerated Strategic Transmission Investment (ASTI) framework which is aimed at accelerating the network capacity required to meet the demand in connections, is welcome. However, it is just as important that local 'enabling works' also benefit from access to certainty of need, early construction funding and accelerated regulatory decision-making. Given the strategic interlinkages between the smaller and larger projects, a review of the regulatory treatment of Medium Sized Investment Projects (MSIP) should be undertaken, alongside the current development of the proposed ASTI framework. The CSNP should also include 'enabling works' assumptions to demonstrate certainty of need alongside the relevant funding mechanism. It is important that the CSNP is directly aligned with the connections reform work to ensure interfaces and impacts are considered in delivering Net Zero in the most cost effective way for GB consumers.

Fundamental reform is also required to the current planning processes in Scotland if the delivery of strategic network infrastructure is to be realised. Legislative changes will be required to support the acceleration of planning timelines in Scotland. SPEN is therefore working with both the Scottish and UK Governments, presenting solutions to reduce decision-making timescales for planning and consenting processes to 1 year. Securing these changes will be vital to delivering the scale of strategic infrastructure required to meet the Governments' 2030 and Net Zero ambitions.

In conclusion, SPEN is strongly supportive of the ESO's work in this area, and in particular the proposal to introduce TM04, the most radical of the models proposed. However, the extent of the current problem means that we cannot wait for strategic connection reform to be introduced in 2 years' time and bold measures must be taken now to address the scale of the existing queue. Only by overhauling the existing queue, can a solid baseline be secured, enabling a reformed connections process to be successful. We therefore stand ready to continue to work with the ESO, the ENA, network operators, Ofgem, Government and industry to drive forward a new transparent, fair and agile connection process, fit for the transition to a Net Zero economy.

Please don't hesitate to reach out to me should you wish to discuss any of the issues raised in this letter.

A copy of SPENs' response to the consultation questions are enclosed in Annex A.

Yours sincerely,

Lynne Bryceland

Head of Transmission Commercial,

SP Energy Networks

ANNEX A

SPEN response to ESO GB Connections Reform Consultation

Foundational Design Options

1. Do you generally agree with our overall initial positions on each of the foundational design options and key variations? Are there any foundational design options or key variations that we should have also considered?

SPEN is in agreement with the ESO's position on the foundational design options. There are no alternative options that we would like to have seen considered at this stage.

2. Do you agree with our initial view that the current issues with the connections process could potentially be addressed on an enduring basis through other, less radical, and lower risk means than the introduction of capacity auctions?

Whilst we accept that capacity auctions could be a means of allocating connection capacity to the transmission network, as this consultation highlights, there are other means of delivering reform to the connections process through the use of application windows, milestones and the active use of Queue Management principles to existing and new projects being introduced as soon as possible. We are supportive of the means in which the ESO intends to bring forward improvements to the existing connections process, as per model TM04.

However, the introduction of TM04 is not enough, given the extent of the current connections queue across the GB Transmission network. The current approach of 'first come, first served' to the queue is completely unmanageable and must be addressed now, if strategic connections reform is to be successful in the future.

At a time when the ESO and TOs are struggling to design and process the daily increase in increasingly complex connection applications, the TOs are also being asked to undertake wider reform work in reviewing the Current Planning Assumptions (CPAs), updating of Transmission Reinforcement Works (TRWs), facilitating TEC Amnesty applications and addressing the impact of the ESO's forthcoming BESS policy. Whilst we are supportive of the need for all of these activities, it must be recognised that this wider reform work is putting significant additional workload pressures on teams, who are already struggling to manage the influx in transmission connections within short licence connection timeframes.

In order to allow this important work to be undertaken, which will determine whether some connections can be accelerated, we are proposing that there should a short-term pause in the acceptance of connection applications which will allow for the ESO, TOs and Ofgem to streamline the current queue, using the above-mentioned policy tools as well as robust queue management principles, to ensure a strong starting foundation, from which model TM04 can then be introduced.

3. Do you agree with our initial view that the reformed connections process should facilitate and enable efficient connection under either a market-based (i.e. locational signals) or 'centralised' deployment approach (or an approach somewhere between the two), but not mandate which approach to follow?

We can understand why the ESO is not mandating a market-based or 'centralised' deployment approach, at this stage, in light of the ongoing Review of Electricity Market Arrangements (REMA).

However, SPEN is of the view that a centralised approach based on strategic network planning, would best determine what the network needs are and where capacity could best be connected, providing a strong locational signal to developers.

For networks to enable Net Zero, 2030 and 2035 energy targets, the roles and responsibilities relating to network planning must be aligned with the timely delivery of network infrastructure, with the connections process being a key input. A collaborative, Whole System approach to network planning will be critical for the success of the Centralised Strategic Network Plan (CSNP). This CSNP should utilise the ESO/FSO's cross-vector and national strategic analysis, alongside its role as independent evaluator and advisor, in full collaboration with the TOs who have developed significant experience, skills, local network knowledge and stakeholder relationships under the RIIO regulatory framework in the interest of consumers. It is not efficient nor deliverable for one party to have sole responsibility for strategic network planning, given the breadth of skills and combination of local and national level knowledge and experience that must feed into optimal network planning outcomes. We're fully engaged on Ofgem's development of the CSNP including the roles and responsibilities, decision making, governance and regulatory framework. Whilst also considering the interface with connections reform, we strongly urge Ofgem to consider both reforms in their entirety to ensure interfaces and impacts are considered in delivering Net Zero in the most cost effective way for GB consumers.

Looking ahead, we are strongly of the view that CSNP must be used to determine the network requirements, of particular parts of the network, which then determines the appropriate technology (including those emerging and of lower capacity)[3] and future capacity to be sited at particular parts of the network based on network need and spatial planning. Its only in this way that an appropriate and efficient Net Zero network can be delivered for the benefit of consumers with capacity delivered ahead of need moving towards a truly 'invest then connect' approach.

Pre-Application Stage

4. Do you agree with our initial recommendation that TMA A to TMA C should all be progressed, irrespective of the preferred TMO?

We are in agreement with the ESO that the Pre-Application stage is important and should be a fundamental part of any revised connections process. The purpose of the Pre-Application Stage is to better inform parties about network constraints and potential timescales for connection, in order to support any investment decisions.

We accept that there are different types of customers, who are seeking different types of information from Pre-Application meetings, therefore it seems sensible to explore several options for how Pre-Application models could best support individual customer requirements, which can be different depending on how familiar customers are with the connections process.

Given the current work being undertaken to update CPAs and review TRWs, we are keen to understand how these tools are to be used and regularly updated, so as to help the TOs to accurately identify where capacity exists in a rapidly changing network environment. This will be of particular importance once the TEC Amnesty and Queue Management proposals are delivered as we would expect existing network capacity to be released on a regular basis.

[3] *The HND and ASTI was a step change in how the network is designed and planned. However, the main focus and driver was due to government targets and the Crown Estate and Crown Estate Scotland's offshore wind leasing rounds for offshore wind. Smaller capacity technologies such as onshore wind and battery storage can have a cumulative impact on the NETS. All technologies should be treated and considered in the future CSNP.*

5. Do you agree with our initial recommendation on the introduction of a nominal Pre-Application Stage fee, discounted from the application fee for customers which go on to submit an application within a reasonable time period?

We pride ourselves in SPT on the high standard that we deliver in our Pre-Application Meetings. However, it does involve significant resources and preparation in advance to deliver these Pre-Application meetings. The introduction of a nominal Pre-Application stage fee will ensure that customers are more likely to actively participate in the Pre-Application meeting and have an appetite to hear the outcomes from this meeting.

If a nominal Pre-Application Stage fee is to be charged for Pre-Application meetings, it is important that the funds collected from these meetings are used specifically to invest in adequate resources and tools to be utilised in these Pre-Application meetings, in order to deliver for the customers investing in this process. These funds could also ensure that the ESO has sufficient resources to attend and actively participate in all Pre-Application meetings, which is currently a challenge, given the scale of connection application activity.

6. Do you agree with the importance of the TMA A 'Key Data'? Please provide suggestions for any other key data that you suggest we consider publishing at Pre-Application Stage.

We are in agreement with the value and importance of providing up-front, accessible data to our customers, which allows them to effectively 'self-serve' in determining the connection points they believe are right for their projects and their associated timelines, ahead of seeking any required Pre-Application meetings.

7. Do you agree with our initial recommendation with regard to TMA D (requirements to apply)?

SPEN is supportive of the recommendation with regard to TMA D concerning the requirements to apply. In addition to a complete and accurate connection application, we welcome the additional proposals which would provide evidence of the party's ability to deliver its connection application.

We are currently seeing applications across the transmission network submitted from various developers, who are proposing to use the same piece of land, for their projects. In order to mitigate these practices, we believe that the inclusion of a Letter of Authority, which highlights that the developer has undertaken formal development with the landowner will minimise the number of speculative connection applications which are currently being submitted to the ESO. This Letter of Authority process currently works effectively across distribution networks so can be easily replicated at a transmission level.

We would like to see the ESO's proposals go further in that, at the stage of applying for a connection, there is also a requirement on parties to provide evidence that they are financially robust and well-placed to deliver the assets they are seeking to connect to the transmission network. This could be easily achieved through the introduction of a simple financial health check to be completed, ahead of parties seeking to submit a connection application.

8. Do you agree with our initial recommendation with regard to TMA E (determination of enabling works), including that it is right to wait until the impact of the 5-Point Plan is known before forming a view on whether further changes to TMA E are required?

We are in agreement with the ESO that it is appropriate to wait until the work to update CPAs and review TRWs is undertaken in order to ensure that TOs are using the most up to date network background against which our network studies are then undertaken.

With the updating of CPAs in Scotland, working to a different timeline to that of England and Wales, SPT is currently working closely with the ESO on the development of these CPAs, which are to be used in Scotland, with a view to finalising them in the near future.

We are however keen to understand how these tools are to be used and regularly updated, so as to help the TOs to accurately identify where capacity exists in a rapidly changing network environment. This will be of particular importance once the TEC Amnesty and Queue Management proposals are delivered as we would expect existing network capacity to be released on a regular basis.

9. Do you agree with our initial recommendation with regard to TMA F (criteria for accelerating 'priority' projects)?

For strategic reasons, such as system security and network resilience, we can understand why the ESO is keen to have the ability to accelerate 'priority' projects. As we move away from the "First Come, First Served" approach, to one of "First Ready, First Connected", it is important that those projects which are required on the network, are able to gain speedy access. The introduction of the CSNP would be an effective means of identifying the types of generation/demand projects required on different parts of the network. However, in the absence of such a plan, we do agree that the ESO should have other tools at hand to accelerate the connection of 'priority' projects.

We note the ESO's proposals to use market based or price based mechanisms to identify those projects. If the ESO intends to take this approach, it will be important to ensure that lessons are learned from the Stability Pathfinder 2 exercise, whereby the connections process in Scotland was overwhelmed with parties seeking a connection to the grid, in order to improve their chances of being successful in the market-led competition. Instead, the solution adopted for the Stability Pathfinder 3 exercise, whereby a network connection was reserved and set aside for the successful participant(s), is a much more effective way of ensuring that there is no additional pressure put on the existing connections process.

10. Do you agree with our initial recommendation with regard to TMA G (queue management)?

More efficient and effective management of the current and future connections queue must be part of these reforms. The Queue Management proposals, as per CUSC Modification Proposal 376 – ("CMP376") , and in particular Workgroup Alternative CUSC Modification 7 ("WACM7"), are necessary to allow for a fair and effective management of the current and future connections queue.

With some customers having to wait more than 10 years for a connection, it is important that those projects 'blocking' the queue are removed, allowing 'shovel ready' projects timely access to the network. For this reason, SPT supports Reactive Queue Management + (RQM+) whereby a network capacity gap is allocated to a 'priority' project which has proven that it is progressing forward and will be 'ready' to connect to the network. This approach aligns with the 'First Ready, First Connected' approach.

To ensure the Queue Management process is as fair and effective as possible, it requires consistent application across all projects is required. Both new and existing projects should therefore be subject to Queue Management clauses, ensuring no party is prejudiced by the arrangements, and that consumer and system benefits from removing stalled projects from the queue are fully realised. Whilst no process is infallible, we believe that a robust policy on this will also strengthen other

industry objectives and initiatives, most notably the work being undertaken by the ENA's SCG which is examining both queues at distribution and transmission level and is looking to effect solutions with the same principle aim as CMP376 WACM7 – freeing up capacity to allow for quicker connections.

In the unfortunate instance that the full proposals in CMP376 WACM7 are not approved, then mechanisms under the existing connection process will need to be used to look at ways in which projects not progressing forward in their development are removed from the connections queue, so as not to be a 'blocker' to those projects which are progressing. SPT is therefore strongly of the view that the full suite of Queue Management proposals in CMP376 WACM7 is the most effective and transparent means of addressing the challenge of the scale of the existing queue.

11. Do you agree these four TMOs present a reasonable range of options to consider for a reformed connections process?

We agree that the ESO has presented a range of options to facilitate a reformed connections process through TM01 to TM04.

12. Do you think any of the four TMOs could be materially improved e.g. by adding, removing or changing a specific aspect of the TMO? If so, what and why?

SPEN is strongly of the view, that key to the successful implementation of any revised connections model, will be tackling the extent of the existing transmission queue, which is currently sitting at well in excess of 400GW, as per the latest version of the ESO's TEC Register, before any new strategic connections model is introduced.

At a time when the ESO and TOs are struggling to design and process the daily increase in increasingly complex connection applications, the TOs are also being asked to undertake wider reform work in reviewing the Current Planning Assumptions (CPAs), updating of Transmission Reinforcement Works (TRWs), facilitating TEC Amnesty applications and addressing the impact of the ESO's forthcoming BESS policy. Whilst we are supportive of the need for all of these activities, it must be recognised that this wider reform work is putting significant additional workload pressures on specialised teams, who are already struggling to manage the influx in transmission connections within short licence connection timeframes.

In order to allow this important work to be undertaken, which will determine whether some connections can be accelerated, we are proposing that there should be a short-term pause in the acceptance of connection applications which will allow for the ESO, TOs and Ofgem to streamline the current queue, using the above-mentioned policy tools as well as robust Queue Management principles, ensuring a strong starting foundation, from which model TM04 can then be introduced. We are therefore calling for this short-term pause to be incorporated in advance of wider strategic connections reform being introduced.

13. Are there any important TMOs we have missed?

No, we believe that this consultation covers the key potential models for the future.

14. Do you think 'Submit Consent' is too early for Gate 2 in TMO2 to TMO4? If so, what milestone should be used instead and why?

We do not think that submitting planning consent is too early for Gate 2. In fact, we would go further and suggest that the point of submitting a planning request, is the point at which parties should be able to apply through the initial window for a connection offer. This will ensure that projects are well developed and have undertaken the relevant stakeholder engagement, ahead of applying for a connection application.

15. Do you agree that TMO4 should be the preferred TMO?

Given the extent of the connections challenge across the transmission network, SPT is strongly supportive of the most radical of the models proposed, i.e. TM04.

Having applications align with windows will not only help the ESO and TOs process the applications, but it will also bring much needed efficiencies and coordination to the system design element, whereby applications will be assessed holistically, to determine what is needed at a wider level, rather than on the current project by project basis. The induction of robust Queue Management clauses is key and will move the current connections process from one of "First Come, First Served" to one of "First Ready, First Connected", ensuring that 'shovel-ready' customers are accelerated in the connections queue and offered a connection at the point at which they are ready to connect. The right to connect to the network should no longer be automatic but assessed initially against need and viability which will lead to a "right sizing" of the queue of projects. This will reduce timescales to connect and the cost to the UK consumer as the extent to which network reinforcement is subsequently required is rationalized. This approach is used in several countries to manage applications for example, Ireland[4] and California[5] (USA).

16. Do you agree with our design criteria assessment of the four TMOs? If not, what would you change any why?

We agree with the design criteria assessment for the 4 TMOs.

17. What are your views on the stated benefits and key challenges in relation to TMO4?

TM04 will support the transitions from a 'First Come, First Served', approach to one of 'First Ready, First Connected', which is essential if we are to deliver upon Net Zero ambitions. Having applications align with windows will also significantly help the ESO and TOs process the applications, but it will also bring much needed efficiencies and coordination to the system design element, whereby applications will be assessed holistically, to determine what is needed at a wider level, rather than on the current project by project basis. This approach to assessing and designing the system holistically will also aid the Centralised Strategic Network Design. Having only one window each year will by no means 'close' or 'slow down' the connection applications process to developers, rather it will provide efficiencies and more certainty of design to connections customers.

18. Do you think that there is a better TMO than TMO4? Whether that be TMO1 to TMO3, as presented, a materially different option, or a refined version of one of the four TMOs we have presented?

---

[4] *Ireland's regulator introduced connections windows in 2020: https://www.cru.ie/about-us/news/enduring-connection-policy-24-ecp-24/*
[5] *The CAISO runs an annual connections window for transmission applications every April: http://www.caiso.com/Documents/Presentation-1-InterconnectionApplicationOptions-Process.pdf*

SPEN is strongly of the view, that key to the successful implementation of any revised connections model, will be tackling the extent of the existing transmission queue. We are therefore proposing that there should a short-term pause in the acceptance of connection applications which will allow for the ESO, TOs and Ofgem to streamline the current queue, using updated policy tools as well as robust Queue Management principles, ensuring a strong starting foundation, from which model TM04 can then be introduced. We are therefore calling for this short-term pause to be incorporated in advance of wider strategic connections reform being introduced.

We would also suggest that there is a greater focus on self-certification, ahead of parties being able to apply to join the connections queue. We would therefore like to see the ESO's TM04 proposals go further in that, at the stage of applying for a connection, there is also a requirement on parties to provide evidence that they are financially robust and well-placed to deliver the assets they are seeking to connect to the transmission network. This could be easily achieved through the introduction of a simple financial health check to be completed, ahead of parties seeking to submit a connection application. We would also suggest that the point of submitting a planning request, is the point at which parties should be able to apply through the initial window to secure a connection offer. This will ensure that projects are well developed and have undertaken the relevant stakeholder engagement, ahead of applying for a connection application.

19. Do you agree with our views on DNO Demand in respect of the TMOs

None of the TMO1-4 options include provisions for reserved capacity in respect of demand yet facilitating this demand will be central to the UK achieving its carbon targets. It is not clear the degree to which this will be catered for via the existing Week 24 / B07 process, versus the TMO options detailed.

The TMO options appear to relate to larger individual distribution connections requesting either new or additional demand. Beyond these individual connections there is also a need to ensure that sufficient capacity headroom remains available to facilitate background incremental demand growth due to societal decarbonisation. The rate of this demand growth is forecast to significantly increase based on transitioning existing fossil fuel technologies (e.g. petrol/diesel cars, natural gas cooking and heating) to electricity. The connections processes at transmission must ensure that sufficient network capacity remains available for use by smaller customers as they transition to LCTs without risking network compliance, otherwise this could risk delaying the transition to LCTs and inhibit legislated decarbonisation targets. The capacity requirements and network headroom must remain coordinated at the T/D interfaces.

20. Do you have any views on the appropriate mechanism to incentivise accurate forecasting of requirements and avoid more RDC than is necessary being requested by DNOs?

Any such incentives would need to be developed collaboratively via Ofgem and ENA working groups and would need to consider any interactions with the existing price control framework.

A high-proportion of GSPs are already limited and in many instances may not have sufficient capacity available to reserve firm RDC. Due consideration will need to be given on the interaction of the RDC proposal with the outcomes of the recent ENA SCG T/D Limits work which enables the DNOs to manage connections up to agreed GSP technical limits and safeguarded by visibility and control. This enables DNOs to accelerate (on an uncompensated non-firm basis) shovel ready small and medium EG projects which are limited by transmission enabling works.

21. Do you agree with our views on the process under which DNOs apply to the ESO on behalf of relevant small and medium EG that impact on or use the transmission system, including that (under TMO4): i) DNOs should be able to request RDC via application windows to allow them to continue to make offers to EG interwindow; and ii) resulting offers should be for firm access until relevant EG has reached Gate 2 (at which point they can request advancement and an earlier non-firm connection date)?

Given the significant increase in connection application volumes and contracted connections at distribution level, the annual application window within the recommended process would impact the DNOs' Queue Management process. The proposed annual window would impact the progress of shovel ready small and medium EG projects especially at GSPs with limited or no RDC.

Also, it is not clear from the proposal on how the interactivity and T/D queue position will be re-aligned for the EG project which has applied for or secured planning consents within the annual application window at GSPs with limited or no RDC.

In addition to our response to Q20, we do not consider that requesting RDC via the annual application window will be appropriate considering the magnitude of connection activity across both transmission and distribution networks. We would encourage the ESO to consider introducing additional windows throughout the year.

Further we consider that the recommended process may have potential impacts based on the outcome of the change proposals CMP298/CMP328 and Grid Code modifications GC0117/GC0139.

22. Do you agree that directly connected demand should be included within TMO4 and that the benefits and challenges are broadly similar as for directly connected generation?

Yes, we do agree that directly connected demand should also be included within the TM04 model as the challenges and benefits are broadly similar for directly connected generation.

23. Do you agree that TMO1 to TMO3 would require a separate offshore process, and that this would result in material disbenefits?

Offshore wind developers are better placed to answer this question.

24. Do you agree that TMO4 is the most aligned to the direction of travel for offshore projects? If not, why?

Offshore wind developers are better placed to answer this question.

25. Other than the Letter of Authority differences are there any other TMAs which have specific offshore considerations?

It will be important that the different consenting regimes for onshore and offshore projects, as well as the separate marine licensing processes, are reflected in the TM04 model. Different consenting and licensing models also mean that there will be different statutory consultees who will need to be considered in any reformed connections process.

26. Do you agree with our views on network competition in the context of connections reform, including that TMO4 is the option which is most aligned with network competition as it includes the most design time at an early stage in the end-to-end process?

We broadly agree with the ESO's view that TMO4 is most aligned with current proposals for network competition. However, we do not believe that the timelines associated with early competition are well-aligned with the principle of acceleration and streamlining of connections, given the significant duration that competitive tenders require.[6] Where a project is competitively tendered, it is critical that the decision on whether to compete the scheme is made as early in the process as possible, minimising timeline impacts for associated schemes and customer connections.

More broadly, as we have set out to Ofgem and the ESO previously, we do not believe that the benefits case for early competition has yet been robustly made, and as a result we are not confident that early competition represents value for consumers in the context of very significant delivery challenges and already lengthy connections timelines for many projects.

27. Do you agree with our initial recommendation related to each of the TMAs within this chapter? If so, why? If not, what would you change and why?

We are content with the ESO's recommendation in relation to each of the TMAs and we believe that the ESO should now progress with the key proposals set out in the consultation. This should include driving forward with the introduction of TM04 at the earliest opportunity. Any strategic reform should be preceded by a short-term pause in the acceptance of connection applications which will allow for the ESO, TOs and Ofgem to streamline the current queue, using updated policy tools as well as robust Queue Management principles, ensuring a strong starting foundation, from which model TM04 can then be introduced.

28. Do you agree with our current views in respect of the implementation period?

We agree with the key areas of activity which the ESO is proposing for the implementation period. Whilst we understand that licence and code timescales is likely to drive an implementation timeline of mid to late 2025, we do believe that wider reform is needed before then, as we detail in this response.

Code and licence changes will be fundamental to the implementation of TM04, and it will be crucial to the successful implementation of the new model, that roles and responsibilities of all parties are well understood from the outset. It will also be important that the implementation of TM04 takes into account, and is coordinated with, wider relevant policy initiatives which are also currently underway, key strategic initiatives such as REMA and the development of the CSNP.

There is still a lot of work to be undertaken in relation to the end to end process for the Transmission and Distribution interface, which should be treated as a priority. It is important that the work of the ENA SCG continues in this area involving the TOs, DNOs and the ESO.

29. Do you agree with our current views in respect of transitional arrangements? What are your views on how and when we should transition to TMO4?

[6] *The Early Competition Plan set out an additional time requirement for Early Competition of 2.5 to 3 years. https://www.nationalgrideso.com/document/191251/download P.62.*

SPEN is strongly supportive of the ESO's work in this area, and in particular the proposal to introduce TM04, the most radical of the models proposed. However, the extent of the current problem means that we cannot wait for strategic connection reform to be introduced and that bold measures must be taken now to address the scale of the existing queue. Only by overhauling the existing queue, can a solid baseline be secured, enabling a reformed connections process to be successful.

Any strategic reform should be preceded by a short-term pause in the acceptance of connection applications which will allow for the ESO, TOs and Ofgem to streamline the current queue, using updated policy tools as well as robust Queue Management principles, ensuring a strong starting foundation, from which model TM04 can then be introduced.

30. What further action could Government and/or Ofgem take to support connections reform and reduce connection timescales, including in areas outside of connections process reform?

We agree with Ofgem in its Open Letter on Connections Reform, that *"there is an urgent need for rapid progress to address the scale of the queue and to start to bring forward connection dates for both generation and demand customers"*. Strategic connections reform will only be delivered in a timely and effective manner if the new processes and new ways of working do not get overwhelmed by the scale of connection applications received, as is currently the case. We therefore call upon Ofgem to progress with, and consult upon, proposals to review the way in which parties connect to the grid and to explore the options for reforming the existing licence duties, and their associated timelines, on the ESO and TOs to connect parties to the network, in a way which complements and aligns with Net Zero aspirations.

We welcome this ESO Connections Reform Consultation as an important milestone in this connections reform process. Bold and radical solutions, with strong backing from both Government and Ofgem, are needed now. Through a transparent and consultative process of reform, and by ensuring reforms are targeted at legally binding Net Zero ambitions, we believe that policymakers and industry should be able to make bold but fair decisions to give the greatest chance of meeting Net Zero ambitions. To fix the extent of the existing problem, there will inevitably be winners and losers among parties seeking to connect to the network. However, projects with reasonable chance of connecting to the grid will be supported under a reformed connections process, and a steadfast approach to complaints that have no credible foundation will be required.