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Contact / Extension

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Dear Neil, Konark and Dayna,

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

SP Energy Networks (SPEN) represents the transmission licensee SP Transmission plc (SPT) and the distribution licensees of SP Distribution plc (SPD) and SP Manweb plc (SPM). We own and maintain the electricity transmission network in Central and South Scotland (SPT). We also own and operate the electricity distribution networks in the Central Belt and South of Scotland (SPD), and Merseyside and North Wales (SPM). 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.

Thank you for the opportunity to respond to this consultation on Ofgem's initial findings from the Electricity Transmission Network Planning Review (ETNPR). Our response is summarised in this covering letter, with detailed responses to the consultation questions set out in Appendix 1 below.

We welcome Ofgem's and the ESO's commitment to developing the Centralised Strategic Network Plan (CSNP) as part of the ETNPR, and we believe that this represents an opportunity to resolve key issues with the current NOA-FES-ETYS process. As we have begun to see via the ESO's publication of the Holistic Network Design (HND), we welcome the intention for the CSNP to coordinate recommendations across onshore, offshore and interconnector network assets, giving a clear assessment of need across the network.

For networks to enable Net Zero and 2030 and 2035 energy targets, the roles and responsibilities relating to network planning must be aligned with the timely delivery of network infrastructure. A collaborative, Whole System approach to network planning will be critical, taking advantage of both the FSO's strategic analysis, and the significant experience, skills, local network knowledge and stakeholder relationships that the TOs have developed under the RIIO regulatory framework in the interest of consumers. It is not efficient 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 therefore support a coordinating role for the FSO, collaborating with the TOs and third parties to identify and recommend optimal solutions. We see the CSNP delivering maximum value where the

FSO collaborates effectively and meaningfully with other key industry parties, taking advantage of the skills and expertise held by both TOs and third parties, rather than simply consulting them or engaging them once solutions are identified. We believe that this coordinating role for the FSO on Strategic Investment (SI) projects would support the development of Whole System solutions, particularly for large, cross-boundary projects or cross-sectoral projects.

Whilst we recognise that the ETNPR and Centralised Strategic Network Plan (CSNP) remain in an early development stage, policy gaps in this minded-to consultation cause challenges in understanding the full implications of the proposals. In particular, clarity on the definition of Strategic Investment is required. We note that this definition is subject to further consultation but we have set out our initial views of what this should cover below.

We believe that an appropriate Whole System scope for SI would be new, high-value, network infrastructure projects that facilitate cross-boundary capacity upgrades, or interact with other sectors, such as hydrogen. These are the projects which would see the greatest benefit from FSO's strategic coordination as the FSO could coordinate proposals and input from a variety of stakeholders and sectors, alongside their own analysis. For all other transmission works and connections, we cannot identify the consumer value in transferring network planning roles to the FSO, as the scope of these works can change frequently, and a 2-3 yearly refresh of the CSNP would not likely be agile enough to progress some of these projects at pace.

Were the FSO to plan the strategic network and deliver the CSNP in silo, without leveraging the full expertise of the TOs and other key stakeholders, we foresee significant risks, both to the transmission system and to the value that consumers receive. These risks are set out in Appendix 1 below, and include reduced efficiency and coordination in network planning, risks to deliverability, and exacerbation of industry-wide resourcing issues.

It is right that an attempt should be made to understand the materiality of the CSNP proposals, however, the high-level scoping calculations included in this consultation are of limited value when the actual consumer value is not quantitatively assessed. Whilst we recognise benefit in some of the proposed activities under the CSNP and support its high-level goals, we believe it is critical to see clear evidence of consumer value before a significant change to network planning processes and industry organisation is implemented.

Should you have any questions in relation to the issues raised in this response, please do not hesitate to contact me.

Yours sincerely,



Stephanie Anderson
Head of Regulation and Policy
SP Energy Networks

Appendix 1: SPEN response to Ofgem's consultation questions on Ofgem's Minded-to Decisions on the initial findings of the Electricity Transmission Network Planning Review

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

We welcome Ofgem's and the ESO's commitment to developing the Centralised Strategic Network Plan (CSNP) as part of the ETNPR, and we believe that this represents an opportunity to resolve key issues with the current NOA-FES-ETYS process. As we have begun to see via the ESO's publication of the Holistic Network Design (HND), we welcome the intention for the CSNP to coordinate recommendations across onshore, offshore and interconnector network assets. However, the design of this process will be critical to the success of the network planning framework and the delivery of the required network capacity to meet 2030 and 2035 targets and achieve Net Zero.

The full implications of the proposals set out in this consultation on Ofgem's minded-to decision cannot be understood until we have a clear understanding of what is meant by Strategic Investment (SI) in this context. The consultation does not clarify how SI would be treated differently from non-SI, and nor is it clear how treatment of SI sits alongside the proposal that all load-related investment will be in scope of the CSNP. This represents a crucial gap in policy, and clarity is required before high-level policy decisions are committed to. We therefore welcome the upcoming consultation on the definition of 'Strategic Investment' for the purposes of the CSNP.

We believe that an appropriate Whole System scope for SI would be new, high-value, network projects that facilitate cross-boundary capacity upgrades, or interact with other sectors, such as hydrogen. These projects would see greatest benefit from FSO strategic coordination, where FSO could help coordinate proposals and input from a variety of stakeholders and sectors, as well as their own analysis and recommendations. For all other transmission works and customer connections, we see little consumer value in transferring network planning responsibilities to the FSO, as the scope of these works can change frequently, and a 2-3 yearly refresh of the CSNP would be unlikely to be agile enough to progress some of these projects at pace.

Network Planning Roles and Responsibilities

To meet Net Zero targets, the roles and responsibilities within the CSNP must be optimised to deliver the most efficient and economical network in a safe and timely way. We see significant benefit in the FSO taking on a strategic collaborator role in strategic network planning, assessing and selecting design options proposed by the TOs and third parties. A CSNP process that does not involve the FSO collaborating early and meaningfully with TOs and third parties risks delivering lower quality solutions, and would not take advantage of the significant experience, skills, local network knowledge and stakeholder relationships that the TOs have developed under the regulated RIIO framework in the interest of consumers.

It is not efficient for one party to have sole responsibility for 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 fully support the FSO having an enhanced role in centralised network planning, however this should build on the successful network planning frameworks that have preceded the CSNP, most recently the HND and upcoming HND follow up process. Specifically, the FSO role should be coordinating the network solutions that are proposed

by the TOs and third parties, as well as by the FSO itself. The TOs' significant experience, local knowledge and stakeholder relationships make them ideally placed to continue to identify solutions on their networks that would then feed into the FSO's detailed economic and system analysis, identifying the optimal set of options for flexibility, reinforcement, and other solutions to network constraints.

Were the FSO to be solely responsible for network planning, without a collaborative approach, we believe this would result in significant risks to both timely delivery of infrastructure and the quality of solutions proposed. Key risks include:

- **Lack of detailed system knowledge:** TOs draw on knowledge and experience from outside the system planning function to enable optimum solutions to be produced and developed over time. These areas include operations, engineering design, standards, consenting and project delivery. For example, detailed knowledge of flood prevention requirements, noise mitigation, land availability information, stakeholder concerns and priorities and detailed knowledge (and, importantly, history) of existing infrastructure and property are essential components in establishing even the very highest-level plans. The CSNP body in silo will either not have this experience to draw on or it will duplicate this work, both of which would increase costs to consumers.
- **Decreased coordination with wider transmission works:** There are numerous occasions where we, using our network planning roles, optimise our time working within a particular area. For example, if we plan to build a new asset in an area that also requires asset replacement, we will carry out this work at the same time to limit the subsequent impact on the local community and minimise system outages. This is evident in SPT's Kincardine North project, where multiple network needs – including system boundary reinforcement, substation and overhead line condition remediation and flood mitigation – as well as wider community economic activities, are being co-ordinated in a single solution that also enables future reinforcements while minimising new infrastructure. This efficiency risks being lost if another party, unfamiliar with the local assets, stakeholder interests and community priorities were to carry out the network planning role alone.
- **Deliverability:** We own and manage a transmission system that is relatively tight geographically, and system access can be challenging to secure. A CSNP that makes recommendations without collaboration with the TO risks recommending an undeliverable set of reinforcements, if system access cannot be optimised. With the scale of major transmission projects and customer connections required to be delivered by 2030 and beyond, system access will only become more challenging, and effective Whole System collaboration will be required to manage it.
- **Accountability for the system:** Currently, the TOs have a set of obligations regarding the management of their networks. These include legal obligations under the Electricity Act 1989, licence obligations, and compliance with industry standards and codes including the Security and Quality of Supply Standards (SQSS) and the SO:TO Code (STC). Given that the consultation proposes that the CSNP will consider voltage, inertia and operability impacts, this could require a reconsideration of core competency and compliance roles for all industry parties. A diminished role for the TOs may result in reduced transparency, unclear accountability and unfair allocation of risk if network planning failures occur.
- **Consenting projects:** The TOs' network planning role interacts significantly with its role in consenting projects, setting out the strategic needs case, and providing evidence in the context of Hearings or Inquiries. The consultation is unclear on how the FSO will interact

with the consenting process, and this must be clarified by Ofgem. However, poor coordination between network planning teams, consenting teams, and local stakeholder engagement risks causing significant delay to critical infrastructure projects.

- **Industry-wide resource issues:** Currently, we are facing recruitment challenges for skilled network planning staff, given increasing global competition for in-demand skills in our sector, which will become even more intense as investment to achieve Net Zero continues to increase. The impact of the proposals on skills and recruitment must be recognised and assessed by Ofgem, as inefficient use of an already small pool of highly skilled resource could increase costs to consumers, as well as create risks to timely delivery. Industry upheaval and uncertainty in future career progression for network planning engineers may result in the transfer of critical skills away from transmission network planning to other engineering areas, at a time when they are most needed. The signal that is sent to employees in the industry regarding the future of network planning must be carefully considered, as skills losses stemming from regulatory signals and career uncertainty will not be easily reversed. The development of the CSNP must not assume that highly skilled staff will automatically move to the ESO/FSO. Skilled transmission planning engineers have alternate options to undertake similar network planning responsibilities, including opportunities with generators, DNOs, other third parties or retraining.

Providing Certainty

To meet national offshore wind targets for 2030, it will be critical that the delivery of strategic network infrastructure projects can progress quickly. This means that clear signals for projects are required early, to enable project development on accelerated timescales. We therefore welcome the move away from the annual update process of NOA towards a CSNP that is refreshed every 2-3 years. Whilst we believe longer refresh periods can provide increased project certainty, the development of the wider CSNP must maintain a focus on the objective to enable 2030 and 2035 targets, recognising the critical role and responsibility that the ESO/ FSO has to enable networks to invest ahead of these targets. BEIS and Ofgem should commit to recognising the CSNP, incorporating the input of TOs, as the confirmed network requirement as we move towards Net Zero. Like HND, the CSNP should be accepted as the needs case for each of the projects that it recommends. A clear and timely needs case, combined with appropriate regulatory mechanisms, will enable the pre-construction and early construction work that is critical to delivering time-sensitive reinforcement projects.

It is also important that the design of the CSNP aligns with the price control regulatory framework, with timing of publications and re-openers considered to ensure that the price control remains responsive and reflective of CSNP cycles. For example, CSNP publications should be followed at an appropriate interval by mechanisms to re-open allowances and delivery dates, where CSNP outputs are substantively different.

More generally, the CSNP should recognise the importance of anticipatory investment to a greater extent than the NOA-FES-ETYS process currently does. Whilst early investment risks increased costs to consumers resulting from temporary lower asset utilisation, late investment risks far greater costs through constraint and balancing payments from the ESO. The ESO currently forecasts that

constraint costs alone will total £1.4bn in 2023.¹ By way of example, the ESO has assessed that a year's delay to the delivery of the Torness to Hawthorn Pit HVDC link (E2DC) and the Peterhead to Drax HVDC link (E4D3) may result in additional annual constraint costs to the GB consumer of c.£400m.² Furthermore, recommended optimal delivery dates often change significantly due to the highly uncertain nature of Future Energy Scenarios (FES) forecasting. Investment signals must not be left too late, as the regret of delivering a project earlier than optimal is usually substantially lower than the regret (i.e., constraints) of delivering the project late.

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

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?

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

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

Delivering Consumer Value

The Impact Assessment associated with the consultation attempts to understand the scope of the investment that the CSNP will cover, suggested to be approximately £134bn of load-related expenditure from 2025-2040. However, this scoping work is not an impact assessment, and no assessment of consumer value has been completed beyond qualitative assertions. It is right that an attempt should be made to understand the materiality of the CSNP proposals, however, the high-level scoping calculations are of limited value where the actual consumer value is not quantitatively assessed. Whilst we recognise benefit in some of the proposed activities under the CSNP and support its high-level goals, we believe it is critical to see clear and compelling evidence of consumer value before a significant change to system planning processes and industry organisation is implemented. This is critical, given the potential risk to the operation of current network arrangements which provides excellent service to consumers, delivering 99.99995% reliability on the GB transmission network.³

The consultation notes that there could be a small increase in TO costs due to implementing CSNP, and that TOs could consequently 'scale back' their network planning activities. However, given the volume of projects required by 2030 and beyond, we do not agree that TOs are likely to scale back their network planning functions.

We currently manage significant recruitment challenges for skilled network planning staff. Greater competition for a limited pool of expertise, driven by transferral and duplication of network planning roles, is not consistent with meeting already challenging 2030 targets. At a time when TOs are being asked to undertake unprecedented levels of critical network investment on short timescales to meet 2030 targets, exacerbating resource constraints and uncertainty, risks causing delays to critical infrastructure projects. Scaling back network planning activities in this context is simply not an option if we are to achieve the 2030 targets. It is critical that Ofgem, BEIS and the ESO understand the

¹ <https://data.nationalgrideso.com/constraint-management/24-months-ahead-constraint-cost-forecast>, Accessed 01/08/2022

² <https://www.ofgem.gov.uk/publications/eastern-hvdc-conditional-decision-projects-final-needs-case>

³ <https://www.nationalgrideso.com/industry-information/industry-data-and-reports/system-performance-reports>

complexity and multifaceted nature of the network planning role that the TOs deliver, and the combination of skills, experience and local network knowledge that is embedded within these organisations. Through this the TOs provide ongoing value to consumers.

When a robust Impact Assessment is completed, this should include the cost to the consumer of each of the risks highlighted above, including risk associated with skills transfer or loss, lower quality network options, deliverability and solution coordination.

Lessons-Learned and Next Steps

Following the ESO's publication of the first HND, it is right that a lessons-learned process is being undertaken prior to delivery of HND follow up process in 2023 and the CSNP. This lessons-learned process has been started by the ESO, which we welcome, and it is critical that experience is built upon, and issues are addressed through the design and development of the CSNP.

The next steps outlined in the consultation note the key contributors to CSNP development as the ESO, BEIS and Ofgem, with no significant role identified for TOs or other stakeholders, including the Scottish and Welsh Governments. Given that the TOs currently carry out the network planning role and will retain elements of that role whilst also engaging with the FSO during the delivery of the CSNP, it is critical that TOs are engaged early in the CSNP development process, rather than simply as a consultee. Likewise, the inputs of the Scottish and Welsh Governments should be recognised in the process, particularly given the different Net Zero targets and plans in Scotland and Wales.

We welcome the upcoming consultation on the definition of SI for the purposes of the CSNP. A clear understanding of the definition and treatment of SI is required in the upcoming consultation, and policy decisions should not be made prior to clarifying Ofgem's thinking on these issues. We have set out above an initial view of an appropriate definition for Strategic Investment.

It is critical at this early stage in the development of the CSNP that Ofgem makes use of the existing TO experience in network planning and avoids unilateral process changes that may have significant unintended consequences, including detrimental impacts on consumers. Collaboration will be key to delivering maximum consumer value whilst developing the system required for 2030. That collaboration should take place in both the delivery of network planning roles through the CSNP, and in the design of the optimal network planning framework that is currently in development.