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Neil Copeland, Konark Anand and
Dayna Rodger
Network Planning Review
10 South Colonnade
Canary Wharf
London
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18th August 2022

Dear Konark and Dayna,

Consultation on our minded-to decision and draft impact assessment on the initial findings of the Electricity Transmission Network Planning Review (ETNPR)

This response is from ScottishPower Renewables (SPR). With a portfolio of 20GW of offshore and onshore renewable generation in planning, development and construction SPR are at the forefront of decarbonisation of the electricity system. To achieve this, it is vital that an effective strategic electricity transmission network planning process is in place to ensure our projects can be efficiently connected and the renewable energy transmitted to where it is needed most.

Ofgem's minded-to decision does not give us confidence that the proposed Centralised Strategic Network Planning (CSNP) with FSO as Central Network Planner (CNP) will achieve this for the following reasons:

- Ofgem's minded-to decision supports an approach that will discourage collaboration across the industry by potentially concentrating all strategic planning functions and resources into the FSO. Establishing and placing sole responsibility for electricity network planning on one entity, a CNP, rather than empowering the whole industry, risks greatly diminishing our speed of transition to Net Zero and jeopardising innovation of future investments in transmission network. Overall, this could reduce the confidence of developers and wider industry in the overall planning process. We think the FSO in its CSNP role would be better focussed coordinating TOs and other stakeholders currently involved in strategic network planning
- Ofgem's minded-to position does not demonstrate it has listened to, acted upon or responded to stakeholder concerns to the initial consultation. Ofgem do not present a clear response to alleviate these concerns. Consequently, SPR are concerned that the CSNP is not well-justified, robust or in the best interest of consumers.

- Ofgem's decision to take responsibility for network planning and development away from Transmission Owners to a single organisation with limited experience is not demonstrably justified and could add risk to the future security of supply and delivery of efficient, economic and co-ordinated network planning.
- Ofgem refer to the recent Holistic Network Design process as an example of how the Future System Operator (FSO) is best placed to be the CNP as currently proposed. Our experience of the HND suggests this assumption is not a given and instead raises important questions of Ofgem's minded-to decision.

Ofgem's minded-to-decision proposes a yet to be justified drastic change to load related planning at a time when certainty and stability are essential for future energy security. SPR consider the proposed changes are more likely to delay the delivery of necessary transmission infrastructure to connect 25GW of ScotWind projects and overall, 50GW of offshore wind by 2030, rather than bring it forward. That the FSO as single entity will be responsible for system operation, design, system, and grid code development creates an unhealthy concentration of resources and functions that could stifle and reduce innovation in future network planning and development. It also leaves little to no room for challenge and scrutiny by external stakeholders such as TOs and generators, who have more expertise and experience in network planning and development than the FSO.

SPR therefore propose the following options for consideration for future transmission centralised network planning:

1. The existing NOA process should be reviewed to better utilise future network and connected generator assets. Similarly, the System Operability Framework (SOF) should be reviewed and updated to support operation of a converter dominated grid and Net Zero operability.
2. CSNP should be a central process run with TOs as Network Planners and FSO providing strategic decision.
3. CSNP should be run with input from other system vectors such as distribution network owners, and gas network owners and operators.
4. The CSNP output should be subject to wider system review such as by generators and original equipment manufacturers (OEMs) in order to identify any challenges with supply chain and overall delivery.
5. The process should be repeated every 2 years.
6. Innovation should be encouraged by running parallel pathfinder projects with generators and other industry stakeholders.

Please refer to Annex 1 below for responses to the consultation questions.

yours sincerely,



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Annex 1 – RESPONSES TO QUESTIONS

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

SPR Response:

Ofgem have stated a list of objectives (para 2.1) to for the proposed Centralised Strategic Network Planning (CSNP) process with FSO as Central Network Planner (CNP).

SPR agree that whole system approach to network planning should be encouraged, and that onshore and offshore networks including interconnectors must be planned together. It is important that better co-ordination is developed between TOs, ESO/FSO, generators, the supply chain and other energy vectors such as the gas sector. SPR also agree with the need to address system operability challenges (para 2.30) within the same planning process.

However, SPR disagree that the CSNP, as proposed, will improve identification and delivery of strategic investments and in fact could limit innovation and delay delivery. SPR are concerned that Ofgem's minded-to decision supports an approach that will discourage collaboration across the industry and creates a monopoly FSO. This will jeopardise future investments in transmission network and reduce confidence of developers on the overall planning process. Further, placing sole responsibility for electricity network planning on one entity, the CNP, rather than empowering the whole industry, could greatly diminish the speed of transition to Net Zero.

Additionally, we believe Ofgem have not sufficiently considered the concerns and risks identified by stakeholders regarding the CNSP process and role of FSO as future Central Network Planner. These concerns include (see Appendix 1 of this consultation)

- TOs roles were understated within the proposed changes presented within the ETNPR consultation (App1 para 1.2)
- The current ESO does not have the technical skills, knowledge, expertise, or resources required to successfully enact the FSO role as CNP, and the need for this to be secured for implementation of the enduring CSNP. It is challenging to build such expertise within the given time frame, as it requires processes and policies in place which is then handed over to new team (App1 para 1.20) Delivering these changes are likely to be very disruptive to the industry and delay key milestones in this decade and beyond to achieving Net Zero.
- Consideration of environmental and community factors are vital (App1 para 1.3). SPR highlight that TOs and DNOs have worked closely with local communities in the past, developing strong relationships and have deep understanding of their asset based and planning requirements. SPR believe these social and community relationships are essential to accelerating transmission network deployment and do not believe the FSO will be able to develop the same level of social and community engagement within its new role.
- Competition has not been fully considered (app 1 para 1.17) and that innovation would be lost by the CNP developing options in isolation and we believe this still remains the case.

Ofgem's minded-to consultation does not present a clear response to alleviate these concerns, consequently SPR are concerned that the CSNP is not well-justified, robust or in the best interest of consumers.

SPR believe the FSO should focus on strategic direction of the network and improved coordination, but not undertake the network plan and design, which should remain with the TO's. The CSNP should enable more co-ordination between TOs, DNOs, OFTOs in overall planning and design of electricity transmission network, with input from generators, supply chain and other stakeholders regarding innovation and whole system approach.

Ofgem explain that they have not yet finalised how the CSNP process should work (para 2.12) in detail. However, the minded-to decision has concluded that TO's and third parties will not be responsible for generating strategic investment options and this will be the sole responsibility of the FES. The decision to remove strategic load related network planning from TO's who have historically undertaken by this work with expertise built up over years of experience and at this stage seems premature and could have significant impacts on the industry. Ofgem have kept in scope for future workstreams that co-ordination of non-strategic investment could be the extent of the FES role. This approach should be applied to strategic investments as well and the minded-to decision reversed. The assessment of who and how strategic network planning is done should be addressed in the scope of the proposed workstream "Power system analysis and compliance"¹ rather than set out as a minded to position now.

Ofgem point to the recent HND process (para 2.19) as an indication that a single entity leading the strategic investment process will be successful. However, SPR are of the view that the ESO has led the HND process with a significant lack of transparency, consultation and effective engagement with Users or TO's. If the HND is evidence of how the future CSNP will operate Ofgem need to think again.

Ofgem further justify their minded-to decision (para 2.21) on a premise that the annual planning process and infrastructure solutions delay the provision of network capacity. However, they do not present evidence that generation capacity has been constructed and had to wait for network capacity to start generating. Nor do they recognise that the environmental planning and consenting process is the main contributor to extended delivery periods.

Ofgem (para 2.35) expect the CSNP to provide signals for locating generation to minimise network reinforcement. SPR agree this is beneficial and could lead to reduced connection costs. However, Ofgem must recognise that there are other, more dominant factors in determining optimal generation location including transmission charges (TNUoS), energy resource, land and planning and consenting issues.

Ofgem present Figure 4 (Para 2.40) as a very top-down process of how critical strategic network planning decisions will be mandated to TOs, without giving the industry appropriate opportunity to voice concerns that inform the decision-making process and lead to better outcomes. This could be a risky precedent, contrary to the standards of GB system standards, and whole system approach, where more engagement with stakeholders and other sectors is

¹ Consultation on our minded-to decision and draft impact assessment on the initial findings of the Electricity Transmission Network Planning Review. Table 9: ETNPR Workstreams

encouraged. It is likely to lead to negative outcomes such as TOs and generators facing unrealistic targets to deliver under highly pressured timescales.

SPR therefore propose the following options for consideration for future transmission centralised network planning:

1. The existing NOA process should be reviewed to better utilise future network and connected generator assets. Similarly, the System Operability Framework (SOF) should be reviewed and updated to support operation of a converter dominated grid and Net Zero operability.
2. CSNP should be a central process run with TOs as Network Planners and FSO providing strategic decision.
3. CSNP should be run with input from other system vectors such as distribution network owners, and gas network owners and operators.
4. The CSNP output should be subject to wider system review such as by generators and OEMs in order to identify any challenges with supply chain and overall delivery.
5. The process should be repeated every 2 years.
6. Innovation should be encouraged by running parallel pathfinder projects with generators and other industry stakeholders.

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

SPR Response: SPR broadly agree with the range of load related investments identified, however, do not agree that the Impact Assessment demonstrates that the original objectives of CSNP including system operability requirements and encouraging more innovation in planning considerations are achieved.

In addition, the scale of load related expenditure could be improved with the inclusion of gas networks and consideration of an offshore grid. This will encourage a more co-ordinated approach with network management solutions that truly realise the potential of whole system planning and design to achieve Net Zero targets.

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?

Ofgem need to provide a fully justified impact assessment to support their minded-to position. We do not agree with the risk and impact assessment provided in Table 7 and 8 demonstrates this. To highlight this SPR have provided its own assessment in the table below. We base our assessment on evidence from past experiences and our own analysis of current network planning process:

1. HND did not propose a well-co-ordinated system based on system studies. It only showed generators where to connect, without considering system operability and wider system studies. It did not also take into account practical planning considerations, such as environmental and community impact; and overall deliverability of the proposed targets. This outcome exposes the current ESO's lack of experience in network planning.
2. The current SOF does not consider new converter-based-generation capabilities and does not support optimal placement of advanced converter technologies. There is also a need to improve dispatch and balancing mechanism based dynamic probabilistic

planning. This will deliver better network operability, compared to the proposed CSNP approach. SPR recommend the FSO focus on these activities to improve overall network operability and make better use of assets connected to the network.

3. CSNP as it is set out so far, will remove competition and reduce innovation. By giving one body the sole responsibility to design solutions without consideration of deliverability, will place unreasonable risk on TOs and generators to meet the deliverables set out by the FSO.
4. As the FSO also has responsibility to manage system and grid code, design network and run commercial tender for services, the CSNP will be creating a monopoly and greatly jeopardising competition, consumer interests and feasibility of delivery. The FSO will be also in charge of policing and determining whether a particular connection and delivery project meets the STC, SQSS and Grid Code standards, yet have no responsibility and risk for achieving its own strategic plan.

Stakeholder	Likelihood of risk arising (Ofgem's Assessment)	Impact of risk arising (Ofgem's Assessment)	Likelihood of risk arising (SPR's assessment)	Impact of risk arising (SPR's Assessment)
Reliance on single organisation (e.g., FSO) which may fail to deliver quality outputs.	Low	Medium	Medium	High
Innovative solutions are not considered by the FSO.	Low	Medium	Medium	Medium
FSO fails to source the right skills in sufficient quantity.	Medium	High	High	High
Options and decision making are worse as a result of only one organisation leading the process.	Low	Low	Medium	High
Network planning lacks transparency.	Low	Low	Medium	High
Risk of FSO being unduly influenced by industry.	Low	Medium	Low	High

Table 1 SPR's impact assessment of CSNP implementation as per Ofgem's minded to decision

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

SPR have no comment to make on this question

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

SPR have no comment to make on this question