

Strategic Planning of Networks
Ofgem
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30 August 2023

Dear Konark,

Centralised Strategic Network Plan: Consultation on framework for identifying and assessing transmission investment options

EDF is the UK's largest producer of low carbon electricity. EDF operates low carbon nuclear power stations and is building the first of a new generation of nuclear plants. EDF also has a large and growing portfolio of renewables, including onshore, offshore wind and solar generation, and energy storage. With around six million electricity and gas customer accounts, including residential and business users, EDF aims to help Britain achieve net zero by building a smarter energy future that will support delivery of net zero carbon emissions, including through digital innovations and new customer offerings that encourage the transition to low carbon electric transport and heating.

We welcome the opportunity to respond to the 'Centralised Strategic Network Plan (CSNP: Consultation on framework for identifying and assessing transmission investment options' consultation. Thank you for granting the extension to the original deadline, it is an important consultation that requires considered industry input.

Ofgem's consultation is seeking views on how the Future System Operator (FSO) will identify future system needs and the associated options to develop a strategic network investment plan – the CSNP. The introduction of CSNP seeks to refresh and improve the Networks Options Assessment (NOA), Electricity Ten Year Statement (ETYS) and Future Energy Scenarios (FES). We support the CSNP proposal which will be critical to help meet the government's decarbonisation and Net Zero targets.

There are a number of key issues that we believe need to be highlighted and, in some cases, considered further:

Regulation and Roles

This consultation and proposed reforms are within a framework of wider reforms including the establishment of the FSO and the future regulation of networks. The Electricity Networks Commissioner's report has also now been published.

Our views and comments on the CSNP are in the context where other crucial parts of the overall framework have not been decided and will affect the success and effectiveness of the CSNP.

Further work needs to be done particularly to define with clarity and in one place, the roles and responsibilities of the various parties identified in these proposals, in particular, the

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Government, Ofgem, the FSO, and the TOs. It is important to provide greater certainty and transparency on the roles of Government and Ofgem; as well as clearly set out the regulatory framework landscape within which all the entities will operate and seek to implement changes of energy policy.

Consideration of the wider ramifications of changes to FES

We continue to agree that adapting the FES for network investment is a priority. However, as EDF stated in our previous response FES serves several purposes and it is questionable to redesign FES around one purpose without considering the other purposes, which may drive different requirements. This consultation document does not consider the wider implications of changes to FES and its publication frequency. The FES is widely used by the Electricity System Operator (ESO) and its stakeholders across the energy industry: to underpin energy network investment; support financial investment decisions for net zero technologies; inform national and regional policy as well as carrying out academic research and innovation.

As stated in our previous consultation response, even over the past 3 years the electricity generation mix and policies have changed significantly. Therefore, there may be a need to increase the frequency of publications until the pace of changes across the energy industry reaches a steadier state.

Decision Making Tools

Further clarity needed on 'specific decision-making tools' particularly in relation to the level of investment uncertainty (para 6.12).

Should you have any queries or wish to discuss our response, please contact me or Natasha Ranatunga at Natasha.Ranatunga@edfenergy.com. I confirm that this response may be published on Ofgem's website.

Yours sincerely,

A handwritten signature in dark ink, appearing to read 'AM Cox'.

Mark Cox
Head of Nuclear & Wholesale Policy and Regulation

Attachment

Q1. Do you agree with our broad regulatory approach to establishing the FSO's obligations to deliver the CSNP products?

Yes, the broad regulatory approach to establish the FSO's obligations through new FSO CSNP Licence Conditions, Ofgem owned CSNP Governance Document and FSO owned CSNP Methodology to deliver the CSNP products seems appropriate. EDF would welcome clarity on the frequency of consultations and updates to the Governance Document and Methodology, the minimum consultation period and how stakeholders will be able to effectively engage.

This consultation and proposed reforms are within a framework of wider reforms including the establishment of the FSO and the future regulation of networks. The Electricity Networks Commissioner's report has also now been published. This consultation and development of CSNP needs to be understood within this broader framework to ensure it overall effectiveness.

We consider it important that greater certainty and transparency is provided on the roles of Government and Ofgem; as well clearly set out the regulatory framework landscape within which all the entities will operate and seek to implement changes of energy policy.

We continue to believe that further engagement on this will be necessary as the relationship between the FSO, Ofgem, Government and the industry begins to crystallise.

Q2. What are your views on the types of system need that we have proposed are covered by the CSNP? Are there any gaps?

It is really helpful to set this out and providing at least this level of clarity is essential to ensure the CSNP is effective. The table shows the degree of interaction and potential for shared or unclear responsibilities between FSO and TO. It will be important to increasingly clarify roles and ensure accountability is clear.

We agree with the types of system need/issues and approach set out in the consultation. However, we believe that further analysis will be needed not just for SQSS standards but for "quality of system stability" given all the power electronics connecting and driving electricity flows across the country over the next 5-30 years.

The recent sub-synchronous oscillations seen across the Scottish power system this summer are a clear example where accountability for system resilience needs to be addressed. It is not clear from the table 1 (p16), for instance, where this responsibility lies. It's important to ensure the risks are known and tested for each pathway.

Q3. Do you agree that the time horizon for system need assessment should be extended to 2050?

Yes, this should be the starting point for FES, however we feel that the FES could keep this assumption under review and later shift to a longer-term horizon.

As stated in EDF's response to the previous consultation, eventually it will be prudent to extend the analysis beyond 2050. It should be recognised that 2050 won't be "steady state", whether we reach net zero or not. Early zero carbon assets will close and be replaced by newer ones – maybe with different technologies, maybe in different places. However, we

recognise the substantial scale of the challenge in adapting FES and we agree with Ofgem that post-2050 extension does not currently appear a priority.

Q4. Do you agree that the FSO should move to a year-round nodal assessment of system need as part of the CSNP?

Yes, we agree that it is appropriate at this stage for the FSO to move to a year-round assessment of system need, instead of assessing system need at winter peak demand conditions, and an assessment of future requirements at system nodes rather than looking at network boundaries.

However, the system needs may change again and it would be appropriate for the FSO to continually review whether its approach to assessment of system need is the most effective and valid.

Q5. We welcome stakeholders' views on how the FSO can communicate effectively about future system needs?

We agree with Ofgem's expectation that the FSO should review its communications with stakeholders on system need and this requirement should be set out in the CSNP Governance document. We note that the Electricity Network Commissioner set out that creating "easy to understand materials on the ... CSNP is an activity that could be carried out by the FSO and form part of the materials they would produce when publishing plans".

EDF would welcome regular, easier to navigate and more consistency in how the FSO communicates with its stakeholders. At this stage of the energy system transformation, we do not agree with any proposal for a 'major' CSNP publication on a less frequent basis, with smaller annual updates in the intervening years. Reflecting on the significant changes in the previous three years does emphasise how quickly things can change.

The ESO's Operational Transparency Forum (OTF) has proven to be an effective method to communicate shorter- and medium-term system issues. We would welcome more continual review and improvements to ensure that it continues to be as effective as the ESO evolves into the FSO.

Q6. What are your views on the FSO establishing minimum design requirements for high-level option designs and are there areas where exceptions are needed?

We welcome Ofgem's proposal that the FSO develops and provides guidance on the minimum level of detail needed for high-level designs. We agree that a consistent level of detail for option design is an important foundation for effective network planning and are keen to understand how the FSO will engage with industry and by when will these be developed.

Q7. Do you have any views on our proposals for considering environmental and community impacts as part of high-level design of options?

Ofgem proposes that the FSO's CSNP Methodology should include guidance on how environmental and community impacts will be considered at the high-level design stage. The recent [independent report](#) and recommendations from the Electricity Networks Commissioner cites how the inclusion of the environmental assessments can support endorsement of the

CSNP by Ofgem and by Governments in the National Policy Statements (NPS) and National Planning Framework (NPF) and remove the need for the TOs to develop a needs case as part of the regulatory approval process.

Therefore, EDF would welcome the inclusion of both environmental and community impacts as part of high-level design of options. This is a significant undertaking for the FSO and it needs to be sufficiently resourced and funded to undertake this activity effectively.

Q8. Do you have any views on our proposal for the FSO to independently decide which network needs it may lead the high-level design of?

We welcome Ofgem's proposal that the FSO independently decides which network needs it may lead the high-level design of. We agree that this would allow the FSO to utilise its unique position to consider strategic, whole system outcomes and propose innovative non-build solutions to the commonly proposed new build options by the TOs. Where appropriate, TOs should lead on the high-level design if the FSO deems that it does not have the capability or specific network knowledge to do so.

However, if TOs do lead on the high-level design we would welcome clarification as to how non-build solutions i.e. provision of market services will also be considered and assessed.

Q9. Do you have any views on our proposal for the FSO to set out how and when third parties can be involved within the CSNP?

EDF welcomes initiative to create a more transparent and consistent process that enables stakeholders to support the development of market service procurement processes, to find market solutions to operability, and constraint management needs.

Q10. Do you have any views on our proposals on data exchange to enable the implementation of CSNP?

As stated in our response to the previous consultation we agree that the energy system input and output data used in the FES should be treated as open by default, including the models and algorithms used to produce the data. We agree with Ofgem's definition of open data - Data Assets, their associated Metadata and Software Scripts used to process Data Assets that are made available for anyone to use, modify, and distribute without restrictions.

We would like to reiterate that we would welcome greater distinction of regional data; a similar approach could be adopted at transmission level that is in place at distribution level - data workbooks with data sets at GSP.

We also believe that when auditing previous assumptions, it should be noted that discovering with the benefit of hindsight, that a decision turns out to be wrong does not automatically make it a bad decision at the time.

Therefore, we support the principles and progress on transparency in data sources and analytical methods. It would be appropriate to have any data exchange issues to be resolved in advance of the CSNP.

We would like to understand how Ofgem expects commercially sensitive information to be managed. Commercial data is shared with the Transmission Operators (TOs) by developers in

order to support the development of a business case for funding network investment. This information is currently incorporated into FES by the ESO. There may be a risk that developers would withhold information or data which would mean that the quality of information feeding into FES process is reduced.

Q11. Do you have any views on our proposals regarding the principles to be followed in the CSNP decision-making framework?

We agree with increased transparency and engagement given the increasing importance the CSNP is expected to play in driving substantial investment in the networks. We support Ofgem's proposal that the FSO ensures that its website is clear on how and when stakeholders can get involved in the CSNP process.

Q12. Do you have any views on our proposals on the decision-making framework for selecting potential projects to address longer-term system needs?

We welcome the establishment of a clear assessment methodology for selecting options to enter the potential projects funnel.

Q13. Do you have any views on the decision-making framework to bring potential projects into the 'delivery pipeline' for nearer-term needs?

We believe that further clarity needed on 'specific decision-making tools' particularly in relation to the level of investment uncertainty (para 6.12).

Q14. We would welcome views on our proposal to not re-evaluate projects that are in the delivery pipeline, and whether a materiality trigger is appropriate and what criteria might be used.

We support the proposal to not re-evaluate projects that are in the delivery pipeline. It would provide stakeholders with greater clarity on network project build timelines reduce the risk to developments in the pipeline.

We recognise the potential risks and believe that Ofgem's suggestion of a materiality trigger is an appropriate measure. We propose that setting the minimum level of MWs required for a project to continue in the delivery pipeline may be an appropriate trigger to put in place. This would need to be tailored depending upon the project and would allow the need to be re-assessed if generation projects fall away, reducing the chance of stranded assets.

Q15. Do you have any views on our proposal on inclusion of environmental and community impacts in the CSNP CBA?

We would welcome the inclusion of environmental and community impacts as well as the mitigations of these impacts in the CSNP CBA.

Q16. Do you have any views on our proposal for the CSNP to include a methodology for assessing and taking forward system operability solutions?

EDF would welcome greater transparency and clarity on how all types of operability solutions will be assessed and taken forward. It would provide a level playing field for all stakeholders

providing market-based services by setting out transparently and with clarity how different options are appraised.

This should include a thorough appraisal of how all the different power electronics behind each a-synchronous technology will work together to produce a stable and efficient grid system with little or no power disruptions alongside the SQSS requirements necessary for security of supply.

Q17. Do you agree with our proposal for the ESO to review its current approach to assessing short- and long-term solutions, and for the FSO to set out its approach in the CSNP Methodology?

EDF supports Ofgem's proposal that the ESO review its NOA CBA approach to assess any shortcomings in fairly assessing short- and long-term options when resolving network constraints as well as its current approach to resolving operability needs. We would welcome the findings and recommendations of these reviews be implemented as soon as practicably possible.

Q18. Do you have views on our proposals for FSO to develop capabilities to consider different combinations of options and how this should be implemented?

EDF supports Ofgem's proposal that the FSO should develop capabilities to appraise and compare different combinations of energy system and network options. The Electricity Network Commissioner's report also sets out a requirement for the FSO to develop capabilities to deliver outputs across a number of measures. The next step is for Ofgem to work with Government determine how and by when, will the FSO be funded for these activities.

Q19. Do you agree with our proposal to introduce a requirement, as part of the new CSNP licence condition, for the FSO to make recommendations on additional interconnection and OHAs opportunities between GB and other markets?

We would welcome clarity on how Ofgem envisages how the FSO could make recommendations on additional interconnection and OHAs opportunities between GB and other markets. Any assessment and methodology need to be robust and transparent and should form part of a larger assessment of the generation mix in GB.

Q20. Do you agree with our proposal that the FSO should use reasonable endeavours to support relevant stakeholders as part of the offshore asset development process?

The use of a single scenario was appropriate and necessary for the HND and HND Follow Up Exercises because of the clarity, scale and lack of alternatives for delivering the 50GW offshore wind target. However, the political and market uncertainties for future decisions are likely to be more nuanced; therefore the HND process should not be considered as the blueprint for future system planning. However, EDF would welcome greater collaboration and co-ordination with government, TCE and CES as part of the CSNP development.

Q21. Do you agree with our proposal that the FSO assess third-party options under the CSNP and recommend delivery by competition where proposed solutions meet the relevant competition criteria?

EDF supports competition where ultimately it can bring value to consumers and support FSO having this role. However, we note the recent recommendations from the Electricity Networks Commissioner which argued that competition should be put on hold given the scale of transformation and network delivery needed this decade. Ofgem and Government need to satisfy themselves that a competitive network option adds sufficient value at this time given the accepted additional delivery challenges it creates.

Q22. What are your views on whether changes to the SQSS or obligations on licensees are needed to support the CSNP - where specifically are these changes needed and when do they need to happen by?

Our strong view is that there needs to be sufficient clarity on respective roles of the FSO and the TOs (and also Ofgem and Government). This clarity will bring accountability. If further changes are needed to ensure an effective process and overall framework then these will be highlighted. The task of identifying, planning and delivering the scale of network needed this decade as well as ensuring the overall system is operable is massive and it is crucial that all stakeholders understand their respective roles while recognising the inherent interactions and need for collaboration to ensure success.

Q23. Do you agree that the FSO should evaluate the climate resilience of the long-term whole-system CSNP?

Resilience planning is critical to match the increased reliance on electricity. EDF agrees that it is vital that the decarbonised network is also planned to be resilient to changing climate conditions and continues to deliver high levels of security of supply. Therefore, EDF support a requirement for FSO build capacity to look at the climate resilience of the longer-term whole system CSNP.

Q24. Do you agree with the proposed position on the treatment of connections in the CSNP?

Yes, we agree with the proposed position on the treatment of connections in the CSNP. Overall, should reflect the expected supply/ demand picture to achieve net zero but with potential adjustment to recognise coordinated policy exercises like HND or large nuclear power plants.