Public

Appendix E

Summary of Stakeholder Feedback

March 2025/Issue 10.2

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1. Introduction

In December 2024 and January 2025, we consulted on our proposed methodology for the tCSNP2 Refresh in line with the C13 Electricity transmission license condition to gather feedback, insights, and improvements to the methodology. The feedback we received was invaluable in helping us understand the perspectives and interests of our stakeholders.

At the same time as the tCSNP2 Refresh methodology consultation, we consulted on the Strategic Spatial Energy Plan (SSEP) methodology and the Centralised Strategic Network Plan (CSNP) high level principles. The documents were promoted on our website, through our working groups and a webinar open to all interested parties. A recording of the webinar is available ***here***.

The tCSNP2 Refresh draft methodology consultation generated feedback from more than **thirty (30) respondents** comprising of organisations and individuals across the UK. Participants included national and local governments, transmission operators, distribution networks, energy industry influencers and experts, interest groups, advisory bodies, and local community groups. Together they provided a breadth of feedback and insight about our methodology.

Since the consultation closed on 20 January 2025, we have continued to develop the tCSNP2 Refresh methodology, assessing all comments and, where appropriate, making changes to the methodology as well as providing further clarity and additional information.

2. Key themes

More than two-thirds of the respondents agree that the draft tCSNP2 Refresh methodology approach is appropriate and covers a wide range of topics. They agree that producing a summarised main document with a suite of detailed documents was helpful to understand the tCSNP2 Refresh process.

Stakeholders have asked to clarify some aspects as well as suggesting approaches for consideration in the tCSNP2 Refresh. We have grouped these under various key themes which include the need for robust modelling and analysis, integration of environmental considerations, the importance of stakeholder engagement, and the need for a more comprehensive approach to energy planning. These key themes are detailed below.

2.1. Modelling and Analysis

Feedback included various recommendations regarding:

- the baseline network and background analysis for the tCSNP2 Refresh
- the options development process
- the economic assessment process for options

a. Baseline Network/Background for Analysis.

Stakeholder Feedback

I. Respondents highlighted the need for a well-defined and stable background for analysis, considering ongoing projects and parallel processes such as the HND/HNDFUE impact assessments and INTOG projects to avoid undermining the tCSNP2 Refresh outputs.

II. A number of respondents requested clearer guidance on how the UK Governments Clean Power 2030 Action Plan outcomes (CP30), Connection Reforms outcomes, and updated offshore grid designs would be reflected in the baseline network to ensure economic, efficient, and coordinated network development.

NESO Response

I. For the tCSNP2 Refresh power system studies, we will use the latest Future Energy Scenarios (FES) to form the background for the analysis. We propose that the analysis and optioneering that transmission owners (TOs) will undertake to submit options in the tCSNP2 Refresh should be based on those scenarios, with the exchange of the power system models during the summer.

II. We will look to reflect outputs of the Connections Reform, Offshore Impact Assessments, and the Government's Clean Power 2030 Action Plan as appropriate in the background of our tCSNP2 Refresh analysis by updating the latest FES where necessary.

b. Options Development

Stakeholder Feedback

I. A number of respondents requested clarity on the scope of the tCSNP2 Refresh and what extent the maturity assessment of options is considered against the timing of when solutions are needed.

II. Some respondents highlighted the risk of over- or under- estimating the economics of a solution proposed by TOs. This is because we propose to use the TOs' specific Weighted Average Cost of Capital (WACC), but the most up-to-date version will only be available after Ofgem's Final Determination on RIIO-T3.

NESO Response

I. In the tCSNP2 Refresh, we will consider all options of various levels of maturity that are submitted into the options assessment process as well as options recommended in the Beyond 2030 (tCSNP2) report that should have higher level of design maturity. More details on the options to be assessed in the tCSNP2 Refresh can be found in *Annex 3 – Options Development*.

II. We expect TOs to provide relevant financial parameters for assessments, including WACC, sensitivity analysis if requested. We would consider performing a sensitivity (e.g. high-central-low) if requested. Additional sensitivities are subject to whether there is sufficient time available within the assessment timeframe and the relevant parameters being provided and agreed.

c. Options Assessment

Stakeholder Feedback

I. Some respondents requested that we include societal impacts of carbon in our cost-benefit analysis (CBA) and reassess the economic optimality of some proposed transmission assets against interconnection options.

II. There were also recommendations to reconsider certain proposed transmission assets, onshore options, and the use of third-party data for forecasting energy costs. There was also emphasis on the importance of a rigorous and flexible environmental and community impact appraisal.

III. A small number of respondents raised points about reassessing projects that were granted delivery track status and given access to pre-construction funding and the

Advanced Procurement Mechanism without early competition. They highlighted that this could introduce uncertainty and potentially affect the efficient delivery of transmission infrastructure.

NESO Response

I. The economic benefit for options will include the cost of carbon valued at the HM Treasury Green Book values, which is consistent with the network analysis in Beyond 2030 (tCSNP2) and tCSNP2 Refresh.
As part of the process of developing the Future Energy Scenarios (FES), third party data is used as economic inputs in our modelling. Throughout the development of FES, external feedback is obtained which helps to shape the forecasts. We continue to improve our modelling and have recently included an estimate of network infrastructure operational expenditure (OPEX) costs, and other cost components.

II. We will use the latest FES to guide our Interconnectors' assessments with the optimal path from the main tCSNP2 Refresh assessments.

III. As mentioned earlier, the tCSNP2 Refresh will consider all options of various levels of maturity that are submitted into the options assessment process as well as options recommended in the Beyond 2030 (tCSNP2) report that now have higher level of maturity.

d. Interconnector Assessments

Stakeholder Feedback

I. We received feedback emphasising the need for early and clear communication of long-term needs to developers and coordination with European stakeholders. Some respondents raised concerns about the omission of Offshore Hybrid Assets (OHAs) and stressed on the importance of better coordination with connected markets and clear pathways to implementation while encouraging more industry engagement from NESO.

II. Some stakeholders requested detailed information on several key areas, including:
- the publication of source data,
- a breakdown of social economic welfare (SEW) for Great Britain and connecting countries,
- and the application of the Weighted Average Cost of Capital (WACC).

III. Some respondents called for an assessment of potential alternative trajectories if not all projects with Cap and Floor from previous windows as well as clarity on the specification of the network and boundaries in Great Britain, details on the methodology for modelling European markets, and information on the calculation of net present value (NPV). They also requested detailed information on the indicators used to determine the optimal level of interconnection, such as social economic welfare (SEW), capital expenditure (CAPEX), and attributable constraint costs (ACC).

IV. Some respondents highlighted the importance of including carbon savings and the benefits of integrating renewable energy sources (RES) in the assessment of interconnectors and OHAs.

V. A number of respondents requested an explanation of the iterative optimisation approach used. They also expressed concerns about a development gap between the tCSNP2 and the enduring CSNP, and the risk of excluding projects commissioning between 2030 and 2035 from the strategic planning framework.

NESO Response

I. We will coordinate with all appropriate stakeholders, including Ofgem, DESNZ, transmission system operators, and interconnector developers, to ensure the tCSNP2 Refresh methodology has considered their views.
We confirm that the tCSNP2 Refresh will include all Cap and Floor W3 projects given a positive decision by Ofgem in December 2024, including the OHA pilot projects (Lionlink and Nautilus) and three point-to-point interconnectors (Maresconnect, LirlC, and Tarchon).

II. We have clarified that the 5.38% Interest during construction (IDC) rate for interconnectors is the mid-point of the real-consumer prices index including owner occupiers' housing costs (CPIH) as well as the vanilla WACC range used in the Cap and Floor W3 analysis, and this will be used to calculate CAPEX PVs. North Connect will not be included in the baseline interconnection for tCSNP2 Refresh. This is because for tCSNP2 Refresh we will include all the Cap and Floor W3 project that were given a positive decision by Ofgem in December 2024, it will include the two OHA projects (Lionlink and Nautilus) and three point to point ICs (Mareconnect, LirlC & Tarchon).

III. We commit to facilitating the development of the right interconnection for GB at the right time and location, considering cross-border projects in development. We will be guided by the latest Future Energy Scenarios (FES) when carrying out interconnector assessments. This will provide a baseline for identifying realistic interconnection landing points based on future transmission requirements and network capability.

IV. We will run study cases for the latest FES for all European countries using the PLEXOS economic dispatch optimisation tool. PLEXOS can simulate all European power markets

simultaneously and calculate SEW and constraint costs. Historically, changes in carbon emissions and the use of RES are analysed but not used to optimise the level of interconnection due to the complexity of combining these estimates with welfare costs.

V. We will apply the same iterative optimisation approach used in tCSNP2, which involves maximising present value by considering SEW, CAPEX, and ACC. We acknowledge the importance of carbon savings and RES integration benefits however this would pose a challenge in incorporating these factors into the optimisation process.
We will focus the iterative process on SEW, capital costs, and reinforcement costs, and include an assessment of changes in carbon emissions due to more interconnection.
The iterative process involves:
    - setting the base level of interconnection,
    - creating study cases,
    - simulating European markets,
    - calculating the net benefit of each potential interconnector,
    - identifying the optimal interconnector solution for each FES scenario,
    - and updating the base level of interconnection in each FES scenario.

The results of the system operability analysis will be overlaid onto the iterative analysis.

2.2. Environment and Community

Stakeholder feedback

I. Feedback asked whether options would be assessed on environmental and community impacts and the types of activities TOs were expected to undertake at different points in time. The relative weighting of these impacts in decision making was raised.

II. Some feedback was on whether strategic environmental assessment would be undertaken.

III. Some stakeholders sought more clarification on how the environment is considered and how acceptable environmental impacts are going to be defined, suggesting that it would be appropriate to consider the environment as an asset as opposed to a cost, as well as incorporating biodiversity, marine, and natural capital net gains and natural capital ecosystem assessment in the appraisal process.

IV. Respondents asked whether stakeholders beyond the energy industry would be consulted during the assessment process. They also sought clarity on the impact to HND and HNDFUE if any proposed changes are made the methodology.

V. The importance of stakeholder engagement throughout the process was highlighted by some respondents.

NESO Response

I. The options that the TOs submit to the tCSNP2 Refresh process are to include Environment & Community impact appraisals as well as the System Requirement Form (SRF) data.
Our recommendations for network options are balanced against four assessment criteria (Economic and Efficient, Deliverability and Operability, Environmental Impact, Community Impact) similar to tCSNP2. As we move to the enduring CSNP process, we are re-evaluating how the criteria are balanced and weighted.

II. We are exploring the requirement for additional environmental assessments for the tCSNP2 Refresh.

III. The high-level appraisals cover a range of aspects including ecology (typically Special Areas of Conservation (SACs), Special Protection Areas (SPAs), Ramsar sites, ancient woodlands), geology, and soils, and this is contained in a separate methodology.
As the requirement for biodiversity net gain (BNG)s on individual projects, and the tCSNP2 Refresh is at a strategic scale, we will work with stakeholders to understand the potential ways in which biodiversity net gain in England, net benefit for biodiversity (NBB) in Wales and any future strategies proposed for Scotland can be facilitated through strategic plans.

IV. The TOs engage as part of their statutory consultation process with communities about proposed works.

V. As done in tCSNP2, we will consult with the Environmental Sub Group and any changes proposed as a result of the tCSNP2 Refresh, will be covered in the appropriate environmental reports for the tCSNP2 Refresh. Where these changes result in an impact on the HND and HNDFUE offshore design, this will be captured within updates to the HRA and SEA assessments for HND and HNDFUE.

2.3. Stakeholder Engagement

Stakeholder Feedback

I. Some respondents mentioned that the number of consultations held at the same time, the period these consultations lasted, as well as the timing of the consultations resulted in a difficulty in thoroughly engaging in the process.

II. Some respondents requested clarification on how stakeholder feedback is being used and expressed concerns about the potential for important issues to be lost within broader themes.

NESO Response

I. Given the scale of the work required and interdependencies between plans, we could not have a longer consultation period or delay the consultation without impacting our delivery plans. It is within our license obligation to submit the tCSNP2 Refresh methodology to Ofgem by end of March. Therefore, the timing of the consultation was necessary to give us time to address the feedback received and make the required amends to the methodology. There will be more opportunities for public consultation on the SSEP and CSNP during 2025 and 2026.

II. We respond to a summary of the feedback received from the consultation within the Appendix E. While some feedback received was in the form of suggestions and have been taken into consideration, there were others that led to changes to the methodology, and we have updated the methodology where appropriate as a result.

2.4. Competition Assessment

Stakeholder Feedback

I. We received feedback requesting clarity on the eligible participants of the competitive tendering process as well as highlight the role Ofgem plays in consulting on projects suitable for competition. Some feedback asked about the competitive framework relating to connections in the context of Connections Reform.

II. Some feedback was about the safety and efficiency implications of having multiple work parties within a substation. It included concern over the complexity of separability, including pre-existing agreements and whether connecting infrastructure is the responsibility of the TOs to build, leading to uncertainty in cost for third parties and a risk of projects falling below the competition threshold.

III. We received feedback highlighting that there was no cost benefit analysis mentioned for assessing projects which could lead to incorrect identification of correct projects and a lack of accuracy in gauging the benefits of early competition.

NESO Response

I. Competed projects are open to incumbent TOs as well as third parties. We have amended *Annex 6* on Competition to clarify this.
Ofgem make the final decision as to whether to approve a competitive tender for a project and Ofgem's approach to approving any competition is their decision.
NESO is developing proposals for the introduction of competition for connection driven projects in line with the ongoing Connections Reform work. Further details will be made available once connection reform proposals bed in.

II. Matters relating to arguments for and against competition were covered as part of Early Competition consultations and lie outside the scope of this methodology.

III. The eligibility criteria for early competed projects are covered by the Electricity Regulations 2024 (Criteria for Relevant Electricity Projects) (Transmission) which includes for a consumer benefit criterion, which is assessed via the early competition cost benefit analysis (CBA) methodology. Details of this can be found on NESO's early competition website.

3. Summary

We would like to thank stakeholders for the time, participation and feedback provided. All responses are valuable, and we are committed to making the necessary adjustments to improve Great Britain's network planning approach and ensuring our methodology is robust.