

National Grid Electricity System Operator
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NGESO Offshore Coordination Project - Consultation response

Equinor refers to the National Grid Electricity System Operator (NGESO) Offshore Coordination Project Consultation launched on 30 September 2020. The Offshore Coordination Project provides valuable information and insights which are crucial to understand how the future offshore transmission can be developed and will be an important input to BEIS offshore transmission review. Equinor welcomes the opportunity to respond to the consultation.

Equinor is a global energy company, employing over 650 people in the UK. It is the UK's largest supplier of crude oil and the largest supplier of natural gas, meeting more than 25% of UK demand. It operates the Mariner oil field and three offshore wind farms including Hywind Scotland, the world's first floating wind farm. With partner SSE Renewables Equinor is building Dogger Bank, the world's largest offshore wind farm.

The UK government has set ambitious targets for offshore wind deployment. The ambition is challenging but achievable. To meet these targets both the onshore and the offshore transmission grid needs to be developed efficiently. Although radial offshore grid connections may still be economic and efficient for some developments, in other regions a more coordinated approach will be required to ensure the best possible outcome for consumers, local stakeholders and society.

NGESO has estimated that consumers may save approximately £6bn in capital and operating expenditure between now and 2050, as well as reducing the number of cables, cable landing points, onshore and offshore assets by 50%. Equinor has not assessed the potential benefits of a coordinated offshore transmission approach in detail but agrees that coordination will bring significant value to consumers.

Reforming the offshore transmission regime must however not jeopardise advanced offshore wind projects in planning and/or with grid connection agreements in place. We anticipate that the effect of a more coordinated approach most probably will be seen closer to 2030 or even beyond due to the advance stage of projects deploying before 2030. We note that NGESO also question the assumption that all projects connecting after 2025 could be expected to coordinate. However, there may be potential for coordination of some projects early, but this needs to be on a voluntary basis to avoid delays. We welcome the opportunity for early projects to be pathfinder projects.

The offshore transmission review is set to conclude by end of 2021. It is important NGEsO's work and the government's offshore transmission review does not bring uncertainty to the industry causing investment hiatus in offshore wind, as this will damage investors' confidence as well as hindering the government's offshore wind ambitions and the ability to meet the net-zero commitment in 2050.

The Crown Estate and Crown Estate Scotland will announce the results of the R4 and Scotwind lease auctions in spring 2021. Equinor's assumption is therefore that the outcome of the offshore transmission review will not be retrospectively imposed on R4/Scotwind projects but be based on voluntary agreement if developers find it commercial and technical attractive.

As shown in the reports the development of an efficient and economic integrated design will require significant pre-investments in offshore and onshore transmission assets. It will be difficult for projects to commit to such investments ahead of the income certainty of a CfD, hence it will be necessary with a system that allows for anticipatory investments when deemed efficient and economical and how these can be guaranteed and carried until the projects are in a position to commit.

In the current regime the Generator Build option has been preferred by developers to control cost and schedule. For an integrated design this may be different. Cost and schedule risk will however be equally important, if not more, when developing offshore infrastructure in the future. Equinor is of the opinion that developers will still be well positioned to plan, and construct coordinated offshore transmission assets efficient and economically.

It will also be important that BEIS' offshore transmission review assess the interactions between the seabed leasing process, the grid connection process, the consenting process and the CfD process, and how this may impact offshore transmission coordination. NGEsO participation in and input to this work will be crucial.

We have in the appendix provided our response to relevant consultation questions. We would welcome the opportunity to discuss the response in further detail.

Yours sincerely,

Torkel Sjoner (sign)

Equinor ASA

Appendix

Detailed response to specific questions

Holistic Approach to Offshore Transmission Planning Report

Q1. Do you agree with our assessment of the key technology and system risk barriers coming from the Holistic Approach to Offshore Transmission Planning Report?

The proposed integrated designs are dependent on larger HVDC designs than currently used for offshore wind in the UK. DC circuit breakers (DCCB) will also be required to capture the full benefit of an integrated design. The complexity and cost attached to this will be significant. It is important that this risk is properly acknowledged by decision makers and authorities when deciding the future offshore transmission regime.

Offshore Connections Review Report

Q1. Do you think that if the areas we are highlighting were improved, that the ability to coordinate projects would be significantly increased?

Reviewing and codifying the CION will provide clarity and certainty on the process and as such will be welcomed. It is however important that NGESO's current obligation to provide connection offers (connection point, connection date and capacity) no later than 3 months following an application stands and that the codified CION process does not include provisions for prolonging this obligation.

Formalising developers' roles in the System Operator-Transmission Owner Code (STC) may also provide increased clarity and certainty to developers when they act as TO during the early phases of designing and constructing offshore transmission assets.

The report also describes the possibility to package or coordinate connection application offers. While this may be efficient and support a more coordinated approach to offshore transmission it is important that the proposal is scrutinized and that amongst other impact on competition as well as competition law is assessed.

It is also important that a review of where risks should sit for financial liabilities also in full assesses how AI will impact on the liabilities the generators are expected to secure.