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## ESO letter to Ofgem regarding HND South Cluster Impact Assessment and asset classification

Dear Stuart,

In July 2022, ESO published the first Holistic Network Design<sup>1</sup> (HND) setting out a single, integrated design that supports the large-scale delivery of electricity generated from offshore wind, taking power to where it's needed across Great Britain. Since the publication of the HND, Transmission Owners (TOs) and in scope offshore wind developers with non-radial connections have started to produce the Detailed Network Design (DND). As part of that process, TOs and developers have identified potential design changes which required us to develop a process to assess the impact of these changes, against the baseline of the HND, using the four HND design criteria. We have referred to this process as the HND Impact Assessment process<sup>2</sup>.

Deviations from its recommendations may have wider implications for the transmission network and other industry processes. It is important that we understand the full impact of any design changes, as there may be consequences that are not immediately obvious, and the ESO is best placed to conduct this holistic assessment.

The purpose of this letter is to communicate the outcome of the first impact assessment and the changes to the original recommended HND. We also wish to request that Ofgem consider the asset classification of the new recommended design for the "South Cluster" (as defined below) of the HND.

The first group to submit design changes for the Impact Assessment process were the HND developers and TOs due to be electrically connected off the east coast of England. These parties are known as the "South Cluster" (due to their location in relation to other HND projects) and include NGET, SSEN-T, RWE (Dogger Bank South (DBS) East and DBS West) and SSE Renewables and Equinor (Dogger Bank D). The request follows recent movements in the global supply chain of HVDC technology making the HND network in this area challenging to deliver for 2030.

The group submitted four categories of designs, ranging in levels of interconnection. Upon completing the Impact Assessment for the HND South Cluster, Category D performed more favourably against the HND design objectives than all other categories, as well as the baseline design. Further detail of the new design, the factors influencing the outcome of the Impact Assessment, and the potential benefits of the design change can be found in the accompanying South Cluster Impact Assessment Outcome [summary document](#) on the ESO HND website.

<sup>1</sup> [The Pathway to 2030 Holistic Network Design | ESO \(nationalgrideso.com\)](#)

<sup>2</sup> [Offshore Coordination Project | ESO \(nationalgrideso.com\)](#) – see "Progressing delivery of the Holistic Network Design (HND)" section

There are a number of changes that have occurred since the HND was published in 2022 which have led to this outcome. Increases in the cost of Offshore equipment above the rates of general price increases, challenges in the supply chain for transmission assets, and the identification of opportunities to realise additional electrical and physical capacity are key factors. The Category D design delivers economic benefits by enabling earlier connection of generators, operability benefits in providing a simpler design, environmental benefits in reducing assets in a marine area that is sensitive to cabling, and a small change in community impact driven by an additional converter station being required onshore.

On 15<sup>th</sup> December, ESO took an agenda item on the South Cluster Impact Assessment to a meeting of the Offshore Transmission Networks Review (OTNR) Transmission Networks Board, in order to ratify that the necessary considerations had been applied<sup>3</sup>. This is consistent with the approval sought for HND and HND Follow up Exercise (HNDFUE). We presented the outcome of the assessment and an explanation of the process that we followed, in order to provide sufficient evidence to the group to demonstrate that we had followed the required process and ask for their sign off. The group confirmed they believe we had followed the required process which means the outcome of the Impact Assessment is now finalised.

In October 2022, Ofgem set out the criteria for determining the appropriate classification<sup>4</sup> of each asset in the HND, in order for the correct licence to be granted. We are now advising Ofgem of the change to the network design in this region so that Ofgem can consider the asset classification for infrastructure proposed in the Category D design for the South Cluster. This will provide clarity for TOs and developers progressing the DND for the Category D design.

We welcome your response. If you have any questions or comments related to points raised in this letter or require further information to carry out the asset classification of the design, please do get in touch.

Yours sincerely

Graham Stein

Head of Offshore Coordination Network Planning

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<sup>3</sup> PowerPoint Presentation ([nationalgrideso.com](http://nationalgrideso.com)) – see Governance section

<sup>4</sup> [Offshore Transmission Network Review: Decision on asset classification | Ofgem](#)