

4 May 2022

**National Grid ESO response to the Eastern HVDC - Consultation on the project's Final Needs Case and Delivery Model**

Dear Keren,

We are pleased to be able to provide a response on Ofgem's consultation on the Large Onshore Transmission Investment final needs case for the proposed 'Eastern High Voltage Direct Current' Link (Eastern HVDC) submitted by National Grid Electricity Transmission, SP Transmission and Scottish Hydro Electric Transmission plc.

National Grid ESO is the electricity system operator for Great Britain. We move electricity around the country second by second to ensure that the right amount of electricity is where it's needed, when it's needed – always keeping supply and demand in perfect balance. As Great Britain transitions towards a low-carbon future, our mission is to enable the sustainable transformation of the energy system and ensure the delivery of reliable, affordable energy for all consumers.

The ESO holds a unique position at the heart of the nation's energy system. We use our unique perspective and independent position to facilitate market-based solutions which deliver value for consumers.

This work is a key enabler for the required power flows in Great Britain to connect increased renewable generation in Scotland, with demand centres in the South. With the Government's 40GW offshore wind by 2030 plan, significant renewable capacity increase in the Scotland and North England region has been observed from previous Future Energy Scenarios (FES). Eastern Links Torness to Hawthorn Pit (E2DC) and Peterhead to Drax (E4D3) have received a strong and long-term signal to proceed in the Networks Options Assessment for several years, and most recently in the NOA 2021/22 published in January 2022<sup>1</sup>.

As the ESO, we contributed towards the LOTI assessment of Eastern HVDC Initial Needs Case (INC) in 2019 and again to the Final Needs Case (FNC) in 2022 in collaboration with all three Transmission Owners. There were seventy-six options in the INC and ninety-three options in the FNC, which have been studied under FES and sensitivity scenarios. Our economic assessments demonstrate a strong needs case and significant benefit to the transmission system and GB consumer for the first two Eastern HVDC links between Torness to Hawthorn Pit and Peterhead to Drax to be commissioned on time. The early years' economic value of the two HVDC links signals to maintain or even advance their Earliest in Service Date is pivotal. We also note that the most recent NOA also shows a strong recommendation for further reinforcements on key north south boundaries in the form of further offshore and onshore links.

We strongly support the development of the Eastern HVDC links, as the next step in the reinforcements needed to facilitate the transition towards a net zero energy system.

We welcome the opportunity to discuss any of the points raised within this response. Should you require further information or clarity on any of the points outlined please contact Paul Wakeley in the first instance at Paul.Wakeley@nationalgrideso.com. Our response is not confidential.

Yours sincerely

Nick Harvey (By email)

Network Development Manager

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<sup>1</sup> [https:// www.nationalgrideso.com/research-publications/network-options-assessment-noa](https://www.nationalgrideso.com/research-publications/network-options-assessment-noa)