

27 June 2022

## **National Grid ESO response to RIIO-2 Medium Sized Investment Project (MSIP) Re-opener consultation**

Dear Graeme,

Thank you for the opportunity to respond to Ofgem's RIIO-2 MSIP Re-opener consultation for the following:

1. Melksham Operational Tripping Scheme Phase 2 Project submitted by National Grid Electricity Transmission.
2. National Electricity Transmission (NGET) Cellarhead Customer Connection
3. National Electricity Transmission (NGET) Frodsham Customer Connection and Lister Drive Customer Connection

As the Electricity System Operator (ESO) for Great Britain, we are in a privileged position at the heart of the energy system, balancing electricity supply and demand second by second. As the UK moves towards its 2050 net zero target, our mission is to enable the sustainable transformation of the energy system and ensure the delivery of reliable, affordable energy for all consumers.

We use our unique perspective and independent position to facilitate market-based solutions which deliver value for consumers.

These works are a key enabler to facilitate net zero by 2050 with new renewable generation connecting on the transmission and distribution systems. We support the consultation and Ofgem's preferred position for:

- **Melksham Operational Tripping Scheme Phase 2 Project**  
With the connection of over 7GW of zero-carbon generation and interconnectors, managing the power flows in a safe manner, compliant to the SQSS, needs to be done in the most economic and efficient manner. We support the NGET and Ofgem view that this is the most cost-effective solution to extend the OTS to operate a more compliant network while making use of existing inter-tripping assets on the system and enhancing them through extension.
- **Frodsham Customer Connection and Lister Drive Customer Connection**  
To move to a zero-carbon network world, some the ESO's biggest challenges is the management of high voltage and the loss in grid inertia. The high voltage Mersey Pathfinder procured a shunt reactor at Frodsham 400kV and the Stability Pathfinder Phase 1 procured two synchronous compensators at Lister Drive 275kV to manage high voltages and maintain system stability respectively. We support Ofgem and NGET's view of using the existing bay at Frodsham and the tee'd connection design at Lister Drive as being the most optimal outcomes, allowing a more cost effective and timely connection for these services to be available for the ESO.
- **Cellarhead Customer Connection**  
The proposal by NGET is for the construction of a new assets within the existing 132kV substation site to accommodate a new 132kV WPD circuit. Ofgem's view is to accept WPD's proposed short listed solution as the most economic alternative. However, the ESO's view, based on the information presented in the consultation, is that the proposal for a whole system/market-based solution has been discounted too early. We note this is a cost benefit analysis that should be conducted to determine whole system solutions that weigh up the cost of build vs. non-build solution before progressing.

We welcome the opportunity to discuss any of the points raised within this response.

Should you require further information or clarity please contact Griffin John, Power Systems Engineer, [Griffin.John@nationalgrideso.com](mailto:Griffin.John@nationalgrideso.com) in the first instance.

Yours sincerely

Dr Paul Wakeley,

Strategic Network Development Senior Manager