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## 16th October 2023

ESO Response to consultation on the assessment of initial needs case submission of 2023 Medium Sized Investment Project from SHET for the installation of a harmonic filter in the southwest (Kintyre Peninsula) region

Dear Eliska,

Thank you for the opportunity to respond to your consultation on the assessment of initial needs case submission of 2023 Medium Sized Investment Project from SHET for the installation of a harmonic filter in the southwest (Kintyre Peninsula) region.

## Who we are

As the Electricity System Operator (ESO) for Great Britain, we are at the heart of the energy system, balancing electricity supply and demand second by second.

Our mission, as the UK moves towards its 2050 net zero target, is to drive the transformation to a fully decarbonised electricity system by 2035, one which is reliable, affordable, and fair for all. We play a central role in driving Great Britain's path to net zero and use our unique perspective and independent position to facilitate network and market-based solutions to the challenges posed by the trilemma.

Our transformation to a Future System Operator (FSO) is set to build on the ESO's position at the heart of the energy industry, acting as an enabler for greater industry collaboration and alignment. This will unlock value for current and future consumers through more effective strategic planning, management, and coordination across the whole energy system.

## Our key points

We support the need for Electricity Transmission Owner's investment to ensure that power quality within their licensed area is managed in such a way that it remains within acceptable levels. Scottish Hydro Electric Transmission (SHET) have assessed the harmonics on the Kintyre Peninsula against the levels set out in Engineering Recommendation G5/5 and set out proposed mitigations for the elevated levels of harmonics they have observed.

We agree with the view that use of harmonic filters from the Western High Voltage Direct Current (WLHVDC) at the Hunterston Converter Station is not a suitable long-term solution and note that this option would also add operational complexity, with associated operational risk and costs.

Crossaig substation has been identified as the preferred location for a filter installation and note that this is still subject to further detailed optioneering and design work. We will continue to work with SHET and Ofgem to ensure that the most efficient design for the network is procured, taking in to account future network reinforcements.

We look forward to engaging with you further. Should you require additional information on any of the points raised in our response please contact David Gregory, Power System Engineer, Network Operability at david.gregory1@nationalgrideso.com.

Our response is not confidential.



Yours sincerely
Nick Harvey
Network Operability Manager

## Appendix 1 – Consultation Question Responses

Question 1: Do you agree with our initial view on the needs case for the Southwest Harmonic Filter project?

We agree with Ofgem's initial view of the needs case as described in paragraphs 2.7 and 2.8 of the consultation document.

Question 2: Do you agree with our initial view on the preferred option presented by SHET?

We agree with Ofgem's initial view on the preferred option presented by SHET, as described in paragraph 2.21 of the consultation document.