

All interested parties,
stakeholders in Northern Ireland,
and other regulatory bodies.

Ref: NET/E/TH/699

Date: 11/07/2023

To whom it may concern

Utility Regulator Decision on SONI TSO resubmission of the general application of technical requirements in accordance with Articles 11 – 50 of the Commission Regulation (EU) 2016/1447 establishing a network code on high voltage direct current systems and direct current-connected power park modules

Background

In accordance with Article 5 (4) of Commission Regulation (EU) 2016/1447, establishing a Network Code on High Voltage Direct Current Systems and Direct Current-Connected Power Park Modules (hereafter referred to as **HVDC**), SONI was required to submit a proposal for requirements of general application for approval by the Utility Regulator (UR) within two years of the regulation's entry into force, i.e. 15 September 2018. On the 21st December 2018 the Utility Regulator (UR) received the TSO's (SONI – The System Operator in Northern Ireland) proposal¹ for the general application of technical requirements for establishing a Network Code on the HVDC (the HVDC proposal.). On 26 June 2019, UR issued a decision letter² which highlighted that the UR considered that part of the proposal can be approved, however some aspects of the proposal needed further elaboration before approval can be given.

The decision letter part approves SONI's proposal for the general application of technical requirements in accordance with Articles 11-50 of the Commission Regulation (EU) 2016/1447 establishing a Network Code on High Voltage Direct Current and Direct Current Connected Power Park Modules. This part approval excludes the HVDC proposal elements which relate to Articles 39.8, 47.2, 29.2, 29.3 and 42(a) of the HVDC code.

In the decision letter the UR proposed that the following amendments were made:

¹ <https://www.soni.ltd.uk/media/documents/Proposal-for-general-application-of-HVDC-Requirements-for-Northern-Ireland....pdf>

² https://www.uregni.gov.uk/files/uregni/media-files/2019-06-26%20Part%20Approval%20Part%20RfA%20of%20SONI%20HVDC%20Methodology_0.pdf

1. Within the HVDC Article 39.8 it states that a capability for frequency sensitive mode for a DC-connected power park module shall be determined in accordance with Article 15(2)(d) of Regulation (EU) 2016/631, subject to a fast signal response as specified in paragraph 1 for the 50 Hz nominal system.

After discussions with ENTSO-E SONI understood that the requirements of the Network Codes were not intended to reduce the capability of the fleet of generation connected to a power system. Therefore we as the regulatory authority cannot approve Article 39.8 within the code until we receive the necessary timelines for this derogation in order to maintain grid code requirements for Frequency Response of PPMs, including DC-connected PPMs, we have been told this will be submitted to us at the same time as the proposed modification to the grid code.

2. Under Article 47.2 of the HVDC code, with regards to frequency response, the remote-end HVDC converter station owner and the DC-connected power park module owner shall agree on the technical modalities of the fast signal communication in accordance with Article 39(1). Where the relevant TSO requires, the HVDC system shall be capable of providing the network frequency at the connection point as a signal. For an HVDC system connecting a power park module the adjustment of active power frequency response shall be limited by the capability of the DC-connected power park modules.

We as regulatory authority cannot approve this article within the code as we require a timeline for the implementation phase and a timeframe as to when the requirements will be made publicly available.

3. Under Article 29.2 any studies required as specified by the TSO (studies in relation to several HVDC converter stations or other plants and equipment being in close electrical proximity) shall be carried out by the connecting HVDC system owner with the participation of all other parties identified by the TSOs as relevant to each connection point. Member States may provide that the responsibility for undertaking the studies in accordance with this Article lies with the TSO. All parties shall be informed of the results of the studies. Additionally, under Article 29.3 all parties identified by the relevant TSO as relevant to each connection point, including the relevant TSO, shall contribute to the studies and shall provide all relevant data and models as reasonably required to meet the purposes of the studies.

We as regulatory authority cannot approve this article as more detail is necessary. With regards to Article 29.2 we would need to see an updated version of Appendix A and with regard to Article 29.3 timeframes and more detail on the process for gathering the relevant information. We require this detail before approving these Articles to enable us to make an informed decision.

4. Under Article 42(a) With regard to the network characteristics, the following shall apply for the DC-connected power park modules: (a) each relevant system operator shall specify and make publicly available the method and the pre-fault and post-fault conditions for the calculation of minimum and maximum short circuit power at the HVDC interface point.

We as regulatory authority cannot approve this article as we need more detail with regard to the timelines.

SONI's Re-submission of Articles 39.8, 47.2, 29.2, 29.3 and 42(a) of the HVDC code

This letter provides detail on the decision of the UR, on articles 39.8, 47.2, 29.2, 29.3 and 42(a) of the HVDC proposal re-submission put forward by SONI on 5 April 2023. The proposal was submitted in accordance with Article 5 (4) of the HVDC by the TSO which relate to Northern Ireland.

Decision

The UR has reviewed the resubmitted HVDC Proposal in line with the requirements of the HVDC, the wider objectives of Regulation (EC) 2016/1447 and the UR's statutory duties and obligations. In accordance with Article 5 (6) of the HVDC, the UR approves Articles 39.8, 47.2, 29.2, 29.3 and 42(a) of the HVDC code.

Next Steps

We request that SONI publish this decision and the HVDC methodology, on the internet.

If you have any queries regarding the information contained within this letter please contact jody.oboyle@uregni.gov.uk or kenny.mcpartland@uregni.gov.uk.

Yours sincerely



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