

Grid Code Modification Proposal Form

Email to gridcode@eirgrid.com



Title of Modification Proposal: Revised ESPS Phase 2 - Incorporation of Energy Storage Power Stations Part 2

MPID (EirGrid Use Only): 318

Date:	9 Sept 2024
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Grid Code Version:	Version 14.2
Grid Code Section(s) Impacted by Modification Proposal:	Various - see document entitled "MPID318_ESPS_Phase2_GridCodeModLocationsSeptGCRP" for full list of Grid Code Sections impacted by this modification proposal

Modification Proposal Justification:

Purpose:

The purpose of this modification is to incorporate Energy Storage Power Station (ESPS) unit type into all sections of the Grid Code that were not included in the previous modification MPID 304.

Background:

MPID 304 Incorporation of Battery ESPS Grid Code Implementation Note was presented to the GCRP in November 2022 and May 2023. The CRU approved the Grid Code modification, MPID 304, on 25 September 2023 and the approved changes were incorporated into Grid Code version 13. MPID 304 incorporated the required Grid Code changes as recommended by the Battery ESPS Grid Code Implementation Note version 3. At that time, only the PPM sections and any associated definitions were impacted by this implementation note. All information can be found on MPID 304, on the EirGrid website [here](#).

MPID 318 proposes to incorporate ESPSs into all sections of the Grid Code that were not considered under MPID 304. This modification proposal also includes changes required by the Scheduling and Dispatch Programme and changes required to align with the requirements set by the Trading and Settlement Code.

Summary of changes included within the proposal brought to the March 2024 GCRP Meeting:

Grid Code version 13 includes the user type Energy Storage Power Station Demand. This user type applies demand requirements to ESPSs while they are importing electricity. This means that ESPSs are both Non-RfG Generating Units and non-DCC Demand Units. Our review of the Grid Code determined that this approach is excessive and that ESPSs are non-RfG Generators only. This approach aligns with the Scheduling and Dispatch Programme, which considers ESPSs to be non-RfG Generators that are capable of responding to positive or negative MW set points. As a result, we propose to remove the term Energy Storage Power Station Demand from the Grid Code. Where appropriate, the term has been replaced with Energy Storage Power Stations or, in limited instances, Energy Storage Power Station acting as demand.

This modification proposes a new section, PC.A.9, that provides details of the planning data requirements for ESPSs.

OC.5 Demand Control incorporates a requirement mandated by Article 15 of Commission Regulation (EU) 2017/2196 establishing a network code on electricity emergency and restoration (NCER). Article 15 requires

ESPSs acting as demand to disconnect or switch to exporting if the transmission system experiences an under-frequency event.

The proposed changes to SDC1 and SCD2 incorporates the requirements specified by the Scheduling and Dispatch Programme. We propose updating the SDC1-Appendix A table and associated defined terms to align with the Scheduling and Dispatch Programme.

We propose making minimal changes to the PPM section as this was previously modified by MPID 304. However, we propose removing references to Energy Storage Power Station Demand where necessary.

Within the Definitions section, we propose removing references to Energy Storage Power Station Demand and we propose modifying several terms in order to align with the Scheduling and Dispatch Programme.

Summary of changes included within the revised proposal for the September 2024 GCRP Meeting:

MPID318 was not recommended to the CRU at the March 2024 GCRP due to the proposed frequency range for low Frequency Demand Disconnection of ESPSs acting as demand. The original modification proposal suggested a frequency range of 47 – 50 Hz. Upon further consultation with industry and a review of SOGL and NCER, this revised MPID318 modification proposes that ESPSs that cannot switch to Generation during a low Frequency event shall be capable of automatic low Frequency Demand Disconnection where the steady state System Frequency falls below 49.5 Hz for a sustained period of more than 1 minute. This revised proposed requirement is aligned with SOGL, NCER, and feedback from industry.

All proposed changes as indicated in this modification proposal and accompanying documentation have been presented for review in the latest version of the Grid Code, version 14.2.

Red-line Version of Impacted Grid Code Section(s) - show proposed changes to text:

Deleted text in ~~strike-through red font~~ and new text highlighted in blue font

As per the document titled "MPID318_ESPS_Phase2_Redline_GCV14.2_Revised".

Green-line Version of Impacted Grid Code Section(s) - show proposed final text:

As per the document titled "MPID318_ESPS_Phase2_Greenline_GCV14.2_Revised".