Grid Code
Modification Recommendation Form

Title of Recommended Proposal:

MPID 318 Energy Storage Power Station (ESPS) Phase 2

Date:	20/11/2024
Recommended at GCRP Meeting No.:	The revised modification was presented at both the JGCRP and GCRP Meeting dated 24 September 2024.
Grid Code Version:	14.2
Grid Code Section(s) Impacted by Recommended Proposal:	Various - see document entitled "MPID318_ESPS_Phase2_GridCodeModLocationsSeptGCRP" for full list of Grid Code Sections impacted by the modification proposal and recommendation.

The Reason for the Recommended Modification:

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

MPID 304 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 on MPID 304 can be found on the EirGrid website here.

MPID 318 Energy Storage Power Station (ESPS) Phase 2 proposes incorporating 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, the Trading and Settlement Code and the EU System Operation Guideline (SOGL) and Network Code for Emergency Restoration (NCER).

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:

This modification proposal was originally presented to the JGCRP on 20th March 2024. Members requested more time to review the proposed modification, and were given until 17th April 2024 to provide feedback. The SONI ESPS Phase 2 modification proposal, SPID_03_2024, was subsequently recommended for approval to the UR following public consultation. The EirGrid ESPS Phase 2 modification proposal, MPID318, was not recommended to the CRU for approval due to industry feedback regarding the proposed frequency range for low Frequency Demand Disconnection of ESPSs.

The original modification proposal suggested a frequency range of 47 – 50 Hz for low frequency demand disconnection of ESPSs. Upon further consultation with industry and a review of SOGL and NCER, this revised 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.

Additionally, we propose correcting a typo that was identified in SDC1.4.8.7 (SONI)/SDC1.4.7.7 (EirGrid). The proposed low frequency demand disconnection changes sit outside Sections under Common Governance, so the details of how this requirement is captured is specific to each Grid Code. SONI will re-submit their modification proposal with the changes to SDC1.4.8.7. The low frequency disconnection requirements will also be the same, but will be addressed via a change to the SONI PPM Settings Schedule.

For the EirGrid Grid Code, all proposed changes as indicated in the revised MPID 318 modification proposal and accompanying documentation have been presented for review in the latest version of the Grid Code, version 14.2 in the documents titled “MPID318_ESPS_Phase2_GridCodeModLocationsSeptGCRP”, “MPID318_ESPS_Phase2_Redline_GCV14.2_Revised”and “MPID318_ESPS_Phase2_Greenline_GCV14.2_Revised”.
History of Progression through GCRPs, Working Group and/or Consultation: On the 24 September 2024 this revised modification proposal was presented to the SONI and EirGrid Joint Grid Code Review Panel, and voted on at the EirGrid GCRP. A detailed history of the modification is provided for in the section above titled ‘The Reason for the Recommended Modification’.
Summary Note of any Objections to the Recommended Change from GCRP Members or Consultation Responses: No objections were raised by the GCRP members.
Outcome of any GCRP Meeting Actions Relating to the Recommended Modification: The EirGrid GCRP recommended that the revised proposed modification be submitted to the CRU. No further actions were raised at either the JGCRP or the EirGrid GCRP.
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”.