

SONI Consultation Paper: Energy Storage Power Stations Phase 2 Modification

Consultation Paper
22/04/24



1. Introduction

- 1.1 The purpose of this Phase 2 modification is to incorporate the Energy Storage Power Stations (ESPS) unit type into all sections of the Grid Code that were not included in the ESPS Phase 1 modification entitled Battery ESPS Grid Code Implementation Guide.
- 1.2 The Phase 1 modification was approved by the Utility Regulator on 5 December 2023.
- 1.3 The consultation period for this proposed modification is 4 weeks; the deadline for submission of comments is close of business on 17/05/2024. SONI will submit a copy of all responses to the Utility Regulator alongside a report on this consultation. If a response is required to remain confidential this should clearly be stated. The intention is to publish all non-confidential responses. Please note that, in any event, all responses will be shared with the Utility Regulator.

2. Background and Overview

- 2.1 The Incorporation of Battery ESPS Grid Code Implementation Guide was approved by the Utility Regulator on 5 December 2023. The purpose of the modification proposal was to incorporate version 3 of the Battery ESPS Grid Code Implementation Note into Grid Code and to incorporate Battery ESPS Compliance Test Procedures and SONI Signal List for Battery ESPS into the PPM Setting Schedule. Those changes are incorporated into the most recent Grid Code version dated 8 December 2023 and the SONI PPM Setting Schedule Issue 5 dated December 2023. Both documents can be accessed at the SONI website here <https://www.soni.ltd.uk/how-the-grid-works/grid-codes/>
- 2.2 This Phase 2 modification proposes the incorporation of ESPSs into the remaining sections of the Grid Code that were not considered under the December 2023 update. This modification proposal also includes all changes required under the Scheduling and Dispatch Programme and will align with the requirements within the Trading and Settlement Code.
- 2.3 Grid Code December 2023 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 should only be classified as non-RfG Generators. 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 defined term “Energy Storage Power Station Demand” from Grid Code. Where appropriate, it has been replaced with “Energy Storage Power Stations” or, in limited instances, Energy Storage Power Station acting as demand.

- 2.4 This modification proposes a small number of changes to PC.A2 and PC.A3, that provides details of the planning data requirements for ESPSs.
- 2.5 OC4 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.
- 2.6 The proposed changes to SDC1 and SCD2 incorporates the requirements specified by the Scheduling and Dispatch Programme. We propose updating the SCD1-Appendix A table and its associated defined terms were also updated to align with the Scheduling and Dispatch Programme.

3. Changes to the Grid Code – Battery ESPS Phase 2 Modification

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

Refer to file **SONI ESPS Ph2 GC Mods (Redline – Draft) based on_Dec23**

4. Benefits and Impacts

- 4.1 This modification will ensure that all remaining sections of the SONI Grid Code and the PPM Settings Schedule align with the requirements of the Battery ESPS Grid Code Implementation Note.
- 4.2 This modification will ensure that Grid Code requirements for Battery ESPS low frequency response align with the requirements of Article 15 of Commission Regulation (EU) 2017/2196.

5. Next steps

- 5.1 The consultation period will run for 4 weeks. Users are invited to send their comments to SONI via email to gridcode@soni.ltd.uk by close of business on Wednesday 17/05/2024. Should Users have any queries, they should contact SONI via gridcode@soni.ltd.uk
- 5.2 Following receipt of comments in relation to this Consultation Paper and the expiration of the period for making comments, SONI will, in accordance with Condition 16 of its Licence, send to the Utility Regulator a report on the outcome of this review.

- 5.3 If you require your response to remain confidential you should clearly state this on the coversheet of the response. We intend to publish all non-confidential responses. Please note that, in any event, all responses will be shared with the Utility Regulator.
- 5.4 Following the end of the consultation period and subject to discussions to be held with the Utility Regulator, the approved modification to the Grid Code (with amendments as described in this consultation paper) will be incorporated into the code.