



Trading and Settlement Code Modifications Committee  
c/o Esther Touhey  
SEMO Modifications Committee Secretariat  
The Oval  
160 Shelbourne Rd  
Dublin 4

20 December 2024

**Our Ref:** F/28675

**SEM Committee Decision for the Regulatory Authorities in relation to Mod\_02\_24 (Final Recommendation Report FRR\_02\_24)**

Dear Esther,

On 24 May 2024 the Modifications Committee submitted its Final Recommendation Report (FRR) regarding Modification Proposal Mod\_02\_24 '*SDP\_02 Battery Integration V3*' in accordance with Paragraph B.17.18.1 of the SEM Trading and Settlement Code (TSC). Mod\_02\_24 was submitted to the Modifications Committee by EirGrid, SONI and SEMO on 9 April 2024 and was discussed and voted on at Modifications Committee Meeting 122 on 23 April 2024.

Mod\_02\_24 resulted from initiative 2 of the TSOs' Scheduling and Dispatch Programme (SDP\_02). The objective of SDP\_02 was to facilitate more effective use of battery storage units in the TSOs' scheduling and dispatch processes and systems. The changes included in SDP\_02 are intended to better align the treatment of battery storage units in the TSOs' scheduling and dispatch systems with their operating characteristics and to allow market participants and the TSOs to realise more value from battery storage units. The most significant

change arising from SDP\_02 and Mod\_02\_24 is that battery storage units will be able to submit negative Physical Notifications (PNs), representing charging, to the TSOs, and the TSOs will be able to issue negative dispatch instructions to battery storage units, i.e. to dispatch them to specific MW levels in their charging range.

Under the SDP\_02 solution battery storage units will be scheduled to “follow PN”, i.e. scheduled to a fixed profile based on participant-submitted PNs. Battery storage units will be dispatched to follow their PNs except for in certain defined circumstances, for example system alerts, and will not be dispatched away from their PNs in the balancing market based on merit order alone. All TSO actions on battery storage units will be SO-flagged.

The TSOs have stated that under the SDP\_02 solution, if a battery storage unit is dispatched away from its PNs the TSOs will use reasonable endeavours to return the unit to its PNs within the trading day, and if later PNs in the trading day are infeasible due to earlier TSO actions, the TSO will dispatch the unit away from those infeasible PNs. Under this solution settlement will be based on EDIL availability, and where the TSO dispatches a battery storage unit to charge or discharge away from its submitted PN the availability status in EDIL will not be affected by the state of charge. This means that dispatch away from PNs that have become infeasible due to previous TSO actions will be settled at better of complex bid-offer price and the imbalance price. This removes significant risk from battery storage units and their bid-offer prices to the balancing market must reflect this, i.e. their bid-offer prices must not include risks that the unit does not face.

Battery storage units must not submit infeasible PNs or inappropriate PNs that do not support the “Follow PNs” solution. The TSOs will not accept such PNs and the submission of such PNs will be investigated.

It is important to note that the “Follow PNs” solution is not the complete solution for battery storage units and the TSOs will develop an enduring solution under the Balancing Market Reform element of the TSOs’ Strategic Market Programme. This enduring solution will enable the inclusion of battery storage units in scheduling and dispatch processes in a manner that facilitates more efficient utility of these storage assets across all timeframes including the balancing market.

The RAs considered that (1) the introduction of the SDP\_02 changes for battery storage units is a significant change to the SEM; and (2) that important elements of the “Follow PNs” solution are not covered in Mod\_02\_24 itself, for example the certain defined circumstances under which the TSOs will dispatch battery storage units away from their PNs. The RAs requested that the TSOs produce an overview of the SDP battery solution to accompany the FRR for Mod\_02\_24, which would explain the end-to-end treatment and operation of battery storage units by the TSOs under the SDP\_02 solution and which would help the SEM Committee come to a decision regarding Mod\_02\_24. This overview document is published alongside this decision letter on the SEMO website. Any changes to this overview document in future will require the consideration of the RAs.

The SEM Committee considers that the Bidding Code of Practice (BCOP) / Balancing Market Principles Code of Practice (BMPCOP) and their application to battery storage units are important here, and the RAs will work on updates required to the BCOP/BMPCOP for the introduction of new technology types and new treatments of existing technology types.

The RAs note that Modification Proposal Mod\_02\_24 was recommended for approval on a unanimous basis by the Modifications Committee.

Considering the above and noting that the proposed changes will allow battery storage units to participate fully in the ex-ante markets and arbitrage efficiently between low and high prices, and in accordance with Paragraph B.17.20 of the Code, the SEM Committee directs that a Modification, as set out in Appendix 1 of FRR\_02\_24, is implemented on a Trading Day basis and should be made effective on the first available date following the delivery of the required system changes, unless otherwise directed by the RAs, giving particular consideration to the updates required to the BCOP/BMPCOP for the introduction of new technology types and new treatments of existing technology types.

The SEM Committee also hereby directs the RAs, TSOs and SEMO to monitor the outcomes of the SDP\_02 battery storage unit solution. The SEM Committee will keep the levels of dispatch away from PNs for battery storage units under review. Any learnings from the SDP\_02 solution should be used to inform the design of the enduring solution for battery storage units being developed under the Balancing Market Reform element of the TSOs’ Strategic Market Programme.

Yours sincerely,

**Kevin Hagan**  
**Manager**  
**Wholesale Electricity Markets**  
**Commission for Regulation of Utilities**

**Lisa Tate**  
**Manager**  
**All-Island Regulation**  
**Utility Regulator**

(Sent by email with no signature)