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| NPRR Number | [1209](https://www.ercot.com/mktrules/issues/NPRR1209) | NPRR Title | State of Charge Ancillary Service Failed Quantity Allocations under NPRR 1149 |
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| Date | November 27, 2023 |
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| Submitter’s Information |
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| Market Segment | Not Applicable |

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| Comments |

At the November 9, 2023 Protocol Revision Subcommittee (PRS) meeting and in follow-up discussions, stakeholders have had questions relating to the mechanics of the calculation of the “Ancillary Service Up Responsibility for Insufficient State of Charge” variable. As proposed in the NPRR, this variable is defined as:

The average insufficient Up Ancillary Service MW amount converted from the insufficient SOC MWh amount for the ESR *esr* represented by QSE *q* for the hour, as received from the Energy Management System, per paragraph (4)(a) of Section 8.1, QSE and Resource Performance Monitoring.

To further clarify ERCOT’s intended implementation of this language, ERCOT notes that it plans to use Security-Constrained Economic Dispatch (SCED)-level data to calculate these average values. Specifically, every four seconds, the Energy Management System (EMS) will calculate the insufficient Up Ancillary Service MW amount by dividing the insufficient State of Charge (SOC) MWh amount by the remaining time in the current Operating Hour. The calculated insufficient Up Ancillary Service MW amount for each SCED interval will use the snapshot of the insufficient Up Ancillary Service MW amount, if any is identified for the interval. A similar process will be applied to calculate the insufficient Down Ancillary Service MW amount by dividing the insufficient SOC headroom MWh by the remaining time in the Operating Hour.

The use of SCED interval data will make these calculations consistent with the approach being used for other Ancillary Service failed quantity calculations envisioned under Nodal Protocol Revision Request (NPRR) 1149, Implementation of Systematic Ancillary Service Failed Quantity Charges.

ERCOT plans to present additional examples to illustrate how this calculation will be applied under different scenarios at the special [PRS meeting](https://www.ercot.com/calendar/11302023-Special-PRS-Meeting-_) scheduled for November 30, 2023.

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| Revised Cover Page Language |

None

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| Revised Proposed Protocol Language |

None