



Item 6.1.1.1: ERCOT Comments on NPPR 1186

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Reliability and Markets Committee Meeting

ERCOT Public

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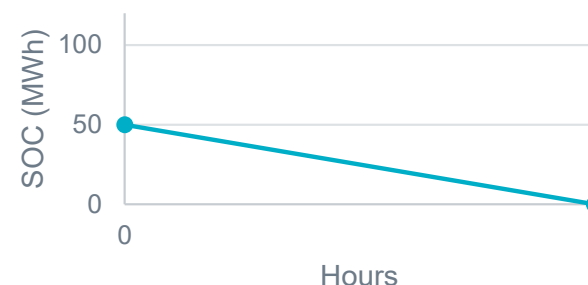
Background

- On August 31, 2023, the ERCOT Board of Directors (Board) remanded Nodal Protocol Revision Request (NPRR) 1186, Improvements Prior to the RTC+B Project for Better ESR State of Charge Awareness, Accounting, and Monitoring, to the Technical Advisory Committee (TAC) with instructions to address the issue of “stranded energy” when ERCOT Contingency Reserve Service (ECRS) and Non-Spinning Reserve Service (Non-Spin) are deployed in a scarcity situation.

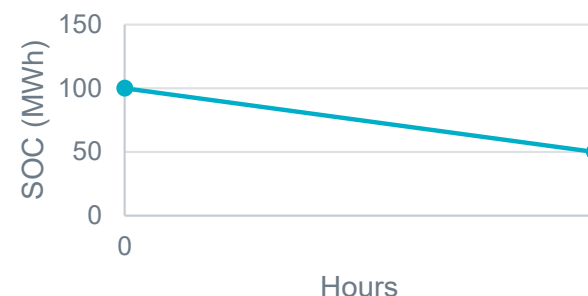
Proposed Changes to NPRR1186

- ERCOT submitted comments to the Board-remanded version of NPRR1186 to change the minimum State of Charge (SOC) requirements for ECRS and Non-Spin to slope from the full hourly Ancillary Service (AS) Resource Responsibility at the start of each hour to 0 MWh at the end of the hour in each hour where the Resource is carrying that Responsibility.
 - **Example:** To provide 50 MW of ECRS, the minimum SOC requirement will be 50 MWh at the top of the hour and will decrease as a function of time to 0 MWh by the end of the hour.
 - **Example:** To provide 50 MW of Non-Spin, the minimum SOC requirement will be 50 MWh at the top of the hour and will decrease as a function of time to 0 MWh by the end of the hour.
- This change eliminates the need for ESRs to hold any more SOC than the amount needed for a full deployment across a single hour and will enable this energy to be made available to the grid in all conditions, including scarcity.
- This approach, however, does increase the risk that an ESR that is planned to carry an AS in a future hour will not achieve sufficient SOC by that hour to provide the service. ERCOT is proposing one or more forthcoming NPRR(s) to add controls to mitigate this reliability risk.

ECRS State of Charge Requirement for 50MW - Current Version



ECRS State of Charge Requirement for 50MW - Previous Version



Key Takeaway: The approach proposed in the revised NPRR1186 resolves the “stranded energy” issue in all cases. However, additional requirements are necessary to manage the resulting increased reliability risk. (See Next Slide)

Additional Controls Needed

- The proposed change increases the risk that short-duration ESRs will not have the SOC necessary to fulfill their future AS Responsibilities in the event the ESRs are carrying an AS Responsibility across multiple consecutive hours and are subject to a deployment of that service across those hours.
- To mitigate this risk, ERCOT proposes stronger compliance and financial penalties.
 - ERCOT currently imposes failure-to-provide charges when a QSE would be unable to provide the AS it is obligated to provide if called upon. The failure-to-provide process should be enhanced to explicitly include min/max SOC requirements in the consideration of the ability to provide where technologically relevant, and to automate imposition of failure-to-provide charges due to this SOC trigger, consistent with the imposition of charges in all other failure-to-provide circumstances.
 - Resources should be disqualified from providing AS based on repeated failures to provide.
- *ERCOT requests that the Board direct ERCOT to submit one or more NPRRs to implement the two controls identified above and to designate these NPRRs as Board Priority NPRRs, which will ensure they are considered as promptly as possible.*

Key Takeaway: ERCOT requests that the Board direct one or more Board Priority NPRRs to strengthen the compliance and financial penalties to mitigate the reliability risk from the proposed change to NPRR1186.

Other Considerations

- ERCOT and TAC are not proposing any additional changes as a part of this remand, including any changes to the qualification requirements in NPRR1096, Require Sustained Two-Hour Capability for ECRS and Four-Hour Capability for Non-Spin, approved in May of 2022.
- If ERCOT observes that the additional controls proposed on the previous slide are not sufficient to mitigate the reliability risk from non-compliance, ERCOT may propose additional controls through future NPRRs:
 - Increasing the quantities of certain Ancillary Services to mitigate risks associated with duration-limited ESRs carrying the same type of AS for several consecutive hours.
 - Impose system-level limits on the amount of RRS, ECRS, and Non-Spin that ESRs can provide.

Key Takeaway: The proposed compliance and financial penalties that would be implemented through the Board Priority NPRR should be sufficient to maintain reliability with the reduction in SOC requirements, but additional mitigation will be proposed if needed.