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| NPRR Number | [1075](http://www.ercot.com/mktrules/issues/NPRR1075) | NPRR Title | Update Telemetered HSL and/or MPC for ESRs in Real-Time to Meet Ancillary Service Resource Responsibility |
| Date of Decision | June 8, 2021 |
| Action | Approved |
| Timeline  | Urgent – Urgent status is necessary to put the language into effect as soon as possible, so that Energy Storage Resources (ESRs) can better contribute to system reliability during summer peak demand. |
| Effective Date | June 9, 2021 |
| Priority and Rank Assigned | Not applicable |
| Nodal Protocol Sections Requiring Revision  | 3.8.5, Energy Storage Resources |
| Related Documents Requiring Revision/Related Revision Requests | None |
| Revision Description | This Nodal Protocol Revision Request (NPRR) allows ESRs to update their High Sustained Limit (HSL) and/or Maximum Power Consumption (MPC) in Real-Time for the purposes of maintaining sufficient energy to meet an Ancillary Service Resource Responsibility. The ability for ESRs to update their Real-Time HSL and/or MPC would expire at the earlier of system implementation of Real-Time Co-Optimization (RTC) or implementation of a Mitigated Offer Cap (MOC) for ESRs other than the System-Wide Offer Cap (SWCAP). |
| Reason for Revision |  Addresses current operational issues. Meets Strategic goals (tied to the [ERCOT Strategic Plan](http://www.ercot.com/content/wcm/lists/144926/ERCOT_Strategic_Plan_2019-2023.pdf) or directed by the ERCOT Board). Market efficiencies or enhancements Administrative Regulatory requirements Other: (explain)*(please select all that apply)* |
| Business Case | This NPRR clarifies that ESRs are allowed to update their Real-Time telemetered HSL and/or MPC in order to ensure sufficient state of charge (stored energy) to meet Ancillary Service Obligations. Without the ability to modify Real-Time telemetered HSL and/or MPC for this purpose, an ESR cannot prevent dispatch and depletion of state of charge when prices rise to the SWCAP. Because the MOC for ESRs is currently set to the SWCAP, ESRs gain no financial benefit from the ability to modify their Real-Time HSL. This NPRR would remove the allowance for ESRs to modify Real-Time HSL at the earlier of RTC implementation or implementation of a different MOC than the SWCAP. |
| Credit Work Group Review | ERCOT Credit Staff and the Credit Work Group (Credit WG) have reviewed NPRR1075 and do not believe that it requires changes to credit monitoring activity or the calculation of liability. |
| PRS Decision | On 5/13/21, PRS voted via roll call vote to grant NPRR1075 Urgent status; to recommend approval of NPRR1075 as amended by the 4/30/21 ERCOT comments; and to forward NPRR1075 to TAC. There were three abstentions from the Consumer (2) (Nucor, Occidental Chemical) and Independent Generator (Calpine) Market Segments. All Market Segments participated in the vote. |
| Summary of PRS Discussion | On 5/13/21, the sponsor provided an overview of NPRR1075 and their request for Urgent status. Participants discussed concerns about discriminatory treatment for ESRs, the operational needs of ESRs versus thermal Resources, and the potential of expanding the proposed flexibility to update HSLs in Real-Time to all Resources, but also noted proponents of such expansion could sponsor a separate NPRR to address such concerns. |
| TAC Decision | On 5/26/21, TAC voted via roll call to recommend approval of NPRR1075 as recommended by PRS in the 5/13/21 PRS Report, and the Impact Analysis for NPRR1075, with a recommended effective date of upon ERCOT Board approval. There were two opposing votes from the Consumer (CMC Steel Texas, Air Liquide) Market Segment and one abstention from the Independent Generator (Calpine) Market Segment. All Market Segments participated in the vote. |
| Summary of TAC Discussion | On 5/26/21, participants reviewed the Impact Analysis for NPRR1075 and requested continued monitoring and review of battery performance after the summer to evaluate the impact of NPRR1075. |
| ERCOT Opinion | ERCOT supports approval of NPRR1075. |
| Board Decision | On 6/8/21, the ERCOT Board approved NPRR1075 as recommended by TAC in the 5/26/21 TAC Report. |

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| **Comments Received** |
| Comment Author | **Comment Summary** |
| ERCOT 043021 | Extended the concept of HSL update to included MPC, provided additional language to address post-NPRR1014, BESTF-4 Energy Storage Resource Single Model, implementation, and other clarifications |

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| **Market Rules Notes** |

None

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| Proposed Protocol Language Revision |

***3.8.5 Energy Storage Resources***

(1) The Resource Entity and QSE representing an Energy Storage Resource (ESR) which is jointly registered with ERCOT as a Generation Resource and a Controllable Load Resource, pursuant to paragraph (6) of Section 16.5, Registration of a Resource Entity, are responsible for following all requirements in these Protocols associated with Generation Resources and Controllable Load Resources.

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| ***[NPRR1002: Replace paragraph (1) above with the following upon system implementation:]***(1) For the purposes of all ERCOT Protocols and Other Binding Documents, all requirements that apply to Generation Resources and Controllable Load Resources shall be understood to apply to Energy Storage Resources (ESRs) to the same extent, except where the Protocols explicitly provide otherwise. |

(2) A QSE representing an ESR may update the telemetered HSL and/or Maximum Power Consumption (MPC) for the ESR in Real-Time to ensure the ability to meet the ESR’s full Ancillary Service Resource Responsibility for the current Operating Hour. This provision only applies when the Mitigated Offer Cap (MOC) for an ESR is set at the System-Wide Offer Cap (SWCAP) pursuant to paragraph (1)(b) of Section 4.4.9.4.1, Mitigated Offer Cap.

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| ***[NPRR1075: Delete paragraph (2) above upon system implementation of the Real-Time Co-Optimization (RTC) project.]*** |

(3) A QSE representing an ESR may update the telemetered HSL and/or MPC for the ESR in Real-Time to reflect state of charge limitations.

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| ***[NPRR1075: Replace paragraph (3) above with the following upon system implementation of NPRR1014:]***(3) A QSE representing an ESR may update the telemetered HSL and/or Low Sustainable Limit (LSL) for the ESR in Real-Time to reflect state of charge limitations.  |

(4) A QSE representing an ESR co-located with a Generation Resource may reduce the telemetered MPC of the Controllable Load Resource modeled to represent the charging side of the ESR when self-charging using output from the Generation Resource. Such reduction in MPC shall be equal to the MW level of self-charge.

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| ***[NPRR1075: Replace paragraph (4) above with the following upon system implementation of NPRR1014:]***(4) A QSE representing an ESR co-located with a Generation Resource may update the telemetered LSL of the ESR when self-charging (using output from the Generation Resource). The updated LSL shall be equal to the MW level of self-charge. |