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| NPRR Number | [1075](http://www.ercot.com/mktrules/issues/nprr1075) | NPRR Title | Update Telemetered HSL for ESRs in Real-Time to Meet Ancillary Service Resource Responsibility |
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| Date | April 30, 2021 |
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| Submitter’s Information |
| Name | Sandip Sharma |
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| Company | ERCOT |
| Phone Number | 512-248-4298 |
| Cell Number |  |
| Market Segment | Not applicable |

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| Comments |

ERCOT submits these comments to Nodal Protocol Revision Request (NPRR) 1075 to:

* Extend the concept of updating telemetered High Sustained Limit (HSL) to Maximum Power Consuption (MPC) representing the charging side of the battery modeled as Controllable Load Resource;
* Clarify that updating HSL and/or MPC is also appropriate to reflect minimum/maximum state of charge constraints of battery Energy Strorage Resources (ESRs). ERCOT expects Market Participants to normally use offers/bids to maintain their state of charge and only use the option of updating telemetered HSL and/or MPC as a last resort;
* Clarify that Qualified Scheduling Entities (QSEs) can update the MPC of the ESR modeled as controllable load when self-charging from a co-located Generation Resource; and
* Provide updated language once NPRR1014, BESTF-4 Energy Storage Resource Single Model, is implemented.

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| Revised Cover Page Language |

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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 |
| 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). |
| 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. |

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| Revised Proposed Protocol Language |

***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. |