

Item 5.2:TAC Report regarding R&M Committee-Charter Revision Requests

Caitlin Smith
2024 Technical Advisory Committee (TAC)
Chair

Reliability and Markets Committee Meeting

ERCOT Public August 19, 2024

Committee Request

Why this is being presented today:

NPRR1190 and NPRR1215 were considered at the June 24, 2024 TAC Meeting. NPRR1219 and NPRR1230 were considered at the July 31, 2024 TAC Meeting.

This is the resulting Technical Advisory Committee (TAC) recommendation on the following Revision Requests that were recommended by TAC for Board approval, for which the R&M Committee is expected to vote on a recommendation to the Board:

- NPRR1190, High Dispatch Limit Override Provision for Increased Load Serving Entity Costs
 - Recommended for approval with 6 opposing votes
- NPRR1215, Clarifications to the Day-Ahead Market (DAM) Energy-Only Offer Calculation
 - Recommended for approval unanimously
 - 8/1/24 ERCOT comments
- NPRR1219, Methodology Revisions and New Definitions for the Report on Capacity, Demand and Reserves in the ERCOT Region (CDR) – URGENT
 - Recommended for approval with 2 opposing votes
- NPRR1230, Methodology for Setting Transmission Shadow Price Caps for an IROL in SCED URGENT
 - Recommended for approval with 2 opposing votes



NPRR1190, High Dispatch Limit Override Provision for Increased Load Serving Entity Costs

Revision Description	This NPRR adds a provision for recovery of a demonstrable financial loss arising from a manual High Dispatch Limit (HDL) override to reduce real power output, in the case when that output is intended to meet Qualified Scheduling Entity (QSE) Load obligations.
Sponsor	Austin Energy, CPS Energy, Denton Municipal Electric, Garland Power and Light, Greenville Electric Utility System (Joint Sponsors)
Reason for Revision	General system and/or process improvement(s)
Justification of Reason for Revision and Market Impacts	Section 6.6.3.6 currently allow for a QSE to file a timely dispute to recover a demonstrable financial loss stemming from a manual HDL override from the ERCOT Operator. In defining demonstrable financial losses, and in distinguishing these from opportunity costs which are not to be compensated, the current Protocol language allows for compensation for losses on Day-Ahead Market (DAM) obligations and on bilateral contracts that were affected by the HDL override. Non-Opt-In Entities (NOIEs) are bound by obligations to serve Load within their service territories, and generation supports this obligation in an arrangement akin to self-arrangement. When Security-Constrained Economic Dispatch (SCED)-dispatched generation would offset NOIE Load, and a manual HDL override reduces actual generation output, the NOIE incurs a concrete realized loss which is not an opportunity cost. The revised language would allow compensation for such a loss. The revision accounts for a compensable demonstrable financial loss when such loss is incurred by a NOIE due to ERCOT-instructed generation curtailment by an HDL override, and when revenue from that generation is regularly used to offset costs associated with serving that NOIE's Load. Section 3.8.1 describes obligations of the Master QSE of any Split Generation Resource. The revision provides that a Master QSE shall communicate manual High Dispatch Limit override instructions to all other QSEs that represent the Split Generation Resource. Such instructions shall be received by the Master QSE only, but such instructions allow for a dispute process for each QSE to recoup financial losses due to the HDL override. The revision would support all QSEs in meeting necessary timelines for the efficient application of Section 6.6.3.6.
ERCOT Impact / Effective Date	No impact / The first of the month following Public Utility Commission of Texas (PUCT) approval
ERCOT Market Impact Statement	ERCOT Staff has reviewed NPRR1190 and believes the market impact for this NPRR provides QSEs an additional opportunity to recover demonstrable financial losses stemming from an HDL override under certain conditions that previously were not allowed.
TAC Vote	On 6/24/24, TAC voted to recommend approval of NPRR1190 as recommended by PRS in the 6/13/24 PRS Report. There were six opposing votes from the Consumer (6) (Residential, OPUC, City of Eastland, City of Dallas, CMC Steel, Lyondell Chemical) Market Segment and one abstention from the Independent Retail Electric Provider (IREP) (Rhythm Ops) Market Segment.



NPRR1190, High Dispatch Limit Override Provision for Increased Load Serving Entity Costs

Explanation of Opposing TAC Votes

Consumer/Residential Consumer – Residential Consumers voted "No" because this proposal is contrary to the nodal market design. Generators should be paid with high or low prices. The Board and Commission should reject proposals contrary to the fundamental principles of the market design or risk ever increasing costs.

Consumer/OPUC – OPUC voted "No" because this proposal is contrary to the nodal market design. Generators should be paid with high or low prices. The Board and Commission should reject proposals contrary to the fundamental principles of the market design or risk ever increasing costs.

Consumer/City of Eastland – City of Eastland agrees with the comments of the Residential Consumer and OPUC above. **Consumer/City of Dallas –** Explanation requested but not provided.

Consumer/CMC Steel - Explanation requested but not provided.

Consumer/Lyondell Chemical – Lyondell Chemical voted "No" because the NPRR would reward overscheduling of power that can't be delivered. A major reason the ERCOT market adopted nodal dispatch and pricing was to avoid paying for power that was scheduled but not delivered. Rejecting the NPRR would provide the proper incentives for dispatching existing units that could deliver power at that time and siting new generation in places where its power could be delivered at a future date.



NPRR1215, Clarifications to the Day-Ahead Market (DAM) Energy-Only Offer Calculation

Revision Description	This Nodal Protocol Revision Request (NPRR) clarifies that the Day-Ahead Market (DAM) Energy-Only Offer credit exposure calculation zeros out negative values, with any zeroed out values being included in the calculation of the dpth percentile difference. This clarification aligns with how ERCOT has been performing the calculation since Nodal Go-Live. It also clarifies that the "absolute value" of negative prices is used to increase exposure when prices are negative. Finally, it incorporates a default e2 value in the Protocols, which is consistent with "Procedures for Setting Nodal Day Ahead Market (DAM) Credit Requirement Parameters," which was an Other Binding Document (OBD) approved by the ERCOT Board of Directors in July of 2012. Although NPRR671, Incorporation of DAM Credit Parameters into Protocols, approved in April of 2015, attempted to incorporate that OBD into Protocols, it appears to have inadvertently not incorporated the default e2 value into the Protocols at that time. Finally, this NPRR clarifies the definitions of e-factors.
Sponsor	ERCOT
Reason for Revision	Strategic Plan Objective 1 - General system and/or process improvement(s)
Justification of Reason for Revision and Market Impacts	This NPRR clarifies the calculation of the credit exposure of the DAM Energy-Only Offer. The current language could be read to imply that negative values are excluded from the calculation, but this is not the case. Negative values are set to zero and then included in the calculation. It also clarifies that the "absolute value" of negative prices is used to increase exposure when prices are negative. As currently written, the Protocol language could inaccurately be read to mean that negative prices could decrease exposure, when the opposite is true. This NPRR also incorporates the default e2 value of zero into the Protocols. As currently written, it is not clear that the formula in paragraph (6)(b)(i)(A) of Section 4.4.10 is only applied when favorable treatment is requested by a Market Participant, and that absent that request, it has been ERCOT's practice since the outset to set e2 to zero. Finally, this NPRR makes clarifications to the definition of e-factors.
ERCOT Impact / Effective Date	No impact / The first of the month following Public Utility Commission of Texas (PUCT) approval
ERCOT Opinion / Market Impact Statement	ERCOT Staff has reviewed NPRR1215 and believes the market impact for NPRR1215 is to clarify how ERCOT calculates credit exposure for bids and offers in the DAM.
TAC Vote	On 6/24/24, TAC voted unanimously to recommend approval of NPRR1215 as recommended by PRS in the 6/13/24 PRS Report.



NPRR1219, Methodology Revisions and New Definitions for the Report on Capacity, Demand and Reserves in the ERCOT Region (CDR) – URGENT

Revision Description	This NPRR changes the methodologies for preparation of the Report on Capacity, Demand, and Reserves in the ERCOT Region ("CDR") and incorporates a report release schedule. Other changes include new definitions to support the methodology changes and revisions to address outdated terms and add clarity to the methodology descriptions. Finally, Section 16.5.4, Maintaining and Updating Resource Entity Information, is updated to require Switchable Generation Resource (SWGR) owners to provide information on unavailable SWGR units for all seasons rather than just for the summer and winter. A revised SWGR data reporting form will be posted to the ERCOT website.
Sponsor	ERCOT
Reason for Revision	Strategic Plan Objective 1 - Be an industry leader for grid reliability and resilience
Justification of Reason for Revision and Market Impacts	This NPRR improves forecasts in the CDR given Resource mix trends (more Inverter-Based Resources (IBRs) relative to dispatchable resources, which is changing the timing of the hours with the greatest reserve scarcity risk) and extend reporting to all seasons. Many of the proposed changes to the CDR, such as a switch to ELCCs and reporting of Loads and resources during the forecasted peak Net Load hour, are consistent with direction from the Public Utility Commission of Texas (PUCT) and supported by Market Participants as expressed at workshops and working group meetings. Other changes are intended to align methodologies for the CDR with other implemented Protocol changes (e.g., ERCOT-directed deployment of distribution voltage reduction).
ERCOT Impact / Effective Date	Less than \$20k O&M / No earlier than January 1, 2025 for the grey-boxed language; and the first of the month following PUCT approval for all remaining language
ERCOT Opinion / Market Impact Statement	ERCOT Staff has reviewed NPRR1219 and believes it provides a positive market impact by improving forecasts in the CDR given Resource mix trends, more closely aligning planned resource eligibility criteria with Planning Guide requirements, and incorporating Energy Storage Resource availabilities.
TAC Vote	On 7/31/24, TAC voted to recommend approval of NPRR1219 as recommended by PRS in the 7/18/24 PRS Report as amended by the 7/29/24 ERCOT comments as revised by TAC; and the 7/30/24 Revised Impact Analysis; with a recommended effective date of no earlier than January 1, 2025 for the grey-boxed language and the first of the month following PUCT approval for all remaining language. There were two opposing votes from the Consumer (CMC Steel, Lyondell Chemical) Market Segment; and four abstentions from the Consumer (2) (Residential Consumer, OPUC), Independent Generator (ENGIE), and Independent Power Marketer (IPM) (SENA) Market Segments.



NPRR1219, Methodology Revisions and New Definitions for the Report on Capacity, Demand and Reserves in the ERCOT Region (CDR) – URGENT

Explanation of Opposing TAC Votes

Cooperative/CMC Steel Texas – Explanation requested but not provided **Cooperative/Lyondell Chemical** – Explanation requested but not provided



NPRR1230, Methodology for Setting Transmission Shadow Price Caps for an IROL in SCED – URGENT

Revision Description	This NPRR establishes a Shadow Price cap for congestion impacting an Interconnection Reliability Operating Limits (IROLs).
Sponsor	ERCOT
Reason for Revision	Strategic Plan Objective 1 - Be an industry leader for grid reliability and resilience
Justification of Reason for Revision and Market Impacts	ERCOT is required to ensure that power flows do not exceed any IROL on the ERCOT System in order to prevent system instability, uncontrolled separation, and cascading. Therefore, the Shadow Price cap of an IROL must be set at a value such that Security-Constrained Economic Dispatch (SCED) will continue to manage the IROL constraint even during periods of system-wide scarcity. This NPRR establishes the methodology for calculating the Shadow Price cap for IROLs. This NPRR will enable ERCOT to manage power flows within IROLs using existing operational and market tools instead of relying on manual intervention by ERCOT operators. The manual intervention methods currently being used introduce operational risk during periods of stressed system conditions.
ERCOT Impact / Effective Date	No impact / The first of the month following Public Utility Commission of Texas (PUCT) approval
ERCOT Opinion / Market Impact Statement	ERCOT Staff has reviewed NPRR1230 and believes the market impact for NPRR1230 properly leverages existing market tools to provide additional ERCOT operator flexibility when managing IROLs.
TAC Vote	On 7/31/24, TAC voted to recommend approval of NPRR1230 as recommended by PRS in the 5/9/24 PRS Report as amended by the 5/29/24 ERCOT comments as revised by TAC. There were two opposing votes from the Cooperative (LCRA) and Municipal (Austin Energy) Market Segments; and four abstentions from the Cooperative (3) (GSEC, PEC, STEC) and Independent Retail Electric Provider (IREP) (APG&E) Market Segments.



NPRR1230, Methodology for Setting Transmission Shadow Price Caps for an IROL in SCED – URGENT

Explanation of Opposing TAC Votes

Cooperative/LCRA – ERCOT filed NPRR1230 in direct response to summer 2023 operational events on the South Texas Export and Import Generic Transmission Constraints ("STX GTC"). At TAC on 7/31/24, ERCOT presented a 2023 backcast analysis that indicated that the market cost for Load (i.e., Load quantity times Load price) would've increased between \$0.5B and \$1.6B over 20 operating days in the study. LCRA believes that this cost increase is not justified. ERCOT already has a method in place to relieve these constraints (i.e., issuance of High Dispatch Limit (HDL) overrides) that is significantly cheaper than the mechanics that NPRR1230 imposes. For example, the HDL overrides issued on 9/6/23 only resulted in \$185K of uplift cost to Load. To put these cost numbers into context, if a 9/6/23 event happened every single day it would take between 7.5 and 24 years for the HDL override uplift cost to equal the 2023 NPRR1230 cost as indicated by ERCOT's analysis. Additionally, ERCOT has outlined a STX GTC exit strategy that indicates that transmission solutions resolving this issue will be in service starting in 2027. LCRA does not support this change as it will serve to increase risk and hedging cost into the future which does not serve to keep costs low for our customers. As detailed above, there is a cheaper solution already in place and a permanent solution is on the horizon.

Municipal/Austin Energy – Austin Energy voted against this NPRR due to its increased cost to specific Load Zones. We

Municipal/Austin Energy – Austin Energy voted against this NPRR due to its increased cost to specific Load Zones. We appreciate the extra time that ERCOT and stakeholders provided us on this NPRR so that we can hedge against the cost in the future.

