



**Date:** March 31, 2025  
**To:** Board of Directors  
**From:** Caitlin Smith, Technical Advisory Committee (TAC) Chair  
**Subject:** Unopposed Revision Requests Recommended by TAC for Approval

**Issue for the ERCOT Board of Directors**

**ERCOT Board of Directors Meeting Date:** April 7-8, 2025

**Item No.:** 6.1

**Issue:**

Consideration of the following Revision Requests: Nodal Protocol Revision Request (NPRRs), Nodal Operating Guide Revision Request (NOGRR), Planning Guide Revision Requests (PGRRs), System Change Request (SCR), Settlement Metering Operating Guide Revision Request (SMOGRR), and Verifiable Cost Manual Revision Request (VCMRR) recommended for approval by TAC (with no opposing votes recorded):

- NPRR1234, Interconnection Requirements for Large Loads and Modeling Standards for Loads 25 MW or Greater;
- NPRR1241, Firm Fuel Supply Service (FFSS) Availability and Hourly Standby Fee;
- NPRR1256, Settlement of MRA of ESRs;
- NPRR1268, RTC – Modification of Ancillary Service Demand Curves – URGENT;
- NPRR1270, Additional Revisions Required for Implementation of RTC – URGENT;
- NPRR1273, Appropriate Accounting for ESRs in PRC Calculation – URGENT;
- NOGRR274, Conform Nodal Operating Guide to Revisions Implemented for NPRR1217, Remove Verbal Dispatch Instruction (VDI) Requirement for Deployment and Recall of Load Resources and Emergency Response Service (ERS) Resources – URGENT;
- PGRR115, Related to NPRR1234, Interconnection Requirements for Large Loads and Modeling Standards for Loads 25 MW or Greater;
- PGRR119, Stability Constraint Modeling Assumptions in the Regional Transmission Plan;
- SCR829, API for the NDCRC Application;
- SMOGRR028, Add Series Reactor Compensation Factors; and
- VCMRR042, SO<sub>2</sub> and NO<sub>x</sub> Emission Index Prices Used in Verifiable Cost Calculations.

**Background/History:**

**Unless otherwise noted: (i) all Market Segments participated in each vote; (ii) For NPRRs, ERCOT Credit Staff and the Credit Finance Sub Group (CFSG) have**

reviewed the NPRR and do not believe it requires changes to credit monitoring activity or the calculation of liability.

**Board Review is required of all TAC Reports and Impact Analyses (Protocol Section 21.3.10)**

- **[NPRR1234, Interconnection Requirements for Large Loads and Modeling Standards for Loads 25 MW or Greater](#)**

**Sponsor:** ERCOT

**Revision Description:** This NPRR and the related PGRR115 establish interconnection and modeling requirements for “Large Loads”—defined in this NPRR to refer to one or more Facilities at a single site with an aggregate peak power Demand of 75 MW or more. This NPRR also adds a requirement that any Resource Entity that adds 20 MW or more of Load at any site with an existing Generation Resource shall submit a new Reactive Power study. This NPRR also establishes specific Subsynchronous Oscillation (SSO) requirements for Large Loads and revises and supplements SSO-related definitions, in addition to clarifying existing SSO requirements. This NPRR also establishes new standards for the identification and classification of a site with an aggregate peak Demand of 25 MW or more at a common substation in ERCOT Network Operations Model. Finally, this NPRR adds a fee for Large Load Interconnection Study (LLIS) Requests to the ERCOT Fee Schedule.

**Impact Analysis:** Between \$600K and \$800K (budgetary); \$180K - \$220K (staffing); (12 – 18 months)

**Proposed Effective Date:** Upon system implementation – Priority 2026; Rank 4730

**TAC Report/Decision:** On 3/26/25, TAC voted unanimously to recommend approval of NPRR1234 as recommended by PRS in the 3/12/25 PRS Report as amended by the 3/25/25 ERCOT comments as revised by TAC.

**ERCOT Opinion:** ERCOT supports approval of NPRR1234.

**ERCOT Market Impact Statement:** ERCOT Staff has reviewed NPRR1234 and believes the market impact for NPRR1234, along with PGRR115, provides necessary structure and clarification to the interconnection requirements for Large Loads.

**IMM Opinion:** IMM has no opinion on NPRR1234.

**[Key Documents](#) (including comments, ballots, reports and impact analyses)**

- **[NPRR1241, Firm Fuel Supply Service \(FFSS\) Availability and Hourly Standby Fee](#)**

**Sponsor:** Luminant

**Revision Description:** This Nodal Protocol Revision Request (NPRR) provides equity and clarity surrounding the hourly standby fee claw backs for Firm Fuel Supply Service (FFSS) during a Watch for winter weather using a linear curve formula.

**Impact Analysis:** No impact

**Proposed Effective Date:** First of the month following Public Utility Commission of Texas (PUCT) approval

**TAC Report/Decision:** On 2/27/25, TAC voted unanimously to recommend approval of NPRR1241 as recommended by PRS in the 2/12/25 PRS Report.

**ERCOT Opinion:** ERCOT supports approval of NPRR1241.

**ERCOT Market Impact Statement:** ERCOT Staff has reviewed NPRR1241 and believes the market impact for NPRR1241 maintains appropriate penalties for unavailability during a Watch for winter weather while providing improved incentives for impacted Firm Fuel Supply Service Resources (FFSSRs) to restore their availability as soon as possible.

**IMM Opinion:** IMM supports NPRR1241.

**[Key Documents](#) (including comments, ballots, reports and impact analyses)**

- **[NPRR1256, Settlement of MRA of ESRs](#)**

**Sponsor:** ERCOT

**Revision Description:** This NPRR changes language in select provisions in Section 6, Adjustment Period and Real-Time Operations, related to Must-Run Alternatives (MRAs) primarily in grey-boxed language from NPRR885 in order to align the terminology for Energy Storage Resources (ESRs) for the single-model era and specify how Qualified Scheduling Entities (QSEs) representing ESR MRAs would be settled for the provision of MRA Service. The Settlement changes reflect that ESR MRAs would not have fuel costs, but would have costs associated with charging.

**Impact Analysis:** \$25K - \$50K (3 – 5 months)

**Proposed Effective Date:** Upon system implementation; and upon system implementation of NPRR885, Must-Run Alternative (MRA) Details and Revisions Resulting from PUCT Project No. 46369, Rulemaking Relating to Reliability Must-Run Service

**TAC Report/Decision:** On 3/26/25, TAC voted unanimously to recommend approval of NPRR1256 as recommended by PRS in the 3/12/25 PRS Report as revised by TAC.

**ERCOT Opinion:** ERCOT supports approval of NPRR1256.

**ERCOT Market Impact Statement:** ERCOT Staff has reviewed NPRR1256 and believes the market impact for NPRR1256 clarifies the Settlement treatment of ESR MRAs.

**IMM Opinion:** IMM has no opinion on NPRR1256.

**[Key Documents](#) (including comments, ballots, reports and impact analyses)**

- **[NPRR1268, RTC – Modification of Ancillary Service Demand Curves – URGENT](#)**

**Sponsor:** IMM

**Revision Description:** This NPRR defines a methodology for disaggregating the Operating Reserve Demand Curve (ORDC), creating “blended” Ancillary Service Demand Curves (ASDCs).

**Impact Analysis:** No impact (There are no additional impacts to this NPRR beyond what was captured in PR447, Real-Time Co-optimization)

**Proposed Effective Date:** Upon system implementation of PR447, Real-Time Co-Optimization (RTC)

**TAC Report/Decision:** On 3/26/25, TAC voted unanimously to recommend approval of NPRR1268 as recommended by PRS in the 3/12/25 PRS Report as amended by the 3/19/25 IMM comments; and the 3/18/25 Impact Analysis.

**ERCOT Opinion:** ERCOT supports approval of NPRR1268.

**ERCOT Market Impact Statement:** ERCOT Staff has reviewed NPRR1268 and believes the market impact for NPRR1268, after extensive review with stakeholders at the Real-Time Co-optimization plus Batteries Task Force (RTCBTF), introduces “blended” ASDCs which will improve reliability and market performance by allowing Security-Constrained Economic Dispatch (SCED) to make more efficient tradeoffs between energy and reserves under shortage conditions while maintaining sufficient price signals to promote Resource adequacy.

**IMM Opinion:** IMM supports approval of NPRR1268

**Key Documents** (including comments, ballots, reports and impact analyses)

- **[NPRR1270, Additional Revisions Required for Implementation of RTC – URGENT](#)**

**Sponsor:** ERCOT

**Revision Description:** This NPRR updates requirements for Load Resources that are changing under RTC and were not updated in earlier revisions; removes language associated with group assignments in the Day-Ahead Market (DAM); deployments are Resource-specific based on Real-Time awards; no requirement to return to service in three hours as that capacity will be replaced with awarded capacity in Real-Time; eliminates the automatic qualification of all Resources to provide On-Line Non-Spinning Reserve (Non-Spin) and SCED-dispatchable ERCOT Contingency Reserve Service (ECRS). Resources will be required to undergo a qualification test to provide each of these services; and adds additional pre-processing checks in the SCED process to validate Ancillary Service capability telemetry that are sent by QSEs.

**Impact Analysis:** No impact (There are no additional impacts to this NPRR beyond what was captured in PR447, Real-Time Co-optimization)

**Proposed Effective Date:** Upon system implementation of PR447, Real-Time Co-Optimization (RTC)

**TAC Report/Decision:** On 3/26/25, TAC voted unanimously to recommend approval of NPRR1270 as recommended by PRS in the 3/12/25 PRS Report.

**ERCOT Opinion:** ERCOT supports approval of NPRR1270.

**ERCOT Market Impact Statement:** ERCOT Staff has reviewed NPRR1270 and believes the market impact for NPRR1270, after extensive review with stakeholders at the RTCBTF, provides improvements and clarifications to RTC requirements ahead of the upcoming RTC market trials.

**IMM Opinion:** IMM supports approval of NPRR1270.

**[Key Documents](#) (including comments, ballots, reports and impact analyses)**

- **[NPRR1273, Appropriate Accounting for ESRs in PRC Calculation – URGENT](#)**  
**Sponsor:** ERCOT

**Revision Description:** This NPRR modifies the capacity from ESRs included in the calculation of Physical Responsive Capability (PRC) to be the amount that can be sustained for 45 minutes.

**Impact Analysis:** No impact

**Proposed Effective Date:** First of the month following Public Utility Commission of Texas (PUCT) approval

**TAC Report/Decision:** On 3/26/25, TAC voted unanimously to recommend approval of NPRR1273 as recommended by PRS in the 3/12/25 PRS Report.

**ERCOT Opinion:** ERCOT supports approval of NPRR1273.

**ERCOT Market Impact Statement:** ERCOT Staff has reviewed NPRR1273 and changing the PRC calculation to include the capacity that can be sustained for 45 minutes rather than 15 minutes will better ensure that PRC is an accurate indicator of the amount of capacity that currently has sufficient energy to support the grid until any needed load shed could be implemented. This change has a positive market impact by allowing ERCOT to meet its reliability obligations and by informing the market more accurately about grid conditions during scarcity.

**IMM Opinion:** IMM has no opinion on NPRR1273.

**[Key Documents](#) (including comments, ballots, reports and impact analyses)**

- **[NOGRR274, Conform Nodal Operating Guide to Revisions Implemented for NPRR1217, Remove Verbal Dispatch Instruction \(VDI\) Requirement for Deployment and Recall of Load Resources and Emergency Response Service \(ERS\) Resources – URGENT](#)**

**Sponsor:** ERCOT

**Revision Description:** This NOGRR conforms the Nodal Operating Guide to Protocol changes made by NPRR1217.

**Impact Analysis:** No impact

**Proposed Effective Date:** The first of the month following Public Utility Commission of Texas (PUCT) approval

**TAC Report/Decision:** On 3/26/25, TAC voted unanimously to recommend approval of NOGRR274 as recommended by ROS in the 3/6/25 ROS Report

**ERCOT Opinion:** ERCOT supports approval of NOGRR274.

**ERCOT Market Impact Statement:** ERCOT Staff has reviewed NOGRR274 and confirms the revisions appropriately conform the Nodal Operating Guide with the Protocol language implemented from NPRR1217. There are no impacts to the ERCOT market beyond those associated with NPRR1217.

**IMM Opinion:** IMM has no opinion on NOGRR274.

**[Key Documents](#) (including comments, ballots, reports and impact analyses)**

- **[PGRR115, Related to NPRR1234, Interconnection Requirements for Large Loads and Modeling Standards for Loads 25 MW or Greater;](#)**

**Sponsor:** ERCOT

**Revision Description:** This PGRR creates a new process for studying the reliability impacts of all Large Loads (as defined in the accompanying NPRR1234) seeking to interconnect to the ERCOT System. As with the Full Interconnection Study (FIS) required for proposed Generation Resources, this PGRR requires a LLIS for each new Large Load meeting applicability requirements that is proposed to interconnect to the ERCOT System. Like the FIS, the LLIS will consist of a similar suite of studies conducted by one or more affected Transmission Service Providers (TSPs). This PGRR describes these studies in detail and establishes timelines for the review of these studies and the completion of other steps in the interconnection process.

**Impact Analysis:** No impact (There are no additional impacts to this PGRR beyond what was captured in the Impact Analysis for NPRR1234.)

**Proposed Effective Date:** Upon implementation of NPRR1234, Interconnection Requirements for Large Loads and Modeling Standards for Loads 25 MW or Greater

**TAC Report/Decision:** On 3/26/25, TAC voted to recommend approval of PGRR115 as recommended by ROS in the 3/6/25 ROS Report as revised by TAC. There were three abstentions from the Consumer (2) (CMC Steel, Lyondell Chemical) and Independent Generator (Calpine) Market Segments.

**ERCOT Opinion:** ERCOT supports approval of PGRR115.

**ERCOT Market Impact Statement:** ERCOT Staff has reviewed PGRR115 and believes the market impact for PGRR115, along with NPRR1234, provides necessary structure and clarification to the interconnection requirements for Large Loads.

**IMM Opinion:** IMM has no opinion on PGRR115.

**Key Documents** (including comments, ballots, reports and impact analyses)

- **[PGRR119, Stability Constraint Modeling Assumptions in the Regional Transmission Plan](#)**

**Sponsor:** ERCOT

**Revision Description:** This PGRR revises the Planning Guide to codify that a reliability margin consistent with expected operations procedures for the study period will be utilized when limits associated with a stability constraint are modeled in the Regional Transmission Plan reliability and economic base cases.

**Impact Analysis:** No impact

**Proposed Effective Date:** The first of the month following Public Utility Commission of Texas (PUCT) approval

**TAC Report/Decision:** On 3/26/25, TAC voted unanimously to recommend approval of PGRR119 as recommended by ROS in the 3/6/25 ROS Report.

**ERCOT Opinion:** ERCOT supports approval of PGRR119.

**ERCOT Market Impact Statement:** ERCOT Staff has reviewed PGRR119 and believes it provides a positive market impact by clarifying and codifying the

transmission planning assumptions related to the modeling of stability constraints in the Regional Transmission Plan base case.

**IMM Opinion:** IMM has no opinion on PGRR119.

**[Key Documents](#)** (including comments, ballots, reports and impact analyses)

- **[SCR829, API for the NDCRC Application](#)**

**Sponsor:** Constellation Energy Generation, Tenaska Power Services, NRG Texas Power LLC, Lower Colorado Review Authority (Joint Sponsors)

**Revision Description:** This SCR adds an Application Programming Interface (API) to upload unit testing data and download unit testing data from the Net Dependable Capability and Reactive Capability (NDCRC) application.

**Impact Analysis:** Between \$100K and \$200K (7 – 10 months)

**Proposed Effective Date:** Upon system implementation – Priority 2025; Rank 4560

**TAC Report/Decision:** On 3/26/25, TAC voted unanimously to recommend approval of SCR829 as recommended by PRS in the 3/12/25 PRS Report.

**ERCOT Opinion:** ERCOT supports approval of SCR829.

**ERCOT Market Impact Statement:** ERCOT Staff has reviewed SCR829 and believes it provides a positive market impact by enabling QSEs to upload and download unit testing data from the NDCRC application, reducing manual demands and opportunities for error.

**IMM Opinion:** IMM has no opinion on SCR829.

**[Key Documents](#)** (including comments, ballots, reports and impact analyses)

- **[SMOGRR028, Add Series Reactor Compensation Factors](#)**

**Sponsor:** ERCOT

**Revision Description:** This SMOGRR gives guidance for allowing loss compensation for current limiting reactors.

**Impact Analysis:** No impact

**Proposed Effective Date:** First of the month following PUCT approval

**TAC Report/Decision:** On 3/26/25, TAC voted unanimously to recommend approval of SMOGRR028 as recommended by WMS in the 3/5/25 WMS Report

**ERCOT Opinion:** ERCOT supports approval of SMOGRR028.

**ERCOT Market Impact Statement:** ERCOT Staff has reviewed SMOGRR028 and believes it provides a positive market impact by extending the guidelines for loss compensation to include current limiting reactors, which may be identified as needed later in the design process, the use of which allowing greater flexibility in meter installation location without requiring additional metering structures.

**IMM Opinion:** IMM has no opinion on SMOGRR028.

**[Key Documents](#)** (including comments, ballots, reports and impact analyses)

- **[VCMRR042, SO2 and NOx Emission Index Prices Used in Verifiable Cost Calculations](#)**

**Sponsor:** ERCOT

**Revision Description:** This Verifiable Cost Manual Revision Request (VCMRR) adds the use of seasonal nitrogen oxide (NOX) prices obtained from indices to calculate emission costs from May through September. Annual index prices would continue to be used for SO2 from January through December.

**Impact Analysis:** \$90K - \$140K (6 – 9 months)

**Proposed Effective Date:** Upon system implementation – Priority 2026; Rank 4720

**TAC Report/Decision:** On 2/27/25, TAC voted unanimously to recommend approval of VCMRR042 as recommended by WMS in the 2/5/25 WMS Report.

**ERCOT Market Impact Statement:** ERCOT Staff has reviewed VCMRR042 and agrees that seasonal NOx emissions prices are a better valuation of NOx emissions costs than annual NOx emissions prices currently used. Also, when automated, this VCMRR will enable daily SO2 and NOx prices to be included in the verifiable Operations and Maintenance (O&M) costs, capturing price changes more promptly than the current use of monthly averages.

**IMM Opinion:** IMM supports approval of VCMRR042.

**Key Documents (including comments, ballots, reports and impact analyses)**

The TAC Reports and Impact Analyses for these Revision Requests are included in the [ERCOT Board meeting materials](#).

In addition, these Revision Requests and supporting materials are posted on the ERCOT website.

**Key Factors Influencing Issue:**

The PRS met, discussed the issues, and submitted reports to TAC regarding NPRRs 1234, 1241, 1256, 1268, 1270, 1273; and SCR829.

The ROS met, discussed the issues, and submitted reports to TAC regarding NOGRR274; and PGRRs 115 and 119.

The WMS met, discussed the issues, and submitted reports to TAC regarding SMOGRR028 and VCMRR042.

**Conclusion/Recommendation:**

As more specifically described above, TAC recommends that the Board recommend approval of NPRRs 1234, 1241, 1256, 1268, 1270, and 1273; NOGRR274; PGRRs 115 and 119; SCR829; SMOGRR028; and VCMRR042.





**ELECTRIC RELIABILITY COUNCIL OF TEXAS, INC.**  
**BOARD OF DIRECTORS RESOLUTION**

WHEREAS, after due consideration of the alternatives, the Board of Directors (Board) of Electric Reliability Council of Texas, Inc. (ERCOT) deems it desirable and in the best interest of ERCOT to recommend approval of the following Nodal Protocol Revision Request (NPRRs), Nodal Operating Guide Revision Request (NOGRR), Planning Guide Revision Requests (PGRRs), System Change Request (SCR), Settlement Metering Operating Guide Revision Request (SMOGRR), and Verifiable Cost Manual Revision Request (VCMRR) recommended for approval by TAC (with no opposing votes recorded):

- NPRR1234, Interconnection Requirements for Large Loads and Modeling Standards for Loads 25 MW or Greater;
- NPRR1241, Firm Fuel Supply Service (FFSS) Availability and Hourly Standby Fee;
- NPRR1256, Settlement of MRA of ESRs;
- NPRR1268, RTC – Modification of Ancillary Service Demand Curves – URGENT;
- NPRR1270, Additional Revisions Required for Implementation of RTC – URGENT;
- NPRR1273, Appropriate Accounting for ESRs in PRC Calculation – URGENT;
- NOGRR274, Conform Nodal Operating Guide to Revisions Implemented for NPRR1217, Remove Verbal Dispatch Instruction (VDI) Requirement for Deployment and Recall of Load Resources and Emergency Response Service (ERS) Resources – URGENT;
- PGRR115, Related to NPRR1234, Interconnection Requirements for Large Loads and Modeling Standards for Loads 25 MW or Greater;
- PGRR119, Stability Constraint Modeling Assumptions in the Regional Transmission Plan;
- SCR829, API for the NDCRC Application;
- SMOGRR028, Add Series Reactor Compensation Factors; and
- VCMRR042, SO<sub>2</sub> and NO<sub>x</sub> Emission Index Prices Used in Verifiable Cost Calculations

THEREFORE, BE IT RESOLVED, that the Board hereby recommends approval of NPRRs 1234, 1241, 1256, 1268, 1270, and 1273; NOGRR274; PGRRs 115 and 119; SCR829; SMOGRR028; and VCMRR042.



**CORPORATE SECRETARY'S CERTIFICATE**

I, Brandon Gleason, Assistant Corporate Secretary of ERCOT, do hereby certify that, at its April 7-8, 2025 meeting, the Board passed a motion approving the above Resolution by \_\_\_\_\_.

IN WITNESS WHEREOF, I have hereunto set my hand this \_\_\_\_ day of April 2025.

\_\_\_\_\_  
Brandon Gleason  
Assistant Corporate Secretary