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OPEN MEETING COVER SHEET

MEMORANDUM AND PROPOSED ORDER

MEETING DATE:	October 27, 2021
DATE DELIVERED:	October 28, 2021
AGENDA ITEM NO.:	22
CAPTION:	Project No. 52307 – Review of Rules Adopted by the Independent Organization in Calendar Year 2021
DESCRIPTION:	Discussion and Possible Action

Public Utility Commission of Texas

Memorandum

TO: Chairman Peter Lake
Commissioner Will McAdams
Commissioner Lori Cobos
Commissioner Jimmy Glotfelty

FROM: Rebecca Zerwas, Market Analysis

DATE: October 27, 2021

RE: October 28, 2021 Open Meeting – Item No. 22
Project No. 52307 – *Review of Rules Adopted by the Independent Organization in Calendar Year 2021 (Discussion and possible action)*

Senate Bill (SB) 2 (87th Legislature, Regular Session) requires both the Commission and the Electric Reliability Council of Texas (ERCOT) to establish processes for Commission approval of any rules or protocols adopted under authority delegated from the Commission to the independent organization. Commission Staff will utilize Project No. 52307, *Review of Rules Adopted by the Independent Organization in Calendar Year 2021*, to facilitate this review and approval. Staff continues to work with ERCOT on amendments to the revision request approval process in anticipation of Project No. 52301, *ERCOT Governance and Related Issues*, and a full implementation of SB2.

Since the Commission adopted an order approving the last set of ERCOT rules at the October 7, 2021 Open Meeting, the ERCOT Board of Directors (BOD) met and passed twelve additional rules through the stakeholder process. These include two Planning Guide Revisions Requests (PGRRs), one Resource Registration Glossary Revision Request (RRGRR), two system change controls (SCRs), four Nodal Protocol Revision Requests (NPRRs), one Nodal Operating Guide Revision Request (NOGRR) and two Other Binding Document Revision Requests (OBDRRs). These matters are now pending at the Commission prior to ERCOT implementation.

Staff requests consideration of twelve matters approved by BOD at its October 22, 2021 meeting:

- PGRR093, *Replace Inadvertent Deletions in Section 5*. Staff recommends approval to provide ERCORT accurate and timely information requirements for both transmission planning and resource adequacy studies.

- PGRR094, *Clarify Notification Requirement for Generator Construction Commencement or Completion*. Staff recommends approval to provide clarity to market participants regarding submission of data pending updated functionality in the Resource Integration and Ongoing Operations (RIOO) – Integration Services system.

- RRGRR031, *Related to NPRR995, RTF-6 Create Definition and Terms for Settlement Only Energy Storage*. Staff recommends approval to create consistency between the registration requirements for Settlement Only Energy Storage Systems (SOESSs) and Energy Storage Resources.

- SCR813, *NMMS Jointly-Rated Equipment Coordination Confirmation*. Staff recommends approval to bring additional awareness and increased coordination between Transmission and/or Distribution Service Providers (TDSPs) where service areas interface.

- SCR814, *Point-to-Point (PTP) Obligation Bid Interval Limit*. Staff recommends approval to optimize Day-Ahead Market (DAM) performance by mitigating the volume of PTP Obligations affecting DAM runtime.

- NPRR1082, *Emergency Response Service (ERS) Test Exception for Co-located ERS Loads*. Staff recommends approval to prevent unnecessary testing and delays where an ERS Generator is capable of reliably meeting the combined obligations of both the ERS Generator and the ERS Load.

- NPRR1087, *Prohibit Participation of Critical Loads as Load Resources or ERS Resources*. Staff recommends approval in support of the required Resource Entity and Qualified Scheduling Entity attestations and to ensure Critical Loads, including critical natural gas, do not participate in Load Resource programs.

- NPRR1090, *ERS Winter Storm Uri Lessons Learned Changes and Other ERS Items*. Staff recommends approval to address issues with the ERS program identified during URI, including removing limits on deployments and eliminating scheduled unavailability, prior to the December-March 2022 ERS Standard Contract Term.

- NPRR1093, *Load Resource Participation in Non-Spinning Reserve*. Staff recommends approval to allow Load Resource participation in Non-Spin and ensure additional capacity is available to ERCOT Operators by summer 2022.

- NOGRR232, *Related to NPRR1093, Load Resource Participation in Non-Spinning Reserve*. Staff recommends approval to align the Nodal Operating Guide with NPRR 1093 for the participation of Load Resource in Non-Spin.

- OBDRR032, *Non-Spin Changes Related to NPRR1093, Load Resource Participation in Non-Spinning Reserve*. Staff recommends approval to align the deployment and recall procedures with NPRR 1093 to facilitate Load Resources participation in Non-Spin by summer 2022.

- OBDRR033, *ORDC Changes Related to NPRR1093, Load Resource Participation in Non-Spinning Reserve*. Staff recommends approval to align the Operating Reserve Demand Curve (ORDC) methodology with NPRR 1093 for the participation of Load Resource in Non-Spin.

Included for your review are the BOD Report and ERCOT Impact Analysis. These documents are intended to provide a comprehensive overview describing the revisions, including ERCOT's market impact statement.

Please find attached a proposed order for your consideration consistent with Staff's recommendation in this memo.

PROJECT NO. 52307

REVIEW OF RULES ADOPTED BY THE INDEPENDENT ORGANIZATION IN CALENDAR YEAR 2021	**§ § §**	**PUBLIC UTILITY COMMISSION OF TEXAS**

PROPOSED ORDER APPROVING ERCOT REVISION REQUESTS

This Order addresses revisions to twelve Electric Reliability Council of Texas (ERCOT) rules. The Commission approves the revisions and the accompanying market impact statements.

The ERCOT Board of Directors approved Planning Guide Revision Request (PGRR) 093, *Replace Inadvertent Deletions in Section 5*; PGRR 094, *Clarify Notification Requirement for Generator Construction Commencement or Completion*; Resource Registration Glossary Revision Request (RRGRR) 031, *Related to NPRR995, RTF-6 Create Definition and Terms for Settlement Only Energy Storage*; System Change Request (SCR) 813, *NMMS Jointly-Rated Equipment Coordination Confirmation*; SCR 814, *Point-to-Point (PTP) Obligation Bid Interval Limit*; Nodal Protocol Revision Request (NPRR) 1082, *Emergency Response Service (ERS) Test Exception for Co-located ERS Loads*; NPRR 1087, *Prohibit Participation of Critical Loads as Load Resources or ERS Resources*; NPRR 1090, *ERS Winter Storm Uri Lessons Learned Changes and Other ERS Items;* NPRR 1093, *Load Resource Participation in Non-Spinning Reserve;* Nodal Operating Guide Revision Request (NOGRR) 232, *Related to NPRR1093, Load Resource Participation in Non-Spinning Reserve*; Other Binding Document Revision Request (OBDRR) 032, *Non-Spin Changes Related to NPRR1093, Load Resource Participation in Non-Spinning Reserve*; and OBDRR 033, *ORDC Changes Related to NPRR1093, Load Resource Participation in Non-Spinning Reserve*, at its meeting on October 22, 2021.

Effective June 8, 2021, rules adopted by ERCOT under delegated authority from the Commission are subject to Commission oversight and review and do not take effect before receiving Commission approval.[1] Further, also effective June 8, ERCOT's process for adopting new protocols or revisions to existing protocols must require that new or revised protocols may

[1] PURA § 39.151(d); *see also, id.* § 39.151(g-1) ERCOT's protocols must be approved by the commission.

not take effect until the Commission approves a market impact statement describing the new or revised protocols.[2]

Commission Staff filed a memorandum on October 26, 2021 related to these revisions in which it recommends that the Commission approve the revisions to the rules. Attached to Commission Staff's memorandum were supporting ERCOT documents, which constitute the market impact analysis.

The Commission finds that these revisions are necessary for the proper functioning of the ERCOT market as demonstrated by the supporting material and the Commission issues the following orders:

1. The Commission approves PGRR 093 and accompanying market impact statement.
2. The Commission approves PGRR 094 and accompanying market impact statement.
3. The Commission approves RRGRR 031 and accompanying market impact statement.
4. The Commission approves SCR813 and accompanying market impact statement.
5. The Commission approves SCR 814 and accompanying market impact statement.
6. The Commission approves NPRR 1082 and accompanying market impact statement.
7. The Commission approves NPRR 1087 and accompanying market impact statement.
8. The Commission approves NPRR 1090and accompanying market impact statement.
9. The Commission approves NPRR 1093 and accompanying market impact statement.
10. The Commission approves NOGRR 232 and accompanying market impact statement.
11. The Commission approves OBDRR 032and accompanying market impact statement.
12. The Commission approves OBDRR 033and accompanying market impact statement.

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[2] PURA § 39.151(g-6).

Signed at Austin, Texas the _____ day of _____ 2021.

PUBLIC UTILITY COMMISSION OF TEXAS

_____

PETER M. LAKE, CHAIRMAN

_____

WILL MCADAMS, COMMISSIONER

_____

LORI COBOS, COMMISSIONER

_____

JIMMY GLOTFELTY, COMMISSIONER

Board Report

PGRR Number	093	PGRR Title	Replace Inadvertent Deletions in Section 5
Date of Decision		October 22, 2021	
Action		Recommended Approval	
Timeline		Normal	
Proposed Effective Date		Upon system implementation of Planning Guide Revision Request (PGRR) 082, Revise Section 5 and Establish Small Generation Interconnection Process	
Priority and Rank Assigned		Not Applicable	
Planning Guide Sections Requiring Revision		5.2.5, Duty to Update Project Information and Respond to ERCOT and TDSP Requests for Information 5.2.9.1, Standard Generation Interconnection Agreement for Transmission-Connected Generators	
Related Documents Requiring Revision/Related Revision Requests		None	
Revision Description		This PGRR reinserts three requirements into the graybox language for PGRR082 that were inadvertently removed in the revisions made by PGRR082. These three requirements are necessary to facilitate ERCOT transmission planning and Resource adequacy studies.	
Reason for Revision		☐ Addresses current operational issues. ☐ Meets Strategic goals (tied to the ERCOT Strategic Plan or directed by the ERCOT Board). ☐ Market efficiencies or enhancements ☒ Administrative ☐ Regulatory requirements ☐ Other: (explain) *(please select all that apply)*	
Business Case		The language of PGRR082 inadvertently removed three specific requirements associated with new Resources in the interconnection process. Specifically, language changes included in PGRR082	

	would delete the following three requirements from Section 5, Generation Resource Interconnection or Change Request: • That an Interconnecting Entity (IE) shall submit a Resource Integration and Ongoing Operations (RIOO) change request to indicate that the proposed facility had adequate water resources (if applicable); • That a Transmission Service Provider (TSP) shall submit a RIOO change request if it executes a financially binding agreement other than a Standard Generation Interconnection Agreement (SGIA) with an IE; and • That a TSP shall submit a RIOO change request when an IE has provided notice to proceed along with the collateral specified in an SGIA or other financially binding agreement. ERCOT needs to have an accurate and timely accounting of all Resources that have met these requirements in order to conduct both transmission planning and Resource adequacy studies. In order to eliminate the possibility of a gap in the timely submission of this necessary data, ERCOT proposes that the language in PGRR082 remain grayboxed until these Planning Guide changes are approved and can be implemented with PGRR082.
ROS Decision	On 7/8/21, ROS voted unanimously via roll call to table PGRR093 and refer the issue to the Planning Working Group (PLWG). All Market Segments participated in the vote. On 8/5/21, ROS voted unanimously via roll call to recommend approval of PGRR093 as amended by the 7/30/21 ERCOT comments. All Market Segments participated in the vote. On 9/2/21, ROS voted unanimously via roll call to endorse and forward to TAC the 8/5/21 ROS Report and Impact Analysis for PGRR093. All Market Segments participated in the vote.
Summary of ROS Discussion	On 7/8/21, participants requested PLWG review PGRR093. ERCOT Staff requested that PGRR093 advance in time for approval before implementation of PGRR082 to avoid any gaps in requirements. On 8/5/21, participants reviewed the 7/27/21 Oncor and 7/30/21 ERCOT comments. On 9/2/21, participants reviewed the Impact Analysis for PGRR093.
TAC Decision	On 9/29/21, TAC voted unanimously via roll call to recommend approval of PGRR093 as recommended by ROS in the 9/2/21 ROS Report. All Market Segments participated in the vote.

Board Report

Summary of TAC Discussion	On 9/29/21, TAC reviewed the ERCOT Opinion and ERCOT Market Impact Statement for PGRR093.
ERCOT Opinion	ERCOT supports approval of PGRR093.
ERCOT Market Impact Statement	ERCOT Staff has reviewed PGRR093 and believes the market impact for PGRR093 provides accurate and timely accounting of all Resources that have met certain requirements and facilitates ERCOT transmission planning and Resource adequacy studies.
Board Decision	On 10/22/21, the ERCOT Board recommended approval of PGRR093 as recommended by TAC in the 9/29/21 TAC Report.

Sponsor	
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Phone Number	512-248-4153
Cell Number	
Market Segment	Not Applicable

Market Rules Staff Contact	
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E-Mail Address	Brittney.Albracht@ercot.com
Phone Number	512-225-7027

Comments Received	
Comment Author	**Comment Summary**
Oncor 072721	Recommended the addition of the word “public” as a modifier to the types of financially-binding agreements described in paragraph (3) of Section 5.2.9.1
ERCOT 073021	Changed the order of the paragraphs in Section 5.2.9.1 to group similar requirements together for improved clarity

Market Rules Notes

Board Report

Please note that administrative revisions have been made and authored as "ERCOT Market Rules".

Please note that the baseline language in the following Section(s) has been updated to reflect the incorporation of the following PGRR(s) into the Planning Guide:

- PGRR088, Include Financial Security Amount in the Monthly Generator Interconnection Status Report (incorporated 7/1/21)
  - Section 5.2.9.1

Proposed Guide Language Revision

[PGRR082: Insert Section 5.2.5 below upon system implementation:]

5.2.5 Duty to Update Project Information and Respond to ERCOT and TDSP Requests for Information

(1) Each IE shall provide current and accurate Resource Registration information (including information describing the generator, the MPT, and any other generator-owned transmission or distribution facilities) and contact information to ERCOT and the interconnecting Transmission and/or Distribution Service Provider (TDSP), and shall promptly update that information as soon as possible, but no later than ten Business Days, following any change to that information. All TDSPs will be sent notification when ERCOT reviews and acknowledges Registration Information changes in the online RIOO system. Interconnection studies that are based on outdated, false, or inaccurate data may adversely affect the safety and reliability of the ERCOT System and can result in damage to generation or transmission equipment. Failure to provide accurate Resource Registration information and contact information may result in project delays or cancellation as described in Section 5.2.7, Project Cancellation Due to Failure to Comply with Requirements.

(2) Twice each year, each IE that has submitted an FIS request shall submit via the online RIOO system, for each proposed facility, the declaration in Section 8, Attachment A, Declaration of Resource Data Accuracy, stating that, as of the date of submission, the most recently submitted data on the current version of the Resource Registration form accurately reflects the anticipated characteristics of the proposed Resource and that the contact information is correct. The declaration shall be executed by an officer or other person having authority to bind the company and shall be submitted via the online RIOO system. Each IE shall submit one declaration for each project no earlier than March 1 and no later than March 15 each year, and shall submit another declaration for each proposed facility no earlier than September 1 and no later than September 15 each year. Failure to submit a declaration may result in project cancellation as described in Section 5.2.7.

(3) If, after receipt of updated Resource Registration data, ERCOT, the interconnecting TDSP, or the lead TSP determines that any subsequent changes to the project or to the transmission system or distribution system may affect the reliable operation of the ERCOT System or otherwise warrant new studies, then ERCOT or the TDSP may require additional studies to be performed before the proposed generator is allowed to interconnect to the

ERCOT System. The IE and TDSP(s) shall develop a schedule for completing the additional studies. The TDSP shall provide the FIS studies, if applicable, to ERCOT and the other TDSPs via the online RIOO system.

(4) If the IE increases the requested amount of capacity of any proposed large generator by more than 20% of the amount requested in the initial application, the IE shall submit a new interconnection request for the additional capacity or for the entire project.

(5) Within ten Business Days, the IE shall notify ERCOT and the interconnecting TDSP, or, if applicable, lead TSP of any change in ownership and shall provide conclusive documentary evidence of the ownership change (such as a purchase/sale agreement or a document executed by both parties confirming the transaction) via the online RIOO system. TDSPs will receive notification when ERCOT reviews and acknowledges the change. The new owner shall acknowledge the sale by submitting the Resource Registrations data showing the contact information for the new owners within 60 days. Failure to do so may result in project cancellation as described in Section 5.2.7.

(6) To support ERCOT resource adequacy and North American Electric Reliability Corporation (NERC) reliability assessment reporting requirements, the IE shall provide the following information via the online RIOO system as soon as possible, but in no event later than ten Business Days after the information is available or has been updated:

(a) Revisions to the initial projected Commercial Operations Date and if available, the energization and Initial Synchronization dates;

(b) Notification if any required air permits have been issued or permit applications have been withdrawn;

(c) Notification and dates for when generator construction has commenced or has been completed; and

(d) A declaration of adequate water supplies (Section 8, Attachment B, Declaration of Adequate Water Supplies), unless the generator is powered by wind or PhotoVoltaic equipment or is a battery Energy Storage System (ESS).

(7) If during the course of the GIM process, additional information is needed by ERCOT or the TDSP from the IE, the IE must respond to the request within ten Business Days. The IE will be notified that action is required by its ERCOT contact.

[PGRR082 and PGRR088: Insert applicable portions of Sections 5.2.9 and 5.2.9.1 below upon system implementation:]

5.2.9 Interconnection Agreements and Procedures

5.2.9.1 Standard Generation Interconnection Agreement for Transmission-Connected

Generators

(1) As a condition for obtaining transmission service, an IE for any transmission-connected generator must execute a Standard Generation Interconnection Agreement (SGIA) with its TSP. A template of the SGIA can be found on the ERCOT website.

(2) The TSP must submit a change request via the online RIOO system to transmit a copy of the signed SGIA to ERCOT within ten Business Days of execution.

(3) The TSP must submit a change request via the online RIOO system to transmit a copy of any public, financially-binding agreement between the IE and the TSP, other than an SGIA, under which the interconnection for a transmission-connected generator will be constructed. The agreement must be submitted within ten Business Days of execution.

(4) The TSP must submit a change request via the online RIOO system within ten Business Days of receiving both a notice to proceed with construction of the interconnection for the transmission-connected generator and the financial security sufficient to fund the interconnection facilities pursuant to either agreement addressed in paragraphs (2) or (3) above.

(5) Within ten Business Days of providing the TSP both the notice to proceed with construction of the interconnection for the Generation Resource and the financial security sufficient to fund the interconnection facilities pursuant to the SGIA, the IE must submit a change request via the online RIOO system to provide the financial security amount if it is not redacted in the public version of the SGIA filed with the Public Utility Commission of Texas (PUCT). ERCOT will include in the monthly Generator Interconnection Status report the name of the interconnecting TSP and the total amount of financial security sufficient to fund the interconnection facilities, if provided by the IE.

ERCOT Impact Analysis Report

PGRR Number	093	PGRR Title	Replace Inadvertent Deletions in Section 5
Impact Analysis Date		June 23, 2021	
Estimated Cost/Budgetary Impact		None.	
Estimated Time Requirements		No project required. This Planning Guide Revision Request (PGRR) can take effect upon system implementation of PGRR082, Revise Section 5 and Establish Small Generation Interconnection Process.	
ERCOT Staffing Impacts (across all areas)		Ongoing Requirements: No impacts to ERCOT staffing.	
ERCOT Computer System Impacts		No impacts to ERCOT computer systems.	
ERCOT Business Function Impacts		No impacts to ERCOT business functions.	
Grid Operations & Practices Impacts		No impacts to ERCOT grid operations and practices.	

Evaluation of Interim Solutions or Alternatives for a More Efficient Implementation
None offered.

Comments
There are no additional impacts to this PGRR beyond what was captured in the Impact Analysis for PGRR082.

Board Report

PGRR Number	094	PGRR Title	Clarify Notification Requirement for Generator Construction Commencement or Completion
Date of Decision		October 22, 2021	
Action		Recommended Approval	
Timeline		Normal	
Proposed Effective Date		Upon system implementation	
Priority and Rank Assigned		Priority – 2022; Rank – 3540	
Planning Guide Sections Requiring Revision		5.3.2, Modifications to Request Declarations of Resource Data Accuracy	
Related Documents Requiring Revision/Related Revision Requests		None	
Revision Description		This Planning Guide Revision Request (PGRR) aligns Section 5.3.2 with current practices by greyboxing item (7)(c), which requires submission of project construction start and completion dates, until system implementation in the Resource Integration and Ongoing Operations (RIOO) – Integration Services system.	
Reason for Revision		[X] Addresses current operational issues. [ ] Meets Strategic goals (tied to the ERCOT Strategic Plan or directed by the ERCOT Board). [ ] Market efficiencies or enhancements [X] Administrative [ ] Regulatory requirements [ ] Other: (explain) *(please select all that apply)*	
Business Case		Due to spotty compliance with the construction start and completion date reporting requirement, ERCOT decided to not enforce the submission of these dates until the functionality to submit them in the RIOO-IS system was fully implemented. Due to continued implementation delays, ERCOT has decided to greybox item (7)(c) of Section 5.3.2, such that construction date reporting is no longer required until the functionality has been implemented. This	

	greyboxing is intended to eliminate Interconnecting Entity (IE) confusion regarding when and how construction start and completion dates are to be provided to ERCOT. System implementation will also trigger reporting of the construction dates in the monthly Generator Interconnection Status reports. It should also be noted that PGRR082, Revise Section 5 and Establish Small Generation Interconnection Process, created parallel language in item (6)(c) of Section 5.2.5, Duty to Update Project Information and Respond to ERCOT and TDSP Requests for Information, which should also remain greyboxed until implementation of the necessary functionality in RIOO-IS. If other portions of PGRR082 were to be implemented prior, details about the partial implementation will be provided in a Market Notice.
ROS Decision	On 8/5/21, ROS voted unanimously via roll call to recommend approval of PGRR094 as submitted. All Market Segments participated in the vote. On 9/2/21, ROS voted unanimously via roll call to endorse and forward to TAC the 8/5/21 ROS Report and the Revised Impact Analysis for PGRR094 with a recommended priority of 2022 and rank of 3540. All Market Segments participated in the vote.
Summary of ROS Discussion	On 8/5/21, ERCOT staff provided an overview of PGRR094. On 9/2/21, participants reviewed the Revised Impact Analysis for PGRR094 and considered priority and rank.
TAC Decision	On 9/29/21, TAC voted unanimously via roll call to recommend approval of PGRR094 as recommended by ROS in the 9/2/21 ROS Report; and the Revised Impact Analysis. All Market Segments participated in the vote.
Summary of TAC Discussion	On 9/29/21, TAC reviewed the ERCOT Opinion and ERCOT Market Impact Statement for PGRR094.
ERCOT Opinion	ERCOT supports approval of PGRR094.
ERCOT Market Impact Statement	ERCOT Staff has reviewed PGRR094 and believes the market impact for PGRR094 improves efficiency by aligning the Planning Guide with current practices and removes a potential source of confusion regarding when and how to submit data required for the generator interconnection process.
ERCOT Board Decision	On 10/22/21, the ERCOT Board recommended approval of PGRR094 as recommended by TAC in the 9/29/21 TAC Report.

Board Report

Sponsor	
Name	Pete Warnken
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Company	ERCOT
Phone Number	512-248-6705
Cell Number	
Market Segment	Not applicable

Market Rules Staff Contact	
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Phone Number	512-248-6917

Comments Received	
Comment Author	**Comment Summary**
PRS 092021	Endorsed the ROS-recommended priority of 2022 and rank of 3540

Market Rules Notes

None

Proposed Guide Language Revision

5.3.2 Modifications to Request Declarations of Resource Data Accuracy

(1) The IE shall maintain communication with ERCOT and the assigned TSP at all stages of the generation interconnection process by updating its contact information for the GINR process and in the Resource Registration process. Failure to do so may result in GINR cancellation as described in Section 5.7.7, Cancellation of a Project Due to Failure to Comply with Requirements. As soon as possible, but no later than ten Business Days after any relevant change, the IE shall submit a change request via the online RIOO system to communicate any revisions that would affect the technical attributes and/or timeline of the project. The TSP will receive a RIOO system automated email when ERCOT reviews and acknowledges the change.

(2) The IE shall update the Resource Registration data as soon as possible, but no later than ten Business Days, following any change to the proposed facility and shall submit the

updated information via the online RIOO system. This obligation to update continues even after any interconnection agreement is signed.

(3) Twice each year, each IE that has submitted an FIS request shall submit via the online RIOO system, for each proposed facility, the declaration in Section 8, Attachment A, Declaration of Resource Data Accuracy, stating that, as of the date of submission, the most recently submitted data on the current version of the Resource Registration form accurately reflects the anticipated characteristics of the proposed Resource and that the contact information is correct. The declaration shall be executed by an officer or other person having authority to bind the company and shall be submitted via the online RIOO system. Each IE shall submit one declaration for each project no earlier than March 1 and no later than March 15 each year, and shall submit another declaration for each proposed facility no earlier than September 1 and no later than September 15 each year. Failure to submit a declaration may result in a GINR cancellation as described in Section 5.7.7.

(4) If, after receipt of updated Resource Registration data, ERCOT or the TSP determines that any subsequent changes to the project may affect the reliable operation of the ERCOT System or otherwise warrant new studies, then ERCOT may require additional studies to be performed before the proposed Generation Resource or Settlement Only Generator (SOG), is allowed to interconnect to the ERCOT System. The IE and TSP(s) shall develop a schedule for completing the additional studies. The TSP shall provide the FIS studies to ERCOT and the other TSPs via the online RIOO system. If these additional studies show that the project would not meet the operational standards specified in the Protocols, this Planning Guide, the Operating Guides, or Other Binding Documents, ERCOT may require the IE to demonstrate its compliance with these standards as a condition for energization of the proposed Generation Resource or SOG.

(5) If the IE increases the requested amount of capacity of the proposed Generation Resource or SOG by more than 20% of the amount requested in the initial application, ERCOT shall require the IE to submit a new GINR for the additional capacity or for the entire project. ERCOT may, at its discretion, require the IE to submit a new GINR for significant capacity decreases or capacity increases of less than 20%, particularly if other changes to the request are also made, such as changes to the Commercial Operations Date. ERCOT's determination as to whether new studies are needed in no way affects the ongoing obligations of the IE and TSP to comply with North American Electric Reliability Corporation (NERC) Reliability Standards, Protocols, this Planning Guide and the Operating Guides.

(6) Within ten Business Days, the IE shall notify ERCOT and the relevant TSP(s) of any change in ownership and shall provide conclusive documentary evidence of the ownership change (such as a purchase/sale agreement or a document executed by both parties confirming the transaction) via the online RIOO system. TSPs will receive a RIOO system automated email when ERCOT reviews and acknowledges the change. The new owner shall acknowledge the sale by submitting the Resource Registrations data showing the contact information for the new owners within 60 days. Failure to do so may result in a GINR cancellation as described in Section 5.7.7.

(7) To support ERCOT resource adequacy and NERC reliability assessment reporting requirements, the IE shall enter into the online RIOO system the following information for the proposed Generation Resource or SOG as soon as possible, but in no event later than ten Business Days after the information is available or has been updated:

(a) Revisions to the initial projected Commercial Operations Date; and

(b) Notification if any required air permits have been issued or permit applications have been withdrawn;

[PGRR094: Insert item (c) below upon system implementation:]

(c) Notification and dates for when generator construction has commenced or been completed.

[PGRR082: Delete Section 5.3.2 above upon system implementation.]

Revised ERCOT Impact Analysis Report

PGRR Number	094	PGRR Title	Clarify Notification Requirement for Generator Construction Commencement or Completion
Impact Analysis Date		September 28, 2021	
Estimated Cost/Budgetary Impact		Between $10k and $20k See Comments	
Estimated Time Requirements		The timeline for implementing this Planning Guide Revision Request (PGRR) is dependent upon Public Utility Commission of Texas (PUCT) prioritization and approval. Estimated project duration: 1 to 2 months	
ERCOT Staffing Impacts (across all areas)		Implementation Labor: 100% ERCOT; 0% Vendor Ongoing Requirements: No impacts to ERCOT staffing.	
ERCOT Computer System Impacts		The following ERCOT systems would be impacted: • Resource Integration and Ongoing Operations (RIOO) 100%	
ERCOT Business Function Impacts		No impacts to ERCOT business functions.	
Grid Operations & Practices Impacts		No impacts to ERCOT grid operations and practices.	

Evaluation of Interim Solutions or Alternatives for a More Efficient Implementation
None offered.

Comments
Implementation of this PGRR is expected to take place after the completion of the in-flight RIOO project.

Board Report

RRGRR Number	031	RRGRR Title	Related to NPRR995, RTF-6 Create Definition and Terms for Settlement Only Energy Storage
Date of Decision		October 22, 2021	
Action		Recommended Approval	
Timeline		Normal	
Proposed Effective Date		Upon system implementation of Nodal Protocol Revision Request (NPRR) 995, RTF-6 Create Definition and Terms for Settlement Only Energy Storage	
Priority and Rank Assigned		Not applicable	
Resource Registration Glossary Sections Requiring Revision		Section 2, Resource Registration Glossary – General and Site Section 2, Resource Registration Glossary – Unit Information Section 2, Resource Registration Glossary – Unit Info - DG Section 2, Resource Registration Glossary – Unit Info - Energy Storage Resource Section 2, Resource Registration Glossary – ESR Connectivity Section 2, Resource Registration Glossary – Parameters	
Related Documents Requiring Revision/Related Revision Requests		NPRR995	
Revision Description		This Resource Registration Glossary Revision Request (RRGRR) amends the Resource Registration Glossary to accommodate registration of Settlement Only Energy Storage Systems (SOESSs), proposing to require the same level of registration detail for an SOESS that is required for Energy Storage Resources (ESRs) under RRGRR023, Related to NPRR1002, BESTF-5 Energy Storage Resource Single Model Registration and Charging Restrictions in Emergency Conditions. This RRGRR should be implemented simultaneously with NPRR995.	
Reason for Revision		[X] Addresses current operational issues. [ ] Meets Strategic goals (tied to the ERCOT Strategic Plan or directed by the ERCOT Board). [X] Market efficiencies or enhancements [ ] Administrative [ ] Regulatory requirements [ ] Other: (explain)	

Board Report

	(please select all that apply)
Business Case	An Energy Storage System (ESS) that is one MW or greater in size and that does not choose to register as an ESR must register as an SOESS. These modifications to the Resource Registration Glossary will create the framework for enabling changes to the Resource Integration & On-going Operations – Resources Services (RIOO-RS) system needed to accommodate SOESSs.
ROS Decision	On 7/8/21, ROS unanimously voted via roll call to recommend approval of RRGRR031 as submitted. All Market Segments participated in the vote. On 8/5/21, ROS unanimously voted via roll call to endorse and forward to TAC the 7/8/21 ROS Report and the Impact Analysis for RRGRR031. All Market Segments participated in the vote.
Summary of ROS Discussion	On 7/8/21, ERCOT Staff provided an overview of RRGRR031 and confirmed its planned implementation alongside NPRR995. On 8/5/21, there was no discussion.
TAC Decision	On 8/27/21, TAC unanimously voted via roll call to recommend approval of RRGRR031 as recommended by ROS in the 8/5/21 ROS Report. All Market Segments participated in the vote.
Summary of TAC Discussion	On 8/27/21, TAC reviewed the ERCOT Opinion and ERCOT Market Impact Statement for RRGRR031.
ERCOT Opinion	ERCOT supports approval of RRGRR031.
ERCOT Market Impact Statement	ERCOT Staff has reviewed RRGRR031 and believes the market impact for RRGRR031, along with NPRR995, clarifies the registration and treatment of SOESSs.
Board Decision	On 10/22/21, the ERCOT Board recommended approval of RRGRR031 as recommended by TAC in the 8/27/21 TAC Report.

Sponsor	
Name	Sandip Sharma
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Cell Number	

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Market Segment	Not applicable

Market Rules Staff Contact	
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Comments Received	
Comment Author	**Comment Summary**
None	

Market Rules Notes

Please note that the baseline language in the following section(s) have been updated to reflect the incorporation of the following RRGRR(s) into the Resource Registration Glossary:

- RRGRR025, Related to NPRR1005, Clarify Definition of Point of Interconnection (POI) and Add Definition Point of Interconnection Bus (POIB)
  - Section 2, Resource Registration Glossary – Unit Information (incorporated 9/1/21)

Please note that the following RRGRR(s) also proposes revisions to the following section(s):

- RRGRR029, Related to NPRR1077, Extension of Self-Limiting Facility Concept to Settlement Only Generators (SOGs) and Telemetry Requirements for SOGs
  - Section 2, Resource Registration Glossary – Unit Information
  - Section 2, Resource Registration Glossary – Parameters

Proposed Guide Language Revision

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Resource Registration Data	Wind	Solar Photovoltaic (PV)	[RRGRR023: Insert column "Energy Storage System (ESS)" upon system implementation of NPRRs 1002, 1026, and 1029]	Conventional Generation (Gen)	Combined Cycle (CC)	Load Resources	Distributed Generation	Notes	Field Name	Definition / Detailed Description	Screening Study (SS) (R, C, O, A)	Full Interconnect Study (FIS) - Steady-State, Short Circuit, and Facility	FIS - Stability Study (R, C, O, A)	Planning Model (R, C, O, A)	Full Registration (R, C, O, A)
GENERAL_SITE_ESIID_Information - General and Site Information															
General and Site	X	X	X	X	X		X	List	This submittal is for:	Select from drop down: New Site, Revision, Addition of unit(s), or Deletion of unit(s).				R	R
General and Site	X	X	X	X	X		X	mm/dd/yyyy	Date Form Completed:	Enter date that form completed/revised in the format MM/DD/YYYY.					O
General and Site	X	X	X	X	X		X	Text	Resource Entity Submitting Form:	Enter the name of the Resource Entity/ Interconnecting Entity. The RE must be the same entity name that filed on the Standard Form Agreement. The IE must be the same entity name that filed on the Generation Entity Information Sheet. The Protocols require that a Load Resource must also complete and submit an Application.				R	R
General and Site	X	X	X	X	X		X	Number	Resource Entity DUNS #:	Enter the Market Participant unique identifier as registered with ERCOT for the Resource Entity (e.g. DUNS number plus '3XXX' as assigned by ERCOT).	R	R	R	R	R
General and Site	X	X	X	X	X		X	Text	Resource Site Name:	Resource site or main Facility name (e.g. Cedar Bayou Plant). Determined jointly with ERCOT.					R

General and Site	X	X	X	X	X		X	Text	Resource Site Code:	Code for Resource site (e.g. Cedar Bayou Plant is CBY). Determined jointly with ERCOT.	R	R	R	R	R
General and Site	X	X	X	X	X		X	Text	Street Address:	Physical Street Address of the plant site				R	R
General and Site	X	X	X	X	X		X	Text	City:	City associated with the physical street address of the plant site.					R
General and Site	X	X	X	X	X		X	Text	State:	State associated with the physical street address of the plant site.					R
General and Site	X	X	X	X	X		X	Text	Zipcode:	Zip code associated with the physical street address of the plant site.					R
General and Site	X	X	X	X	X		X	List	County:	County associated with the physical street address of the plant site.	R	R	R	R	R
General and Site	X	X	X	X	X		X	Date	Site In-Service Date:	Date is the date when site was (or is planned to be) commissioned. Entered once initially for the Screening Study. Updated once for FIS. Updated once for the Full Registration. Updated finally for the site commissioning.	R	R	R	R	R
General and Site	X	X	X	X	X		X	Date	Site Stop Service Date:	Model Ready Date when RE retires or relinquishes ownership of all equipment. Blank if not applicable/known.					O
General and Site	X	X	X	X	X		X	List	Congestion Management Zone for 2003:	This information can be found in the ERCOT Data Dictionary on the Planning and Operations Information website. For newer units, please contact ERCOT.					R
General and Site	X	X	X	X	X		X	Y/N	Resource owned by NOIE?	Indicate Non Opt-In Entity Ownership of Resource	R	R	R	R	R
General and Site	X	X	X	X	X		X	Y/N	Is Resource behind a NOIE Settlement Meter Point?	For Resources that are connected to the grid behind NOIE Settlement Meter Points					R
General and Site	X	X	X	X	X		X		Number of EPS Primary meters:	Enter the total number of primary ERCOT-Polled Settlement (EPS) Meters associated with this site.					R
General and Site	X	X	X	X	X			List (Transmissi	Is Resource Transmission or	Refer to Protocol Section 2.1, Definitions, for the definition of a Resource.					R

								on or Distribution)	Distribution Connected?						
[RRGRR023: Insert "General and Site" rows below upon system implementation of NPRRs 1002, 1026, and 1029:]															
General and Site	X	X	X					Y/N	Is Resource a DC-Coupled Resource as defined in ERCOT Protocol Section 2.1, Definitions?	Refer to ERCOT Protocol Section 2.1, Definitions, for the definition of a DC-Coupled Resource.					
General and Site			X					Y/N	Is Resource a Self-Limiting Resource as defined in ERCOT Protocol Section 2.1, Definitions?	Refer to ERCOT Protocol Section 2.1, Definitions, for the definition of a Self-Limiting Resource.					
General and Site	X	X	X	X	X			Y/N	Is Resource a part of a Self-Limiting Facility as defined in ERCOT Protocol Section 2.1, Definitions?	Refer to ERCOT Protocol Section 2.1, Definitions, for the definition of a Self-Limiting Facility.					
General and Site	X	X	X	X	X		X	Y/N	Is Resource claiming status as a Settlement Only Generator (SOG) or Settlement Only Energy Storage System (SOESS) as defined in ERCOT Protocol Section 2.1, Definitions?	Refer to Protocol Section 2.1, Definitions, for the definition of a Settlement Only Generator (SOG) and Settlement Only Energy Storage System (SOESS).					R
General and Site	X	X	X	X	X		X	Y/N	Is Resource >10 MW?	Indicate if the Resource nameplate rating is greater than 10 MW (Gross). Required if Resource is claiming Settlement Only Generator (SOG) status.					C

General and Site	X	X	X	X	X		X	Text	Printed Name:	Enter the Primary Contact person who can address ERCOT questions regarding Resource Registration submittal. Enter the contact's name, title, phone number, and email address.	R	R	R	R	R
General and Site	X	X	X	X	X		X	Text	Title:	Enter the Title of the Primary Contact	R	R	R	R	R
General and Site	X	X	X	X	X		X		Phone Number:	Enter the Phone Number for the Primary Contact	R	R	R	R	R
General and Site	X	X	X	X	X		X		E-mail Address:	Enter the E-mail Address for the Primary Contact	R	R	R	R	R
General and Site	X	X	X	X	X		X	Text	Printed Name:	Enter the Secondary Contact person who can address ERCOT questions regarding Resource Registration submittal. Enter the contact's name, title, phone number, email address, and fax number.	O	O	O	O	O
General and Site	X	X	X	X	X		X	Text	Title:	Enter the Title of the Secondary Contact				O	O
General and Site	X	X	X	X	X		X		Phone Number:	Enter the Phone Number for the Secondary Contact				O	O
General and Site	X	X	X	X	X		X		E-mail Address:	Enter the E-mail Address for the Secondary Contact				O	O
Unit Information															
Unit Information	X	X	X	X	-		X	-	Resource Site Code:	Enter the Site Code established in the General and Site Information tab of the GENERAL_SITE_ESIID_Information workbook.	R	R	R	R	R
Unit Information	X	X	X	X	X		X	All Caps	UNIT NAME	Enter Unit Code for the generator unit (e.g. Cedar Bayou Plant Gen 1 is "CBYG1").	R	R	R	R	R
[RRGRR023: Replace "Unit Information - UNIT NAME" above with the following upon system implementation of NPRRs 1002, 1026, and 1029:]															
Unit Information	X	X	X	X	X		X	All Caps	UNIT NAME	Enter Unit Code for the generator unit (e.g. Cedar Bayou Plant Gen 1 is "CBYG1"). For an ESS this is the name of the ESS while discharging.	R	R	R	R	R

Unit Information	X	X	X	X	X		X	Automatic	Resource Name (Unit Code/Mnemonic)	Concatenated mnemonic of Resource Site Code and Unit name (e.g. CBY_CBYG1).				A	A
[RRGRR023: Insert "Unit Information" rows below upon system implementation of NPRRs 1002, 1026, and 1029:]															
Unit Information			X					All Caps	Energy Storage System (ESS) Name	This name is used to tie ESS discharging and charging, prior to single ESS model era.	R	R	R	R	R
Unit Information			X					All Caps	Dispatch Asset Code (provided by ERCOT)	For ESS enter the Dispatch Asset Code (this code will be provided by ERCOT). This code will be used for the ESS while charging.					R
Unit Information			X		-				ESIID assigned to meter	ESI ID number assigned to the meter. For NOIEs, the TDSP will create a non-settlement ESI ID.					R
Unit Information			X		-			Y/N	Wholesale Delivery Point?	Enter Y or N, if the point of delivery is a wholesale delivery point.					R
Unit Information	X	X	X	X	-			Y/N	Settlement Only Generator (SOG) or Settlement Only Energy Storage System (SOESS)	Refer to ERCOT Protocol Section 2.1, Definitions, for the definition of a Settlement Only Generator (SOG) and Settlement Only Energy Storage System (SOESS).				R	R
Unit Information	X	X	X	X	-			-	PUC Registration Number	Enter the PUCT registration number.					O
[RRGRR023: Insert "Unit Information" rows below upon system implementation of NPRRs 1002, 1026, and 1029:]															
Unit Information	X	X	X					Y/N	DC-Coupled Resource	Refer to ERCOT Protocol Section 2.1, Definitions, for the definition of a DC-Coupled Resource	R	R	R	R	R
Unit Information			X					Y/N	Self-Limiting Resource	Refer to ERCOT Protocol Section 2.1, Definitions, for the definition of a Self-Limiting Resource	R	R	R	R	R
Unit Information	X	X	X	X	X			Y/N	Part of Self-Limiting Resource Facility	Refer to ERCOT Protocol Section 2.1, Definitions, for the definition of a Self-Limiting Resource Facility	R	R	R	R	R
Unit Information	X	X	X	X	X			#	Self-Limiting Facility #	Self-Limiting Facility # 1, 2, 3….Leave blank if not Self-Limiting Facility. Refer to definition of Self-Limiting Facility in Protocol Section 2.1, Definitions.	R	R	R	R	R

Unit Information	X	X	X	X	X			Automatic	Site_Self-Limiting Facility#	Automatic field. All Resources that are part of the same Self-Limiting Facility will have same code	R	R	R	R	R
Unit Information	X	X	X	X	X			-	ERCOT Interconnection Project Number - Only New Units	Enter the ERCOT INR number. Required for new or upgraded units.		C	C	C	C
Unit Information	X	X	X	X	-			-	NERC Number	Enter NERC NCR number.					O
Unit Information	X	X	X	X	-			Y/N	Qualifying Facility	Refer to ERCOT Protocol Section 2 for the definition of Qualifying Facility.					R
Unit Information	X	X	X	X	X			mm/dd/yyyy	Transmission Only MRD	Proposed model load date for RE-owned transmission equipment.					O
Unit Information	X	X	X	X	X			mm/dd/yyyy	Standard Generation Interconnection Agreement (SGIA) Signature Date	Enter the date the Resource signed SGIA. For NOIEs, use MOU date.					R
Unit Information	X	X	X	X	X		X	mm/dd/yyyy	Unit Start Date (Model Ready Date)	Proposed model load date for unit. Required for new units only.					O
Unit Information	X	X	X	X	X			mm/dd/yyyy	Commercial Operations Date	Enter the unit's planned Commercial Operations Date. After the unit completes operational performance testing, this field should be updated by the RE with the actual Commercial Operations Date.	R	R	R	R	R
Unit Information	X	X	X	X	X		X	mm/dd/yyyy	Unit End Date	Entry of a date in this field will result in the unit being removed from the ERCOT model. Enter the model ready date of expected or actual retirement. Leave blank if not known/applicable.					O

Unit Information	X	X	X	X	X			All Caps	SubStation Code/SubStation Mnemonic	Enter the interconnecting transmission station code. If you need assistance in determining the corresponding ERCOT Substation Code\Mnemonic, please consult your TDSP, or ERCOT. For the SS/FIS, if a substation code cannot be identified, leave field blank and enter the expected electrical connection point as text in the comment section.	O	O	O	R	R
Unit Information	X	X	X	X	X			kV	Voltage Level	Enter the nominal voltage level at the Point of Interconnection (e.g. 69kV, 138kV, 345kV). If you need assistance in determining the corresponding Voltage Level, please consult your TDSP, or ERCOT.	R	R	R	R	R
[RRGRR025: Replace "Unit Information - Voltage Level" above with the following upon system implementation of NPRR1005:]															
Unit Information	X	X	X	X	X			kV	Voltage Level	Enter the nominal voltage level at the Point of Interconnection Bus (e.g. 69kV, 138kV, 345kV). If you need assistance in determining the corresponding Voltage Level, please consult your TDSP, or ERCOT.	R	R	R	R	R
Unit Information	X	X	X	X	X			#	PTI Bus Number	Enter the PTI Bus Number at the Point of Interconnection in the planning model. If you need assistance in determining the corresponding PTI Bus Number, please consult your TDSP, or ERCOT.	O	O	O	R	R
[RRGRR025: Replace "Unit Information - PTI Bus Number" above with the following upon system implementation of NPRR1005:]															
Unit Information	X	X	X	X	X			#	PTI Bus Number	Enter the PTI Bus Number at the Point of Interconnection Bus in the planning model. If you need assistance in determining the corresponding PTI Bus Number, please consult your TDSP, or ERCOT.	O	O	O	R	R

[RRGRR023: Insert "Unit Information - Transmission Station Load Name in Network Operations Model" below upon system implementation of NPRRs 1002, 1026, and 1029:]															
Unit Information			X					All Caps	Transmission Station Load Name in Network Operations Model	Enter the Load Name as listed in the ERCOT model as provided by the TDSP to be used by the ESS while charging.					R
Unit Information	X	X	X	X	X		X	List	Primary Fuel Type	AB -- Agriculture Byproducts (bagasse, straw, energy crops) BFG -- Blast-Furnace Gas BIT -- Bituminous Coal BL -- Black liquor DFO -- Distillate Fuel Oil (diesel, No1 fuel oil, No 2 fuel oil, No 4 fuel oil) GEO -- Geothermal JF -- Jet Fuel KER -- Kerosene LFG -- Landfill Gas LIG -- Lignite MSW -- Municipal Solid Waste (refuse) NA -- Not Applicable NG -- Natural Gas (use this fuel type for steam turbines which are part of a Combined Cycle Train) NUC -- Nuclear (uranium, plutonium, thorium) OBG -- Other - Biomass Gas (methane, digester gas) OBL -- Other - Biomass Liquids (ethanol, fish oil, waste alcohol, other gases) OBS -- Other - Biomass Solids (animal manure/waster, medical waste, paper pellets, paper derived fuel) OG -- Other - Gas (butane, coal processes, coke-oven coal, methanol, refinery gas) OO -- Other - Oil (butane, crude, liquid byproducts, oil waste,	R	R	R	R	R

										propane) OTH -- Other (batteries, chemicals, hydrogen pitch sulfur, misc. technologies) PC -- Petroleum Coke PG -- Propane RFO -- Residual Fuel Oil (No 5 and No 6 fuel oil) STM -- Steam from other units SLW -- Sludge Waste SUB -- Sub-bituminous Coal SUN -- Solar (photovoltaic, thermal) TDF -- Tires T -- Tidal WAT -- Water (conventional, pumped storage) WDL -- Wood/Wood Waste - Liquids (red liquor, sludge wood spent sulfite liquor, other liquors) WDS -- Wood/Wood Waste - Solids (peat, railroad ties, utility poles, wood chips, other solids) WH -- Waste heat WND -- Wind WOC -- Waste / Other Coal					

[RRGRR023: Replace "Unit Information - Primary Fuel Type" above with the following upon system implementation of NPRRs 1002, 1026, and 1029:]

Unit Information	X	X	X	X	X		X	List	Primary Fuel Type	AB -- Agriculture Byproducts (bagasse, straw, energy crops) BFG -- Blast-Furnace Gas BIT -- Bituminous Coal BL -- Black liquor DFO -- Distillate Fuel Oil (diesel, No1 fuel oil, No 2 fuel oil, No 4 fuel oil) GEO -- Geothermal JF -- Jet Fuel KER -- Kerosene LFG -- Landfill Gas LIG -- Lignite MSW -- Municipal Solid Waste (refuse) MWH – Electricity (use this fuel type for battery energy storage) NA -- Not Applicable NG -- Natural Gas (use this fuel type for steam turbines which are part of a Combined Cycle Train) NUC -- Nuclear (uranium, plutonium, thorium) OBG -- Other - Biomass Gas (methane, digester gas) OBL -- Other - Biomass Liquids (ethanol, fish oil, waste alcohol, other gases) OBS -- Other - Biomass Solids (animal manure/waster, medical waste, paper pellets, paper derived fuel) OG -- Other - Gas (butane, coal processes, coke-oven coal, methanol, refinery gas) OO -- Other - Oil (butane, crude, liquid byproducts, oil waste, propane) OTH -- Other (chemicals, hydrogen pitch sulfur, misc. technologies) PC -- Petroleum Coke PG -- Propane RFO -- Residual Fuel Oil (No 5 and	R	R	R	R	R

										No 6 fuel oil) STM -- Steam from other units SLW -- Sludge Waste SUB -- Sub-bituminous Coal SUN -- Solar (photovoltaic, thermal) or DC-Coupled Resources combining photovoltaic and battery energy storage TDF -- Tires T -- Tidal WAT -- Water (conventional, pumped storage) WDL -- Wood/Wood Waste - Liquids (red liquor, sludge wood spent sulfite liquor, other liquors) WDS -- Wood/Wood Waste - Solids (peat, railroad ties, utility poles, wood chips, other solids) WH -- Waste heat WND -- Wind and DC-Coupled Resources combining wind and battery energy storage WOC -- Waste / Other Coal WND_SUN – DC-Coupled Resources combining wind, photovoltaic and battery energy storage					
Unit Information	X	X	X	X	X			List	Secondary Fuel Type	Same data entry elements as primary fuel type, but for secondary or start-up fuel.	R	R	R	R	R
[RRGRR023: Replace "Unit Information - Secondary Fuel Type" above with the following upon system implementation of NPRRs 1002, 1026, and 1029:]															

Unit Information	X	X	X	X	X			List	Secondary Fuel Type	Same data entry elements as primary fuel type, but for secondary or start-up fuel. For DC-Coupled Resource use MWH	R	R	R	R	R
Unit Information	X	X		X	-			List	Fuel Transportation Type	CV -- Conveyor PL -- Pipeline RR -- Railroad TK -- Truck NA -- Not Applicable					R
Unit Information	X	X	X	X	-		X	List	Resource Category	Nuclear Hydro Coal and Lignite Combined Cycle ≤ 90 MW* Combined Cycle > 90 MW* Gas Steam - Supercritical Boiler Gas Steam - Reheat Boiler Gas Steam - Non-reheat or Boiler without air-preheater Simple Cycle ≤ 90 MW Simple Cycle > 90 MW Diesel Renewable Reciprocating Engine Solar Power Storage Other				R	R
[RRGRR023: Replace "Unit Information - Resource Category" above with the following upon system implementation of NPRRs 1002, 1026, and 1029:]															

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Unit Information	X	X	X	X	-		X	List	Resource Category	Nuclear Hydro Coal and Lignite Combined Cycle ≤ 90 MW* Combined Cycle > 90 MW* Gas Steam - Supercritical Boiler Gas Steam - Reheat Boiler Gas Steam - Non-reheat or Boiler without air-preheater Simple Cycle ≤ 90 MW Simple Cycle > 90 MW Diesel Renewable Reciprocating Engine Solar Battery Energy Storage DC-Coupled Battery Energy Storage and Solar DC-Coupled Battery Energy Storage and Wind DC-Coupled Battery Energy Storage and Solar and Wind Other				R	R
Unit Information	X	X		X	-		X	Y/N	Renewable	Indicate if the unit is a Renewable Energy Credit (REC) generator, as certified with the PUCT.					R
Unit Information	X	X		X	-		X	Y/N	Renewable/Offset	REC offset generators that produce generation to cover offsets they have been approved to provide, as certified with the PUCT.					R

Unit Information	X	X	X	X	X		X	List	Physical Unit Type	CA -- Combined cycle steam turbine part (includes steam part of integrated coal gasification combined cycle) CC -- Combined cycle total unit (use only for plants/generators that are in planning stage, for which specific generator details cannot be provided) CE -- Compressed air energy storage CS -- Combined cycle single shaft (combustion turbine and steam turbine share a single generator) CT -- Combined cycle combustion/gas turbine part (includes comb. turbine part of integrated coal gasification combined cycle) FC -- Fuel Cell GT -- Simple-cycle Combustion (gas) turbine (includes jet engine design) HY -- Hydraulic turbine (includes turbines associated with delivery of water by pipeline) IC -- Internal combustion (diesel, piston) engine NA -- Unknown at this time (planned units only) OT -- Other PS -- Hydraulic Turbine - Reversible (pumped storage) PV -- Photovoltaic ST -- Steam Turbine including nuclear, geothermal and solar. Does not include combined cycle. WT -- Wind Turbine	R	R	R	R	R

[RRGRR023: Replace "Unit Information - Physical Unit Type" above with the following upon system implementation of NPRRs 1002, 1026, and 1029:]

Unit Information	X	X	X	X	X		X	List	Physical Unit Type	BA – Battery Energy Storage BA-PV – DC-Coupled Battery Energy Storage and Photovoltaic BA-WT – DC-Coupled Battery Energy Storage and Wind Turbine BA-PV-WT – DC-Coupled Battery Energy Storage, Photovoltaic and Wind Turbine CA -- Combined cycle steam turbine part (includes steam part of integrated coal gasification combined cycle) CC -- Combined cycle total unit (use only for plants/generators that are in planning stage, for which specific generator details cannot be provided) CE -- Compressed air energy storage CS -- Combined cycle single shaft (combustion turbine and steam turbine share a single generator) CT -- Combined cycle combustion/gas turbine part (includes comb. turbine part of integrated coal gasification combined cycle) FC -- Fuel Cell GT -- Simple-cycle Combustion (gas) turbine (includes jet engine design) HY -- Hydraulic turbine (includes turbines associated with delivery of water by pipeline) IC -- Internal combustion (diesel, piston) engine NA -- Unknown at this time (planned units only) OT -- Other PS -- Hydraulic Turbine - Reversible (pumped storage) PV -- Photovoltaic ST -- Steam Turbine including	R	R	R	R	R

										nuclear, geothermal and solar. Does not include combined cycle. WT -- Wind Turbine					
Unit Information	X	X	X	X	X		X	MVA	Name Plate Rating	Manufacturer designed MVA Rating of this unit at its rated power factor (gross).	R	R	R	R	R
Unit Information	X	X	X	X	X			MW	Real Power Rating	Manufacturer designed MW at rated power factor (gross).	R	R	R	R	R
Unit Information	X	X	X	X	X			MVAR	Reactive Power Rating	Manufacturer designed MVAr at rated power factor (gross)	R	R	R	R	R

Unit Information	X	X		X	X			MW	Turbine Rating	Manufacturer designed MW of the turbine (gross)	C	C	C	R	C
Unit Information	X	X	X	X	X			kV	Unit Generating Voltage	Terminal voltage of generating unit, as modeled (typically equivalent to low side of GSU)	R	R	R	R	R
Unit Information	X	X	X	X	X			-	Governor Droop Setting	The percent change in frequency that will cause generator output to change from no Load to full Load. (e.g. for 5%, use .05)					C
Unit Information	X	X	X	X	X			Hz	Governor Dead-band	The range of deviations of system frequency (+/-) that produces no Primary Frequency Response.					R
Unit Information	X	X	X	X	X			degree F	Design Max Ambient Temperature	This is the plant design maximum (high) air temperature.					O
Unit Information	X	X	X	X	X			degree F	Design Min Ambient Temperature	This is the plant design minimum (low) air temperature.					O
[RRGRR019 and RRGRR023: Insert applicable portions of "Unit Information - Switchable Generation Resource" below upon system implementation of RRGRR019 or NPRRs 1002, 1026, and 1029 respectively:]															
Unit Information	X	X	X	X	X			Y/N	Switchable Generation Resource	Is the unit able to switch between the ERCOT Control Area and a non-ERCOT Control Area?	R	R	R	R	R
Unit Info - DG															
Unit Info - DG					-		X	List	Technology Type	(FS) Fossil Fuel Steam (GT) Gas Turbine (H) Hydro (W) Wind, (S) Solar (BA) Battery (X) Other					
Unit Info - DG							X	#	If Wind, Number of Turbines	Count total of wind turbines	R	R	R	R	R
Unit Info - DG			X				X	MW	SODG or SOESS Nameplate MW Rating	If SODG or SOESS is an aggregation of multiple units, mathematical summation of nameplate ratings of all units in the aggregation					

Unit Info - DG			X				X	MWh	If SODESS, Nameplate MWh Rating. If SODESS is an aggregation of multiple units MWh Rating of all ESSs in the aggregation.	If SODESS, mathematical summation of the nameplate MWh ratings of all battery modules in the ESS. If SODESS is an aggregation of multiple units, mathematical summation of nameplate MWh ratings of all ESSs in the aggregation.					
Unit Info - DG			X				X	%	For SODG that are aggregation of multiple units % of ESS capacity in the aggregation.	For an SODG that is an aggregation of multiple units, the portion of ESS MW capacity in the aggregation, in % of total SODG MW rating.					
Unit Info - DG			X				X	%	For SODG that are aggregation of multiple units % of non-ESS capacity in the aggregation.	For an SODG that is an aggregation of multiple units, the portion of non-ESS MW capacity in the aggregation, in % of total SODG MW rating.					
Unit Info - DG							X	Y/N	Private Network / Cogen	A cogen is a generating facility that produces electricity and another form of useful thermal energy used for industrial, commercial, heating, or cooling purposes. N/A for DRG					
Unit Info - DG							X	MW	Amount of Self Serve for Cogen	Amount of the unit output used for self serve and not available for the grid					
Unit Info - DG							X	MW	Private Network Net Interchange	For private networks, the net interchange shall be provided along with gross MW and MVAr per generating unit. (ERCOT Operating Guides)					
Unit Info - DG							X	MW	Private Network Gross Unit (MW)	For private networks, the net interchange shall be provided along with gross MW and MVAr per generating unit. (ERCOT Operating Guides)					

Unit Info - DG							X	MVAR	Private Network Gross Unit (MVAR)	For private networks, the net interchange shall be provided along with gross MW and MVAr per generating unit. (ERCOT Operating Guides)					
Unit Info - DG							X	List	Generic Fuel Category	1) Coal and Lignite 2) Combined Cycle greater than 90 MW 3) Combined Cycle less than or equal to 90 MW 4) Diesel (and all other diesel or gas-fired Resources) 5) Gas Steam Non-reheat Boiler or Boiler without air-preheater 6) Gas Steam Reheat Boiler 7) Gas Steam Supercritical Boiler 8) Hydro 9) Nuclear 10) Other Renewable (i.e. non-hydro renewable Resources) 11) Power Storage 12) Simple Cycle greater than 90 MW 13) Simple Cycle less than or equal to 90 MW					
Unit Info - DG							X	List	Generic Start-up / Operating Category	1) Base Load 2) Gas-Cyclic 3) Gas-Intermediate 4) Gas-Peaking 5) Renewable (Including Hydro)					
Unit Info - DG							X	All Caps	Substation Name for POD	Enter the name of the substation as provided by the TDSP. (Where the DG will be mapped.)					R
Unit Info - DG							X	All Caps	Substation Code for POD	Enter the TDSP substation code as provided by the TDSP. (Where the DG will be mapped.)					R
Unit Info - DG							X		Transmission Bus POD (PTI Bus No)	Enter the transmission PTI bus number as provided by the TDSP. (Where the DG will be mapped.)					R

Unit Info - DG							X	kV	Transmission Station Voltage	Enter the transmission level voltage of the TDSP station as provided by the TDSP. Normally this will be 69 kV or higher. (Where the DG will be mapped.)					R
Unit Info - DG							X	All Caps	Transmission Station Load Name in Network Operations Model	Enter the Load Name as listed in the ERCOT model as provided by the TDSP. (Where the DG will be mapped.)					R
Unit Info - DG							X	All caps	Resource Entity Name Owner	Enter the name of the Resource Entity who owns all or a portion of this unit.					R
Unit Info - DG							X		Resource Entity Owner Duns Number	Enter the name of the Resource Entity/ Interconnecting Entity. The RE must be the same entity name that filed on the Standard Form Agreement. The IE must be the same entity name that filed on the Generation Entity Information Sheet. The Protocols require that a Load Resource must also complete and submit an Application.					R
[RRGRR023: Insert Section "Unit Info - Energy Storage Resource" below upon system implementation of NPRRs 1002, 1026, and 1029:]															
Unit Info - Energy Storage System															
Unit Info - Energy Storage System			X					degree F	Maximum Operating Temperature	The highest ambient temperature at which ESS may cease operating due to procedural requirements or equipment limitations. (Most limiting condition)					R
Unit Info - Energy Storage System			X					degree F	Minimum Operating Temperature	The lowest ambient temperature at which ESS may cease operating due to procedural requirements or equipment limitations. (Most limiting condition)					R
Unit Info - Energy Storage System			X					ft	Distance above base flood elevation	Flood level elevation					R
Unit Info - Energy Storage System			X					MW	Nameplate DC Capacity	Mathematical summation of the DC nameplate capacities of all battery modules in the ESS.					R

Unit Info - Energy Storage System			X					MW	Nameplate AC Capacity	Mathematical summation of the AC nameplate capacities of all inverters in the ESS.					R
Unit Info - Energy Storage System			X					MWh	Nameplate MWh Rating	Mathematical summation of the nameplate MWh ratings of all battery modules in the ESS.				R	R
Unit Info - Energy Storage System			X					%	Roundtrip Efficiency	Roundtrip Efficiency of an ESS at the POI. Roundtrip Efficiency should take into account all energy used to complete the cycle of "withdraw/ store/inject" as seen from the POI and should include the energy required for thermal management even though that may be metered and/or provided through a separate feed.				R	R
Unit Info - Energy Storage System			X					% /day	Self-discharge Rate	% Energy loss/day					R
Unit Info - Energy Storage System			X					seconds	Minimum discharge time	Minimum discharge time to ramp from 0 MW to rated MW discharging capacity					R
Unit Info - Energy Storage System			X					seconds	Minimum charge time	Minimum charge time to ramp from 0 MW to Maximum Discharge Power					R
Unit Info - Energy Storage System			X					MW	Maximum Charge Power	Power needed to fully charge the ESS from completely discharged state					R
Unit Info - Energy Storage System			X					Hr	Standard discharge duration	Estimated distribution of the state of charge and power level in operation --Maximum discharge time					R
Unit Info - Energy Storage System			X					#	Cycling capacity	Number of times the ESS can release energy level it was designed for after re-charge (#/days; #/week, etc.)					R

Unit Info - Energy Storage System			X					Yrs	Life Expectancy	Estimated ESS life expectancy in years					R
[RRGRR023: Insert Section "ESS Connectivity" below upon system implementation of NPRRs 1002, 1026, and 1029:]															
ESS Connectivity															
ESS Connectivity			X					All Caps	Resource Name (Unit Code/Mnemonic)	Concatenated mnemonic of Resource Site Code and Unit name (e.g. CBY_CBYG1).					A
ESS Connectivity			X					List	Skid/Array Configuration Identifier	Select one from drop down list					R
ESS Connectivity			X					#	Number of Skid/Arrays per Skid/Array Configuration Identifier	Enter the total number of Skid/Arrays of the identifier selected in the preceding cell					R
ESS Connectivity			X					List	Battery Module Configuration Identifier	Select one from drop down list					R
ESS Connectivity			X					#	# of Battery Modules per Module Configuration	Enter the total number of battery modules of the identifier selected in the preceding cell					R
Parameters															
Parameters		X	X		X			List	SITECODE	For Parameters - CFG - enter the Site Code established in the General and Site Information tab of the GENERAL_SITE_ESIID_Information workbook.				R	R
Parameters		X			X			List	Train Code	For Parameters - CFG - enter the Train Code as provided on the Unit Information Train tab. Select from drop-down list.				R	R
Parameters		X			X			List	Configuration Code	For Parameters - CFG - enter the Concatenated code of the Train Code and the Configuration Number. Select from drop-down list.				R	R

Parameters	X	X	X	X	X			List	UNIT NAME	Code for name of generator unit, as provided on the Unit Information tab.				R	R
Parameters	X	X	X	X	X			Automatic	Resource Name (Unit Code/Mnemonic)	Concatenated mnemonic of Resource Site Code and Unit name (e.g. CBY_CBYG1).				A	A
Parameters	X	X	X	X	X			MW	High Reasonability Limit	A theoretical value of net generation above which, the generator is not expected to operate under most conceivable conditions. This value is used by ERCOT market systems to validate COP submissions of HSL, telemetered HSL, and certain offers which may have been entered in error by the QSE. The HRL is also used in settlements to deconstruct prices at a CCT logical resource node.					R
[RRGRR023: Replace "Parameters - High Reasonability Limit" above with the following upon system implementation of NPRRs 1002, 1026, and 1029:]															
Parameters	X	X	X	X	X			MW	High Reasonability Limit	A theoretical value of net generation above which, the generator is not expected to operate under most conceivable conditions. This value is used by ERCOT market systems to validate COP submissions of HSL, telemetered HSL, and certain offers which may have been entered in error by the QSE. The HRL is also used in settlements to deconstruct prices at a CCT logical resource node. Self-Limiting Resources should use this field to enter the limit for maximum MW injection.					R
[RRGRR023: Insert "Parameters - High Reasonability Limit, Self-Limiting Facility" below upon system implementation of NPRRs 1002, 1026, and 1029:]															

Parameters	X	X	X	X	X			MW	High Reasonability Limit, Self-Limiting Facility	Limit for maximum MW injection for Self-Limiting Facility above which the Self-Limiting Facility is not expected to operate. This field should not be used by Resources that are not part of Self-Limiting Facility.					
Parameters	X	X	X	X	X			MW	Low Reasonability Limit	A theoretical limit of net generation below which, the generator is not expected to operate under most conceivable conditions. This value is used by ERCOT market systems to validate COP submissions of LSL, telemetered LSL, and certain offers which may have been entered in error by the QSE.					R
[RRGRR023: Replace "Parameters - Low Reasonability Limit" above with the following upon system implementation of NPRRs 1002, 1026, and 1029:]															
Parameters	X	X	X	X	X			MW	Low Reasonability Limit	A theoretical limit of net generation below which, the generator is not expected to operate under most conceivable conditions. For Energy Storage System (ESS) Low Reasonability limit is a negative value showing theoretical limit of net withdrawal/charging below which ESS is not expected to withdraw/charge. This value is used by ERCOT market systems to validate COP submissions of LSL, telemetered LSL, and certain offers which may have been entered in error by the QSE. Self-Limiting Resources should use this field to enter the limit for maximum MW withdrawal.					R
[RRGRR023: Insert "Parameters - Low Reasonability Limit, Self-Limiting Facility" below upon system implementation of NPRRs 1002, 1026, and 1029:]															

Parameters	X	X	X	X	X			MW	Low Reasonability Limit, Self-Limiting Facility	Limit for maximum MW withdrawal of Self-Limiting Facility above which the Self-Limiting Facility is not expected to operate This field should not be used by Resources that are not part of Self-Limiting Facility					
Parameters	X	X	X	X	X			MW/min	High Reasonability Ramp Rate Limit	An "Out-of-Bounds" value chosen by the Resource Entity that represents the maximum magnitude of the values entered for the up and down ramp rates used by SCED. Used by ERCOT to alarm/reject data exceeding this value.					R
Parameters	X	X	X	X	X			MW/min	Low Reasonability Ramp Rate Limit	An "Out-of-Bounds" value chosen by the Resource Entity that represents the minimum magnitude of the values entered for the up and down ramp rates used by SCED. Used by ERCOT to alarm/reject data below this value.					R
Parameters	X	X	X	X	X			MW	Seasonal Net Max Sustainable Rating - Spring	Spring months are March, April, and May. Ambient conditions (dry bulb temperature) assumptions by ERCOT Weather Zone shall be as follows: - 87 deg F for Coastal Weather Zone, - 89 deg F for East Weather Zone, - 96 deg F for Far West Weather Zone, - 90 deg F for North Central Weather Zone, - 89 deg F for North Weather Zone, - 92 deg F for South Central Weather Zone, - 90 deg F for South Weather Zone, - 93 deg F for West Weather Zone. These are not the HSL/LSL or HEL/LEL values that are submitted in the COP.				R	R

Parameters	X	X	X	X	X			MW	Seasonal Net Min Sustainable Rating - Spring	Spring months are March, April, and May. These are not the HSL/LSL or HEL/LEL values that are submitted in the COP.				R	R
[RRGRR023: Replace "Parameters - Seasonal Net Min Sustainable Rating - Spring" above with the following upon system implementation of NPRRs 1002, 1026, and 1029:]															
Parameters	X	X	X	X	X			MW	Seasonal Net Min Sustainable Rating - Spring	Spring months are March, April, and May. These are not the HSL/LSL or HEL/LEL values that are submitted in the COP. For ESS this value is negative, showing seasonal net maximum withdrawal/charging.				R	R
Parameters	X	X	X	X	X			MW	Seasonal Net Max Emergency Rating - Spring	Spring months are March, April, and May. These are not the HSL/LSL or HEL/LEL values that are submitted in the COP.					R
Parameters	X	X	X	X	X			MW	Seasonal Net Min Emergency Rating - Spring	Spring months are March, April, and May. These are not the HSL/LSL or HEL/LEL values that are submitted in the COP.					R
[RRGRR023: Replace "Parameters - Seasonal Net Min Emergency Rating - Spring" above with the following upon system implementation of NPRRs 1002, 1026, and 1029:]															
Parameters	X	X	X	X	X			MW	Seasonal Net Min Emergency Rating - Spring	Spring months are March, April, and May. These are not the HSL/LSL or HEL/LEL values that are submitted in the COP. For ESS this value is negative, showing seasonal net maximum emergency withdrawal/charging.					R

Parameters	X	X	X	X	X			MW	Seasonal Net Max Sustainable Rating - Summer	Summer months are June, July, and August. Ambient conditions (dry bulb temperature) assumptions by ERCOT Weather Zone shall be as follows: - 94 deg F for Coastal Weather Zone, - 98 deg F for East Weather Zone, - 98 deg F for Far West Weather Zone, - 101 deg F for North Central Weather Zone, - 99 deg F for North Weather Zone, - 99 deg F for South Central Weather Zone, - 96 deg F for South Weather Zone, - 99 deg F for West Weather Zone. These are not the HSL/LSL or HEL/LEL values that are submitted in the COP.				R	R
Parameters	X	X	X	X	X			MW	Seasonal Net Min Sustainable Rating - Summer	Summer months are June, July, and August. These are not the HSL/LSL or HEL/LEL values that are submitted in the COP.				R	R
[RRGRR023: Replace "Parameters - Seasonal Net Min Sustainable Rating - Summer" above with the following upon system implementation of NPRRs 1002, 1026, and 1029:]															
Parameters	X	X	X	X	X			MW	Seasonal Net Min Sustainable Rating - Summer	Summer months are June, July, and August. These are not the HSL/LSL or HEL/LEL values that are submitted in the COP. For ESS this value is negative, showing seasonal net maximum withdrawal/charging.				R	R
Parameters	X	X	X	X	X			MW	Seasonal Net Max Emergency Rating - Summer	Summer months are June, July, and August. These are not the HSL/LSL or HEL/LEL values that are submitted in the COP.					R
Parameters	X	X	X	X	X			MW	Seasonal Net Min Emergency Rating - Summer	Summer months are June, July, and August. These are not the HSL/LSL or HEL/LEL values that are submitted in the COP.					R
[RRGRR023: Replace "Parameters - Seasonal Net Min Emergency Rating - Summer" above with the following upon system implementation of NPRRs 1002, 1026, and 1029:]															

Parameters	X	X	X	X	X			MW	Seasonal Net Min Emergency Rating - Summer	Summer months are June, July, and August. These are not the HSL/LSL or HEL/LEL values that are submitted in the COP. For ESS this value is negative, showing seasonal net maximum emergency withdrawal/charging.					R
Parameters	X	X	X	X	X			MW	Seasonal Net Max Sustainable Rating - Fall	Fall months are September, October, and November. Ambient conditions (dry bulb temperature) assumptions by ERCOT Weather Zone shall be as follows: - 86 deg F for Coastal Weather Zone, - 86 deg F for East Weather Zone, - 87 deg F for Far West Weather Zone, - 87 deg F for North Central Weather Zone, - 84 deg F for North Weather Zone, - 88 deg F for South Central Weather Zone, - 88 deg F for South Weather Zone, - 86 deg F for West Weather Zone. These are not the HSL/LSL or HEL/LEL values that are submitted in the COP.				R	R
Parameters	X	X	X	X	X			MW	Seasonal Net Min Sustainable Rating - Fall	Fall months are September, October, and November. These are not the HSL/LSL or HEL/LEL values that are submitted in the COP.				R	R
[RRGRR023: Replace "Parameters - Seasonal Net Min Sustainable Rating - Fall" above with the following upon system implementation of NPRRs 1002, 1026, and 1029:]															
Parameters	X	X	X	X	X			MW	Seasonal Net Min Sustainable Rating - Fall	Fall months are September, October, and November. These are not the HSL/LSL or HEL/LEL values that are submitted in the COP. For ESS this value is negative, showing seasonal net maximum withdrawal/charging.				R	R

Parameters	X	X	X	X	X			MW	Seasonal Net Max Emergency Rating - Fall	Fall months are September, October, and November. These are not the HSL/LSL or HEL/LEL values that are submitted in the COP.					R
Parameters	X	X	X	X	X			MW	Seasonal Net Min Emergency Rating - Fall	Fall months are September, October, and November. These are not the HSL/LSL or HEL/LEL values that are submitted in the COP.					R
[RRGRR023: Replace "Parameters - Seasonal Net Min Emergency Rating - Fall" above with the following upon system implementation of NPRRs 1002, 1026, and 1029:]															
Parameters	X	X	X	X	X			MW	Seasonal Net Min Emergency Rating - Fall	Fall months are September, October, and November. These are not the HSL/LSL or HEL/LEL values that are submitted in the COP. For ESS this value is negative, showing seasonal net maximum emergency withdrawal/charging.					R
Parameters	X	X	X	X	X			MW	Seasonal Net Max Sustainable Rating - Winter	Winter months are December, January, and February. Ambient conditions (dry bulb temperature) assumptions by ERCOT Weather Zone shall be as follows: - 37 deg F for Coastal Weather Zone, - 30 deg F for East Weather Zone, - 26 deg F for Far West Weather Zone, - 26 deg F for North Central Weather Zone, - 23 deg F for North Weather Zone, - 31 deg F for South Central Weather Zone, - 40 deg F for South Weather Zone, - 26 deg F for West Weather Zone. These are not the HSL/LSL or HEL/LEL values that are submitted in the COP.				R	R

Parameters	X	X	X	X	X			MW	Seasonal Net Min Sustainable Rating - Winter	Winter months are December, January, and February. These are not the HSL/LSL or HEL/LEL values that are submitted in the COP.				R	R
[RRGRR023: Replace "Parameters - Seasonal Net Min Sustainable Rating - Winter" above with the following upon system implementation of NPRRs 1002, 1026, and 1029:]															
Parameters	X	X	X	X	X			MW	Seasonal Net Min Sustainable Rating - Winter	Winter months are December, January, and February. These are not the HSL/LSL or HEL/LEL values that are submitted in the COP. For ESS this value is negative, showing seasonal net maximum withdrawal/charging.				R	R
Parameters	X	X	X	X	X			MW	Seasonal Net Max Emergency Rating - Winter	Winter months are December, January, and February. These are not the HSL/LSL or HEL/LEL values that are submitted in the COP.					R
Parameters	X	X	X	X	X			MW	Seasonal Net Min Emergency Rating - Winter	Winter months are December, January, and February. These are not the HSL/LSL or HEL/LEL values that are submitted in the COP.					R
[RRGRR023: Replace "Parameters - Seasonal Net Min Emergency Rating - Winter" above with the following upon system implementation of NPRRs 1002, 1026, and 1029:]															
Parameters	X	X	X	X	X			MW	Seasonal Net Min Emergency Rating - Winter	Winter months are December, January, and February. These are not the HSL/LSL or HEL/LEL values that are submitted in the COP. For ESS this value is negative, showing seasonal net maximum emergency withdrawal/charging.					R
Parameters				X				MW	MW1	Net MW value where the steam generator typically reaches rated pressure (required value for steam turbines).					C
Parameters				X				PSI	PSI1	Rated throttle pressure (required value for steam turbines) at MW1					C

Parameters				X				MW	MW2	Net unit output (breakpoint value used to define the pressure/MW curve). If pressure is constant for the normal operating range enter the same value as is entered for MW1.					C
Parameters				X				PSI	PSI2	Throttle steam pressure (psi) at MW2 value (breakpoint value used to define the pressure/MW curve). If pressure is constant for the normal operating range enter the same value as is entered for PSI1.					C
Parameters				X				MW	MW3	Net unit output (breakpoint value used to define the pressure/MW curve). If pressure is constant for the normal operating range, or is not needed, enter the same value as is entered for MW2.					C
Parameters				X				PSI	PSI3	Throttle steam pressure (psi) at MW3 value (breakpoint value used to define the pressure/MW curve). If pressure is constant for the normal operating range, or is not needed, enter the same value as is entered for PSI2.					C
Parameters				X				MW	MW4	Net unit output (breakpoint value used to define the pressure/MW curve). If pressure is constant for the normal operating range, or is not needed, enter the same value as is entered for MW3.					C
Parameters				X				PSI	PSI4	Throttle steam pressure (psi) at MW4 value (breakpoint value used to define the pressure/MW curve). If pressure is constant for the normal operating range, or point is not needed, enter the same value as is entered for PSI3.					C
Parameters				X				MW	MW5	Net unit output (breakpoint value used to define the pressure/MW curve). If pressure is constant for the normal operating range, or point					C

									is not needed, enter the same value as is entered for MW4.					
Parameters				X				PSI	PSI5	Throttle steam pressure (psi) at MW5 value (breakpoint value used to define the pressure/MW curve). If pressure is constant for the normal operating range, or point is not needed, enter the same value as is entered for PSI4.					C
Parameters				X				MW	MW6	Net unit MW output where the steam generator typically reaches minimum pressure (required value for steam turbines).					C
Parameters				X				PSI	PSI6	Throttle steam pressure (psi) at MW6 value (required value for steam turbines).					C
Parameters				X				PSIG/MW	Limiting K Factor	The K factor is used to model the stored energy available to the resource. The value ranges between 0.0 and 0.6 psig per MW change. Additional information on determining the K factor can be found in Attachment 2, Primary Frequency Response Reference Document, of NERC Reliability Standard, of BAL-001-TRE-1, Primary Frequency Response in the ERCOT Region. The default value would be zero (required for steam turbines).					C

ERCOT Impact Analysis Report

RRGRR Number	031	RRGRR Title	Related to NPRR995, RTF-6 Create Definition and Terms for Settlement Only Energy Storage
Impact Analysis Date		June 16, 2021	
Estimated Cost/Budgetary Impact		None.	
Estimated Time Requirements		No project required. This Resource Registration Glossary Revision Request (RRGRR) can take effect upon implementation of Nodal Protocol Revision Request (NPRR) 995, RTF-6 Create Definition and Terms for Settlement Only Energy Storage.	
ERCOT Staffing Impacts (across all areas)		Ongoing Requirements: No impacts to ERCOT staffing.	
ERCOT Computer System Impacts		No impacts to ERCOT computer systems.	
ERCOT Business Function Impacts		No impacts to ERCOT business functions.	
Grid Operations & Practices Impacts		No impacts to ERCOT grid operations and practices.	

Evaluation of Interim Solutions or Alternatives for a More Efficient Implementation
None offered.

Comments
There are no additional impacts to this RRGRR beyond what was captured in the Impact Analysis for NPRR995.

Board Report

SCR Number	813	SCR Title	NMMS Jointly-Rated Equipment Coordination Confirmation
Date of Decision		October 22, 2021	
Action		Recommended Approval	
Timeline		Normal	
Proposed Effective Date		Upon system implementation	
Priority and Rank Assigned		Priority – 2022; Rank – 3510	
Supporting Protocol or Guide Sections/Related Documents		Protocol Section 3.10, Network Operations Modeling and Telemetry	
System Change Description		This System Change Request (SCR) modifies the Network Model Management System (NMMS) to highlight change submissions related to jointly-rated equipment. NMMS will display the jointly-rated equipment to the submitter and list other Entities which have also provided ratings. The submitter will be asked to confirm that the requested changes have been coordinated with the associated companies. Additional changes are requested to improve automated email notifications of these model changes.	
Reason for Revision		☒ Addresses current operational issues. ☐ Meets Strategic goals (tied to the ERCOT Strategic Plan or directed by the ERCOT Board). ☒ Market efficiencies or enhancements ☐ Administrative ☐ Regulatory requirements ☐ Other: (explain) *(please select all that apply)*	
Business Case		This modification will bring additional awareness to the submitter when proposed changes affect jointly-rated equipment. In doing so, it will reiterate the need to coordinate such changes with neighboring Entities. Added attention when the data is being provided to ERCOT can help to earlier mitigate data inconsistencies and avoid reliability or financial impacts in more Real-Time applications.	

Board Report

PRS Decision	On 4/15/21, PRS unanimously voted via roll call to table SCR813 and refer the issue to ROS. All Market Segments participated in the vote. On 7/15/21, PRS unanimously voted via roll call to recommend approval of SCR813 as submitted. All Market Segments participated in the vote. On 8/12/21, PRS unanimously voted via roll call to endorse and forward to TAC the 7/15/21 PRS Report and Revised Impact Analysis for SCR813 with a recommended priority of 2022 and rank of 3510. All Market Segments participated in the vote.
Summary of PRS Discussion	On 4/15/21, ERCOT Staff provided an overview of SCR813, and participants requested additional review by ROS. On 7/15/21, there was no discussion. On 8/12/21, there was no discussion.
TAC Decision	On 8/27/21, TAC unanimously voted via roll call to recommend approval of SCR813 as recommended by PRS in the 8/12/21 PRS Report. All Market Segments participated in the vote.
Summary of TAC Discussion	On 8/27/21, TAC reviewed the ERCOT Opinion and ERCOT Market Impact Statement for SCR813.
ERCOT Opinion	ERCOT supports approval of SCR813.
ERCOT Market Impact Statement	ERCOT Staff has reviewed SCR813 and believes the market impact for SCR813 improves situational awareness regarding jointly-rated equipment and helps earlier mitigate data inconsistencies.
Board Decision	On 10/22/21, the ERCOT Board recommended approval of SCR813 as recommended by TAC in the 8/27/21 TAC Report and the Revised Impact Analysis.

Sponsor	
Name	Joel Koepke
E-mail Address	Joel.Koepke@ercot.com
Company	ERCOT
Phone Number	512-248-6589
Cell Number	

Board Report

Market Segment	Not applicable

Market Rules Staff Contact	
Name	Cory Phillips
E-Mail Address	cory.phillips@ercot.com
Phone Number	512-248-6464

Comments Received	
Comment Author	**Comment Summary**
ROS 050421	Requested PRS continue to table SCR813 for review by the Network Data Support Working Group (NDSWG)
ROS 071221	Endorsed SCR813 as submitted

Market Rules Notes

None

Proposed System Change

Issue:

The ERCOT Network Model Management System (NMMS) is designed to accommodate multiple sets of ratings for transformers and line segments. More than one set is used when multiple Transmission and/or Distribution Service Providers (TDSPs) need to provide their own ratings to a device. This most often occurs when one TDSP service area interfaces with another. ERCOT applications take these ratings sets and use the most limiting values for the appropriate condition.

Through the course of normal business, TDSPs submit change requests to NMMS to update their companys' ratings sets. If changes to jointly-rated lines are not coordinated between the different Entities then it is feasible that inaccurate values may remain in the modeling application eventually affecting downstream uses.

Furthermore, the existing automated notifications sent by NMMS are only sent to the owners and operators of the modeling objects being added/modified/deleted in each change request. Each ratings set is a different object owned by only one company. Therefore, for jointly-rated equipment, the other associated companies do not receive notification that a ratings set has been changed.

Resolution:

The requested NMMS change can be broken into two sections:

Prompt Confirming Coordination - Immediately prior to a change request submission the NMMS application will:

Determine if the requested changes are associated to jointly-rated equipment:

- If jointly-rated equipment is being modified, the submission form will:
  - Display identifying information of the affected jointly-rated equipment;
  - Display all companies providing ratings for the jointly-rated equipment;
  - Request confirmation, through the use of a checkbox or similar functionality, that coordination has been done by the submitting Entity; and
  - Disable final submission until coordination has been confirmed.
- If no jointly-rated changes are detected, the submission process will remain unchanged.

Enhanced Automated Email Notification – The NMMS application will be modified to have additional control over what triggers and who is sent automated notifications. The enhancement will enable the application to traverse the model hierarchy to find additional companies to notify. For example, if a TDSP changes a line's ratings set, the submitter of the change as well as any other companies associated to the ACLineSegment would receive the notification.

Revised ERCOT Impact Analysis Report

SCR Number	813	SCR Title	NMMS Jointly-Rated Equipment Coordination Confirmation
Impact Analysis Date		September 28, 2021	
Estimated Cost/Budgetary Impact		Between $100k and $150k Additional Cost to Implement in Passport: N/A	
Estimated Time Requirements		The timeline for implementing this System Change Request (SCR) is dependent upon Public Utility Commission of Texas (PUCT) prioritization and approval. Estimated project duration: 5 to 7 months in current systems Passport Schedule Risk Assessment: No Risk to Schedule	
ERCOT Staffing Impacts (across all areas)		Implementation Labor: 60% ERCOT; 40% Vendor Ongoing Requirements: No impacts to ERCOT staffing.	
ERCOT Computer System Impacts		The following ERCOT systems would be impacted: • Network Model Management System (NMMS) 100%	
ERCOT Business Function Impacts		No impacts to ERCOT business functions.	
Grid Operations & Practices Impacts		No impacts to ERCOT grid operations and practices.	

Evaluation of Interim Solutions or Alternatives for a More Efficient Implementation
None offered.

Comments
None.

Board Report

SCR Number	814	SCR Title	Point-to-Point (PTP) Obligation Bid Interval Limit
Date of Decision		October 22, 2021	
Action		Recommended Approval	
Timeline		Normal	
Proposed Effective Date		Upon system implementation	
Priority and Rank Assigned		Priority – 2021; Rank – 3350	
Supporting Protocol or Guide Sections/Related Documents		Protocol Section 4.4.6, PTP Obligation Bids	
System Change Description		This System Change Request (SCR) introduces a limit on the total number of Point-to-Point (PTP) Obligation bid intervals that can be submitted into the Day-Ahead Market (DAM) per Counter-Party.	
Reason for Revision		☒ Addresses current operational issues. ☐ Meets Strategic goals (tied to the ERCOT Strategic Plan or directed by the ERCOT Board). ☐ Market efficiencies or enhancements ☐ Administrative ☐ Regulatory requirements ☐ Other: (explain) *(please select all that apply)*	
Business Case		This SCR will implement software changes to place a maximum limit per Counter-Party per Operating Day for PTP Obligation bid intervals. This proposal was identified as a solution based on the analysis ERCOT shared with stakeholders. This system change should reduce PTP bid intervals and the risk of DAM aborts due to a disproportionate increase in submissions by certain Qualified Scheduling Entities (QSEs). SCR798, PTP Obligation Bid ID Limit, was previously created to help mitigate the amount of PTP Obligations, but PTP volumes continue to be the most significant variable affecting DAM runtime. ERCOT will continue to monitor	

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	PTP Obligation bids and will tune the PTP interval limit to ensure DAM performance is optimized. If the PTP interval limit needs to be reduced, ERCOT will send a Market Notice informing Market Participants of the reduction. In addition, ERCOT will monitor QSE submission behavior (Energy-only Offers and Energy Bids) and determine if further action is needed.
PRS Decision	On 7/15/21, PRS voted via roll call to recommend approval of SCR814 as submitted. There was one abstention from the Independent Generator (Luminant) Market Segment. All Market Segments participated in the vote. On 8/12/21, PRS voted via roll call to endorse and forward to TAC the 7/15/21 PRS Report and Revised Impact Analysis for SCR814 with a recommended priority of 2021 and rank of 3350. There were six abstentions from the Independent Generator (Luminant, Exelon, Broad Reach Power, Enel Green Power, Calpine, EDP Renewables) Market Segment. All Market Segments participated in the vote.
Summary of PRS Discussion	On 7/15/21, ERCOT staff provided an overview of SCR814. Participants discussed the process for future changes to the limit, and whether bid fees could be considered for either this or a future SCR. Some participants expressed concern that SCR814 might limit hedging by generation owners. On 8/12/21, participants reviewed the Revised Impact Analysis. Some Market Participants expressed concern that SCR814 would create an inability to hedge a Resource.
TAC Decision	On 8/27/21, TAC voted via roll call to recommend approval of SCR814 as recommended by PRS in the 8/12/21 PRS Report. There were two abstentions from the Independent Generator (Luminant, Calpine) Market Segment. All Market Segments participated in the vote.
Summary of TAC Discussion	On 8/27/21, TAC reviewed the ERCOT Opinion and ERCOT Market Impact Statement for SCR814.
ERCOT Opinion	ERCOT supports approval of SCR814.
ERCOT Market Impact Statement	ERCOT Staff has reviewed SCR814 and believes that SCR814 will reduce PTP bid interval limits by placing a maximum limit per Counter-Party per Operating Day, thereby reducing the risk of DAM aborts due to disproportionate PTP submission increases by QSEs.

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Board Decision	On 10/22/21, the ERCOT Board recommended approval of SCR814, as recommended by TAC in the 8/27/21 TAC Report, and the Revised Impact Analysis.

Sponsor	
Name	Alfredo Moreno
E-mail Address	Alfredo.Moreno@ercot.com
Company	ERCOT
Phone Number	512-248-6977
Market Segment	Not Applicable

Market Rules Staff Contact	
Name	Brittney Albracht
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Comments Received	
Comment Author	**Comment Summary**
None	

Market Rules Notes

None

Proposed System Change

Issue:

ERCOT has observed an amplified number of PTP Obligation bids, which has caused longer runtimes and an increased number of DAM delays. PTP Obligation bid intervals have doubled in the last five years and increased the risk of DAM aborts. Large volumes of PTP bid intervals can require manual actions, emergency patches, or create long runtimes that could introduce the potential for operator error and/or DAM delays.

Resolution:

Create a PTP bid intervals limit per Counter-Party per Operating Day for PTP Obligation bids. When a Counter-Party has multiple QSEs, the QSEs will share the allowed capacity (e.g., QQSE, QQSE1, and QQSE2 all have the same Counter-Party; each

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QSE submits one PTP obligation bid with 24 hours, this will count as 72 intervals towards the Counter-Party interval limit). Once the interval limit is exceeded, further bid submissions by the QSE will be rejected with a descriptive error message. The current per- Counter-Party interval limit will be posted in the Market Submission Validation Rules document on the Market Information System (MIS) Secure Area.

Revised ERCOT Impact Analysis Report

SCR Number	814	SCR Title	Point-to-Point (PTP) Obligation Bid Interval Limit
Impact Analysis Date		September 29, 2021	
Estimated Cost/Budgetary Impact		Between $10k and $25k Additional Cost to Implement in Passport: N/A	
Estimated Time Requirements		The timeline for implementing this System Change Request (SCR) is dependent upon Public Utility Commission of Texas (PUCT) prioritization and approval. Estimated project duration: 3 to 5 months in current systems Passport Schedule Risk Assessment: No Risk to Schedule	
ERCOT Staffing Impacts (across all areas)		Implementation Labor: 100% ERCOT; 0% Vendor Ongoing Requirements: No impacts to ERCOT staffing.	
ERCOT Computer System Impacts		The following ERCOT systems would be impacted: • Market Operation Systems 100%	
ERCOT Business Function Impacts		No impacts to ERCOT business functions.	
Grid Operations & Practices Impacts		No impacts to ERCOT grid operations and practices.	

Evaluation of Interim Solutions or Alternatives for a More Efficient Implementation
None offered.

Comments
None.

Board Report

NPRR Number	1082	NPRR Title	Emergency Response Service (ERS) Test Exception for Co-located ERS Loads
Date of Decision		October 22, 2021	
Action		Recommended Approval	
Timeline		Normal	
Proposed Effective Date		Upon system implementation	
Priority and Rank Assigned		Not Applicable	
Nodal Protocol Sections Requiring Revision		8.1.3.2, Testing of Emergency Response Service Resources	
Related Documents Requiring Revision/Related Revision Requests		None	
Revision Description		This Nodal Protocol Revision Request (NPRR) changes the testing criteria for Emergency Response Service (ERS) Load with obligations no greater than 100 kW that is co-located with an ERCOT Generator. If the ERS Load and ERS Generator are evaluated separately, the ERS Load will be considered to have passed its testing obligations if the ERS Generator meets the combined testing obligations of both the ERCOT Generator and the ERS Load.	
Reason for Revision		[X] Addresses current operational issues. [ ] Meets Strategic goals (tied to the ERCOT Strategic Plan or directed by the ERCOT Board). [X] Market efficiencies or enhancements [ ] Administrative [ ] Regulatory requirements [ ] Other: (explain) *(please select all that apply)*	
Business Case		When ERS Load with an obligation of no more than 100 kW is co-located with an ERS Generator, it is not necessary to ensure the	

	reliability of the ERS Load if the ERS Generator is capable of reliably meeting the combined ERS obligations of both the ERS Generator and the ERS Load. This modification prevents unnecessary testing and delays in the event ERS Load does not pass an ERS test under Section 8.1.3.2.
Credit Work Group Review	ERCOT Credit Staff and the Credit Work Group (Credit WG) have reviewed NPRR1082 and do not believe that it requires changes to credit monitoring activity or the calculation of liability.
PRS Decision	On 7/15/21, PRS voted via roll call to table NPRR1082 and refer the issue to WMS. There were two opposing votes from the Consumer (Occidental) and Independent Power Marketer (IPM) (Morgan Stanley) Market Segments. All Market Segments participated in the vote. On 8/12/21, PRS voted via roll call to recommend approval of NPRR1082 as amended by the 8/6/21 WMS comments. There was one opposing vote from the IPM (Morgan Stanley) Market Segment, and four abstentions from the Cooperative (STEC) and Independent Generator (3) (Luminant, Exelon, Enel Green Power) Market Segments. All Market Segments participated in the vote. On 9/16/21, PRS voted via roll call to endorse and forward to TAC the 8/12/21 PRS Report and Impact Analysis for NPRR1082. There was one opposing vote from the IPM (Morgan Stanley) Market Segment and two abstentions from the Cooperative (STEC) and Independent Generator (Luminant) Market Segments. All Market Segments participated in the vote.
Summary of PRS Discussion	On 7/15/21, participants requested WMS ensure NPRR1082 is a solution for more than one Entity, and to review the 100 kW threshold. On 8/12/21, participants reviewed the 8/6/21 WMS comments. On 9/16/21, there was no discussion.
TAC Decision	On 9/29/21, TAC voted via roll call to recommend approval of NPRR1082 as recommended by PRS in the 9/16/21 PRS Report. There was one opposing vote from the IPM (Morgan Stanley) Market Segment. All Market Segments participated in the vote.
Summary of TAC Discussion	On 9/29/21, TAC reviewed the ERCOT Opinion and ERCOT Market Impact Statement for NPRR1082.
ERCOT Opinion	ERCOT supports approval of NPRR1082.
ERCOT Market Impact	ERCOT Staff has reviewed NPRR1082 and believes the market

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Statement	impact for NPRR1082 improves grid reliability by preventing unnecessary testing and delays where the ERS Load with an obligation of no more than 100 kW is co-located with an ERS Generator, and the ERS Generator is capable of reliably meeting the combined ERS obligations of both the ERS Generator and the ERS Load.
Board Decision	On 10/22/21, the ERCOT Board recommended approval of NPRR1082 as recommended by TAC in the 9/29/21 TAC Report.

Sponsor	
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Company	Enerwise Global Technologies LLC
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Cell Number	716-512-5745
Market Segment	IPM

Market Rules Staff Contact	
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E-Mail Address	Brittney.Albracht@ercot.com
Phone Number	512-225-7027

Comments Received	
Comment Author	**Comment Summary**
WMS 080621	Corrected a typographical error

Market Rules Notes

Please note that the following NPRR(s) also propose revisions to the following section(s):

- NPRR1090, ERS Winter Storm Uri Lessons Learned Changes and Other ERS Items
  - Section 8.1.3.2

Proposed Protocol Language Revision

8.1.3.2 Testing of Emergency Response Service Resources

(1) ERCOT may conduct an unannounced test of any ERS Resource at any time during an ERS Time Period in which the ERS Resource is contracted to provide ERS. Prior to the beginning of a Standard Contract Term, a QSE may request that one or more of its ERS Resources awarded in ERS-30 be tested as if subject to a ten-minute ramp during that ERS Standard Contract Term. The duration of a test will not count toward the ERS Resource's eight hours of maximum deployment time for an ERS Contract Period.

(a) For Non-Weather-Sensitive ERS Resources, ERCOT shall determine a test performance factor for each test using the methodology defined in Section 8.1.3.1.4, Event Performance Criteria for Emergency Response Service Resources.

(i) The test performance factors for Non-Weather-Sensitive ERS Resources resulting from those tests will be used in Settlement for that and subsequent ERS Standard Contract Terms as specified in Section 8.1.3.3, Payment Reductions and Suspension of Qualification of Emergency Response Service Resources and/or their Qualified Scheduling Entities.

(ii) A test shall be deemed to be successful if the ERS Resource achieves both a test performance factor of 0.95 or greater and an EIPF for the full first interval of the test of 0.95 or greater.

(iii) An ERS Resource for which the most recent test with a ten-minute ramp was successful shall not be subject to a test for at least 330 days regardless of whether the ERS Resource is participating in ERS-10 or ERS-30.

(iv) An ERS Resource for which the most recent test with a 30-minute ramp was successful shall not be subject to a test for at least 330 days unless the ERS Resource participates in ERS-10 during that period.

(v) An ERS Resource participating in ERS-10 that meets its ERS-10 performance obligations for all ERS deployment events during an ERS Standard Contract Term shall not be subject to a test for ERS-10 or ERS-30 for at least 330 calendar days following the date of the last deployment of ERS-10 during that ERS Standard Contract Term.

(vi) An ERS Resource participating in ERS-30 that meets its ERS-30 performance obligations for all ERS deployment events during an ERS Standard Contract Term shall not be subject to a test for ERS-30 for at least 330 calendar days following the date of the last deployment of ERS-30 during that ERS Standard Contract Term.

(vii) Notwithstanding the foregoing:

(A) If ERCOT determines that an ERS Generator failed to perform adequately in one or more scheduled self-tests, ERCOT may re-test that ERS Generator without regard to the 330 day limit specified above.

(B) If the ERSAFCOMB for an ERS Resource for an ERS Standard Contract Term consisting of a single ERS Contract Period is less than 0.85, or the ERSAFCOMB for an ERS Resource for an ERS Contract Period with a duration that is less than an ERS Standard Contract Term is lower than the threshold specified in paragraph (4)(d) of Section 8.1.3.1.3.3, Contract Period Availability Calculations for Emergency Response Service Resources, ERCOT may re-test that ERS Resource without regard to the 330 day limit specified above.

(C) If an ERS Resource is contracted to provide services under an MRA Agreement and has an ERS obligation during an overlapping ERS Standard Contract Term, ERCOT may conduct additional testing to verify the site's ability to provide both services on the same or consecutive days. Such testing may be conducted without regard to the 330 day limit specified above and without regard to any recovery periods allowed for either ERS or the MRA Agreement.

(D) If a single TDSP-metered Premise has more than one ERS site and those ERS sites participate in different ERS Resources, then all of those ERS Resources will be subject to testing if any one of the ERS Resources is subject to testing.

(b) Testing will be considered void and would require re-testing for any non-weather-sensitive Resources if one or more sites of an ERS Resource were disabled or unverifiable due to events on the TDSP side of the meter affecting the supply, delivery or measurement of electricity either during the event or prior that impacts the creation of a credible baseline. QSEs must provide verification of such events from the TDSP or MRE.

(c) For Weather-Sensitive ERS Resources, ERCOT shall conduct unannounced testing of each Weather-Sensitive ERS Load at least once but no more than twice per month of obligation during an ERS Standard Contract Term, unless testing has been superseded by deployment events as described in paragraph (vii) below.

(i) The tests will be conducted according to normal ERS testing procedures.

(ii) At the time of Dispatch during a test, ERCOT will not advise the QSE of the test duration, which may vary from one full 15-minute interval to 12 full 15-minute intervals.

(iii) ERCOT may conduct a test during any of a Weather-Sensitive ERS Load's obligated hours. However, tests will generally be targeted toward periods of peak weather conditions.

(iv) For a Weather-Sensitive ERS Load assigned to the control group baseline, for each test ERCOT will designate a single group which shall be removed from the test population that will serve as the control group.

(v) ERCOT shall calculate a test performance factor for each test of a Weather-Sensitive ERS Load using the event performance methodology described in Section 8.1.3.1.4.

(vi) The QSE is responsible for managing group assignments and for deploying only the sites dispatched by ERCOT during a test.

(vii) ERCOT may reduce the number of tests administered by the number of deployment events during the ERS Standard Contract Term.

(viii) The test performance factors for Weather-Sensitive ERS Resources shall always be set to one for use in Settlement for the ERS Standard Contract Term.

(ix) Testing will be considered void for any weather-sensitive Resources if 10% or more sites of a weather-sensitive Resource were disabled or unverifiable due to events on the TDSP side of the meter affecting the supply, delivery or measurement of electricity either during the event or prior that impacts the creation of a credible baseline. QSEs must provide verification of such events from the TDSP or MRE.

(2) ERCOT shall conduct an unannounced test of an ERS Resource that has been suspended from participation in ERS pursuant to Section 8.1.3.3. ERCOT will conduct such a test only after the QSE representing the ERS Resource has communicated to ERCOT a request for reinstatement of the suspended ERS Resource.

(3) An ERCOT unannounced test of an ERS Generator must demonstrate injection of energy to the ERCOT System. The use of Load banks is prohibited for ERCOT unannounced tests.

(4) If an ERS Generator is co-located with an ERS Load as specified in Section 8.1.3.1.2, Performance Evaluation for Emergency Response Service Generators, ERCOT shall test both such ERS Resources simultaneously and the following shall apply:

(a) Test performance of the ERS Load and the ERS Generator shall be evaluated jointly and attributed to both if the ERS Load is assigned to a default baseline or is assigned to the alternate baseline and the QSE elected for joint evaluation at the beginning of the ERS Standard Contract Term.

(b) Test performance of the ERS Load and the ERS Generator shall be evaluated separately if the ERS Load is assigned to the alternate baseline and the QSE elected for separate evaluation at the beginning of the ERS Standard Contract Term. If the separately evaluated ERS Load has no obligation greater than 100 kW in any ERS Time Period and does not meet the criteria for a successful test as defined in paragraph (1)(a)(ii) above, the following shall apply:

(i) If the interval data measured by the metering on the output of the generator(s) meets the criteria for a successful test as defined in paragraph (1)(a)(ii) above, for the combined obligation of the ERS Load and the ERS Generator, then both the ERS Load and the ERS Generator will be deemed to have performed successfully for that ERS test.

(ii) Otherwise, the ERS Load will be considered to have not performed successfully for that ERS test.

(5) In order to assist QSEs and ERS Resources in managing environmental compliance, ERCOT shall limit the cumulative duration of Sustained Response Periods of testing of an ERS Resource to a maximum of one hour per ERS Standard Contract Term unless otherwise required to conduct re-testing.

(6) Notwithstanding paragraph (5) above, Weather-Sensitive ERS Resources shall be subject to testing as described in paragraph (1)(c) above.

ERCOT Impact Analysis Report

NPRR Number	1082	NPRR Title	Emergency Response Service (ERS) Test Exception for Co-located ERS Loads
Impact Analysis Date		August 24, 2021	
Estimated Cost/Budgetary Impact		Less than $5k, which will be absorbed by the Operations & Maintenance (O&M) budgets of affected department.	
Estimated Time Requirements		No project required. This Nodal Protocol Revision Request (NPRR) can take effect within 1-2 months after Public Utility Commission of Texas (PUCT) approval.	
ERCOT Staffing Impacts (across all areas)		Implementation Labor: 100% ERCOT; 0% Vendor Ongoing Requirements: No impacts to ERCOT staffing.	
ERCOT Computer System Impacts		The following ERCOT systems would be impacted: • Data Management & Analytic Systems 100%	
ERCOT Business Function Impacts		ERCOT will update its business processes to implement this NPRR.	
Grid Operations & Practices Impacts		No impacts to ERCOT grid operations and practices.	

Evaluation of Interim Solutions or Alternatives for a More Efficient Implementation
None offered.

Comments
None.

Board Report

NPRR Number	1087	NPRR Title	Prohibit Participation of Critical Loads as Load Resources or ERS Resources
Date of Decision		October 22, 2021	
Action		Recommended Approval	
Timeline		Urgent – to ensure that Critical Loads, including Loads that are essential to the supply of natural gas to Generation Resources in the ERCOT Region, do not participate as Load Resources or Emergency Response Service (ERS) Resources	
Proposed Effective Date		November 1, 2021 (Section 2.1, paragraph (9) of Section 3.6.1) Effective upon the later of the effective date of the rules adopted by the Public Utility Commission of Texas (PUCT) pursuant to Utilities Code Section 38.074 and the effective date of the rules adopted by the Railroad Commission of Texas (RRC) pursuant to Natural Resources Code Section 81.073 (Section 3.14.3.1; paragraphs (7) and (8) of Section 3.6.1) Resource Entities representing Load Resources must submit the attestation required by paragraph (8) of Section 3.6.1 within ten days of the effective date of paragraph (8)	
Priority and Rank Assigned		Not applicable	
Nodal Protocol Sections Requiring Revision		2.1, Definitions 3.6.1, Load Resource Participation 3.14.3.1 Emergency Response Service Procurement	
Related Documents Requiring Revision/Related Revision Requests		None	
Revision Description		This Nodal Protocol Revision Request (NPRR) defines "Critical Load" and adds language in Section 3.6.1 to prohibit the registration and participation of such Loads as Load Resources or ERS Resources. "Critical Load" is defined in this NPRR as a Load that is designated as, or has a pending application to be designated as, a Critical Load Public Safety Customer, Critical Load Industrial Customer, Chronic Condition Residential Customer, or Critical Care Residential Customer pursuant to P.U.C. SUBST. R. 25.497, Critical Load Industrial Customers, Critical Load Public Safety Customers, Critical Care, Residential Customers, and Chronic Condition Residential	

	Customers, or as a critical load under any other category identified under PUCT Rules. The revisions proposed in this NPRR also require any Resource Entity that owns or controls a currently registered Load Resource to ensure and attest that the Load Resource is not located behind an Electric Service Identifier (ESI ID) for a Critical Load, or if it is located behind such an ESI ID, that the Load Resource itself is not the Critical Load or else has available backup generation or another technology that will ensure the Load's continued availability during an emergency deployment. If a Resource Entity cannot provide the required attestation for any currently registered Load Resource after a reasonable submission period, the Load Resource will not be permitted to submit any offer to provide Ancillary Services. Any Resource Entity seeking to register a new Load Resource will also be required to submit such an attestation as a condition of registration. This NPRR also requires a Qualified Scheduling Entity (QSE) representing an ERS Resource to ensure and attest that the ERS Resource is not located behind an ESI ID for a Critical Load, or if it is located behind such an ESI ID, that the ERS Resource itself is not the Critical Load or else has available backup generation or another technology that ensures the ERS Resource's continued availability during emergency deployment. To foreclose the possibility that backup generation supporting one or more Critical Loads could be offered as an ERS Generator, this NPRR also requires the QSE to ensure and attest that the ERS Resource offered does not support a Critical Load.
Reason for Revision	☒ Addresses current operational issues. ☐ Meets Strategic goals (tied to the ERCOT Strategic Plan or directed by the ERCOT Board). ☐ Market efficiencies or enhancements ☐ Administrative ☐ Regulatory requirements ☐ Other: (explain) *(please select all that apply)*
Business Case	Load Resources and ERS Resources play an indispensable role in ensuring system security during Emergency Conditions. However, when a Load Resource or ERS Resource also serves a critical industrial or public safety function, the deployment of that Load Resource or ERS Resource can have other severe consequences. For example, curtailing Loads that support the natural gas supply chain for generators can negatively impact the availability of gas-

	fired generation during a system emergency. To avoid these impacts, this NPRR explicitly requires that any Resource Entity representing a Load Resource and any QSE representing an ERS Resource must ensure that the Load Resource or ERS Resource is not located behind an ESI ID for a Critical Load, or if it is located behind such an ESI ID, that the Load Resource or ERS Resource is not the Critical Load at the site or else uses backup generation or another technology that ensures the Load's continued availability during emergency deployment This NPRR is consistent with subsection (g)(3) of P.U.C. SUBST. R. 25.503, Oversight of Wholesale Market Participants, which mandates that a "market participant must not offer reliability products to the market that cannot or will not be provided if selected."
Credit Work Group Review	ERCOT Credit Staff and the Credit Work Group (Credit WG) have reviewed NPRR1087 and do not believe that it requires changes to credit monitoring activity or the calculation of liability.
PRS Decision	On 8/12/21, PRS voted via roll call to grant NPRR1087 Urgent status; and to table NPRR1087. There was one opposing vote from the Independent Power Marketer (IPM) (Morgan Stanley) Market Segment and one abstention from the IPM (Tenaska) Market Segment. All Market Segments participated in the vote. On 9/16/21, PRS voted via roll call to recommend approval of NPRR1087 as amended by the 9/3/21 ERCOT comments; and to forward to TAC NPRR1087 and the Impact Analysis. There was one opposing vote from the IPM (Morgan Stanley) Market Segment. The Independent Retail Electric Provider (IREP) Market Segment did not participate in the vote.
Summary of PRS Discussion	On 8/12/21, ERCOT Staff provided an overview of NPRR1087 and noted the NPRR1087 workshop scheduled for August 19, 2021. On 9/16/21, participants reviewed the 9/3/21 ERCOT comments.
TAC Decision	On 9/29/21, TAC voted via roll call to recommend approval of NPRR1087 as recommended by PRS in the 9/16/21 PRS Report as amended by the 9/24/21 Enel X comments and the Revised Impact Analysis. There was one opposing vote from the IPM (Morgan Stanley) Market Segment. All Market Segments participated in the vote.
Summary of TAC Discussion	On 9/29/21, TAC reviewed the ERCOT Opinion, ERCOT Market Impact Statement, and 9/24/21 Enel X comments for NPRR1087.
ERCOT Opinion	ERCOT supports approval of NPRR1087.

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ERCOT Market Impact Statement	ERCOT Staff has reviewed NPRR1087 and believes the market impact for NPRR1087 improves grid reliability by ensuring Load Resources and participants in the ERS program can fulfill all their obligations under that program.
Board Decision	On 10/22/21, the ERCOT Board recommended approval of NPRR1087 as recommended by TAC in the 9/29/21 TAC Report as amended by the 10/21/21 ERCOT comments and the Revised Impact Analysis.

Sponsor	
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Company	ERCOT
Phone Number	512-248-4298
Cell Number	
Market Segment	Not applicable

Market Rules Staff Contact	
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Comments Received	
Comment Author	**Comment Summary**
TIEC 072921	Proposed deletion of the term “Generation Resource Support Load” and simplification of the term “Critical Load”
Enchanted Rock 072921	Proposed revisions to allow Load Resources and ERS Resources to include Critical Load or Generation Resource Support Load if that Load is supported by adequate on-site generation to meet ERS program requirements while maintaining continuous operation
Enel X 080521	Proposed additional revisions to the 7/29/21 TIEC comments to allow Load Resources and ERS Resources to include Critical Load if it does so without impacting the Loads essential to fulfilling critical infrastructure responsibilities

Pioneer Natural Resources 080621	Proposed deletion of the term "Generation Resource Support Load" and simplification of the term "Critical Load" along with items for further stakeholder discussion
Targa Resources 080921	Endorsed the 8/6/21 Pioneer comments and concepts raised within the 7/29/21 TIEC, 7/29/21 Enchanted Rock, and 8/5/21 Enel X comments; also raised issues for further stakeholder discussion
TAEBA 081021	Endorsed the concepts raised within the 7/29/21 TIEC, 7/29/21 Enchanted Rock, and 8/5/21 Enel X comments
PBPA 081121	Raised issues for further stakeholder discussion
Pioneer Natural Resources 082521	Raised issues for further stakeholder discussion
Luminant 090121	Provided additional edits to the 7/29/21 Enchanted Rock comments to include language requiring an attestation that participation in ERS will not impact in any way the ability of the "Critical Load" and/or the "Generation Resource Support Load" to function
ERCOT 090321	Provided additional edits to the 7/29/21 TIEC comments based on stakeholder discussions and issues raised by other parties in their formal comments to NPRR1087
Enel X 092421	Proposed edits to change "use" to "availability" in paragraphs (7)(c) and (9)(c) of Section 3.6.1
ERCOT 102121	Proposed a bifurcated effective date whereby NPRR1087 requirements for ERS Resources are effective November 1, 2021, and the requirements for Load Resources are upon the later of PUCT and RRC rule changes

Market Rules Notes

Please note that the following NPRR(s) also propose revisions to the following section(s):

- NPRR1090, ERS Winter Storm Uri Lessons Learned Changes and Other ERS Items
  - Section 3.14.3.1
- NPRR1093, Load Resource Participation in Non-Spinning Reserve
  - Section 3.6.1

Proposed Protocol Language Revision

2.1 DEFINITIONS

Critical Load

A Load that is designated as, or has a pending application to be designated as, a Critical Load Public Safety Customer, Critical Load Industrial Customer, Chronic Condition Residential Customer, or Critical Care Residential Customer pursuant to P.U.C. SUBST. R. 25.497, or as a critical load under any other category identified under Public Utility Commission of Texas (PUCT) Rules.

3.6.1 Load Resource Participation

(1) A Load Resource may participate by providing:

(a) Ancillary Service:

(i) Regulation Up (Reg-Up) Service as a Controllable Load Resource capable of providing Primary Frequency Response;

(ii) Regulation Down (Reg-Down) Service as a Controllable Load Resource capable of providing Primary Frequency Response;

(iii) Responsive Reserve (RRS) as a Controllable Load Resource qualified for Security-Constrained Economic Dispatch (SCED) Dispatch and capable of providing Primary Frequency Response, or as a Load Resource controlled by high-set under-frequency relay; and

[NPRR863: Insert paragraph (iv) below upon system implementation and renumber accordingly:]

(iv) ERCOT Contingency Reserve Service (ECRS) as a Controllable Load Resource qualified for SCED Dispatch and capable of providing Primary Frequency Response, or as a Load Resource that may or may not be controlled by high-set under-frequency relay; and

(iv) Non-Spinning Reserve (Non-Spin) Service as a Controllable Load Resource qualified for SCED Dispatch;

(b) Energy in the form of Demand response from a Controllable Load Resource in Real-Time via SCED;

(c) Emergency Response Service (ERS) for hours in which the Load Resource does not have an Ancillary Service Resource Responsibility; and

[NPRR1007: Replace paragraph (c) above with the following upon system implementation of the Real-Time Co-Optimization (RTC) project:]

(c) Emergency Response Service (ERS) for hours in which the Load Resource has a Resource Status of OUTL; and

(d) Voluntary Load response in Real-Time.

(2) Except for voluntary Load response and ERS, loads participating in any ERCOT market must be registered as a Load Resource and are subject to qualification testing administered by ERCOT.

(3) All ERCOT Settlements resulting from Load Resource participation are made only with the Qualified Scheduling Entity (QSE) representing the Load Resource.

(4) A QSE representing a Load Resource and submitting a bid to buy for participation in SCED, as described in Section 6.4.3.1, RTM Energy Bids, must represent the Load Serving Entity (LSE) serving the Load of the Load Resource. If the Load Resource is an Aggregate Load Resource (ALR), the QSE must represent the LSE serving the Load of all sites within the ALR.

(5) The Settlement Point for a Controllable Load Resource is its Load Zone Settlement Point. For an Energy Storage Resource (ESR), the Settlement Point for the charging Load withdrawn by the modeled Controllable Load Resource associated with the ESR is the Resource Node of the modeled Generation Resource associated with the ESR.

(6) QSEs shall not submit offers for Load Resources containing sites associated with a Dynamically Scheduled Resource (DSR).

[NPRR1000: Delete paragraph (6) above upon system implementation.]

(7) Each Resource Entity that represents one or more Load Resources shall ensure that each Load Resource it represents meets at least one of the following conditions:

(a) The Load Resource is not located behind an Electric Service Identifier (ESI ID) that corresponds to a Critical Load;

(b) The Load Resource is located behind an ESI ID that corresponds to a Critical Load, but the Load Resource is not a Critical Load and does not include a Critical Load; or

(c) The Load Resource is located behind an ESI ID that corresponds to a Critical Load, but electric service from the ERCOT System is not required for the provision of the critical service due to the availability of back-up generation or other technologies at the site.

(8) As a condition of obtaining and maintaining registration as a Load Resource, the Resource Entity for the Load Resource must have submitted an attestation, in a form deemed acceptable by ERCOT, stating that one of the conditions set forth in paragraph (7) above is true, and that if either of the conditions in paragraph (7)(b) or (7)(c) is true, then all of the Load Resource's offered demand response capacity will be available if deployed by ERCOT during an emergency.

(9) Each QSE that represents one or more ERS Resources shall ensure that each ERS Resource identified in any ERS Submission Form submitted by the QSE meets at least one of the following conditions:

(a) The ERS Resource and each site within the ERS Resource are not located behind an ESI ID or unique meter identifier that corresponds to a Critical Load and are not used to support a Critical Load; or

(b) The ERS Resource or one or more sites within the ERS Resource are behind an ESI ID or unique meter identifier that corresponds to a Critical Load, but the ERS Resource and each site within the ERS Resource are not a Critical Load, do not include a Critical Load, and are not used to support a Critical Load; or

(c) The ERS Resource or one or more sites within the ERS Resource are behind an ESI ID or unique meter identifier that corresponds to a Critical Load, but electric service from the ERCOT System is not required for the provision of the critical service due to the availability of back-up generation or other technologies at the site, and neither the ERS Resource nor any site within the ERS Resource is used to support a Critical Load.

3.14.3.1 Emergency Response Service Procurement

(1) ERCOT shall issue Requests for Proposals to procure ERS for each Standard Contract Term. The ERS Standard Contract Terms are as follows:

(a) February through May;

(b) June through September; and

(c) October through January.

[NPRR984: Replace paragraph (1) above with the following on October 1, 2021 and upon system implementation:]

(1) ERCOT shall issue Requests for Proposals to procure ERS for each Standard Contract Term. The ERS Standard Contract Terms are as follows:

(a) December through March;

(b) April and May;

(c) June through September; and

(d) October and November.

(2) ERCOT shall procure ERS from one or more of the four following ERS service types:

(a) Weather-Sensitive ERS-10

(b) Non-Weather-Sensitive ERS-10

(c) Weather-Sensitive ERS-30

(d) Non-Weather-Sensitive ERS-30

(3) ERS offers shall be submitted only by QSEs capable of receiving both Extensible Markup Language (XML) messaging and Verbal Dispatch Instructions (VDIs) on behalf of represented ERS Resources.

(4) Each site in an ERS Generator must have an interconnection agreement with its Transmission and/or Distribution Service Provider (TDSP) prior to submitting an ERS offer and must have exported energy to the ERCOT System prior to the offer due date. An ERS Resource that cannot inject energy to the ERCOT System can only be offered as an ERS Load.

(5) In order to qualify as weather-sensitive, an ERS Load must meet one of the following criteria:

(a) The ERS Load must consist exclusively of residential sites; or

(b) The ERS Load must consist exclusively of non-residential sites and must qualify as weather-sensitive based on the accuracy of the regression baseline evaluation methodology as described in Section 8.1.3.1.1, Baselines for Emergency Response Service Loads, as an indicator of actual interval Load.

(i) ERCOT shall establish minimum accuracy standards for qualification as an ERS Load under the regression baseline evaluation methodology.

(ii) An ERS Load must have at least nine months of interval meter data to qualify as weather-sensitive under the regression baseline evaluation methodology.

(iii) ERCOT's determination that an ERS Load qualifies as a weather-sensitive ERS Load is independent of ERCOT's determination of which baseline methodologies may be appropriate for purposes of evaluating the ERS Load's performance.

(c) If a site with Distributed Renewable Generation (DRG) has been designated by the QSE to be evaluated by using its native load, the default baseline analysis shall be performed using the calculated native load.

(6) QSEs representing ERS Resources may submit offers for one or more ERS Time Periods within an ERS Standard Contract Term. ERS Time Periods shall be defined by ERCOT in the Request for Proposal for that ERS Standard Contract Term. An ERS offer is specific to an ERS Time Period. In submitting an offer, both the QSE and the ERS Resource are committing to provide ERS for that ERS Time Period if selected.

(7) A QSE may submit separate offers for an ERS Resource to provide any or all of the four ERS service types during the same or different ERS Time Periods in the same ERS Standard Contract Term, but ERCOT shall only award offers for one service type for each ERS Resource.

(8) The minimum capacity offer for an ERS Load on the weather sensitive baseline is one half (0.5) MW; all other ERS capacity offers will have a minimum amount that may be offered of one-tenth (0.1) MW. ERS Resources may be aggregated to reach this requirement.

(9) Offers from ERS Generators must include self-serve capacity and injection capacity amounts greater than or equal to zero for each ERS Time Period offered.

(10) ERCOT may establish an upper limit, in MWs, on the amount of ERS capacity it will procure for any ERS Time Period in any ERS Standard Contract Term.

(11) A QSE's offer to provide ERS shall include:

(a) The name of the QSE representing the ERS Resource and the name of an individual authorized by the QSE to represent the QSE and its ERS Resource(s);

(b) The name of an Entity that controls the ERS Resource, and an affirmation that the QSE has obtained written authorization from the Entity to submit ERS offers on its behalf and to represent the Entity in all matters before ERCOT concerning the Entity's provision of ERS;

(c) Any information or data specified by ERCOT, including access to historical meter data, and affirmation by the QSE that it has obtained written authorization from the controlling Entity of the ERS Resource for the QSE to obtain such data;

(d) Affirmation that the controlling Entity of the ERS Resource has reviewed P.U.C. SUBST. R. 25.507, Electric Reliability Council of Texas (ERCOT) Emergency Response Service (ERS), these Protocols and Other Binding Documents relating to the provision of ERS, and has agreed to comply with and be bound by such provisions;

(e) An agreement by the QSE to produce any written authorization or agreement between the QSE and any ERS Resource it represents, as described in this Section, upon request from ERCOT or the PUCT;

(f) Affirmation that no offered capacity from any site in an ERS Resource has been or will be committed to provide any other product, service, or program during any of the hours in the ERS Time Period in the Standard Contract Term for which the offer is submitted. Such prohibited products, services, or programs include, but are not limited to, Ancillary Services, Security-Constrained Economic Dispatch (SCED), or TDSP standard offer programs. As an exception to the foregoing, a QSE may offer a site to provide ERS for an ERS Time Period in the Standard Contract Term even if the QSE has an offer pending for that same site to serve as an MRA during that ERS Time Period and Standard Contract Term; however, if the site is selected to serve as an MRA it will not be permitted to serve as ERS during any ERS Time Period in the ERS Contract Term in which it is obligated to serve as an MRA;

(g) Affirmation that the QSE and the controlling Entity the ERS Resource are familiar with any applicable federal, state or local environmental regulations that apply to the use of any generator in the provision of ERS, and that the use of such generator(s) to provide of ERS would not violate those regulations. This provision applies to both ERS Generators and to the use of backup generation by ERS Loads; and

(h) Affirmation that each offered ERS Resource satisfies at least one of the conditions set forth in paragraph (9) of Section 3.6.1, Load Resource Participation, and that all of the ERS Resource's offered Demand response capacity will be available if deployed by ERCOT during an emergency.

(12) Upon request from a QSE, ERCOT shall provide the dates and times for any deployment events or tests of any ERS site during the previous three ERS Standard Contract Terms, provided that the QSE has obtained written authorization from the ERS site to obtain the information from ERCOT. Such QSE requests shall include the following site-specific information: Electric Service Identifier (ESI ID), unique meter identifier (if applicable), or, if the site is in a Non-Opt-In Entity (NOIE) area, site name and site address.

(13) Sites associated with a Dynamically Scheduled Resource (DSR) may not participate in ERS. Offers for Resources containing sites associated with a DSR will be rejected by ERCOT. If ERCOT determines that any participating site is associated with a DSR, that site will be treated as removed from the Resource on the date the determination was made. An ERS Resource's obligation will not change as a result of any such site removal.

[NPRR1000: Delete item (13) above upon system implementation and renumber accordingly.]

(14) Each offer submitted by a QSE on behalf of an aggregated ERS Load on a weather-sensitive baseline shall include the QSE's projection of the maximum number of sites in the aggregation during the ERS Standard Contract Term. ERCOT shall review this projection and the information provided regarding the initial size of each aggregated ERS Load and shall reject any offer on behalf of such an ERS Load if the maximum size of the ERS Load projected by the QSE would violate the limits of site participation growth described in paragraph (15) below.

(15) A QSE may modify the population of an aggregated ERS Load on a weather-sensitive baseline once per month during an ERS Standard Contract Term via a process defined by ERCOT. Such adjustments shall be effective on the first day of each month following the first month. A fully validated ERS Offer form must be received by ERCOT no later than seven business days prior to the first day of the month for which is intended to be in effect.

(a) During an ERS Standard Contract Term, a QSE may increase the number of sites in an aggregated ERS Load on a weather-sensitive baseline by no more than the greater of the following:

(i) 100% of the initial number of sites; or

(ii) Two MW times the QSE's projection of the maximum number of sites in the aggregation during the ERS Standard Contract Term, divided by the maximum MW capacity offered for any ERS Time Period for the aggregation.

(b) Any sites added to an ERS Load on a weather-sensitive baseline are subject to the same requirements for historical meter data as the other sites in the aggregation, as described in paragraph (4) of Section 8.1.3.1.1.

(16) For each of the four ERS service types, an ERS Standard Contract Term may consist of a single ERS Contract Period or multiple non-overlapping ERS Contract Periods, as follows:

(a) If no ERS Resources' obligations are exhausted for an ERS service type during an ERS Contract Period pursuant to Section 3.14.3.3, Emergency Response Service Provision and Technical Requirements, the ERS Contract Period for that ERS service type shall terminate at the end of the last Operating Day of the ERS Standard Contract Term.

(b) If one or more ERS Resources' obligations in a given ERS service type are exhausted pursuant to Section 3.14.3.3, the ERS Contract Period for that ERS service type shall terminate at the end of the Operating Day during which the exhaustion occurred. However, if ERS Resources participating in a service type remain deployed at the end of that Operating Day, the ERS Contract Period for that ERS service type shall terminate at the end of the Operating Day on which those ERS Resources are recalled.

(c) If an ERS Contract Period terminates as provided in paragraph (b) above, and one or more ERS Resources' obligations were not exhausted or ERCOT elects to renew the obligations of any Resources whose obligations were exhausted, a new ERS Contract Period for the ERS service type shall begin at hour ending 0100 on the following Operating Day. This new ERS Contract Period shall terminate as provided in this Section.

(17) An ERS Resource currently obligated to provide an ERS service type during an ERS Time Period and ERS Contract Period may be offered to provide service as an MRA during that same ERS Time Period in the ERS Contract Period. If the ERS Resource is selected to provide service as an MRA during an ERS Time Period in the ERS Contract Period in which it is currently obligated to provide an ERS service type, the ERS Contract Period will be terminated for that ERS service type. The ERS Contract Period for that ERS service type shall terminate at the end of the Operating Day that is five days before the first Operating Day the ERS Resource is obligated to provide service under the MRA Agreement. However, if any ERS Resources participating in that ERS service type are currently deployed at the end of the Operating Day the ERS Contract Period is scheduled to terminate, then the ERS Resource's ERS Contract Period for that ERS service type shall continue until the end of the Operating Day on which all of the ERS Resources participating in that ERS service type have been recalled, at which time the ERS Contract Period will terminate.

(18) ERS Resources shall be obligated in ERS Contract Periods as follows:

(a) Unless an ERS Contract Period is terminated pursuant to paragraph (17) above, for the first ERS Contract Period in an ERS Standard Contract Term, all ERS Resources awarded by ERCOT shall be obligated.

(b) For each of any subsequent ERS Contract Periods for a given ERS service type in an ERS Standard Contract Term, any ERS Resource with remaining obligation due to cumulative deployment time of less than eight hours at the end of the last ERS Contract Period shall be obligated for only this remaining deployment time in the new ERS Contract Period.

(c) For each of any subsequent ERS Contract Periods in an ERS Standard Contract Term, ERCOT may renew the obligations of certain ERS Resources as follows:

(i) During the offer submission process, QSEs shall designate on the ERS offer form, which is posted on the ERCOT website, whether an ERS Resource elects to participate in renewal ERS Contract Periods ("renewal opt-in"). Except as provided in paragraph (iv) below, this election is irrevocable once the ERS Resource has been committed for an ERS Standard Contract Term.

(ii) If the obligations of one or more ERS Resources are exhausted before the end of an ERS Standard Contract Term, ERCOT shall determine whether to include renewal opt-ins in the subsequent ERS Contract Period.

ERCOT may limit any renewal to one or more ERS Time Periods in which obligations have been exhausted.

(iii) If ERCOT decides to include renewal opt-ins in the subsequent ERS Contract Period, ERCOT shall promptly notify all ERS QSEs as to the ERS Time Periods that it has elected to renew.

(iv) By the end of the second Business Day in any renewal ERS Contract Period, a QSE may revoke the renewal opt-in status of any of its committed ERS Resources for any subsequent ERS Contract Periods within that ERS Standard Contract Term. ERCOT shall develop a method for QSEs to communicate such information.

(v) By the end of the third Business Day in any ERS Contract Period other than the first ERS Contract Period in an ERS Standard Contract Term, ERCOT shall communicate to QSEs a confirmation of the terms of participation for all of their committed ERS Resources.

(19) In any 12-month period beginning on February 1st and ending on January 31st, ERCOT shall not commit dollars toward ERS in excess of the ERS cost cap. ERCOT may determine cost limits for each ERS Standard Contract Term in order to ensure that the ERS cost cap is not exceeded.

[NPRR984: Replace paragraph (19) above with the following on October 1, 2021 and upon system implementation:]

(19) In any 12-month period beginning on December 1st and ending on November 30th, ERCOT shall not commit dollars toward ERS in excess of the ERS cost cap. ERCOT may determine cost limits for each ERS Standard Contract Term in order to ensure that the ERS cost cap is not exceeded.

(20) If a QSE offers a Weather-Sensitive ERS Load, selects a control group baseline for that ERS Load, and ERCOT determines that the magnitude of the offer relative to the baseline error will prevent accurate determination of the performance, ERCOT shall reject the offer.

(21) ERCOT shall reduce the available expenditure under the ERS cost cap by the value of the amount of ERS Self-Provision. ERCOT shall value ERS Self-Provision at the clearing price multiplied by the total MW of ERS Self-Provision during each relevant ERS Time Period.

(22) ERCOT shall procure ERS Resources for each ERS Time Period using a clearing price. The Emergency Response Service Procurement Methodology, posted on the ERCOT website, is an Other Binding Document that describes the methodology used by ERCOT to procure ERS. ERCOT may consider geographic location and its effect on congestion in making ERS awards. ERCOT may prorate the capacity awarded to an ERS Resource

in an ERS Time Period if the capacity offered for that ERS Resource would cost more than the Emergency Response Service Procurement Methodology allows under the time period expenditure limit. Such proration shall only be done if the QSE indicates on its offer for an ERS Resource that the QSE is willing to have the capacity prorated and also has indicated the lowest prorated capacity limit which is acceptable for that ERS Resource. If proration would result in an award below an ERS Resource's designated prorated capacity limit or below the minimum MW offer applicable to the ERS service type as specified in paragraph (8) above, the offer will not be awarded.

(23) Payments and Self-Provision credits to QSEs representing ERS Resources are subject to adjustments as described in Section 8.1.3.3, Payment Reductions and Suspension of Qualification of Emergency Response Service Resources and/or their Qualified Scheduling Entities. Deployment of ERS Resources will not result in additional payments other than any payment for which the QSE may be eligible through Real-Time energy imbalance or other ERCOT Settlement process.

(24) QSEs representing ERS Resources selected to provide ERS shall execute a Standard Form Emergency Response Service Agreement, as provided in Section 22, Attachment G, Standard Form Emergency Response Service Agreement.

Revised ERCOT Impact Analysis Report

NPRR Number	1087	NPRR Title	Prohibit Participation of Critical Loads as Load Resources or ERS Resources
Impact Analysis Date		October 21, 2021	
Estimated Cost/Budgetary Impact		None.	
Estimated Time Requirements		No project required. This Nodal Protocol Revision Request (NPRR) can take effect upon Public Utility Commission of Texas (PUCT) approval. See Comments.	
ERCOT Staffing Impacts (across all areas)		Ongoing Requirements: No impacts to ERCOT staffing.	
ERCOT Computer System Impacts		No impacts to ERCOT computer systems.	
ERCOT Business Function Impacts		ERCOT will update its business processes to implement this NPRR.	
Grid Operations & Practices Impacts		No impacts to ERCOT grid operations and practices.	

Evaluation of Interim Solutions or Alternatives for a More Efficient Implementation
None offered.

Comments
Section 3.14.3.1 and paragraphs (7) and (8) of Section 3.6.1 will be effective upon the later of the effective date of the rules adopted by the Public Utility Commission of Texas pursuant to Utilities Code Section 38.074 and the effective date of the rules adopted by the Railroad Commission of Texas pursuant to Natural Resources Code Section 81.073.

Board Report

NPRR Number	1090	NPRR Title	ERS Winter Storm Uri Lessons Learned Changes and Other ERS Items
Date of Decision		October 22, 2021	
Action		Recommended Approval	
Timeline		Urgent – in order to implement changes by December 1, 2021, so that the changes will be effective starting with the December-March 2022 ERS Standard Contract Term	
Proposed Effective Date		Upon system implementation	
Priority and Rank Assigned		Priority – 2021; Rank – 3360	
Nodal Protocol Sections Requiring Revision		2.1, Definitions 3.14.3.1, Emergency Response Service Procurement 3.14.3.3, Emergency Response Service Provision and Technical Requirements 6.5.9.4.2, EEA Levels 8.1.3.1.3.1, Time Period Availability Calculations for Emergency Response Service Loads 8.1.3.1.3.2, Time Period Availability Calculations for Emergency Response Service Generators 8.1.3.1.3.3, Contract Period Availability Calculations for Emergency Response Service Resources 8.1.3.1.4, Event Performance Criteria for Emergency Response Service Resources 8.1.3.2, Testing of Emergency Response Service Resources 8.1.3.3.3, Performance Criteria for Qualified Scheduling Entities Representing Non-Weather-Sensitive Emergency Response Service Resources	
Related Documents Requiring Revision/Related Revision Requests		Emergency Response Service Technical Requirements and Scope of Work	
Revision Description		This Nodal Protocol Revision Request (NPRR) makes a number of revisions pertaining to Emergency Response Service (ERS) that addresses items 48 and 102 of TAC's Emergency Conditions List, including: 1) Modifying and clarifying language related to the beginning and end of ERS Contract Periods for ERS renewals; 2) Removing the limit on the maximum number of deployments per ERS Contract Period, the three-hour maximum limit per	

	single deployment event, and modifying language related to the cumulative deployment obligation time requirement for Weather-Sensitive ERS Resources; 3) Eliminating the options for ERS Resources to be excluded from an ERS deployment event or to exclude intervals from event and availability performance with properly noticed scheduled unavailability and planned maintenance for up to 2% of their obligated intervals without payment reductions; 4) Modifying language related to short ERS Contract Period availability calculations for ERS Resources to account for short Contract Periods in which no exhaustion occurs and modifying the formula for the ratio of Availability Factor Hours to the total awarded hours in the ERS Standard Contract Term to include all awarded hours in the Standard Contract Term; 5) Removing the requirement to reduce the time-weighting factor for intervals by 25% after eight hours for Qualified Scheduling Entity (QSE)-level event performance; 6) Removing language related to the first full interval of an ERS deployment event from the ERS Resource-level event performance criteria and modifying language related to successful performance during ERS deployment events to satisfy annual testing requirements; 7) Removing language related to testing ERS Generators for failing self-tests; and 8) Modifying QSE-level event performance to be both time and capacity weighted.
Reason for Revision	☒ Addresses current operational issues. ☐ Meets Strategic goals (tied to the ERCOT Strategic Plan or directed by the ERCOT Board). ☒ Market efficiencies or enhancements ☐ Administrative ☐ Regulatory requirements ☐ Other: (explain) *(please select all that apply)*
Business Case	The eight business cases below correspond to each numbered Revision Description above for this NPRR: 1) The added language related to ERS Contract Period renewals

	is intended to make clear that ERCOT has the flexibility to declare when exhausted ERS service types will be renewed for some or all of the ERS Time Periods, thus beginning a new ERS Contract Period. Following the recall of ERS during the Winter Storm Uri event, there was some confusion with ERS QSEs that incorrectly thought the ERS renewal had to occur the day immediately following the recall; 2) The current language for Weather-Sensitive ERS Resources has a maximum deployment of three hours for an event. Once the Weather-Sensitive ERS Resource reaches the three-hour deployment, and following the 10-hour recovery period, the ERCOT Operator is then required to issue a new deployment instruction for the Weather-Sensitive ERS Resource to deploy again. During the Winter Storm Uri event, ERCOT remained in the Energy Emergency Alert (EEA) well beyond three hours and did not recall these Resources. Therefore, the Weather-Sensitive ERS Resource could not be redeployed again beyond the first deployment, which was not the intended outcome for the Resources. This Protocol change will not only eliminate the three-hour deployment limit, but will also eliminate the requirement for the ERCOT Operator to issue new deployment instructions for subsequent obligations during extended events. An additional benefit for this change would be that this treats the Weather-Sensitive and Non-Weather Sensitive ERS Resource consistent as pertaining to the deployment rules; 3) Eliminating scheduled unavailability and planned maintenance for the following reasons: a. ERCOT Operators deploy ERS during Emergency Conditions with the expectation of receiving the full amount of procured ERS capacity, but the current rules pertaining to scheduled unavailability and planned maintenance can materially reduce the actual response to a deployment instruction. During Winter Storm Uri, several ERS Resources were either excluded from ERS deployments or from intervals during the deployment, which reduced the overall response during the event. Eliminating scheduled unavailability and planned maintenance would help ensure ERCOT receives the maximum benefit from ERS Resources during an event as well as reducing any confusion for ERCOT Operations during Emergency Conditions; b. The ERCOT deployment manager is the electronic system that sends the XML deployment instructions to QSEs. This system relies on a pre-loaded file

	containing the QSE-level obligation per ERS Time Period to populate the instruction. Due to current uncertainty surrounding when notices of scheduled unavailability and planned maintenance are submitted, it can be difficult to keep the pre-loaded file current on a day-to-day basis. If an ERS Resource does not deploy due to scheduled unavailability or planned maintenance that is not reflected in the pre-loaded file, there is no ability for another XML to be dispatched during the same deployment event because ERCOT Operations will view the resource as deployed. Eliminating scheduled unavailability and planned maintenance would reduce such challenges for ERCOT Operations during emergencies; c. To better align the ERS megawatts (MW) included in the Real-Time On-Line Reliability Deployment Price Adder with the MWs that are actually deployed for ERS. Currently, the ERCOT deployment manager does not adjust for the reduced ERS capacity due to scheduled unavailability or planned maintenance. Because of this, there can be misalignment with the actual instructed amount of ERS deployed and the amount of ERS MWs used to calculate the adder; d. Other ERCOT Resources are required to seek approval through the Outage coordination process to plan Outages and maintenance, while currently ERS Resources only need to provide three days of notice to remove their obligation for up to 2% of their awarded intervals without any payment reductions. Because ERS Resources and portfolios can be quite large in size, three days notice to remove their ERS obligation, without any discretion from ERCOT to object to the removal, creates a risk for ERCOT reliability during emergencies; and e. ERS QSEs are allowed up to 5% of their obligated intervals to be unavailable and still successfully meet their performance requirements for ERS availability and events. Therefore, despite the removal of the scheduled unavailability and planned maintenance provisions as proposed herein, issues the ERS QSEs may encounter with their ERS Resources could still be accounted for within this current 5% allowance; 4) Availability language related to the treatment of ERS Resources for short ERS Contract Periods is being modified to include a specific case that was omitted in the original

	language and allow for consistent treatment of resources. Currently, if there is a new ERS Contract Period without exhaustion of an ERS service type, the ERS Resources would not be eligible to have a reduced availability threshold apply to their performance requirements for the shortened ERS Contract Period; however, reduced availability is applied to Resources with an exhaustion or because of a Must-Run Alternative (MRA); 5) Removing the requirement to reduce the time-weighting factor for intervals by 25% after eight hours, as it is not necessary since NPRR451, Implementation of New P.U.C. SUBST. Rule 25.507, Electric Reliability Council of Texas (ERCOT) Emergency Response Service (ERS), limited deployment obligation time for ERS Resources to a maximum of 12 hours and simplified QSE-level event performance calculations; 6) Removing unnecessary language from the ERS Resource-level event performance criteria that is only relevant for QSE portfolio-level event performance criteria, and adding language that clarifies what is considered a successful ERS Resource-level event performance to satisfy the annual ERS Resource testing requirements; 7) Removing language related to testing ERS Generators for failing self-tests, which should have been removed when self-tests were eliminated with NPRR1060, Improvements to ERS Testing Requirements and Other ERS Items; and 8) Modifying QSE-level event performance calculations to include capacity weighting, which will make the calculations consistent with QSE-level Standard Contract Term event performance calculations. For example: QSE event has 30 intervals, 29 intervals of 200MW and one interval of 1MW-- QSE performance for the one interval should not be weighted equally with the first 29 intervals; The majority of this NPRR is intended for implementation December 1, 2021, so that the changes will be effective starting with the December-March 2022 ERS Standard Contract Term. Changes to Section 3.14.3.3 are intended to become effective upon system implementation.
Credit Work Group Review	ERCOT Credit Staff and the Credit Work Group (Credit WG) have reviewed NPRR1090 and do not believe that it requires changes to credit monitoring activity or the calculation of liability.
PRS Decision	On 8/12/21, PRS voted via roll call to table NPRR1090 and refer the issue to WMS. There was one opposing vote from the Independent

	Power Marketer (IPM) (Morgan Stanley) Market Segment. All Market Segments participated in the vote. On 9/16/21, PRS voted via roll call to grant NPRR1090 Urgent status; to recommended approval of NPRR1090 as amended by the 9/7/21 WMS comments as revised by PRS; and to forward to TAC NPRR1090 and the Impact Analysis with a recommended priority of 2021 and rank of 3360. There was one opposing vote from the IPM (Morgan Stanley) Market Segment. The Independent Retail Electric Provider (IREP) Market Segment did not participate in the vote.
Summary of PRS Discussion	On 8/12/21, ERCOT Staff provided an overview of NPRR1090. Participants requested additional review by WMS. On 9/16/21, participants reviewed the request for Urgent status outlined in the 8/25/21 ERCOT comments, and additional changes proposed in the 9/7/21 WMS comments.
TAC Decision	On 9/29/21, TAC voted via roll call to recommend approval of NPRR1090 as recommended by PRS in the 9/16/21 PRS Report; and the Revised Impact Analysis. There was one opposing vote from the IPM (Morgan Stanley) Market Segment. All Market Segments participated in the vote.
Summary of TAC Discussion	On 9/29/21, TAC reviewed the ERCOT Opinion and ERCOT Market Impact Statement for NPRR1090.
ERCOT Opinion	ERCOT supports approval of NPRR1090.
ERCOT Market Impact Statement	ERCOT Staff has reviewed NPRR1090 and believes the market impact for NPRR1090 provides transparency, efficiency, and reliability improvements based on lessons learned from Winter Storm Uri.
ERCOT Board Decision	On 10/22/21, the ERCOT Board recommended approval of NPRR1090 as recommended by TAC in the 9/29/21 TAC Report.

Sponsor	
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Board Report

Market Segment	Not applicable

Market Rules Staff Contact	
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Comments Received	
Comment Author	**Comment Summary**
ERCOT 082521	Requested Urgent status for NPRR1090
WMS 090721	Endorsed Urgent status for NPRR1090; and reverted changes proposing use of an XML message instead of a Verbal Dispatch Instruction (VDI) back to original language

Market Rules Notes

Please note that the baseline language in the following section(s) has been updated to reflect the incorporation of the following NPRR(s) into the Protocols:

- NPRR995, RTF-6 Create Definition and Terms for Settlement Only Energy Storage
  - Section 6.5.9.4.2 (incorporated 9/1/21)

Please note that the following NPRR(s) also propose revisions to the following section(s):

- NPRR1094, Allow Under Frequency Relay Load to be Manually Shed During EEA3
  - Section 6.5.9.4.2
- NPRR1082, Emergency Response Service (ERS) Test Exception for Co-Located ERS Loads
  - Section 8.1.3.2
- NPRR1087, Prohibit Participation of Critical Loads as Load Resources or ERS Resources
  - Section 3.14.3.1

Proposed Protocol Language Revision

2.1 DEFINITIONS

Sustained Response Period

The period of time beginning ten minutes after ERCOT's issuance of a VDI deploying ERS-10 or 30 minutes after ERCOT's issuance of a VDI deploying ERS-30 and ending with ERCOT's issuance of a VDI releasing ERS Resources from the deployment.

3.14.3.1 Emergency Response Service Procurement

(1) ERCOT shall issue Requests for Proposals to procure ERS for each Standard Contract Term. The ERS Standard Contract Terms are as follows:

(a) February through May;

(b) June through September; and

(c) October through January.

[NPRR984: Replace paragraph (1) above with the following on October 1, 2021 and upon system implementation:]

(1) ERCOT shall issue Requests for Proposals to procure ERS for each Standard Contract Term. The ERS Standard Contract Terms are as follows:

(a) December through March;

(b) April and May;

(c) June through September; and

(d) October and November.

(2) ERCOT shall procure ERS from one or more of the four following ERS service types:

(a) Weather-Sensitive ERS-10

(b) Non-Weather-Sensitive ERS-10

(c) Weather-Sensitive ERS-30

(d) Non-Weather-Sensitive ERS-30

(3) ERS offers shall be submitted only by QSEs capable of receiving both Extensible Markup Language (XML) messaging and Verbal Dispatch Instructions (VDIs) on behalf of represented ERS Resources.

(4) Each site in an ERS Generator must have an interconnection agreement with its Transmission and/or Distribution Service Provider (TDSP) prior to submitting an ERS offer and must have exported energy to the ERCOT System prior to the offer due date. An ERS Resource that cannot inject energy to the ERCOT System can only be offered as an ERS Load.

(5) In order to qualify as weather-sensitive, an ERS Load must meet one of the following criteria:

(a) The ERS Load must consist exclusively of residential sites; or

(b) The ERS Load must consist exclusively of non-residential sites and must qualify as weather-sensitive based on the accuracy of the regression baseline evaluation methodology as described in Section 8.1.3.1.1, Baselines for Emergency Response Service Loads, as an indicator of actual interval Load.

(i) ERCOT shall establish minimum accuracy standards for qualification as an ERS Load under the regression baseline evaluation methodology.

(ii) An ERS Load must have at least nine months of interval meter data to qualify as weather-sensitive under the regression baseline evaluation methodology.

(iii) ERCOT's determination that an ERS Load qualifies as a weather-sensitive ERS Load is independent of ERCOT's determination of which baseline methodologies may be appropriate for purposes of evaluating the ERS Load's performance.

(c) If a site with Distributed Renewable Generation (DRG) has been designated by the QSE to be evaluated by using its native load, the default baseline analysis shall be performed using the calculated native load.

(6) QSEs representing ERS Resources may submit offers for one or more ERS Time Periods within an ERS Standard Contract Term. ERS Time Periods shall be defined by ERCOT in the Request for Proposal for that ERS Standard Contract Term. An ERS offer is specific to an ERS Time Period. In submitting an offer, both the QSE and the ERS Resource are committing to provide ERS for that ERS Time Period if selected.

(7) A QSE may submit separate offers for an ERS Resource to provide any or all of the four ERS service types during the same or different ERS Time Periods in the same ERS Standard Contract Term, but ERCOT shall only award offers for one service type for each ERS Resource.

(8) The minimum capacity offer for an ERS Load on the weather sensitive baseline is one half (0.5) MW; all other ERS capacity offers will have a minimum amount that may be offered of one-tenth (0.1) MW. ERS Resources may be aggregated to reach this requirement.

(9) Offers from ERS Generators must include self-serve capacity and injection capacity amounts greater than or equal to zero for each ERS Time Period offered.