

Board Report

	<p><input type="checkbox"/> <u>Strategic Plan</u> Objective 2 - Enhance the ERCOT region's economic competitiveness with respect to trends in wholesale power rates and retail electricity prices to consumers</p> <p><input type="checkbox"/> <u>Strategic Plan</u> Objective 3 - Advance ERCOT, Inc. as an independent leading industry expert and an employer of choice by fostering innovation, investing in our people, and emphasizing the importance of our mission</p> <p><input checked="" type="checkbox"/> General system and/or process improvement(s)</p> <p><input type="checkbox"/> Regulatory requirements</p> <p><input type="checkbox"/> ERCOT Board/PUCT Directive</p> <p><i>(please select ONLY ONE – if more than one apply, please select the ONE that is most relevant)</i></p>
<p>Justification of Reason for Revision and Market Impacts</p>	<p>This NPRR provides more detail and improves the fuel-restocking process related to FFSS, by clarifying that a QSE may accelerate restocking through use of existing fuel inventory and providing flexibility for QSEs to recover fuel costs based on new purchases or the FOP, but only after receiving approval from ERCOT to restock.</p> <p>With these changes, FFSSR should be able to restore the service more expeditiously and provide ERCOT with the restored capacity if needed.</p>
<p>PRS Decision</p>	<p>On 9/12/24, PRS voted unanimously to table NPRR1251 and refer the issue to WMS. All Market Segments participated in the vote.</p> <p>On 12/12/24, PRS voted to recommend approval of NPRR1251 as amended by the 12/5/24 WMS comments. There was one abstention from the Consumer (Occidental) Market Segment. All Market Segments participated in the vote.</p> <p>On 1/15/25, PRS voted to endorse and forward to TAC the 12/12/24 PRS Report and 8/28/24 Impact Analysis for NPRR1251. There was one abstention from the Consumer (Occidental) Market Segment. All Market Segments participated in the vote.</p>
<p>Summary of PRS Discussion</p>	<p>On 9/12/24, ERCOT Staff provided an overview of NPRR1251.</p> <p>On 12/12/24, participants reviewed the 12/5/24 WMS comments and discussed the options available to FFSSRs for restocking fuel with existing fuel reserves versus new fuel purchases.</p> <p>On 1/15/25, there was no discussion.</p>

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TAC Decision	On 1/22/25, TAC voted unanimously to recommend approval of NPRR1251 as recommended by PRS in the 1/15/25 PRS Report. All Market Segments participated in the vote.
Summary of TAC Discussion	On 1/22/25, there was no additional discussion beyond TAC review of the items below.
TAC Review/Justification of Recommendation	<input checked="" type="checkbox"/> Revision Request ties to Reason for Revision as explained in Justification <input checked="" type="checkbox"/> Impact Analysis reviewed and impacts are justified as explained in Justification <input checked="" type="checkbox"/> Opinions were reviewed and discussed <input checked="" type="checkbox"/> Comments were reviewed and discussed (if applicable) <input type="checkbox"/> Other: (explain)
ERCOT Board Decision	On 2/4/25, the ERCOT Board voted unanimously to recommend approval of NPRR1251 as recommended by TAC in the 1/22/25 TAC Report.

Opinions	
Credit Review	ERCOT Credit Staff and the Credit Finance Sub Group (CFSG) have reviewed NPRR1251 and do not believe that it requires changes to credit monitoring activity or the calculation of liability.
Independent Market Monitor Opinion	IMM has no opinion on NPRR1251.
ERCOT Opinion	ERCOT supports approval of NPRR1251.
ERCOT Market Impact Statement	ERCOT Staff has reviewed NPRR1251 and believes the market impact for NPRR1251 improves the restocking process and enables a more expeditious restoration of available capacity in instances where FFSSRs are able to restock reserved fuel from existing inventories.

Sponsor	
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Company	ERCOT

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Phone Number	512-248-3954
Cell Number	
Market Segment	Not applicable

Market Rules Staff Contact	
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Phone Number	512-248-6464

Comments Received	
Comment Author	Comment Summary
WMS 100824	Requested PRS continue to table NPRR1251 for further review by the Resource Cost Working Group (RCWG)
WMS 120524	Endorsed NPRR1251 with a minor edit to paragraph (5) of Section 3.14.5

Market Rules Notes

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

- NPRR1231, FFSS Program Communication Improvements and Additional Clarifications (unboxed 11/15/24)
 - Section 3.14.5

Please note administrative changes have been made below and authored as “ERCOT Market Rules”.

Proposed Protocol Language Revision
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3.14.5 *Firm Fuel Supply Service*

- (1) Each Generation Resource providing or offering to provide Firm Fuel Supply Service (FFSS), including the primary and any alternate Generation Resources identified in the FFSS Offer Submission Form, must meet technical requirements specified in Section 8.1.1, QSE Ancillary Service Performance Standards, and Section 8.1.1.1, Ancillary Service Qualification and Testing.
- (2) ERCOT shall issue an RFP by August 1 of each year soliciting offers from QSEs for Generation Resources to provide FFSS. The RFP shall require offers to be submitted on or before September 1 of each year.

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- (3) QSEs may submit offers individually for one or more Generation Resources to provide FFSS using the FFSS Offer Submission Form posted on the ERCOT website. A QSE may not submit an offer for a given Generation Resource unless it is the QSE designated by the Resource Entity associated with that Generation Resource. ERCOT must evaluate offers using criteria identified in an appendix to the RFP. ERCOT will issue FFSS awards by September 30 and will post the awards to the MIS Certified Area for each QSE that is awarded an FFSS obligation. The posting will include information such as, but not limited to, the identity of the primary Generation Resource and any alternate Generation Resource(s), the FFSS clearing price, the amount of reserved fuel associated with the FFSS award, the MW amount awarded, and the Generation Resource's initial minimum LSL when providing FFSS. The RFP awards shall cover a period beginning November 15 of the year in which the RFP is issued and ending on March 15 of the year after the year in which the RFP is issued. A QSE may submit an offer for one or more Generation Resources to provide FFSS beginning in the same year the RFP is issued or as otherwise specified in the RFP. An FFSS Resource (FFSSR) shall be considered an FFSSR and is required to provide FFSS from November 15 through March 15 for each year of the awarded FFSS obligation period. ERCOT shall ensure FFSSRs are procured and deployed as necessary to maintain ERCOT System reliability during, or in preparation for, a natural gas curtailment or other fuel supply disruption.
- (a) On the FFSS Offer Submission Form, the QSE shall disclose information including, but not limited to, the Generation Resource and any alternate Generation Resource(s), the amount of reserved fuel offered, the MW available from the capacity offered, an estimate of the time to restock fuel reserves, and each limitation of the offered Generation Resource that could affect the Generation Resource's ability to provide FFSS.
- (b) If the QSE offers a Generation Resource as meeting the qualification requirements in paragraph (1)(c) of Section 8.1.1.2.1.6, Firm Fuel Supply Service Resource Qualification, Testing, Decertification, and Recertification, the QSE must submit as part of its offer a certification for the offered Generation Resource. The certification must include:
- (i) Certification that the Generation Entity for the Generation Resource (or an Affiliate) has a Firm Transportation Agreement, firm natural gas supply, and contracted or owned storage capacity meeting the qualification requirements in paragraph (1)(c) of Section 8.1.1.2.1.6;
- (ii) The following information regarding the Firm Transportation Agreement:
- (A) FFSS Qualifying Pipeline name;
- (B) Term;
- (C) Primary points of receipt and delivery;
- (D) Maximum daily contract quantity (in MMBtu);

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- (E) Shipper of record; and
 - (F) Whether the Firm Transportation Agreement provides for ratable receipts and deliveries; and
 - (iii) The following information regarding the storage arrangements:
 - (A) Storage facility name;
 - (B) Term of the Firm Gas Storage Agreement (if applicable);
 - (C) Maximum storage quantity owned or contracted under the Firm Gas Storage Agreement (in MMBtu); and
 - (D) Maximum daily withdrawal quantity (in MMBtu).
 - (c) For a Generation Resource to be eligible to receive an FFSS award, the primary Generation Resource and any alternate Generation Resource(s) identified in the FFSS Offer Submission Form shall complete all applicable testing requirements as specified in Section 8.1.1.2.1.6. A QSE representing an FFSSR is allowed to provide the FFSS with an alternate Resource previously approved by ERCOT to replace the FFSSR.
 - (d) An offer to provide FFSS is an offer to supply an awarded amount of capacity, maintain a sufficient amount of reserved fuel to meet that award for the duration requirement specified in the RFP, and to designate a specific number of emissions hours that will be reserved for the awarded FFSSR in meeting its obligation to perform in the event that FFSS is deployed. Reserved fuel, emissions hours, and other attributes, in excess of what is needed to meet the FFSS obligation can be used at the discretion of the QSE as long as sufficient fuel reserves and emissions hours are maintained for the purposes of ERCOT deployment of FFSS.
 - (e) Within ten Business Days of issuing FFSS awards, ERCOT will post on the ERCOT website the identity of all Generation Resources that were offered as primary Generation Resources or alternate Generation Resources to provide FFSS for the most recent procurement period, including prices and quantities offered.
- (4) The QSE for an FFSSR shall ensure that the Resource is prepared and able to come On-Line or remain On-Line in order to maintain Resource availability in the event of a natural gas curtailment or other fuel supply disruption.
- (a) When ERCOT issues a Watch for winter weather, ERCOT will notify all Market Participants, including all QSEs representing FFSSRs, to begin preparation for potential FFSS deployment. Such preparation may include, but is not limited to, circulation of alternate fuel to its facilities, if applicable; heat fuel oil to appropriate temperatures, if applicable; call out additional personnel as necessary, and be ready to receive a Dispatch Instruction to provide FFSS. An FFSSR may

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begin consuming a minimum amount of alternate fuel to validate it is ready for an FFSS deployment.

- (b) In anticipation of or in the event of a natural gas curtailment or other fuel supply disruption to an FFSSR, the QSE shall notify ERCOT as soon as practicable and may request approval to deploy FFSS to generate electricity. ERCOT shall evaluate system conditions and may approve the QSE's request. The QSE shall not deploy the FFSS unless approved by ERCOT. Upon approval to deploy FFSS, ERCOT shall issue an FFSS Verbal Dispatch Instruction (VDI) to the QSE. ERCOT may issue separate VDIs for each Operating Day for each FFSSR that is deployed for FFSS.
- (c) In conjunction with a QSE notification under paragraph (b) above, the QSE shall also report to ERCOT any environmental limitations that would impair the ability of the FFSSR to provide FFSS for the required duration of the FFSS award.
- (d) ERCOT may issue an FFSS VDI without a request from the QSE, however ERCOT shall not issue an FFSS VDI without evidence of an impending or actual fuel supply disruption affecting the FFSSR.
- (e) If the FFSSR is generating at a level above the FFSS MW awarded amount and that level of output cannot be sustained for the required duration of the FFSS award, ERCOT may use a manual High Dispatch Limit (HDL) override to ensure the FFSSR can continue to generate at the FFSS MW award level for the entire FFSS duration requirement specified in the RFP.
- (f) The FFSSR shall continuously deploy FFSS to generate electricity until the earlier of (i) the exhaustion of the fuel reserved to generate at the FFSS MW award level for the duration requirement specified in the RFP, including any fuel that was restocked following approval or instruction from ERCOT, (ii) the fuel supply disruption no longer exists, or (iii) ERCOT determines the FFSS deployment is no longer needed. Upon satisfying one of these qualifications, ERCOT shall terminate the VDI. In the event of (i), the FFSSR shall not be obligated to continue being available for FFSS deployment for the remainder of the Watch. In the event of (ii) or (iii), the FFSSR shall continue being available for FFSS deployment for the remainder of the Watch.
- (g) The QSE for the FFSSR is responsible for communicating with the ERCOT control room the anticipated exhaustion of the reserved fuel at least six hours before that anticipated exhaustion and upon the exhaustion of that fuel.
- (h) A QSE shall notify the ERCOT control room of the anticipated exhaustion of emissions credits or permit allowances at least six hours before the exhaustion of those credits or allowances. Upon receiving such notification, ERCOT shall modify the VDI so the FFSS deployment is terminated upon exhaustion of those credits or allowances.

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- (i) Upon deployment or recall of FFSS, ERCOT shall notify all Market Participants that such deployment or recall has been made, including the MW capacity of service deployed or recalled.
- | (5) Following ~~the~~each deployment of FFSS, the QSE for an FFSSR may request approval from ERCOT via email to FFSS@ercot.com, or ERCOT may instruct the QSE to restock their fuel reserve to restore their ability to generate at the FFSS MW award level for the duration requirement specified in the RFP as follows:
- (a) The QSE requests preliminary approval from ERCOT control room, or ERCOT provides preliminary instruction, to restock and provide ERCOT an initial estimated timeline to complete the refueling.
 - (b) After receiving preliminary approval or instruction from ERCOT, the QSE shall:
 - (i) Immediately provide a final estimate for completing the restocking of fuel; or
 - (ii) Within 24 hours, notify the ERCOT control room with an updated estimated timeline to complete the restocking of the fuel.
 - (c) Based on the most recent expected time needed to restock the fuel, the ERCOT control room may or may not provide final approval for restocking of the fuel.
 - (d) If ERCOT makes final approval to restock the fuel, the QSE representing the FFSSR shall inform the ERCOT control room immediately when restocking is complete.
- | (6) Following final approval from ERCOT, a QSE must restock their fuel reserve, using existing fuel inventories or new fuel purchases, to restore their ability to generate at the FFSS MW award level for the specified duration requirement. In the event ERCOT does not receive the request to restock from a QSE representing an FFSSR, but the QSE no longer has sufficient reserved fuel to generate at the FFSS MW award level for the specified duration requirement, the QSE shall communicate to the ERCOT control room this reduced capability and ERCOT may instruct the QSE to restock the fuel reserve as described in paragraph (5) above.
- (7) For a Resource to be considered as an alternate for providing FFSS, the following requirements must be met. The alternate Resource must:
- (a) Be able to provide net real power sufficient to generate at the same FFSS MW award level as the primary Resource for the duration requirement specified in the RFP;
 - (b) Be a single Generation Resource, as registered with ERCOT; and
 - (c) Use the same source of fuel reserve for providing FFSS as the primary Resource.

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- (8) An FFSS Offer Submission Form may have up to three alternate Generation Resources per primary Resource offering to provide FFSS.
- (9) For FFSSRs with approved alternate Generation Resources if the FFSSR becomes unavailable, the QSE must:
 - (a) As soon as practicable, notify ERCOT via email to FFSS@ercot.com and inform ERCOT that the FFSSR will be replaced by one of the alternate Generation Resources, specify which alternate Generation Resource (if multiple alternate Generation Resources have been designated), and provide an estimate of how long the replacement will be in effect;
 - (b) Update the Availability Plans for these Generation Resources to reflect current operating conditions within 60 minutes after identifying the change in availability of the FFSSR; and
 - (c) Update the COPs for these Generation Resources within 60 minutes after identifying the change in availability of the FFSSR.
- (10) For FFSSRs that were replaced by one of their approved alternate Generation Resources, when the primary Resource is once again the FFSSR, the QSE must notify ERCOT of the change via email to the email address provided in paragraph (9)(a) above as soon as practicable.
- (11) An FFSSR providing BSS must have sufficient fuel reserved to generate at the FFSS MW award level for the duration requirement specified in the RFP in addition to any fuel required for the Generation Resource to meet the contracted BSS obligation. Any remaining fuel reserve in addition to that required for meeting FFSS and BSS obligations can be used at the QSE's discretion.
- (12) If ERCOT issues an FFSS VDI to an FFSSR for the same Operating Hour where a RUC instruction was issued, then for Settlement purposes ERCOT will consider the RUC instruction as cancelled.
- (13) If FFSS is deployed, then ERCOT will provide a report to the TAC or its designated subcommittee within 45 days of the end of the FFSS obligation period. The report must include the Resources deployed and the reason for any deployments.
- (14) Any QSE that submits an offer or receives an award for a SWGR to provide FFSS, and the Resource Entity that owns or controls that SWGR, shall:
 - (a) Not nominate the SWGR to satisfy supply adequacy or capacity planning requirements in any Control Area other than the ERCOT Region during the period of the FFSS obligation; and
 - (b) Take any further action requested by ERCOT to ensure that ERCOT will be classified as the "Primary Party" for the SWGR under any agreement between ERCOT and another CAO during the period of the FFSS obligation.

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- (15) On an annual basis after the FFSS season, ERCOT will provide a report separately for the total amounts from Section 6.6.14.1, Firm Fuel Supply Service Fuel Replacement Costs Recovery, and Section 6.6.14.2, Firm Fuel Supply Service Hourly Standby Fee Payment and Fuel Replacement Cost Recovery, to the TAC or its designated subcommittee.

6.6.14.1 Firm Fuel Supply Service Fuel Replacement Costs Recovery

- (1) If ERCOT approves a Firm Fuel Supply Service Resource (FFSSR) to switch to consume the reserved fuel and directs or approves a restocking pursuant to paragraph (5) of Section 3.14.5, Firm Fuel Supply Service, ERCOT shall pay the QSE representing the FFSSR for the replacement of burned fuel, if the QSE has:
- (a) Complied with the Firm Fuel Supply Service (FFSS) instruction to switch to the reserved fuel;
 - (b) Submitted a Settlement and billing dispute consistent with the dispute process described in Section 9.14, Settlement and Billing Dispute Process;
 - (c) Submitted the following within 90 days of the issuance of a RTM Initial Statement for the Operating Day on which the FFSS instruction was issued:
 - (i) An attestation signed by an officer or executive with authority to bind the QSE stating that the information contained in the dispute is accurate;
 - (ii) For each deployment of FFSS, the quantity of total fuel consumed for the hours in each instance when FFSS was deployed;
 - (iii) For thermal units, the input-output equation or other documentation that allows for verification of fuel consumption for the hours when FFSS was deployed;
 - (iv) The heat content of the fuel, in terms of MMBtu/gal or similar units of measurement;
 - (v) The dollar amount and quantity of fuel purchased to replace the consumed fuel;
 - (vi) Sufficient documentation to support the QSE's determination of the amount and cost of replaced fuel; and
 - (vii) Any other technical documentation within the possession of the QSE or Resource Entity which ERCOT finds reasonably necessary to verify paragraphs (i) through (vi) above. Any additional request from ERCOT for documentation or clarification of previously submitted documentation must be honored within 15 Business Days.

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- (2) In addition to the requirements under paragraph (1)(c) above, for a Generation Resource that was awarded FFSS using reserved fuel based on a Firm Gas Storage Agreement and is requesting compensation for the cost of the replaced fuel, the QSE or Resource Entity representing the FFSSR must show proof that it purchased and nominated fuel in sufficient quantities (in MMBtu) that was consumed during the FFSS deployment and that its actual receipts and deliveries of such replacement fuel conformed with its nominated quantities.
- (3) The Firm Fuel Supply Service Fuel Replacement Cost shall only represent the replacement fuel costs not recovered during the FFSS deployment period through Day-Ahead energy sales and Real-Time energy imbalance settlement revenues related to the Resource with the FFSS award. In addition, the Firm Fuel Supply Service Fuel Replacement Cost shall only include commodity and variable transportation costs directly attributable to the replenishment of fuel for the FFSSR.
- (4) If, after ERCOT approval, the fuel that was burned during FFSS deployment is replaced using existing fuel inventories, the Firm Fuel Supply Service Fuel Replacement Cost may be based on:
 - (a) New fuel purchases made within 30 days after ERCOT approves the restock of the burned fuel as described in paragraph (65) of Section 3.14.5; or
 - (b) The Fuel Oil Index Price (FOP) for the Operating Day the QSE received approval to restock fuel, which includes \$0.05/gallon to cover the cost of transportation.
- (54) ERCOT shall allocate any approved fuel replacement costs to the hours of the corresponding FFSS deployment period when the fuel was consumed following ERCOT's approval to switch to utilize the awarded FFSS.

ERCOT Impact Analysis Report

NPRR Number	<u>1251</u>	NPRR Title	Updated FFSS Fuel Replacement Costs Recovery Process
Impact Analysis Date	August 28, 2024		
Estimated Cost/Budgetary Impact	None.		
Estimated Time Requirements	No project required. This Nodal Protocol Revision Request (NPRR) can take effect following Public Utility Commission of Texas (PUCT) approval.		
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

None.

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NPRR Number	<u>1252</u>	NPRR Title	Pre-notice for Sharing of Some Information, Addition of Research and Innovation Partner, Clarifying Notice Requirements
Date Posted	February 4, 2025		
Action	Recommended Approval		
Timeline	Normal		
Estimated Impacts	Cost/Budgetary: None Project Duration: No project required		
Proposed Effective Date	First of the month following Public Utility Commission of Texas (PUCT) approval		
Priority and Rank Assigned	Not applicable		
Nodal Protocol Sections Requiring Revision	1.3.5, Notice Before Permitted Disclosure 1.3.6, Exceptions 1.7, Rules of Construction 2.1, Definitions 16.1, Registration and Execution of Agreements		
Related Documents Requiring Revision/Related Revision Requests	None		
Revision Description	<p>This Nodal Protocol Revision Request (NPRR) permits ERCOT to provide ERCOT Critical Energy Infrastructure Information (ECEII) or Protected Information materials to a vendor or prospective vendor of ERCOT without a pre-notice of the provision of ECEII materials to a vendor or prospective vendor of a Market Participant if the vendor or prospective vendor has executed an appropriate confidentiality agreement. Additionally, this NPRR adds a definition of ERCOT Research and Innovation (R&I) and ERCOT R&I Partner to clarify notice requirements prior to those entities receiving Protected Information from ERCOT. This NPRR also adds Market Notices as an appropriate method of providing notice under the Protocols, does away with the antiquated requirement that notice sent by email or fax must be followed up with mailed notice or hand delivery, and clarifies who is required to receive notice and a Market Participant's responsibility to subscribe for applicable Market Notice distribution lists.</p>		

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Reason for Revision	<div style="margin-bottom: 5px;"><input type="checkbox"/> <u>Strategic Plan</u> Objective 1 – Be an industry leader for grid reliability and resilience</div> <div style="margin-bottom: 5px;"><input type="checkbox"/> <u>Strategic Plan</u> Objective 2 – Enhance the ERCOT region's economic competitiveness with respect to trends in wholesale power rates and retail electricity prices to consumers</div> <div style="margin-bottom: 5px;"><input type="checkbox"/> <u>Strategic Plan</u> Objective 3 – Advance ERCOT, Inc. as an independent leading industry expert and an employer of choice by fostering innovation, investing in our people, and emphasizing the importance of our mission</div> <div style="margin-bottom: 5px;"><input checked="" type="checkbox"/> General system and/or process improvement(s)</div> <div style="margin-bottom: 5px;"><input type="checkbox"/> Regulatory requirements</div> <div style="margin-bottom: 5px;"><input type="checkbox"/> ERCOT Board/PUCT Directive</div> <p style="font-size: small; margin-top: 10px;"><i>(please select ONLY ONE – if more than one apply, please select the ONE that is most relevant)</i></p>
Justification of Reason for Revision and Market Impacts	<p>ERCOT periodically contracts with third-party vendors to perform work that may include disclosure of Protected Information or ECEI. ERCOT's standard contracting processes require that all such vendors execute nondisclosure agreements with terms that satisfy the requirements in Section 1.3, Confidentiality. Providing notice to Market Participants each time before ERCOT discloses such information to a vendor or prospective vendor that has executed an NDA creates unnecessary delay to ERCOT's ability to carry out essential business tasks. Similarly, Market Participants periodically contract with third-party vendors to perform work that may include disclosure of ECEI, and similarly, providing notice to all Market Participants each time before a Market Participant discloses such information to a vendor or prospective vendor that has executed an NDA creates unnecessary business costs.</p> <p>Further, ERCOT periodically works with entities, such as universities or national laboratories, on studies that help ERCOT plan for a reliable grid and efficient market. Clarifying the notice requirements that apply prior to ERCOT sharing Protected Information or ECEI to these Research and Innovation Partners is necessary so that Market Participants can have transparency as to what information is being shared by ERCOT.</p> <p>Additionally, ERCOT has an often-used, efficient tool in its Market Notices system, and proposes changes to allow notice through that Market Notice system, which can quickly and easily provide notice to large groups of Market Participants. Finally, revisions regarding who</p>

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	is required to receive notice is needed for clarity on the side of both ERCOT and Market Participants.
PRS Decision	<p>On 9/12/24, PRS voted unanimously to table NPRR1252. All Market Segments participated in the vote.</p> <p>On 11/14/24, PRS voted unanimously to recommend approval of NPRR1252 as amended by the 11/8/24 ERCOT comments. All Market Segments participated in the vote.</p> <p>On 12/12/24, PRS voted unanimously to endorse and forward to TAC the 11/14/24 PRS Report and 8/28/24 Impact Analysis for NPRR1252. All Market Segments participated in the vote.</p>
Summary of PRS Discussion	<p>On 9/12/24, ERCOT Staff presented NPRR1252. Some participants expressed concern for disclosures, and requested additional time to review the language and to consider if existing notice provisions are overly burdensome.</p> <p>On 11/14/24, participants discussed the 11/8/24 ERCOT comments.</p> <p>On 12/12/24, participants noted the 8/28/24 Impact Analysis.</p>
TAC Decision	On 1/22/25, TAC voted unanimously to recommend approval of NPRR1252 as recommended by PRS in the 12/12/24 PRS Report. All Market Segments participated in the vote.
Summary of TAC Discussion	On 1/22/25, there was no additional discussion beyond TAC review of the items below.
TAC Review/Justification of Recommendation	<p><input checked="" type="checkbox"/> Revision Request ties to Reason for Revision as explained in Justification</p> <p><input checked="" type="checkbox"/> Impact Analysis reviewed and impacts are justified as explained in Justification</p> <p><input checked="" type="checkbox"/> Opinions were reviewed and discussed – with the exception of the IMM Opinion which was not available for TAC review.</p> <p><input checked="" type="checkbox"/> Comments were reviewed and discussed (if applicable)</p> <p><input type="checkbox"/> Other: (explain)</p>
ERCOT Board Decision	On 2/4/25, the ERCOT Board voted unanimously to recommend approval of NPRR1252 as recommended by TAC in the 1/22/25 TAC Report.

Opinions

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Credit Review	ERCOT Credit Staff and the Credit Finance Sub Group (CFSG) have reviewed NPRR1252 and do not believe that it requires changes to credit monitoring activity or the calculation of liability.
Independent Market Monitor Opinion	IMM has no opinion on NPRR1252.
ERCOT Opinion	ERCOT supports approval of NPRR1252.
ERCOT Market Impact Statement	ERCOT Staff has reviewed NPRR1252 and believes that it improves administrative efficiencies and reduces costs for both ERCOT and Market Participants by permitting the disclosure of Protected Information or ECell to vendors with appropriate confidentiality agreements without prior notice, and also creates definitions for ERCOT Research and Innovation (R&I) and ERCOT R&I Partners and outlines the notice requirements associated with those R&I Partners.

Sponsor	
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Company	ERCOT
Phone Number	512-225-7184 / 512-275-7447 / 512-248-6641
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Market Segment	Not applicable

Market Rules Staff Contact	
Name	Brittney Albracht
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Comments Received	
Comment Author	Comment Summary
ERCOT 110824	Clarified ERCOT's intent regarding Market Participants obligation to subscribe to any public distribution lists for Market Notices that are relevant to each individual Market Participant's operations or obligations; that notice by Market Notice be considered received

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when the Market Notice is sent; and further clarifications of what constitutes prior notice of disclosure to R&I Partners

Market Rules Notes

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

- NPRR1243, Revision to Requirements for Notice and Release of Protected Information or ECEII to Certain Governmental Authorities
 - Section 1.3.5
 - Section 1.3.6

Proposed Protocol Language Revision

1.3.5 *Notice Before Permitted Disclosure*

- (1) Before making any disclosure under Section 1.3.6, Exceptions, the Receiving Party shall promptly notify the Disclosing Party in writing and, with the exception of information disclosed pursuant to paragraph (3) of Section 1.3.6, shall assert confidentiality and take reasonable steps to cooperate with the Disclosing Party in seeking to protect the Protected Information or ECEII from disclosure by confidentiality agreement, protective order, aggregation of information, or other reasonable measures. Notwithstanding the foregoing, ERCOT is not required to provide notice to the Disclosing Party of disclosures made under items (1)(b), ~~(1)(h), (1)(k), (1)(n), or (1)(p)~~ of Section 1.3.6. Further, notwithstanding the foregoing, a Receiving Party is not required to provide notice to the Disclosing Party of disclosures made under item (1)(i) of Section 1.3.6.
- (2) If the Disclosing Party is not also the Creating Party, upon receipt of the notice required by paragraph (1) above, the Disclosing Party shall promptly notify the Creating Party, unless, after making reasonable efforts, the Disclosing Party is unable to identify the Creating Party.
- (3) Notwithstanding any other provision in these Protocols, for disclosures under paragraphs (1)(j) and (1)(k) of Section 1.3.6, ERCOT may satisfy its notice obligations by posting and maintaining on the ERCOT website a list of such categories in lieu of individually notifying each Disclosing Party. When providing notice under this paragraph, ERCOT shall add the disclosed information to the posted list promptly after the disclosure.

Commented [BA1]: Please note NPRR1243 also proposes revisions to this section.

1.3.6 *Exceptions*

- (1) The Receiving Party or Creating Party may, without violating Section 1.3, Confidentiality, disclose Protected Information or ECEII:
 - (a) To governmental officials, Market Participants, the public, or others as required by any law, regulation, or order, or by these Protocols, but any Receiving Party or

Commented [BA2]: Please note NPRR1243 also proposes revisions to this section.

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Creating Party must make reasonable efforts to restrict public access to the disclosed Protected Information or ECEI by protective order, by aggregating information, or otherwise if reasonably possible; or

- (b) If ERCOT is the Receiving Party or Creating Party and disclosure to the PUCT, Reliability Monitor or IMM of the Protected Information or ECEI is required by ERCOT pursuant to applicable Protocol, law, regulation, or order; or
- (c) For Protected Information, if the Disclosing Party has given its prior written consent to the disclosure, which consent may be given or withheld in Disclosing Party's sole discretion; or
- (d) For Protected Information, if the Protected Information, before it is furnished to the Receiving Party, has been disclosed to the public through lawful means; or
- (e) For Protected Information, if the Protected Information, after it is furnished to the Receiving Party, is disclosed to the public other than as a result of a breach by the Receiving Party of its obligations under Section 1.3; or
- (f) If reasonably deemed by the disclosing Receiving Party to be required to be disclosed in connection with a dispute between the Receiving Party and the Disclosing Party, but the disclosing Receiving Party must make reasonable efforts to restrict public access to the disclosed Protected Information or ECEI by protective order, by aggregating information, or otherwise if reasonably possible; or
- (g) To a TSP or DSP engaged in the ERCOT Transmission Grid or Distribution System planning and operating activities, provided that the TSP or DSP has executed a confidentiality agreement with ERCOT with requirements substantially similar to those in Section 1.3. ERCOT shall post on the ERCOT website a list of all TSPs and DSPs that have confidentiality agreements in effect with ERCOT; or
- (h) For Protected Information, to a vendor or prospective vendor of goods and services to ERCOT or a TDSP, so long as such vendor or prospective vendor:
 - (i) Is not a Market Participant, except that ERCOT or the TDSP may disclose Protected Information to a vendor or prospective vendor that is registered solely as an Independent Market Information System Registered Entity (IMRE) to the extent appropriate for the vendor to carry out its responsibilities in such capacity or for the prospective vendor to engage in commercial discussions; and
 - (ii) Has executed a confidentiality agreement with requirements at least as restrictive as those in Section 1.3; or

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- (i) For ECEII, to a vendor or prospective vendor of goods and services, so long as such vendor or prospective vendor has executed a confidentiality agreement with requirements at least as restrictive as those in Section 1.3; or
- (j) For Protected Information, to an ERCOT Research and Innovation (R&I) Partner that has agreed to perform ERCOT Research and Innovation for ERCOT, so long as the ERCOT R&I Partner:
 - (i) Is not a Market Participant, except that ERCOT may disclose Protected Information to an ERCOT R&I Partner that is registered solely as an Independent Market Information System Registered Entity (IMRE) to the extent appropriate for the ERCOT R&I Partner to carry out its responsibilities in such capacity; and
 - (ii) Has executed a confidentiality agreement with requirements at least as restrictive as those in Section 1.3; or
- (k) For ECEII, to an ERCOT R&I Partner that has agreed to perform ERCOT Research and Innovation for ERCOT, so long as such ERCOT R&I Partner has executed a confidentiality agreement with requirements at least as restrictive as those in Section 1.3; or
- (l) To the North American Electric Reliability Corporation (NERC) or the NERC Regional Entity if required for compliance with any applicable NERC or NERC Regional Entity requirement, but any Receiving Party or Creating Party must make reasonable efforts to restrict public access to the disclosed Protected Information or ECEII as reasonably possible; or
- (m) To ERCOT and its consultants, the IMM, the Reliability Monitor, and members of task forces and working groups of ERCOT, if engaged in performing analysis of abnormal system conditions, disturbances, unusual events, and abnormal system performance, or engaged in tasks involving ECEII for support of the ERCOT Transmission Grid. Notwithstanding the foregoing sentence, task forces and working groups may not receive Ancillary Service Offer prices or other competitively sensitive price or cost information before expiration of its status as Protected Information, and each member of a task force or working group shall execute a confidentiality agreement with requirements substantially similar to those in Section 1.3, prior to receiving any Protected Information or ECEII. Data to be disclosed under this exception to task forces and working groups must be limited to clearly defined periods surrounding the relevant conditions, events, or performance under review and must be limited in scope to information pertinent to the condition or events under review and may include the following:
 - (i) QSE Ancillary Service awards and deployments, in aggregate and by type of Resource;
 - (ii) Resource facility availability status, including the status of switching devices, auxiliary loads, and mechanical systems that had a material

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impact on Resource facility availability or an adverse impact on the transmission system operation;

- (iii) Individual Resource information including Base Points, maximum/minimum generating capability, droop setting, real power output, and reactive output;
- (iv) Resource protective device settings and status;
- (v) Data from COPs;
- (vi) Resource Outage schedule information; and
- (vii) BSS test results and ERCOT's Black Start plan, including individual Black Start Resource start-up procedures, cranking paths, and individual TSP Black Start plans;

(n) To the CFTC if requested from ERCOT by the CFTC as part of an investigation or regulatory inquiry authorized pursuant to the Commodity Exchange Act and the CFTC's regulations or if required to be submitted to the CFTC pursuant to any other law, provided that ERCOT, as the Receiving Party or Creating Party, must timely submit a written request for confidential treatment in accordance with the CFTC's regulations or other applicable law;

(om) To a Governmental Cybersecurity Oversight Agency regarding a Cybersecurity Incident, if ERCOT is the Receiving Party, and disclosure of Protected Information is made to a Governmental Cybersecurity Oversight Agency or delegated entity for the purpose of ensuring the safety and/or security of the ERCOT System or ERCOT's ability to perform the functions of an independent organization under PURA; or

(pn) Incidentally as part of a tour of the ERCOT control room provided to persons determined by ERCOT to be eligible to participate in the tour. Prior to accessing the ERCOT control room, such persons must sign a nondisclosure agreement required by ERCOT and comply with the screening and other requirements provided in a policy adopted by ERCOT security. The policy will include a prohibition against taking photographs or recordings of Protected Information or ECEM. This subsection does not apply to a person who is a director, officer, employee, agent, representative, contractor, or consultant of a Market Participant that is registered with ERCOT as one or more of the following registration types: Resource Entity, QSF, LSE, or CRR Account Holder.

- (2) Protected Information may not be disclosed to other Market Participants prior to ten days following the Operating Day under review, except as permitted in paragraph (1)(n) above.

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- (3) ERCOT may disclose, and may authorize a Receiving Party or Creating Party to disclose, ECEII to the public or to any person under the provisions of this paragraph, except for ECEII otherwise protected from disclosure pursuant to law, regulation, or order.
- (a) ERCOT may propose to disclose ECEII that is not otherwise protected from disclosure pursuant to law, regulation, or order. Any Receiving Party or Creating Party other than ERCOT may request ERCOT authorization to disclose such ECEII.
- (i) ERCOT may propose to disclose ECEII that is not otherwise protected from disclosure pursuant to law, regulation, or order if it determines that the public benefit of the proposed disclosure of ECEII outweighs the potential harm resulting from the disclosure. ERCOT shall issue a Market Notice regarding ERCOT's intent to disclose the ECEII, subject to objection as further provided in paragraph (c) below.
- (ii) A request by a Receiving Party or Creating Party other than ERCOT for authorization to disclose ECEII shall be submitted by e-mail to ERCOT's General Counsel. If the ECEII is not otherwise protected from disclosure pursuant to law, regulation, or order, and ERCOT determines that the public benefit of the proposed disclosure of ECEII outweighs the potential harm resulting from the disclosure, ERCOT shall issue a Market Notice authorizing the ECEII to be disclosed, subject to objection as further provided in paragraph (c) below. ERCOT shall make such a determination no later than five Business Days following the date it receives the request.
- (b) The Market Notice issued pursuant to paragraph (a)(i) or (ii) above shall identify the ECEII to be disclosed; the party requesting the disclosure; the public benefit justifying the proposed disclosure; the date on which the information may be disclosed, which shall be no sooner than five Business Days following the date of the Market Notice; and, if the proposed disclosure is not to the public, the persons to whom ECEII would be disclosed. The authorization shall be effective unless a Market Participant submits an objection pursuant to paragraph (c) below.
- (c) Any Market Participant may submit written objections to the proposed disclosure. Such objections shall be submitted by e-mail to ERCOT's General Counsel no later than the end of the fourth Business Day following the issuance of the Market Notice described in paragraph (b) above. Failure to object to the proposed allowance of ECEII disclosure pursuant to this paragraph shall constitute a waiver of any such objection for all purposes. ERCOT shall provide notice of the objection to the party requesting authorization to disclose ECEII no later than the end of the Business Day following receipt of the objection. The party requesting authorization to disclose ECEII shall not disclose the ECEII if it has been notified of any objection pursuant to this paragraph unless and until ERCOT issues a second Market Notice authorizing disclosure, as provided in paragraph (d) below.

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- (d) If one or more objections to disclosure is submitted pursuant to paragraph (c) above, ERCOT shall issue a second Market Notice describing each such objection and stating whether the objection affects ERCOT's determination as to the proposed disclosure of ECEII. If ERCOT determines that the ECEII should still be disclosed notwithstanding these objections, the second Market Notice shall establish the date on which the ECEII may be disclosed, which shall be no sooner than the fifth Business Day following the issuance of the second Market Notice. ERCOT's determination in the second Market Notice is a final decision that may be challenged at the PUCT without using the processes described in Section 20, Alternative Dispute Resolution Procedure and Procedure for Return of Settlement Funds. If ERCOT authorizes a non-public disclosure of ECEII, the party disclosing the ECEII shall require each recipient of ECEII to enter into a nondisclosure agreement that includes the restrictions against disclosure described in Section 1.3.2, ERCOT Critical Energy Infrastructure Information, as a condition for obtaining the ECEII.
- (c) Notwithstanding anything in this Section, ERCOT may disclose ECEII to any federal, state or local government official without issuing a Market Notice if ERCOT determines that such disclosure is necessary to facilitate the government official's public duties and that the delay associated with providing the Notice otherwise required by this paragraph (3) would impair that government official's ability to take action to address a public emergency. As soon as practicable, but no later than 24 hours following the disclosure:
 - (i) ERCOT shall provide Notice to the Disclosing Party and all Market Participants materially impacted by the disclosure; and
 - (ii) ERCOT shall issue a Market Notice describing the disclosure, unless ERCOT determines that such a Notice could jeopardize public safety or welfare, in which case no Notice is required.
 - (iii) Each Disclosing Party, other than ERCOT, shall provide Notice to each Creating Party whose information has been disclosed pursuant to this paragraph (c).
- (f) Notwithstanding anything in this Section, any Receiving Party or Creating Party other than ERCOT may disclose ECEII to any federal, state or local government official without requesting prior authorization from ERCOT if the Receiving Party or Creating Party determines that such disclosure is necessary to facilitate the government official's public duties and that the delay associated with requesting prior ERCOT authorization as otherwise required by this paragraph (3) would impair that government official's ability to take action to address a public emergency.
 - (i) The Receiving Party or Creating Party shall provide Notice to ERCOT and all Market Participants materially impacted by the disclosure as soon as practicable, but no later than 24 hours following the disclosure.

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- (ii) ERCOT shall issue a Market Notice describing the disclosure as soon as practicable, but no later than 24 hours following receipt of notice from the Receiving Party or Creating Party, unless ERCOT determines that such a Notice could jeopardize public safety or welfare, in which case no Notice is required.

1.7 Rules of Construction

- (1) Capitalized terms and acronyms used in the Protocols have the meanings set out in Section 2, Definitions and Acronyms, of these Protocols or the meanings expressly set out in another Section of the Protocols. If a capitalized term or acronym is defined in both Section 2, and another Section of these Protocols, then the definition in that other Section controls the meaning of that term or acronym in that Section, but the definition in Section 2, controls in all other Sections of the Protocols; and
- (2) In these Protocols, unless the context clearly otherwise requires:
 - (a) The singular includes the plural and vice versa;
 - (b) The present tense includes the future tense, and the future tense includes the present tense;
 - (c) Words importing any gender include the other gender;
 - (d) The words “including,” “includes,” and “include” are deemed to be followed by the words “without limitation;”
 - (e) The word “shall” denotes a duty;
 - (f) The word “will” denotes a duty, unless the context denotes otherwise;
 - (g) The word “must” denotes a condition precedent or subsequent;
 - (h) The word “may” denotes a privilege or discretionary power;
 - (i) The phrase “may not” denotes a prohibition;
 - (j) Reference to a Section, Attachment, Exhibit, or Protocol means a Section, Attachment, Exhibit, or provision of these Protocols;
 - (k) References to any statutes, regulations, tariffs, or these Protocols are deemed references to such statute, regulation, tariff, or Protocol as it may be amended, replaced, or restated from time to time;
 - (l) Unless expressly stated otherwise, references to agreements and other contractual instruments include all subsequent amendments and other modifications to the instruments, but only to the extent that the amendments and other modifications are not prohibited by these Protocols;

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- (m) References to persons or Entities include their respective successors and permitted assigns and, for governmental Entities, Entities succeeding to their respective functions and capacities;
 - (n) References to "writing" include printing, typing, lithography, and other means of reproducing words in a tangible visible form;
 - (o) Any reference to a day, week, month, or year is to a calendar day, week, month, or year unless otherwise noted; and
 - (p) Any reference to time is to Central Prevailing Time; the 24-hour clock is used unless otherwise noted.
 - (q) Any reference to dollars is U.S. currency dollars unless otherwise noted.
 - (r) All Settlement calculations are in dollars (USD), unless otherwise noted.
 - (s) Any reference to energy is electrical energy, unless otherwise noted.
- (3) These provisions apply to giving notice under the Protocols:
- (a) Where these Protocols require an Entity to provide, send, or deliver notice, or to notify another Entity, such notice shall be in writing unless otherwise specified. ~~Whenever~~ Where these Protocols require an Entity to send a notice to another Entity and do not specify the method by which ~~that~~ written notice should be sent, then the notice may be sent by:
 - (i) Hand-delivery;
 - (ii) Electronic mail;
 - (iii) Facsimile transmission;
 - (iv) Overnight delivery service (e.g., Federal Express, DHL or similar service) that requires a signed receipt;
 - (v) The Messaging System, Market Notice, or other electronic means provided for by these Protocols; or
 - (vi) U.S. Mail, first class postage prepaid, registered (or certified) mail, return receipt requested, properly addressed.
 - (b) Notice by facsimile, electronic mail, the Messaging System, Market Notice, or other electronic means provided for by these Protocols is considered received when sent unless transmitted after 5:00 p.m. local time of the recipient or on a non-Business Day, in which case it is considered received one Business Day after it was sent.

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- (c) Notice by overnight delivery service that requires a signed receipt is considered received on the day that it was received.
- (d) Notice by U.S. Mail is considered received three days after the date it was deposited in the U.S. Mail, first class postage prepaid, registered (or certified) mail, return receipt requested, properly addressed.

~~(e) For any notice sent by facsimile or electronic mail, the sender must promptly confirm the notice, in writing, by delivering the notice by:~~

~~(i) U.S. Mail, first class postage prepaid, registered (or certified) mail, return receipt requested, properly addressed;~~

~~(ii) Overnight delivery service requiring a signed receipt; or~~

~~(iii) Hand delivery.~~

~~(ef) If ERCOT is providing notice to a Market Participant as required by the Protocols, then such notice shall be provided to the Market Participant's Authorized Representative and backup Authorized Representative, in addition to any other person who is required to receive notice under the Protocols. If ERCOT is providing notice to a Market Participant regarding a breach or default under an agreement contained in the Protocols, then such notice shall be provided to the Market Participant's contact for notice listed in Section 22, Attachment A Standard Form Market Participant Agreement. If a Market Participant is providing notice to ERCOT as required by the Protocols or as provided under an agreement contained in the Protocols, then such notice shall be provided to ERCOT's contact for notice listed in Section 22, Attachment A. If the Protocols require notice to a registered Market Participant by ERCOT, ERCOT must send the notice to the then current Authorized Representative, if any, for the Market Participant as set forth in the Market Participant's Application for Registration on file with ERCOT or another representative designated in writing by the Authorized Representative for the purpose of receiving communications from ERCOT.~~

~~(fg) When the Protocols require a notice to be in writing, sending it by electronic mail, the Messaging System, Market Notice, or other electronic means satisfies the requirement that the notice be in writing.~~

- (4) Nothing in these Protocols may be construed to grant any jurisdiction or authority to NERC or FERC that they do not otherwise have.

2.1 DEFINITIONS

ERCOT Research and Innovation (R&I)

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The creative, innovative, and/or systematic work undertaken with ERCOT's direction or collaboration and that ERCOT believes will improve its ability to plan and/or operate the ERCOT System and/or ERCOT markets. ERCOT R&I work may include, but is not limited to, research or experimental technology development.

ERCOT Research and Innovation (R&I) Partner

An Entity chosen at ERCOT's discretion that works with ERCOT to perform ERCOT Research and Innovation. ERCOT Research and Innovation (R&I) Partners are not paid for their services, but work with ERCOT to advance common research or innovation goals.

Market Notice

A notice required by the Protocols or any Other Binding Document, or at ERCOT's discretion, regarding market-relevant information or other information that ~~shall be~~ communicated through ERCOT publicly-subscribed electronic distribution channels, or to relevant groups of Authorized Representatives as ERCOT may deem appropriate.

Notice or Notification

The sending of information by an Entity to Market Participants, ERCOT, or others, as called for in these Protocols. ~~Notice or Notification may be sent by electronic mail, facsimile transmission, or U.S. mail.~~ Notice or Notification may be sent by electronic mail, facsimile transmission, U.S. mail, or any other method authorized by the Protocols.

16.1 Registration and Execution of Agreements

- (1) ERCOT shall require each Market Participant to register and execute the Standard Form Market Participant Agreement and, as applicable, Standard Form Reliability Must-Run Agreement, and Standard Form Black Start Agreement.
- (2) A Standard Form Market Participant Agreement is in Section 22, Attachments, and ERCOT shall also post this agreement on the ERCOT website.
- (3) ERCOT shall post on the ERCOT website all registration procedures and applications necessary to complete registration for any function described in these Protocols. As part of its registration procedures, ERCOT may require one or more of the following:
 - (a) Reasonable tests of the ability of a Market Participant to communicate with ERCOT or perform as required under these Protocols;
 - (b) An application fee as determined by the ERCOT Board;
 - (c) Related agreements for specific purposes (such as agency designation, meter splitting, or network interconnection) that apply only to some Market Participants;
 - (d) A representation to ERCOT that no officer, owner, partner or other equity interest owner of the Entity was CEO or President or collectively held more than a 10%

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equity interest in (as owner, partner or other equity interest owner) another Entity at the time of a default where the default resulted in amounts owed to ERCOT remaining unpaid on any Agreement with ERCOT; and

- (e) An attestation regarding citizenship, ownership, or headquarters of the Entity seeking to register as a Market Participant.

(4) A Market Participant shall subscribe to any public distribution lists for Market Notices that are relevant to the Market Participant's operations or obligations.

ERCOT Impact Analysis Report

NPRR Number	<u>1252</u>	NPRR Title	Pre-notice for Sharing of Some Information, Addition of Research and Innovation Partner, Clarifying Notice Requirements
Impact Analysis Date	August 28, 2024		
Estimated Cost/Budgetary Impact	None.		
Estimated Time Requirements	No project required. This Nodal Protocol Revision Request (NPRR) can take effect following Public Utility Commission of Texas (PUCT) approval.		
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

None.

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NPRR Number	<u>1253</u>	NPRR Title	Incorporate ESR Charging Load Information into ICCP
Date of Decision	February 4, 2025		
Action	Recommended Approval		
Timeline	Normal		
Estimated Impacts	Cost/Budgetary: Between \$25k and \$50k Project Duration: 1 to 2 months		
Proposed Effective Date	Upon system implementation		
Priority and Rank Assigned	Priority – 2025; Rank - 4225		
Nodal Protocol Sections Requiring Revision	6.3.2, Activities for Real-Time Operations		
Related Documents Requiring Revision/Related Revision Requests	ERCOT Nodal ICCP Communications Handbook		
Revision Description	This Nodal Protocol Revision Request (NPRR) adds "ESR Charging" data used to produce the Energy Storage Resources (ESRs) dashboard on ERCOT's website to the dataset ERCOT provides via Inter-Control Center Communications Protocol (ICCP).		
Reason for Revision	<div> <input type="checkbox"/> <u>Strategic Plan</u> Objective 1 – Be an industry leader for grid reliability and resilience </div> <div> <input checked="" type="checkbox"/> <u>Strategic Plan</u> Objective 2 - Enhance the ERCOT region's economic competitiveness with respect to trends in wholesale power rates and retail electricity prices to consumers </div> <div> <input type="checkbox"/> <u>Strategic Plan</u> Objective 3 - Advance ERCOT, Inc. as an independent leading industry expert and an employer of choice by fostering innovation, investing in our people, and emphasizing the importance of our mission </div> <div> <input type="checkbox"/> General system and/or process improvement(s) </div> <div> <input type="checkbox"/> Regulatory requirements </div>		

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	<input type="checkbox"/> ERCOT Board/PUCT Directive <i>(please select ONLY ONE – if more than one apply, please select the ONE that is most relevant)</i>
Justification of Reason for Revision and Market Impacts	<p>An increasing number of energy Customers are responding to potential 4-Coincident Peak (4-CP) intervals by curtailing their load. This reduction in load by these consumers increases reliability by reducing stress on the ERCOT Transmission Grid at the time when needed most.</p> <p>Customers relying on the Demand as reported on ERCOT's website may miss these important 4-CP intervals because the Demand reported by ERCOT includes Wholesale Storage Load (WSL) while the Protocols defining the 4-CP intervals specifically exclude WSL. Per the Protocols, WSL incorporates multiple sources of load, but the largest and rapidly growing source of WSL is associated with ESR charging Load. Qualified Scheduling Entities (QSEs) are reliant on using the ESRs dashboard data on the ERCOT website. However, this ESR charging load data is not coincident with ERCOT Demand and can change rapidly. Therefore, this NPRR corrects this timing difference by providing ESR charging load via ICCP.</p>
PRS Decision	<p>On 10/17/24, PRS voted unanimously to table NPRR1253. All Market Segments participated in the vote.</p> <p>On 11/14/24, PRS voted unanimously to recommend approval of NPRR1253 as amended by the 10/10/24 ERCOT comments. All Market Segments participated in the vote.</p> <p>On 12/12/24, PRS voted unanimously to table NPRR1253. All Market Segments participated in the vote.</p> <p>On 1/15/25, PRS voted unanimously to endorse and forward to TAC the 12/12/24 PRS Report and 1/14/25 Impact Analysis for NPRR1253 with a recommended priority of 2025 and rank of 4225. All Market Segments participated in the vote.</p>
Summary of PRS Discussion	<p>On 10/17/24, participants requested PRS to table NPRR1253 to give the sponsor an opportunity to file comments providing clarification regarding Comma Separated Value (CSV) and Extensible Markup Language (XML) files.</p> <p>On 11/14/24, participants reviewed the 10/10/24 ERCOT comments.</p> <p>On 12/12/24, participants reviewed the 12/3/24 ERCOT comments.</p>

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	On 1/15/24, participants reviewed at the 1/14/25 Impact Analysis for NPRR1253 and discussed potential edits to the NPRR to have the data available through ICCP only as a solution to address the resource constraint issue identified in the 1/14/25 ERCOT comments.
TAC Decision	On 1/22/25, TAC voted unanimously to recommend approval of NPRR1253 as recommended by PRS in the 1/15/25 PRS Report. All Market Segments participated in the vote.
Summary of TAC Discussion	On 1/22/25, ERCOT outlined its plan that would implement the NPRR1253 changes for the 2025 Summer period as requested by participants and noted expected impacts that will be reflected in a revised Impact Analysis.
TAC Review/Justification of Recommendation	<input checked="" type="checkbox"/> Revision Request ties to Reason for Revision as explained in Justification <input checked="" type="checkbox"/> Impact Analysis reviewed and impacts are justified as explained in Justification <input checked="" type="checkbox"/> Opinions were reviewed and discussed <input checked="" type="checkbox"/> Comments were reviewed and discussed (if applicable) <input type="checkbox"/> Other: (explain)
ERCOT Board Decision	On 2/4/25, the ERCOT Board voted unanimously to recommend approval of NPRR1253 as recommended by TAC in the 1/22/25 TAC Report and the 1/24/25 Revised Impact Analysis.

Opinion	
Credit Review	ERCOT Credit Staff and the Credit Finance Sub Group (CFSG) have reviewed NPRR1253 and do not believe that it requires changes to credit monitoring activity or the calculation of liability.
Independent Market Monitor Opinion	IMM has no opinion on NPRR1253.
ERCOT Opinion	ERCOT supports approval of NPRR1253.
ERCOT Market Impact Statement	ERCOT Staff has reviewed NPRR1253 and believes that it provides improved data transparency for 4-CP calculations and impacts related to ESR charging for all Market Participants.

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Sponsor	
Name	Tim Carter
E-mail Address	tcarter@ammper.com
Company	Ammper Power, LLC
Phone Number	832-684-5645
Cell Number	832-684-5645
Market Segment	Retail Electric Provider

Market Rules Staff Contact	
Name	Erin Wasik-Gutierrez
E-Mail Address	erin.wasik-gutierrez@ercot.com
Phone Number	413-886-2474

Comments Received	
Comment Author	Comment Summary
ERCOT 101024	Offered clarifying revisions that relocated language and replaced “prices” with “data” to reflect that not all data are prices
ERCOT 120324	Indicated ERCOT intends to complete the Impact Analysis for NPRR1253 prior to the 1/15/25 PRS meeting
ERCOT 011425	Noted resource constraints to implement NPRR1253 in time for the 2025 Summer period and highlighted the market design for the Real-Time Co-optimization plus Batteries (“RTC+B”) project will address the issue

Market Rules Notes

None

Revised Proposed Protocol Language

6.3.2 *Activities for Real-Time Operations*

- (1) Activities for Real-Time operations begin at the end of the Adjustment Period and conclude at the close of the Operating Hour.

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- (2) The following table summarizes the timeline for the Operating Period and the activities of QSEs and ERCOT during Real-Time operations where “T” represents any instant within the Operating Hour. The table is intended to be only a general guide and not controlling language, and any conflict between this table and another section of the Protocols is controlled by the other section:

Operating Period	QSE Activities	ERCOT Activities
During the first hour of the Operating Period		<p>Execute the Hour-Ahead Sequence, including HRUC, beginning with the second hour of the Operating Period</p> <p>Review the list of Off-Line Available Resources with a start-up time of one hour or less</p> <p>Review and communicate HRUC commitments and Direct Current Tie (DC Tie) Schedule curtailments</p> <p>Snapshot the Scheduled Power Consumption for Controllable Load Resources</p>
Before the start of each SCED run	Update Output Schedules for DSRs	<p>Validate Output Schedules for DSRs</p> <p>Execute Real-Time Sequence</p>
SCED run		Execute SCED and pricing run to determine impact of reliability deployments on energy prices
During the Operating Hour	<p>Telemeter the Ancillary Service Resource Responsibility for each Resource</p> <p>Telemeter next Operating Hour Ancillary Service Resource Responsibility for an ESR</p> <p>Acknowledge receipt of Dispatch Instructions</p> <p>Comply with Dispatch Instruction</p> <p>Review Resource Status to assure current state of the Resources is properly telemetered</p> <p>Update COP with actual Resource Status and limits and Ancillary Service Schedules</p> <p>Communicate Resource Forced Outages to ERCOT</p> <p>Communicate to ERCOT Resource changes to Ancillary Service Resource</p>	<p>Communicate all binding Base Points, Dispatch Instructions, and the sum of each type of available reserves, including total Real-Time reserve amount for On-Line reserves, total Real-Time reserve amount for Off-Line reserves, Real-Time Reserve Price Adders for On-Line Reserves, and Real-Time Reserve Price Adders for Off-Line Reserves and LMPs for energy and Ancillary Services, and for the pricing run as described in Section 6.5.7.3.1,</p> <p>Determination of Real-Time On-Line Reliability Deployment Price Adder, the total Reliability Unit Commitment (RUC)/Reliability Must-Run (RMR) MW relaxed, total Load Resource MW deployed that is added to the Demand, total Emergency Response Service (ERS) MW deployed that is added to the Demand, total emergency DC Tie MW that is added to or subtracted from the Demand, total Block Load Transfer (BLT) MW that is added to or subtracted from the Demand, total Low Ancillary Service Limit (LASL), total High Ancillary Service Limit (HASL), Real-Time On-Line Reliability Deployment Price</p>

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Operating Period	QSE Activities	ERCOT Activities
	<p>Responsibility via telemetry in the time window beginning 30 seconds prior to the five-minute clock interval and ending ten seconds prior to that five-minute clock interval</p> <p>Submit and update Energy Offer Curves and/or RTM Energy Bids</p>	<p>Adder using Inter-Control Center Communications Protocol (ICCP) or Verbal Dispatch Instructions (VDIs)</p> <p>Monitor Resource Status and identify discrepancies between COP and telemetered Resource Status</p> <p>Restart Real-Time Sequence on major change of Resource or Transmission Element Status</p> <p>Monitor ERCOT total system capacity providing Ancillary Services</p> <p>Monitor ESR State of Charge (SOC) information to ensure Ancillary Service Resource Responsibilities can be met</p> <p>Validate COP information</p> <p>Validate Ancillary Service Trades</p> <p>Monitor ERCOT control performance</p> <p>Distribute by ICCP, and post on the ERCOT website, System Lambda and the LMPs for each Resource Node, Load Zone and Hub, and the sum of each type of available reserves, including total Real-Time reserve amount for On-Line reserves, total Real-Time reserve amount for Off-Line reserves, Real-Time Reserve Price Adders for On-Line Reserves and Real-Time Reserve Price Adders for Off-Line Reserves, and for the pricing run as described in Section 6.5.7.3.1 the total RUC/RMR MW relaxed, total Load Resource MW deployed that is added to the Demand, total ERS MW deployed that is added to the Demand, total emergency DC Tie MW that is added to or subtracted from the Demand, total BLT MW that is added to or subtracted from the Demand, total On-Line LASL, total On-Line HASL, Real-Time On-Line Reliability Deployment Price Adder, <u>and total ESR charging created for each SCED process. These prices data</u> shall be posted immediately subsequent to</p>

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Operating Period	QSE Activities	ERCOT Activities
		<p>deployment of Base Points from SCED with the time stamp the prices<u>data</u> are effective; <u>ESR charging</u></p> <p>Post on the ERCOT website the nodal prices for Settlement Only Distribution Generators (SODGs) and Settlement Only Transmission Generator (SOTGs). These prices shall include all Real-Time Reserve Price Adders for On-Line Reserves and Real-Time On-Line Reliability Deployment Price Adders created for each SCED process. These prices shall be posted immediately subsequent to deployment of Base Points from SCED with the time stamp the prices are effective</p> <p>Post LMPs for each Electrical Bus on the ERCOT website. These prices shall be posted immediately subsequent to deployment of Base Points from each binding SCED with the time stamp the prices are effective</p> <p>Post on the ERCOT website the projected non-binding LMPs created by each SCED process for each Resource Node, the projected total Real-Time reserve amount for On-Line reserves and Off-Line reserves, the projected Real-Time On-Line Reserve Price Adders and Real-Time Off-Line Reserve Price Adders, and for the projected non-binding pricing runs as described in Section 6.5.7.3.1 the total RUC/RMR MW relaxed, total Load Resource MW deployed that is added to Demand, total emergency DC Tie MW that is added to or subtracted from the Demand, total BLT MW that is added to or subtracted from the Demand, total ERS MW deployed that are deployed that is added to the Demand, total LASL, total HASL, Real-Time On-Line Reliability Deployment Price Adder and the projected Hub LMPs and Load Zone LMPs. These projected prices shall be posted at a frequency of every five minutes from SCED for at least 15 minutes in the future with the time stamp of the SCED process that produced the projections</p> <p>Post on the MIS Certified Area the projected non-binding Base Points for each Resource</p>

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Operating Period	QSE Activities	ERCOT Activities
		<p>created by each SCED process. These projected non-binding Base Points shall be posted at a frequency of every five minutes from SCED for at least 15 minutes in the future with the time stamp of the SCED process that produced the projections</p> <p>Post each hour on the ERCOT website binding SCED Shadow Prices and active binding transmission constraints by Transmission Element name (contingency /overloaded element pairs)</p> <p>Post on the ERCOT website the Settlement Point Prices for each Settlement Point and the Real-Time price for each SODG and SOTG immediately following the end of each Settlement Interval</p> <p>Post the Real-Time On-Line Reliability Deployment Price, Real-Time Reserve Price for On-Line Reserves and the Real-Time Reserve Price for Off-Line Reserves immediately following the end of each Settlement Interval</p> <p>Post parameters as required by Section 6.4.9, Ancillary Services Capacity During the Adjustment Period and in Real-Time, on the ERCOT website</p>

[NPRR829, NPRR904, NPRR995, NPRR1000, NPRR1006, NPRR1010, and NPRR1077: Replace applicable portions of paragraph (2) above with the following upon system implementation for NPRR829, NPRR904, NPRR995, NPRR1000, NPRR1006, or NPRR1077; or upon system implementation of the Real-Time Co-Optimization (RTC) project for NPRR1010:]

- (2) The following table summarizes the timeline for the Operating Period and the activities of QSEs and ERCOT during Real-Time operations where “T” represents any instant within the Operating Hour. The table is intended to be only a general guide and not controlling language, and any conflict between this table and another section of the Protocols is controlled by the other section:

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Operating Period	QSE Activities	ERCOT Activities
During the first hour of the Operating Period		<p>Execute the Hour-Ahead Sequence, including HRUC, beginning with the second hour of the Operating Period</p> <p>Review the list of Off-Line Available Resources with a start-up time of one hour or less</p> <p>Review and communicate HRUC commitments and Direct Current Tie (DC Tie) Schedule curtailments</p> <p>Snapshot the Scheduled Power Consumption for Controllable Load Resources</p>
SCED run		Execute SCED and pricing run to determine impact of reliability deployments on energy and Ancillary Service prices
During the Operating Hour	<p>Acknowledge receipt of Dispatch Instructions</p> <p>Comply with Dispatch Instruction</p> <p>Review Resource Status to assure current state of the Resources is properly telemetered</p> <p>Update COP and telemetry with actual Resource Status and limits and Ancillary Service capabilities</p> <p>Submit and update Ancillary Service Offers</p> <p>Communicate Resource Forced Outages to ERCOT</p> <p>Submit and update Energy Offer Curves and/or RTM Energy Bids</p>	<p>Communicate all binding Base Points, Updated Desired Set Points (UDSPs), Ancillary Service awards, Dispatch Instructions, LMPs for energy, Real-Time MCPCs for Ancillary Services, and for the pricing run as described in Section 6.5.7.3.1, Determination of Real-Time Reliability Deployment Price Adders, the total Reliability Unit Commitment (RUC)/Reliability Must-Run (RMR) MW relaxed, total Load Resource MW deployed that is added to the Demand, total Transmission and/or Distribution Service Provider (TDSP) standard offer Load management MW deployed that is added to the Demand, total Emergency Response Service (ERS) MW deployed that is added to the Demand, total ERCOT-directed DC Tie MW that is added to or subtracted from the Demand, total Block Load Transfer (BLT) MW that is added to or subtracted from the Demand Real-Time Reliability Deployment Price Adder for Energy, and Real-Time Reliability Deployment Price Adders for Ancillary Service using Inter-Control Center Communications Protocol (ICCP) or Verbal Dispatch Instructions (VDIs). In communicating Ancillary Service awards, the awards shall be broken out by Ancillary Service sub-type, where applicable</p> <p>Monitor Resource Status and identify discrepancies between COP and telemetered Resource Status</p>

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		<p>Restart Real-Time Sequence on major change of Resource or Transmission Element Status</p> <p>Monitor ERCOT total system capacity providing Ancillary Services</p> <p>Validate COP information</p> <p>Validate Ancillary Service Trades</p> <p>Monitor ERCOT control performance</p> <p>Distribute by ICCP, and post on the ERCOT website, System Lambda and the LMPs for each Resource Node, Load Zone and Hub, and Real-Time MCPCs for each Ancillary Service, and for the pricing run as described in Section 6.5.7.3.1 the total RUC/RMR MW relaxed, total Load Resource MW deployed that is added to the Demand, total ERS MW deployed that is added to the Demand, total TDSP standard offer Load management MW deployed that is added to the Demand, total ERCOT-directed DC Tie MW that is added to or subtracted from the Demand, total BLT MW that is added to or subtracted from the Demand, Real-Time Reliability Deployment Price Adder for Energy, and Real-Time Reliability Deployment Price Adders for Ancillary Service, and <u>ESR charging</u> created for each SCED process. These<u>This prices</u> data shall be posted immediately subsequent to deployment of Base Points and Ancillary Service awards from SCED with the time stamp the <u>data</u>prices are effective, ESR charging</p> <p>Post on the ERCOT website the nodal prices for Settlement Only Distribution Generators (SODGs), Settlement Only Distribution Energy Storage Systems (SODESSs), Settlement Only Transmission Generators (SOTGs), and Settlement Only Transmission Energy Storage Systems (SOTESs). These prices shall include Real-Time Reliability Deployment Price Adders for Energy created for each SCED process. These prices shall be posted immediately subsequent to deployment of Base Points from SCED with the time stamp the prices are effective</p>
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		<p>Post LMPs for each Electrical Bus on the ERCOT website. These prices shall be posted immediately subsequent to deployment of Base Points from each binding SCED with the time stamp the prices are effective</p> <p>Post every 15 minutes on the ERCOT website the aggregate net injection from Settlement Only Generators (SOGs) and Settlement Only Energy Storage Systems (SOESSs)</p> <p>Post on the ERCOT website the projected non-binding LMPs for each Resource Node and Real-Time MCPCs for each Ancillary Service created by each SCED process and for the projected non-binding pricing runs as described in Section 6.5.7.3.1 the total RUC/RMR MW relaxed, total Load Resource MW deployed that is added to Demand, total TDSP standard offer Load management MW deployed that is added to the Demand, total ERCOT-directed DC Tie MW that is added to or subtracted from the Demand, total BLT MW that is added to or subtracted from the Demand, total ERS MW deployed that are deployed that is added to the Demand, Real-Time Reliability Deployment Price Adder for Energy, Real-Time On-Line Reliability Deployment Price Adders for Ancillary Service, and the projected Hub LMPs and Load Zone LMPs. These projected prices shall be posted at a frequency of every five minutes from SCED for at least 15 minutes in the future with the time stamp of the SCED process that produced the projections</p> <p>Post on the MIS Certified Area the projected non-binding Base Points and Ancillary Service awards for each Resource created by each SCED process. These projected non-binding Base Points shall be posted at a frequency of every five minutes from SCED for at least 15 minutes in the future with the time stamp of the SCED process that produced the projections. In posting Ancillary Service awards, the awards shall be broken out by Ancillary Service sub-type, where applicable</p>
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		<p>Post each hour on the ERCOT website binding SCED Shadow Prices and active binding transmission constraints by Transmission Element name (contingency /overloaded element pairs)</p> <p>Post on the ERCOT website, the Settlement Point Prices for each Settlement Point and the Real-Time price for each SODG, SODESS, SOTG, and SOTESS immediately following the end of each Settlement Interval</p> <p>By Settlement Interval, post the 15-minute Real-Time Reliability Deployment Price for Energy, and the 15-minute Real-Time Reliability Deployment Price for Ancillary Service for each of the Ancillary Services</p>
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- (3) At the beginning of each hour, ERCOT shall post on the ERCOT website the following information:
- (a) Changes in ERCOT System conditions that could affect the security and dynamic transmission limits of the ERCOT System, including:
 - (i) Changes or expected changes, in the status of Transmission Facilities as recorded in the Outage Scheduler for the remaining hours of the current Operating Day and all hours of the next Operating Day; and
 - (ii) Any conditions such as adverse weather conditions as determined from the ERCOT-designated weather service;
 - (b) Updated system-wide Mid-Term Load Forecasts (MTLFs) for all forecast models available to ERCOT Operations, as well as an indicator for which forecast was in use by ERCOT at the time of publication;
 - (c) The quantities of RMR Services deployed by ERCOT for each previous hour of the current Operating Day; and
 - (d) Total ERCOT System Demand, from Real-Time operations, integrated over each Settlement Interval.
- (4) No later than 0600, ERCOT shall post on the ERCOT website the actual system Load by Weather Zone, the actual system Load by Forecast Zone, and the actual system Load by Study Area for each hour of the previous Operating Day.
- (5) ERCOT shall provide notification to the market and post on the ERCOT website Electrical Bus Load distribution factors and other information necessary to forecast Electrical Bus Loads. This report will be published when updates to the Load

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distribution factors are made. Private Use Network net Load will be redacted from this posting.

[NPRR1010 and NPRR1204: Insert paragraphs (6) and (7) below upon system implementation of the Real-Time Co-Optimization (RTC) project:]

- (6) After every SCED run, ERCOT shall post to the ERCOT website the total capability of Resources available to provide the following Ancillary Service combinations, based on the Resource telemetry from the QSE and capped by the limits of the Resource and, for ESRs, further capped by Ancillary Service SCED duration requirements and current available State of Charge (SOC), for the most recent SCED execution:
 - (a) Capacity to provide Reg-Up, irrespective of whether it is capable of providing any other Ancillary Service;
 - (b) Capacity to provide RRS, irrespective of whether it is capable of providing any other Ancillary Service;
 - (c) Capacity to provide ECRS, irrespective of whether it is capable of providing any other Ancillary Service;
 - (d) Capacity to provide Non-Spin, irrespective of whether it is capable of providing any other Ancillary Service;
 - (e) Capacity to provide Reg-Up, RRS, or both, irrespective of whether it is capable of providing ECRS or Non-Spin;
 - (f) Capacity to provide Reg-Up, RRS, ECRS, or any combination, irrespective of whether it is capable of providing Non-Spin;
 - (g) Capacity to provide Reg-Up, RRS, ECRS, Non-Spin, or any combination; and
 - (h) Capacity to provide Reg-Down.
- (7) Each week, ERCOT shall post on the ERCOT website the historical SCED-interval data described in paragraph (6) above.

Revised ERCOT Impact Analysis Report

NPRR Number	<u>1253</u>	NPRR Title	Incorporate ESR Charging Load Information into ICCP
Impact Analysis Date	January 24, 2025		
Estimated Cost/Budgetary Impact	Between \$25k and \$50k		
Estimated Time Requirements	The timeline for implementing this Nodal Protocol Revision Request (NPRR) 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: <ul style="list-style-type: none">Enterprise Integration Corp Services 87%Energy Management System 13%		
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.

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NPRR Number	<u>1257</u>	NPRR Title	Limit on Amount of RRS a Resource can Provide Using Primary Frequency Response
Date of Decision	February 4, 2025		
Action	Recommended Approval		
Timeline	Normal		
Estimated Impacts	Cost/Budgetary: Less than \$10K Operations & Maintenance (O&M) Project Duration: No project required		
Proposed Effective Date	First of the month following Public Utility Commission of Texas (PUCT) approval		
Priority and Rank Assigned	Not applicable		
Nodal Protocol Sections Requiring Revision	3.16, Standards for Determining Ancillary Service Quantities 3.18, Resource Limits in Providing Ancillary Service		
Related Documents Requiring Revision/Related Revision Requests	Nodal Operating Guide Revision Request (NOGRR) 271, Related to NPRR1257, Limit on Amount of RRS a Resource can Provide Using Primary Frequency Response ERCOT Methodologies for Determining Minimum Ancillary Service Requirements		
Revision Description	This Nodal Protocol Revision Request (NPRR) establishes a maximum limit on the amount of Responsive Reserve (RRS) that a Resource can provide using Primary Frequency Response ("PFR"). An initial static limit of 157 megawatts (MW) is proposed, and this limit is intended to be reevaluated annually as part of the Ancillary Services Methodology review and approval process.		
Reason for Revision	<input checked="" type="checkbox"/> <u>Strategic Plan</u> Objective 1 – Be an industry leader for grid reliability and resilience <input type="checkbox"/> <u>Strategic Plan</u> Objective 2 - Enhance the ERCOT region's economic competitiveness with respect to trends in wholesale power rates and retail electricity prices to consumers <input type="checkbox"/> <u>Strategic Plan</u> Objective 3 - Advance ERCOT, Inc. as an independent leading industry expert and an employer of choice by fostering innovation, investing in our people, and emphasizing the importance of our mission <input type="checkbox"/> General system and/or process improvement(s)		

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	<input type="checkbox"/> Regulatory requirements <input type="checkbox"/> ERCOT Board/PUCT Directive <i>(please select ONLY ONE – if more than one apply, please select the ONE that is most relevant)</i>
Justification of Reason for Revision and Market Impacts	<p>This NPRR focuses on addressing the risk of common mode failure, i.e., the risk of too much RRS-PFR being provided from a single Resource and that Resource failing to respond as expected.</p> <p>For context, ERCOT commissioned GE Vernova (f/k/a GE Energy Consulting) in December 2021, to conduct an evaluation to identify reliability concerns that could indicate the need to limit the provision of RRS from Primary Frequency Response in certain circumstances. GE Vernova completed this evaluation and presented its results to ERCOT stakeholders in the <u>RRS-PFR Limits Study Workshop</u> held on April 6, 2023. GE Vernova's complete report from this work is posted on ERCOT's webpage (report link).</p> <p>RRS is procured to ensure sufficient response is available to meet ERCOT's frequency response requirements under North American Electric Reliability Corporation (NERC) Reliability Standard BAL-003, Frequency Response and Frequency Bias Setting, specifically, to ensure that enough capacity is available such that Under-Frequency Load Shed (UFLS) is not triggered in the event of the loss of the two largest Resources in the ERCOT Region, totaling 2,805 MW. Failure of a Resource that is carrying an RRS obligation to respond during a frequency event will degrade system frequency response and could increase the risk of triggering UFLS that might not otherwise occur. In its report, GE Vernova recommends that to address the risk related to common mode failures, the maximum amount of RRS-PFR that any individual Resource can provide should be determined using studies that assess the impact of common mode failure on frequency nadir degradation for loss of 2,805 MW of supply during a variety of grid inertia conditions.</p> <p>GE Vernova's proposed approach creates a maximum limit on provision or procurement of RRS-PFR that will vary dynamically with grid inertia conditions. However under the current paradigm, complex systems changes would be needed to implement a concept like this. Implementing this dynamic RRS-PFR limit concept is expected to be simpler after Real-Time Co-optimization (RTC) is implemented and Resources receive binding RRS-PFR awards in Real-Time.</p> <p>To address the immediate reliability concern without necessitating complex system changes before RTC implementation, this NPRR establishes a static limit on the maximum RRS-PFR that a single</p>

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	<p>Resource can provide. To further limit systems impacts, this NPRR incorporates the limit in the procedure used to calculate RRS MW Limit under Nodal Operating Guide Section 8, Attachment N, Procedure for Calculating RRS Limits for Individual Resources.</p> <p>ERCOT recommends 157 MW as the initial static limit for the maximum amount of RRS-PFR that a single Resource can provide. Based on the complementary studies that ERCOT has conducted, with a static RRS-PFR limit of 157 MW, frequency degradation due to failure to perform from a single RRS-PFR Resource is expected to stay below 50 megahertz (MHz) under a variety of historic inertia conditions, while maintaining an approximately 100 MHz margin for other issues that may occur in Real-Time. This proposed limit is higher than the maximum RRS-PFR Ancillary Service Resource Responsibility that any single Resource provided in Real-Time in 2023. ERCOT has analyzed provision of RRS-PFR in 2024 between January 1 and September 30, in approximately 2.78% of Security-Constrained Economic Dispatch (SCED) intervals, nine different Resources carried more than 157 MW of RRS-PFR, in any interval at a maximum two Resources simultaneously carried more than 157 MW of RRS-PFR. ERCOT will revisit the studies used to determine the static RRS-PFR limit during the annual Ancillary Services Methodology review process to identify if any changes in the static limit are necessary. Further, ERCOT proposes to revisit the dynamic RRS-PFR limit concept after RTC is implemented.</p> <p>GE Vernova's report also noted that the studies conducted did not identify a compelling reliability reason to limit the provision or procurement of RRS-PFR in a manner to ensure geographic or locational diversity, such as incorporating proximity checks. Every Resource providing RRS-PFR is expected to have separate/independent control systems for providing frequency response. Equipment failure contributing to performance issues should have no, or low, common mode failure risk because such equipment is expected to be exclusive to the Resource, meaning that any such failure impacts only that single Resource. Accordingly, GE Vernova found that the proposed limit for any single Resource is sufficient and additional safeguards, either at a station level or at the ERCOT Region level, are not necessary at this time. ERCOT agrees with GE Vernova's assessment but will continue to monitor frequency performance in this context and can make adjustments in the future if it becomes necessary.</p>
PRS Decision	<p>On 11/14/24, PRS voted unanimously to table NPRR1257 and refer the issue to ROS. All Market Segments participated in the vote.</p>

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	<p>On 12/12/24, PRS voted unanimously to recommend approval of NPRR1257 as submitted. All Market Segments participated in the vote.</p> <p>On 1/15/25, PRS voted unanimously to endorse and forward to TAC the 12/12/24 PRS Report and 10/21/24 Impact Analysis for NPRR1257. All Market Segments participated in the vote.</p>
Summary of PRS Discussion	<p>On 11/14/24, ERCOT Staff provided an overview of NPRR1257.</p> <p>On 12/12/24, participants noted the ROS endorsement of NPRR1257 as submitted.</p> <p>On 1/15/25, there was no discussion.</p>
TAC Decision	<p>On 1/22/25, TAC voted unanimously to recommend approval of NPRR1257 as recommended by PRS in the 1/15/25 PRS Report. All Market Segments participated in the vote.</p>
Summary of TAC Discussion	<p>On 1/22/25, there was no additional discussion beyond TAC review of the items below.</p>
TAC Review/Justification of Recommendation	<p><input checked="" type="checkbox"/> Revision Request ties to Reason for Revision as explained in Justification</p> <p><input checked="" type="checkbox"/> Impact Analysis reviewed and impacts are justified as explained in Justification</p> <p><input checked="" type="checkbox"/> Opinions were reviewed and discussed</p> <p><input checked="" type="checkbox"/> Comments were reviewed and discussed (if applicable)</p> <p><input type="checkbox"/> Other: (explain)</p>
ERCOT Board Decision	<p>On 2/4/25, the ERCOT Board voted unanimously to recommend approval of NPRR1257 as recommended by TAC in the 1/22/25 TAC Report.</p>

Opinions	
Credit Review	ERCOT Credit Staff and the Credit Finance Sub Group (CFSG) have reviewed NPRR1257 and do not believe that it requires changes to credit monitoring activity or the calculation of liability.
Independent Market Monitor Opinion	IMM has no opinion on NPRR1257.
ERCOT Opinion	ERCOT supports approval of NPRR1257.

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ERCOT Market Impact Statement	ERCOT Staff has reviewed NPRR1257 and believes the market impact for NPRR1257 applies a reasonable limit on the amount of RRS from Primary Frequency Response that is provided by an individual Resource to address the risk of common mode failure, in line with recommendations from GE Vernova.
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Sponsor	
Name	Nitika Mago
E-mail Address	nitika.mago@ercot.com
Company	ERCOT
Phone Number	512-248-6601
Cell Number	
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 110824	Requested PRS table NPRR1257 for further review by the Performance, Disturbance, Compliance Working Group (PDCWG)
ROS 120524	Endorsed NPRR1257 as submitted

Market Rules Notes

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

- NPRR1183, ECEI Definition Clarification and Updates to Posting Rules for Certain Documents without ECEI (unboxed 12/12/24)
 - Section 3.16

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

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- NPPRR1235, Dispatchable Reliability Reserve Service as a Stand-Alone Ancillary Service
 - Section 3.18
- NPPRR1246, Energy Storage Resource Terminology Alignment for the Single-Model Era
 - Section 3.18

Proposed Protocol Language Revision

3.16 Standards for Determining Ancillary Service Quantities

- (1) ERCOT shall comply with the requirements for determining Ancillary Service quantities as specified in these Protocols and the ERCOT Operating Guides.
- (2) ERCOT shall, at least annually, determine with supporting data, the methodology for determining the quantity requirements for each Ancillary Service needed for reliability, including:
 - (a) The percentage or MW limit of ERCOT Contingency Reserve Service (ECRS) allowed from Load Resources providing ECRS;
 - (b) The maximum amount (MW) of Responsive Reserve (RRS) that can be provided by Resources capable of Fast Frequency Response (FFR);

[NPPRR1128: Replace item (b) above with the following upon system implementation:]

- (b) The maximum amount (MW) of Responsive Reserve (RRS) that can be provided by Resources capable of Fast Frequency Response (FFR) and specify the Operating Hours where prioritizing procurement of FFR up to the maximum FFR amount is beneficial in improving reliability;
- (c) The maximum amount (MW) of Regulation Up Service (Reg-Up) that can be provided by Resources providing Fast Responding Regulation Up Service (FRRS-Up); and
- (d) The maximum amount (MW) of Regulation Down Service (Reg-Down) that can be provided by Resources providing Fast Responding Regulation Down Service (FRRS-Down).

[NPPRR1007: Delete items (c) and (d) above upon system implementation of the Real-Time Co-Optimization (RTC) project and renumber accordingly.]

- (e) The minimum capacity required from Resources providing RRS using Primary Frequency Response shall not be less than 1,150 MW.

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- (3) The ERCOT Board shall review and recommend approval of ERCOT's methodology for determining the minimum Ancillary Service requirements, any minimum capacity required from Security-Constrained Economic Dispatch (SCED) dispatchable Resources to provide Non-Spinning Reserve (Non-Spin), the minimum capacity required from Resources providing Primary Frequency Response to provide RRS, the maximum amount of RRS that can be provided by Resources capable of FFR, the maximum amount of RRS that an individual Resource can provide using Primary Frequency Response, and the maximum amount of Reg-Up and Reg-Down that can be provided by Resources providing FRRS-Up and FRRS-Down. ERCOT shall post on the ERCOT website the ERCOT Methodologies for Determining Minimum Ancillary Service Requirements approved by the ERCOT Board. Any such recommendations require approval by the Public Utility Commission of Texas (PUCT) prior to implementation.

[NPRR1007, NPRR1128, NPRR1171, and NPRR1213: Replace applicable portions of paragraph (3) above with the following upon system implementation of the Real-Time Co-Optimization (RTC) project for NPRR1007; or upon system implementation for NPRR1128, or NPRR1171; or upon system implementation and upon system implementation of NPRR1171 for NPRR1213:]

- (3) The ERCOT Board shall review and recommend approval of ERCOT's methodology for determining the minimum Ancillary Service requirements, any minimum capacity required from Security-Constrained Economic Dispatch (SCED) dispatchable Resources to provide Non-Spinning Reserve (Non-Spin), the maximum amount of Non-Spin that can be provided by Distribution Generation Resources (DGRs) and Distribution Energy Storage Resources (DESRS) that are interconnected to a distribution circuit that is subject to Load shed, the maximum amount of ECRS that can be provided by DGRs and DESRS that are interconnected to a distribution circuit that is subject to Load shed, the minimum capacity required from Resources providing Primary Frequency Response to provide RRS, the maximum amount of RRS that can be provided by Resources capable of FFR, the maximum amount of RRS that an individual Resource can provide using Primary Frequency Response, and the Operating Hours where prioritizing procurement of FFR up to the maximum FFR amount is beneficial in improving reliability. ERCOT shall post on the ERCOT website the ERCOT Methodologies for Determining Minimum Ancillary Service Requirements approved by the ERCOT Board. Any such recommendations require approval by the Public Utility Commission of Texas (PUCT) prior to implementation.

- (4) If ERCOT determines a need for additional Ancillary Service Resources under these Protocols or the ERCOT Operating Guides, after an Ancillary Service Plan for a specified day has been posted, ERCOT shall inform the market by posting notice on the ERCOT website, of ERCOT's intent to procure additional Ancillary Service Resources under Section 6.4.9.2, Supplemental Ancillary Services Market. ERCOT shall post the reliability reason for the increase in service requirements.

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[NPRR1007: Delete paragraph (4) above upon system implementation of the Real-Time Co-Optimization (RTC) project and renumber accordingly.]

- (5) Monthly, ERCOT shall determine and post on the ERCOT website a minimum capacity required from Resources providing RRS using Primary Frequency Response. The remaining capacity required for RRS may be supplied by all Resources qualified to provide RRS, provided that RRS from Load Resources on high-set under-frequency relays and Resources providing FFR shall be limited to 60% of the total ERCOT RRS requirement. ERCOT may increase the minimum capacity required from Resources providing RRS using Primary Frequency Response if it believes that the current posted quantity will have a negative impact on reliability or if it would require additional Regulation Service to be deployed.

[NPRR1128: Replace paragraph (5) above with the following upon system implementation:]

- (5) Monthly, ERCOT shall determine and post on the ERCOT website a minimum capacity required from Resources providing RRS using Primary Frequency Response. The remaining capacity required for RRS may be supplied by all Resources qualified to provide RRS, provided that RRS from Load Resources on high-set under-frequency relays and Resources providing FFR shall be limited to 60% of the total ERCOT RRS requirement. ERCOT may increase the minimum capacity required from Resources providing RRS using Primary Frequency Response if it believes that the current posted quantity will have a negative impact on reliability or if it would require additional Regulation Service to be deployed. ERCOT may add more Operating Hours where prioritizing procurement of FFR up to the maximum FFR amount is beneficial in improving reliability if it believes that these additional hours are vulnerable to low system inertia. ERCOT will issue an operations notice when such a change is made.
- (6) The amount of RRS that a Qualified Scheduling Entity (QSE) can self-arrange using a Load Resource excluding Controllable Load Resources (CLRs) and Resources providing FFR is limited to its Load Ratio Share (LRS) of the capacity allowed to be provided by Resources not providing RRS using Primary Frequency Response established in paragraph (5) above, provided that RRS from these Resources shall be limited to 60% of the total ERCOT RRS requirement.
- (7) However, a QSE may offer more of the Load Resource above the percentage limit established by ERCOT for sale of RRS to other Market Participants. The total amount of RRS using the Load Resource procured by ERCOT is also limited to the capacity established in paragraph (5) above, up to the lesser of the 60% limit or the limit established by ERCOT in paragraph (5) above.
- (8) Monthly, ERCOT shall determine and post on the ERCOT website a minimum capacity required from Resources providing FCRS. The amount of Load Resources excluding

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CLRs that may or may not be on high-set under-frequency relays providing ECRS is limited to 50% of the total ERCOT ECRS requirement.

- (9) The amount of ECRS that a QSE can self-arrange using a Load Resource excluding CLRs is limited to the lower of:
 - (a) 50% of its ECRS Ancillary Service Obligation; or
 - (b) A reduced percentage of its ECRS Ancillary Service Obligation based on the limit established by ERCOT in paragraph (8) above.
- (10) A QSE may offer more of the Load Resource above the percentage limit established by ERCOT for sale of ECRS to other Market Participants. The total amount of ECRS using the Load Resource excluding CLRs procured by ERCOT is also limited to the lesser of the 50% limit or the limit established by ERCOT in paragraph (9) above.
- (11) The maximum MW amount of capacity from Resources providing FRRS-Up is limited to 65 MW. ERCOT may reduce this limit if it believes that this amount will have a negative impact on reliability or if this limit would require additional Regulation Service to be deployed.
- (12) The maximum MW amount of capacity from Resources providing FRRS-Down is limited to 35 MW. ERCOT may reduce this limit if it believes that this amount will have a negative impact on reliability or if this limit would require additional Regulation Service to be deployed.
- (13) Resources can only provide FRRS-Up or FRRS-Down if awarded Regulation Service in the Day-Ahead Market (DAM) for that particular Resource, up to the awarded quantity.

[NPRR1007: Delete paragraphs (11)-(13) above upon system implementation of the Real-Time Co-Optimization (RTC) project.]

3.18 Resource Limits in Providing Ancillary Service

- (1) For both Generation Resources and Load Resources the High Sustained Limit (HSL) must be greater than or equal to the Low Sustained Limit (LSL) and the sum of the Resource-specific designation of capacity to provide Responsive Reserve (RRS), ERCOT Contingency Reserve Service (ECRS), Regulation Up Service (Reg-Up), Regulation Down Service (Reg-Down), and Non-Spinning Reserve (Non-Spin).

[NPRR1007: Replace paragraph (1) above with the following upon system implementation of the Real-Time Co-Optimization (RTC) project:]

- (1) For both Generation Resources and Load Resources the High Sustained Limit (HSL) must be greater than or equal to the Low Sustained Limit (LSL) and the sum of the

Commented [CP1]: Please note NPRRs 1235 and 1246 also propose revisions to this section.

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Resource-specific awards for Responsive Reserve (RRS), ERCOT Contingency Reserve Service (FCRS), Regulation Up Service (Reg-Up), Regulation Down Service (Reg-Down), and Non-Spinning Reserve (Non-Spin).

- (2) For Non-Spin, the amount of Non-Spin provided must be less than or equal to the HSL for Off-Line Generation Resources.

[NPRR1007: Replace paragraph (2) above with the following upon system implementation of the Real-Time Co-Optimization (RTC) project:]

- (2) For Non-Spin, the amount of Non-Spin awarded must be less than or equal to the HSL for Off-Line Generation Resources.

- (3) For RRS:

- (a) The full amount of RRS using Primary Frequency Response awarded to or self-arranged from an On-Line ~~Generation~~ Resource is dependent upon the verified droop characteristics of the Resource. ERCOT shall calculate and update, using the methodology described in the Nodal Operating Guide Section 8, Attachment N, Procedure for Calculating RRS MW Limits for Individual Resources to Provide RRS Using Primary Frequency Response, a maximum MW amount of RRS using Primary Frequency Response for each ~~Generation~~ Resource subject to verified droop performance. The default value for any newly qualified ~~Generation~~ Resource not yet evaluated per Nodal Operating Guide Section 8, Attachment N shall be 20% of its HSL. A Private Use Network with a registered Resource may use the gross HSL for qualification and establishing a limit on the amount of RRS capacity that the Resource within the Private Use Network can provide;
- (b) Generation Resources operating in the synchronous condenser fast-response mode may provide RRS up to the Generation Resource's proven 20-second response capability (which may be 100% of the HSL). The initiation setting of the automatic under-frequency relay setting shall not be lower than 59.80 Hz. Once deployed, a Resource telemetering a Resource Status of ONRR shall telemeter an RRS Ancillary Service Schedule of zero, and when recalled by ERCOT after frequency recovers above 59.98 Hz, such Resource shall telemeter an RRS Ancillary Service Schedule that shall be a non-zero value equal to its RRS Ancillary Service Responsibility;
- (c) The initiation setting of the automatic under-frequency relay setting for Load Resources providing RRS shall not be lower than 59.70 Hz; and
- (d) The amount of RRS provided from a Resource capable of providing Fast Frequency Response (FFR) must be less than or equal to its 15-minute rated capacity. The initiation setting of the automatic self-deployment of the Resource

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providing RRS as FFR must be no lower than 59.85 Hz. A Resource providing RRS as FFR that is deployed shall not recall its capacity until system frequency is greater than 59.98 Hz. Once deployed, a Resource telemetering a Resource Status of ONFFRRRS or ONFFRRSL shall telemeter an RRS Ancillary Service Schedule of zero, and when recalled, such Resource shall telemeter an RRS Ancillary Service Schedule that shall be a non-zero value equal to its RRS Ancillary Service Responsibility. Once recalled, a Resource providing RRS as FFR must restore its full RRS Ancillary Service Resource Responsibility within 15 minutes after cessation of deployment or as otherwise directed by ERCOT.

[NPRR1007: Replace paragraph (3) above with the following upon system implementation of the Real-Time Co-Optimization (RTC) project:]

(3) For RRS:

- (a) The full amount of RRS using Primary Frequency Response that can be provided by an On-Line ~~Generation~~ Resource is dependent upon the verified droop characteristics of the Resource. ERCOT shall calculate and update, using the methodology described in the Nodal Operating Guide Section 8, Attachment N, Procedure for Calculating RRS MW Limits for Individual Resources to Provide RRS Using Primary Frequency Response, a maximum MW amount of RRS using Primary Frequency Response for each ~~Generation~~ Resource subject to verified droop performance. The default value for any newly qualified ~~Generation~~ Resource not yet evaluated per Nodal Operating Guide Section 8, Attachment N shall be 20% of its IISL. A Private Use Network with a registered Resource may use the gross IISL for qualification and establishing a limit on the amount of RRS capacity that the Resource within the Private Use Network can provide;
- (b) Generation Resources operating in the synchronous condenser fast-response mode may be awarded RRS up to the Generation Resource's proven 20-second response capability (which may be 100% of the IISL). The initiation setting of the automatic under-frequency relay setting shall not be lower than 59.80 Hz;
- (c) The initiation setting of the automatic under-frequency relay setting for Load Resources providing RRS shall not be lower than 59.70 Hz; and
- (d) The amount of RRS awarded to a Resource capable of providing Fast Frequency Response (FFR) must be less than or equal to its 15-minute rated capacity. The initiation setting of the automatic self-deployment of the Resource providing RRS as FFR must be no lower than 59.85 Hz.

(4) For ECRS:

- (a) The full amount of ECRS provided from an On-Line Generation Resource must be less than or equal to ten times the Emergency Ramp Rate;

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- (b) The full amount of ECRS provided by a Quick Start Generation Resource (QSGR) must be less than or equal to its proven ten-minute capability as demonstrated pursuant to paragraph (16) of Section 8.1.1.2, General Capacity Testing Requirements;
- (c) Generation Resources operating in the synchronous condenser fast-response mode may provide ECRS up to the Generation Resource's proven 20-second response capability (which may be 100% of the HSL). The initiation setting of the automatic under-frequency relay setting shall not be lower than 59.80 Hz; and
- (d) For any Load Resources controlled by under-frequency relay and providing ECRS, the initiation setting of the automatic under-frequency relay setting shall not be lower than 59.70 Hz. To provide ECRS, Load Resources are not required to be controlled by under-frequency relays.

[NPRR1007: Replace applicable portions of paragraph (4) above with the following upon system implementation of the Real-Time Co-Optimization (RTC) project:]

- (4) For ECRS:
 - (a) The full amount of ECRS that can be awarded to an On-Line Generation Resource must be less than or equal to ten times the Emergency Ramp Rate;
 - (b) The full amount of ECRS that can be awarded to a Quick Start Generation Resource (QSGR) must be less than or equal to its proven ten-minute capability as demonstrated pursuant to paragraph (16) of Section 8.1.1.2, General Capacity Testing Requirements;
 - (c) Generation Resources operating in the synchronous condenser fast-response mode may be awarded ECRS up to the Generation Resource's proven 20-second response capability (which may be 100% of the HSL). The initiation setting of the automatic under-frequency relay setting shall not be lower than 59.80 Hz; and
 - (d) For any Load Resources controlled by under-frequency relay and awarded ECRS, the initiation setting of the automatic under-frequency relay setting shall not be lower than 59.70 Hz. To provide ECRS, Load Resources are not required to be controlled by under-frequency relays.

ERCOT Impact Analysis Report

NPRR Number	<u>1257</u>	NPRR Title	Limit on Amount of RRS a Resource can Provide Using Primary Frequency Response
Impact Analysis Date	October 21, 2024		
Estimated Cost/Budgetary Impact	Less than \$10K, 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 following Public Utility Commission of Texas (PUCT) approval.		
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

None.

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NPRR Number	<u>1258</u>	NPRR Title	TSP Performance Monitoring Update
Date of Decision	February 4, 2025		
Action	Recommended Approval		
Timeline	Normal		
Estimated Impacts	Cost/Budgetary: None Project Duration: No project required		
Proposed Effective Date	First of the month following Public Utility Commission of Texas (PUCT) approval		
Priority and Rank Assigned	Not applicable		
Nodal Protocol Sections Requiring Revision	8.3, TSP Performance Monitoring and Compliance		
Related Documents Requiring Revision/Related Revision Requests	None		
Revision Description	This Nodal Protocol Revision Request (NPRR) removes language from Section 8.3 that is duplicative of requirements that are detailed in Section 3, Management Activities for the ERCOT System. The provisions at issue provide model update requirements that are designed to ensure network data is in Common Information Model (CIM) format and uses the required naming convention.		
Reason for Revision	<input type="checkbox"/> <u>Strategic Plan</u> Objective 1 – Be an industry leader for grid reliability and resilience <input type="checkbox"/> <u>Strategic Plan</u> Objective 2 - Enhance the ERCOT region’s economic competitiveness with respect to trends in wholesale power rates and retail electricity prices to consumers <input type="checkbox"/> <u>Strategic Plan</u> Objective 3 - Advance ERCOT, Inc. as an independent leading industry expert and an employer of choice by fostering innovation, investing in our people, and emphasizing the importance of our mission		

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	<input checked="" type="checkbox"/> General system and/or process improvement(s) <input type="checkbox"/> Regulatory requirements <input type="checkbox"/> ERCOT Board/PUCT Directive <i>(please select ONLY ONE – if more than one apply, please select the ONE that is most relevant)</i>
Justification of Reason for Revision and Market Impacts	ERCOT's modeling systems automatically reject any submission that is not CIM compliant and any submissions where the naming convention is not adhered to. This automatic validation enforces the requirements in Section 3, rendering the naming convention and format requirements found in Section 8.3 duplicative and unnecessary.
PRS Decision	<p>On 11/14/24, PRS voted unanimously to recommend approval of NPRR1258 as submitted. All Market Segments participated in the vote.</p> <p>On 12/12/24, PRS voted unanimously to endorse and forward to TAC the 11/14/24 PRS Report and 10/29/24 Impact Analysis for NPRR1258. All Market Segments participated in the vote.</p>
Summary of PRS Discussion	<p>On 11/14/24, PRS reviewed NPRR1258.</p> <p>On 12/12/24, PRS reviewed the 10/29/24 Impact Analysis.</p>
TAC Decision	On 1/22/25, TAC voted unanimously to recommend approval of NPRR1258 as recommended by PRS in the 12/12/24 PRS Report. All Market Segments participated in the vote.
Summary of TAC Discussion	On 1/22/25, there was no additional discussion beyond TAC review of the items below.
TAC Review/Justification of Recommendation	<input checked="" type="checkbox"/> Revision Request ties to Reason for Revision as explained in Justification <input checked="" type="checkbox"/> Impact Analysis reviewed and impacts are justified as explained in Justification <input checked="" type="checkbox"/> Opinions were reviewed and discussed <input checked="" type="checkbox"/> Comments were reviewed and discussed (if applicable) <input type="checkbox"/> Other: (explain)

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ERCOT Board Decision	On 2/4/25, the ERCOT Board voted unanimously to recommend approval of NPRR1258 as recommended by TAC in the 1/22/25 TAC Report.
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Opinions	
Credit Review	ERCOT Credit Staff and the Credit Finance Sub Group (CFSG) have reviewed NPRR1258 and do not believe that it requires changes to credit monitoring activity or the calculation of liability.
Independent Market Monitor Opinion	IMM has no opinion on NPRR1258.
ERCOT Opinion	ERCOT supports approval of NPRR1258.
ERCOT Market Impact Statement	ERCOT Staff has reviewed NPRR1258 and believes that it provides a positive market impact through general system improvements by removing duplicative language regarding network data naming convention and formatting requirements.

Sponsor	
Name	Eric Meier
E-mail Address	eric.meier@ercot.com
Company	ERCOT
Phone Number	512-248-6770
Cell Number	
Market Segment	Not applicable

Market Rules Staff Contact	
Name	Jordan Troublefield
E-Mail Address	Jordan.Troublefield@ercot.com
Phone Number	512-248-6521

Comments Received	
Comment Author	Comment Summary
None	

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Market Rules Notes

None

Proposed Protocol Language Revision

8.3 TSP Performance Monitoring and Compliance

- (1) ERCOT shall develop a Technical Advisory Committee (TAC)- and ERCOT Board-approved Transmission Service Provider (TSP) monitoring program to be included in the Operating Guides for TSPs regarding Real-Time data telemetry performance, ~~which shall include the following:~~
 - ~~(a) — Real Time data:~~
 - ~~(i) — Telemetry performance; and~~
 - ~~(b) — Compliance with model update requirements, including provision of network data in Common Informational Model (CIM) compatible format and consistency with the Transmission Element naming convention developed in accordance under Section 3, Management Activities for the ERCOT System.~~

[NPRR857: Replace Section 8.3 above with the following upon system implementation and satisfying the following conditions: (1) Southern Cross provides ERCOT with funds to cover the entire estimated cost of the project; and (2) Southern Cross has signed an interconnection agreement with a TSP and the TSP gives ERCOT written notice that Southern Cross has provided it with: (a) Notice to proceed with the construction of the interconnection; and (b) The financial security required to fund the interconnection facilities:]

8.3 TSP and DCTO Performance Monitoring and Compliance

- (1) ERCOT shall develop a Technical Advisory Committee (TAC)- and ERCOT Board-approved Transmission Service Provider (TSP) and Direct Current Tie Operator (DCTO) monitoring program to be included in the Operating Guides for TSPs and DCTOs regarding Real-Time data telemetry performance, ~~which shall include the following:~~
 - ~~(a) — Real Time data:~~
 - ~~(i) — Telemetry performance; and~~
 - ~~(b) — Compliance with model update requirements, including provision of network data in Common Informational Model (CIM) compatible format and~~

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~~consistency with the Transmission Element naming convention developed in accordance under Section 3, Management Activities for the ERCOT System.~~

ERCOT Impact Analysis Report

NPRR Number	<u>1258</u>	NPRR Title	TSP Performance Monitoring Update
Impact Analysis Date	October 29, 2024		
Estimated Cost/Budgetary Impact	None.		
Estimated Time Requirements	No project required. This Nodal Protocol Revision Request (NPRR) can take effect following Public Utility Commission of Texas (PUCT) approval.		
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

None.

Board Report

NPRR Number	<u>1259</u>	NPRR Title	Update Section 15 Level Response Language
Date of Decision	February 4, 2025		
Action	Recommended Approval		
Timeline	Normal		
Estimated Impacts	Cost/Budgetary: None Project Duration: No project required		
Proposed Effective Date	First of the month following Public Utility Commission of Texas (PUCT) approval		
Priority and Rank Assigned	Not applicable		
Nodal Protocol Sections Requiring Revision	15, Customer Registration		
Related Documents Requiring Revision/Related Revision Requests	None		
Revision Description	This Nodal Protocol Revision Request (NPRR) clarifies that retail transaction response timing requirements will not include the duration of a planned and approved ERCOT retail system outage.		
Reason for Revision	<input type="checkbox"/> <u>Strategic Plan</u> Objective 1 – Be an industry leader for grid reliability and resilience <input type="checkbox"/> <u>Strategic Plan</u> Objective 2 - Enhance the ERCOT region's economic competitiveness with respect to trends in wholesale power rates and retail electricity prices to consumers <input type="checkbox"/> <u>Strategic Plan</u> Objective 3 - Advance ERCOT, Inc. as an independent leading industry expert and an employer of choice by fostering innovation, investing in our people, and emphasizing the importance of our mission <input checked="" type="checkbox"/> General system and/or process improvement(s) <input type="checkbox"/> Regulatory requirements		

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	<input type="checkbox"/> ERCOT Board/PUCT Directive <i>(please select ONLY ONE – if more than one apply, please select the ONE that is most relevant)</i>
Justification of Reason for Revision and Market Impacts	The purpose of this NPRR is to provide clarification on the response expectations of retail transactions during an approved ERCOT retail system outage.
PRS Decision	<p>On 11/14/24, PRS voted unanimously to table NPRR1259 and refer the issue to RMS. All Market Segments participated in the vote.</p> <p>On 12/12/24, PRS voted unanimously to recommend approval of NPRR1259 as amended by the 12/10/24 RMS comments. All Market Segments participated in the vote.</p> <p>On 1/15/25, PRS voted unanimously to endorse and forward to TAC the 12/12/24 PRS Report and 10/30/24 Impact Analysis for NPRR1259. All Market Segments participated in the vote.</p>
Summary of PRS Discussion	<p>On 11/14/24, PRS reviewed NPRR1259 and requested that RMS review NPRR1259.</p> <p>On 12/12/24, PRS reviewed the 12/10/24 RMS comments.</p> <p>On 1/15/25, PRS reviewed the 10/30/24 Impact Analysis.</p>
TAC Decision	On 1/22/25, TAC voted unanimously to recommend approval of NPRR1259 as recommended by PRS in the 1/15/25 PRS Report. All Market Segments participated in the vote.
Summary of TAC Discussion	On 1/22/25, there was no additional discussion beyond TAC review of the items below.
TAC Review/Justification of Recommendation	<input checked="" type="checkbox"/> Revision Request ties to Reason for Revision as explained in Justification <input checked="" type="checkbox"/> Impact Analysis reviewed and impacts are justified as explained in Justification <input checked="" type="checkbox"/> Opinions were reviewed and discussed <input checked="" type="checkbox"/> Comments were reviewed and discussed (if applicable) <input type="checkbox"/> Other: (explain)
ERCOT Board Decision	On 2/4/25, the ERCOT Board voted unanimously to recommend approval of NPRR1259 as recommended by TAC in the 1/22/25 TAC Report.

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Opinions	
Credit Review	ERCOT Credit Staff and the Credit Finance Sub Group (CFSG) have reviewed NPRR1259 and do not believe that it requires changes to credit monitoring activity or the calculation of liability.
Independent Market Monitor Opinion	IMM has no opinion on NPRR1259.
ERCOT Opinion	ERCOT supports approval of NPRR1259.
ERCOT Market Impact Statement	ERCOT Staff has reviewed NPRR1259 and believes that it provides process improvements by clarifying that retail transaction response timing requirements will not include the duration of a planned and approved ERCOT retail system outage.

Sponsor	
Name	David Michelsen
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Company	ERCOT
Phone Number	(512) 248-6740
Cell Number	
Market Segment	Not Applicable

Market Rules Staff Contact	
Name	Jordan Troublefield
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Phone Number	512-248-6521

Comments Received	
Comment Author	Comment Summary
RMS 121024	Endorsed NPRR1259 as revised by RMS

Market Rules Notes

Please note the baseline Protocol language in the following section has been updated to reflect the incorporation of the following NPRR into the Protocols:

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- NPRR1168, Related to RMGRR172, Texas SET V5.0 Continuous Service Agreements Changes (incorporated 11/11/24)
 - Section 15

Proposed Protocol Language Revision

15 CUSTOMER REGISTRATION

- (1) ERCOT shall maintain a registration database of all metered and unmetered Electric Service Identifiers (ESI IDs) in Texas for Customer Choice.
- (2) ERCOT will notify the Public Utility Commission of Texas (PUCT) and the affected Competitive Retailer (CR) if a Transmission and/or Distribution Service Provider (TDSP) fails to meet its Customer switch responsibilities under the ERCOT Protocols.
- (3) All CRs with Customers in Texas, whether operating inside the ERCOT Region or not, shall be required to register their Customers in accordance with this Section.
- (4) All Customer registration processes will be conducted using the appropriate Texas Standard Electronic Transactions (TX SETs). Definitions of all TX SET codes referenced in this Section can be found in Section 19, Texas Standard Electronic Transaction. A reference to any TX SET transaction should be read as referring to the named transaction or its Market Information System (MIS) equivalent, if any. Transaction flow diagrams for Customer registration processing are posted on the ERCOT website.
- (5) ERCOT will reject any initiating transaction due to date reasonableness if the requested implementation date is of more than 90 days in the future or 270 days in the past. Initiating transactions are: 814_01, Switch Request; 814_16, Move In Request; and 814_24, Move Out Request. ERCOT will reject an 814_18, Establish/Change/Delete CSA Request, transaction with a requested start date of more than 90 days in the future or a requested start date in the past.
- (6) ERCOT will prioritize initiating or inbound transactions in the following manner: The following timing requirement calculations will not include the duration of a planned and TAC subcommittee-approved ERCOT retail system outage:
 - (a) Level 1 – Same day 814_16 transactions, same day 814_24 transactions, 814_01 transactions and 814_20, ESI ID Maintenance Requests (Create), will be processed in one Retail Business Hour.
 - (b) Level 2 – Standard 814_16 transactions and standard 814_24 transactions will be processed in two Retail Business Hours.
 - (c) Level 3 – 867_02, Historical Usage, 814_20, ESI ID Maintenance Requests (Maintain and Retire), will be processed in four Retail Business Hours.

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- (d) Level 4 – All 814_26, Historical Usage Requests, 814_18, Establish/Change/Delete CSA Requests, and 814_19, Establish/Change/Delete CSA Responses, will be processed in one Retail Business Day.
- (7) For transactions to flow through ERCOT, back-dated transactions for a market-approved corrective action must meet the date reasonableness test. Market Participants must work with ERCOT for any manual changes to transactions that fall outside these dates for market-approved corrective action. However, a TDSP will reject a back-dated transaction that is not part of a market-approved transaction.
- (8) For more information concerning the requirements for transaction processing in the retail market, please refer to the Retail Market Guide.

ERCOT Impact Analysis Report

NPRR Number	<u>1259</u>	NPRR Title	Update Section 15 Level Response Language
Impact Analysis Date	October 30, 2024		
Estimated Cost/Budgetary Impact	None.		
Estimated Time Requirements	No project required. This Nodal Protocol Revision Request (NPRR) can take effect following Public Utility Commission of Texas (PUCT) approval.		
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

None.

Board Report

NPRR Number	<u>1260</u>	NPRR Title	Corrections for CLR Requirements Inadvertently Removed
Date of Decision	February 4, 2025		
Action	Recommended Approval		
Timeline	Normal		
Estimated Impacts	Cost/Budgetary: None Project Duration: No project required		
Proposed Effective Date	First of the month following Public Utility Commission of Texas (PUCT) approval		
Priority and Rank Assigned	Not applicable		
Nodal Protocol Sections Requiring Revision	3.17.2, Responsive Reserve Service 8.1.1.2.1.2, Responsive Reserve Qualification		
Related Documents Requiring Revision/Related Revision Requests	None		
Revision Description	This Nodal Protocol Revision Request (NPRR) reinstates requirements applicable to Controllable Load Resources (CLRs) that were inadvertently removed during the process to approve and implement NPRR863, Creation of ERCOT Contingency Reserve Service and Revisions to Responsive Reserve. The changes shown represent existing business requirements that were in place for CLR participation in the Ancillary Services markets prior to and after implementing NPRR863.		
Reason for Revision	<div style="display: flex; flex-direction: column; gap: 10px;"> <div> <input type="checkbox"/> <u>Strategic Plan</u> Objective 1 – Be an industry leader for grid reliability and resilience </div> <div> <input type="checkbox"/> <u>Strategic Plan</u> Objective 2 - Enhance the ERCOT region's economic competitiveness with respect to trends in wholesale power rates and retail electricity prices to consumers </div> <div> <input type="checkbox"/> <u>Strategic Plan</u> Objective 3 - Advance ERCOT, Inc. as an independent leading industry expert and an employer of choice by fostering innovation, investing in our people, and emphasizing the importance of our mission </div> <div> <input checked="" type="checkbox"/> General system and/or process improvement(s) </div> </div>		

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	<input type="checkbox"/> Regulatory requirements <input type="checkbox"/> ERCOT Board/PUCT Directive <i>(please select ONLY ONE – if more than one apply, please select the ONE that is most relevant)</i>
Justification of Reason for Revision and Market Impacts	This NPRR aligns Protocols with existing business requirements for Controllable Load Resources providing Responsive Reserve (RRS) by restoring inadvertently removed language.
PRS Decision	<p>On 12/12/24, PRS voted unanimously to recommend approval of NPRR1260 as submitted. All Market Segments participated in the vote.</p> <p>On 1/15/25, PRS voted unanimously to endorse and forward to TAC the 12/12/24 PRS Report and 11/6/24 Impact Analysis for NPRR1260. All Market Segments participated in the vote.</p>
Summary of PRS Discussion	<p>On 12/12/24, ERCOT Staff provided an overview of NPRR1260.</p> <p>On 1/15/25, there was no discussion.</p>
TAC Decision	On 1/22/25, TAC voted unanimously to recommend approval of NPRR1260 as recommended by PRS in the 1/15/25 PRS Report. All Market Segments participated in the vote.
Summary of TAC Discussion	On 1/22/25, there was no additional discussion beyond TAC review of the items below.
TAC Review/Justification of Recommendation	<input checked="" type="checkbox"/> Revision Request ties to Reason for Revision as explained in Justification <input checked="" type="checkbox"/> Impact Analysis reviewed and impacts are justified as explained in Justification <input checked="" type="checkbox"/> Opinions were reviewed and discussed <input checked="" type="checkbox"/> Comments were reviewed and discussed (if applicable) <input type="checkbox"/> Other: (explain)
ERCOT Board Decision	On 2/4/25, the ERCOT Board voted unanimously to recommend approval of NPRR1260 as recommended by TAC in the 1/22/25 TAC Report.

Opinions

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Credit Review	ERCOT Credit Staff and the Credit Finance Sub Group (CFSG) have reviewed NPRR1260 and do not believe that it requires changes to credit monitoring activity or the calculation of liability.
Independent Market Monitor Opinion	IMM has no opinion on NPRR1260.
ERCOT Opinion	ERCOT supports approval of NPRR1260.
ERCOT Market Impact Statement	ERCOT Staff has reviewed NPRR1260 and believes the market impact for NPRR1260 realigns Protocols with the existing requirements in place for CLRs which were inadvertently removed by NPRR863.

Sponsor	
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Company	ERCOT
Phone Number	512-569-5539
Cell Number	512-569-5539
Market Segment	Not applicable

Market Rules Staff Contact	
Name	Cory Phillips
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Phone Number	512-248-6464

Comments Received	
Comment Author	Comment Summary
None	

Market Rules Notes

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

- NPRR1246, Energy Storage Resource Terminology Alignment for the Single-Model Era
 - Section 3.17.2

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Proposed Protocol Language Revision

3.17.2 *Responsive Reserve Service*

Commented [CP1]: Please note NPRR1246 also proposes revisions to this section.

- (1) Responsive Reserve (RRS) is a service used to restore or maintain the frequency of the ERCOT System in response to a significant frequency deviation.
- (2) RRS is automatically self-deployed by Resources in a manner that results in real power increases or decreases.
- (3) RRS may be provided by:
 - (a) On-Line Generation Resource capable of providing Primary Frequency Response with the capacity excluding Non-Frequency Responsive Capacity (NFRS);
 - (b) Resources capable of providing Fast Frequency Response (FFR) and sustaining their response for up to 15 minutes;
 - (c) Load Resources controlled by high-set under-frequency relays;
 - (d) Controllable Load Resources; and
 - (e) Generation Resources operating in synchronous condenser fast-response mode as defined in the Operating Guides.

8.1.1.2.1.2 **Responsive Reserve Qualification**

- (1) RRS may be provided by:
 - (a) On-Line Generation Resource capacity;
 - (b) Resources capable of providing FFR;
 - (c) Generation Resources operating in the synchronous condenser fast-response mode; ~~and~~
 - (c) Load Resources controlled by high-set under-frequency relays; and-
 - (d) Controllable Load Resources.
- (2) The amount of RRS provided by individual Generation Resources or Controllable Load Resources is limited by the ERCOT-calculated maximum MW amount of RRS for the Generation Resource or Controllable Load Resource subject to its verified droop performance as described in the Nodal Operating Guide. The default value for any newly qualified Generation Resource or Controllable Load Resource shall be 20% of its HSL. A Private Use Network with a registered Resource may use the gross HSL for

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qualification and establishing a limit on the amount of RRS capacity that the Resource within the Private Use Network can provide.

- (3) A QSE's Load Resource must be loaded and capable of unloading the scheduled amount of RRS within ten minutes of instruction by ERCOT and must either be immediately responsive to system frequency or be interrupted by action of under-frequency relays with settings as specified by the Operating Guides.
- (43) Any QSE providing RRS shall provide communications equipment to provide ERCOT with telemetry for the output of the Resource.
- (54) Resources capable of FFR providing RRS must provide a telemetered output signal, including breaker status and status of the frequency detection device.
- (65) Each QSE shall ensure that each Resource is able to meet the Resource's obligations to provide the Ancillary Service Resource Responsibility. Each Resource providing RRS must meet additional technical requirements specified in this Section.
- (76) Generation Resources providing RRS shall have their Governors in service.
- (87) Generation Resources and Resources capable of FFR providing RRS shall have a Governor droop setting that is no greater than 5.0%.
- (98) Resources may be provisionally qualified by ERCOT to provide RRS for 90 days. Within the 90-day provisional window, a Resource must successfully complete one of the Governor tests identified in the Nodal Operating Guide Section 8, Attachment C, Turbine Governor Speed Tests, before being declared fully qualified to provide RRS.
- (10) A qualification test for each Resource to provide RRS is conducted during a continuous eight-hour period agreed to by the QSE and ERCOT. ERCOT shall confirm the date and time of the test with the QSE. ERCOT shall administer the following test requirements:
 - (a) At any time during the window, which is selected by ERCOT when market and reliability conditions allow and not previously disclosed to the QSE, ERCOT shall notify the QSE that it is to provide an amount of RRS from its Resource to be qualified equal to the amount for which the QSE is requesting qualification. The QSE shall acknowledge the start of the test.
 - (b) For Generation Resources desiring qualification to provide RRS, ERCOT shall send a signal to the Resource's QSE to deploy RRS indicating the MW amount. ERCOT shall monitor the QSE's telemetry of the Resource's Ancillary Service Schedule for an update within 15 seconds. ERCOT shall measure the test Resource's response as described under Section 8.1.1.4.2, Responsive Reserve Service Energy Deployment Criteria. ERCOT shall evaluate the response of the Generation Resource given the current operating conditions of the system and determine the Resource's qualification to provide RRS.

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- (c) For Controllable Load Resources desiring qualification to provide RRS, ERCOT shall send a signal to the Resource's QSE to deploy RRS indicating the MW amount. ERCOT shall measure the test Resource's response as described under Section 8.1.1.4.2. ERCOT shall evaluate the response of the Controllable Load Resource given the current operating conditions of the system and determine the Controllable Load Resource's qualification to provide RRS.
- (d) For Load Resources, excluding Controllable Load Resources, desiring qualification to provide RRS, ERCOT shall deploy RRS indicating the MW amount. ERCOT shall measure the test Resource's response as described under Section 8.1.1.4.2.
- (e) On successful demonstration of all test criteria, ERCOT shall qualify that the Resource is capable of providing RRS and shall provide a copy of the certificate to the QSE and the Resource Entity.

[NPRR1011 and NPRR1014: Replace applicable portions of Section 8.1.1.2.1.2 above with the following upon system implementation for NPRR1014; or upon system implementation of the Real-Time Co-Optimization (RTC) project for NPRR1011:]

8.1.1.2.1.2 Responsive Reserve Qualification

- (1) RRS may be provided by:
 - (a) On-Line Generation Resource capacity;
 - (b) Resources capable of providing FFR;
 - (c) Generation Resources operating in the synchronous condenser fast-response mode;
 - (d) Load Resources controlled by high-set under-frequency relays; ~~and~~
 - (e) Controllable Load Resources; and
 - (f) Energy Storage Resources (ESRs).
- (2) The amount of RRS provided by individual Generation Resources, Controllable Load Resources, or ESRs is limited by the ERCOT-calculated maximum MW amount of RRS for the Generation Resource, Controllable Load Resource, or ESR subject to its verified droop performance as described in the Nodal Operating Guide. The default value for any newly qualified Generation Resource, Controllable Load Resource, or ESR shall be 20% of its HSL. A Private Use Network with a registered Resource may use the gross HSL for qualification and establishing a limit on the amount of RRS capacity that the Resource within the Private Use Network can provide.
- (3) A QSE's Load Resource must be loaded and capable of unloading the scheduled amount of RRS within ten minutes of instruction by ERCOT and must either be

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immediately responsive to system frequency or be interrupted by action of under-frequency relays with settings as specified by the Operating Guides.

- (43) Any QSE representing a Resource qualified to provide RRS shall provide communications equipment to provide ERCOT with telemetry for the output of the Resource.
- (54) Resources capable of FFR providing RRS must provide a telemetered output signal, including breaker status and status of the frequency detection device.
- (65) Each QSE shall ensure that each Resource is able to meet the Resource's obligations to provide the RRS award. Each Resource providing RRS must meet additional technical requirements specified in this Section.
- (76) Generation Resources offering to provide RRS shall have their Governors in service.
- (87) Generation Resources and Resources capable of FFR providing RRS shall have a Governor droop setting that is no greater than 5.0%.
- (98) Resources may be provisionally qualified by ERCOT to provide RRS for 90 days. Within the 90-day provisional window, a Resource must successfully complete one of the Governor tests identified in the Nodal Operating Guide Section 8, Attachment C, Turbine Governor Speed Tests, before being declared fully qualified to provide RRS.
- (109) For Resources providing RRS and available for dispatch by SCED, the maximum quantity of RRS that a Resource is qualified to provide is limited to the amount of RRS that can be sustained by the Resource for at least 15 minutes. For all other Resources excluding non-Controllable Load Resources providing FFR, the maximum quantity of RRS that a Resource is qualified to provide is limited to the amount of RRS that can be sustained by the Resource for at least one hour. The maximum quantity of FFR that any non-Controllable Load Resource qualified to provide FFR is limited to the amount of FFR that can be sustained by the Resource for at least 15 minutes.
- (11) A qualification test for each Resource to provide RRS is conducted during a continuous eight-hour period agreed to by the QSE and ERCOT. ERCOT shall confirm the date and time of the test with the QSE. ERCOT shall administer the following test requirements:
 - (a) At any time during the window, which is selected by ERCOT when market and reliability conditions allow and not previously disclosed to the QSE, ERCOT shall notify the QSE that it is to provide an amount of RRS from its Resource to be qualified equal to the amount for which the QSE is requesting qualification. The QSE shall acknowledge the start of the test.
 - (b) For Generation Resources desiring qualification to provide RRS, ERCOT shall send a signal to the Resource's QSE to deploy RRS indicating the MW amount. ERCOT shall monitor the QSE's telemetry of the Resource's Ancillary Service Schedule for an update within 15 seconds. ERCOT shall measure the test

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Resource's response as described under Section 8.1.1.4.2, Responsive Reserve Service Energy Deployment Criteria. ERCOT shall evaluate the response of the Generation Resource given the current operating conditions of the system and determine the Resource's qualification to provide RRS.

- (c) For Controllable Load Resources desiring qualification to provide RRS, ERCOT shall send a signal to the Resource's QSE to deploy RRS indicating the MW amount. ERCOT shall measure the test Resource's response as described under Section 8.1.1.4.2. ERCOT shall evaluate the response of the Controllable Load Resource given the current operating conditions of the system and determine the Controllable Load Resource's qualification to provide RRS.
- (d) For Load Resources, excluding Controllable Load Resources, desiring qualification to provide RRS, ERCOT shall deploy RRS indicating the MW amount. ERCOT shall measure the test Resource's response as described under Section 8.1.1.4.2.
- (e) On successful demonstration of all test criteria, ERCOT shall qualify that the Resource is capable of providing RRS and shall provide a copy of the certificate to the QSE and the Resource Entity.

ERCOT Impact Analysis Report

NPRR Number	<u>1260</u>	NPRR Title	Corrections for CLR Requirements Inadvertently Removed
Impact Analysis Date		November 6, 2024	
Estimated Cost/Budgetary Impact		None.	
Estimated Time Requirements		No project required. This Nodal Protocol Revision Request (NPRR) can take effect following Public Utility Commission of Texas (PUCT) approval.	
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

None.

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NPRR Number	<u>1261</u>	NPRR Title	Operational Flexibility for CRR Auction Transaction Limits
Date of Decision	February 4, 2025		
Action	Recommended Approval		
Timeline	Normal		
Estimated Impacts	Cost/Budgetary: None Project Duration: No project required		
Proposed Effective Date	First of the month following Public Utility Commission of Texas (PUCT) approval		
Priority and Rank Assigned	Not applicable		
Nodal Protocol Sections Requiring Revision	7.5.2, CRR Auction Offers and Bids		
Related Documents Requiring Revision/Related Revision Requests	None		
Revision Description	This Nodal Protocol Revision Request (NPRR) removes references to Technical Advisory Committee (TAC)-approved Congestion Revenue Right (CRR) transaction limits and per-CRR Account Holder transaction limits and replaces the existing limits with a framework of transaction limits specific to each auction to maximize market bidding and liquidity while minimizing the risk of performance issues and/or triggering a transaction adjustment period.		
Reason for Revision	<div style="display: flex; flex-direction: column; gap: 10px;"> <div> <input type="checkbox"/> <u>Strategic Plan</u> Objective 1 - Be an industry leader for grid reliability and resilience </div> <div> <input type="checkbox"/> <u>Strategic Plan</u> Objective 2 - Enhance the ERCOT region's economic competitiveness with respect to trends in wholesale power rates and retail electricity prices to consumers </div> <div> <input type="checkbox"/> <u>Strategic Plan</u> Objective 3 - Advance ERCOT, Inc. as an independent leading industry expert and an employer of choice by fostering innovation, investing in our people, and emphasizing the importance of our mission </div> <div> <input checked="" type="checkbox"/> General system and/or process improvement(s) </div> </div>		

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	<input type="checkbox"/> Regulatory requirements <input type="checkbox"/> ERCOT Board/PUCT Directive <i>(please select ONLY ONE – if more than one apply, please select the ONE that is most relevant)</i>
Justification of Reason for Revision and Market Impacts	<p>The ERCOT CRR market has consistently and significantly increased in the amount of market transactions. To address the growing number of market transactions ERCOT seeks to implement a new, more dynamic framework to maximize the number of transactions that can be allowed for all auctions, while also protecting against transaction adjustment periods and performance issues. ERCOT's new framework will designate, for each auction, the following varying auction limits:</p> <ul style="list-style-type: none"> • The overall transaction limit; • Per-CRR Account Holder transaction limit; and • Per time-of-use transaction limits. <p>ERCOT's new framework will enable operational flexibility, which will ensure the maximum number of transactions are made available in each auction, while also preserving the optimizations' performance, and will be communicated to the market in each auction's Market Notice.</p>
PRS Decision	<p>On 12/12/24, PRS voted unanimously to recommend approval of NPRR1261 as submitted. All Market Segments participated in the vote.</p> <p>On 1/15/25, PRS voted unanimously to endorse and forward to TAC the 12/12/24 PRS Report and 11/13/24 Impact Analysis for NPRR1261. All Market Segments participated in the vote.</p>
Summary of PRS Discussion	<p>On 12/12/24, ERCOT Staff provided an overview of NPRR1261 and participants reviewed the 12/6/24 DC Energy comments.</p> <p>On 1/15/25, there was no discussion.</p>
TAC Decision	<p>On 1/22/25, TAC voted unanimously to recommend approval of NPRR1261 as recommended by PRS in the 1/15/25 PRS Report. All Market Segments participated in the vote.</p>
Summary of TAC Discussion	<p>On 1/22/25, there was no additional discussion beyond TAC review of the items below.</p>

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TAC Review/Justification of Recommendation	<input checked="" type="checkbox"/> Revision Request ties to Reason for Revision as explained in Justification <input checked="" type="checkbox"/> Impact Analysis reviewed and impacts are justified as explained in Justification <input checked="" type="checkbox"/> Opinions were reviewed and discussed <input checked="" type="checkbox"/> Comments were reviewed and discussed (if applicable) <input type="checkbox"/> Other: (explain)
ERCOT Board Decision	On 2/4/25, the ERCOT Board voted unanimously to recommend approval of NPRR1261 as recommended by TAC in the 1/22/25 TAC Report.

Opinions	
Credit Review	ERCOT Credit Staff and the Credit Finance Sub Group (CFSG) have reviewed NPRR1261 and do not believe that it requires changes to credit monitoring activity or the calculation of liability.
Independent Market Monitor Opinion	IMM supports approval of NPRR1261.
ERCOT Opinion	ERCOT supports approval of NPRR1261.
ERCOT Market Impact Statement	ERCOT Staff has reviewed NPRR1261 and believes the market impact for NPRR1261 enables operational flexibility for ERCOT to ensure the maximum number of transactions are made available within each CRR Auction while targeting to avoid performance issues and/or minimizing Transaction Adjustment Periods.

Sponsor	
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Market Segment	Not applicable

Market Rules Staff Contact

Board Report

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

Comments Received	
Comment Author	Comment Summary
DC Energy 120624	Expressed support for NPRR1261 and requested continued engagement with Congestion Management Working Group (CMWG) on ERCOT's decision making process on setting transaction limits

Market Rules Notes

None

Proposed Protocol Language Revision

7.5.2 CRR Auction Offers and Bids

- (1) To submit bids or offers into a CRR Auction, an Entity must become a CRR Account Holder and satisfy financial assurance criteria required to participate, under Section 16.8, Registration and Qualification of Congestion Revenue Rights Account Holders.
- (2) In order to enforce a volume limitation on the number of market transactions (bids and offers) submitted into the CRR Auction, ERCOT shall evaluate the maximum number of transactions which are available prior to the auction, and evenly divide the limit across the CRR Account Holders eligible to submit bids or offers according to paragraph (1) above. This limit shall be designated as the preliminary allocated CRR transaction limit. ~~The preliminary allocated CRR transaction limitation for all CRR Account Holders will be communicated as part of the CRR Auction Notice prior to each auction.~~ A CRR Auction Notice will be provided to all CRR Account Holders prior to each auction. The CRR Auction Notice will include the following ERCOT determined limitations for each CRR Monthly Auction and each Long-Term Auction Sequence: the preliminary allocated CRR transaction limit; the maximum overall transaction limits; time-of-use transaction limits; and per-CRR Account Holder transaction limits.
 - (a) Prior to executing the CRR Auction but after the transaction submission window is closed, ERCOT shall determine which of the CRR Account Holders are Participating CRR Account Holders for that CRR Auction. ERCOT shall then calculate a final allocated CRR transaction limit by evenly dividing the number of available transactions across the Participating CRR Account Holders.
 - ~~(b) The Technical Advisory Committee (TAC) shall establish transaction limits for the CRR Auctions for Participating CRR Account Holders. As part of TAC consideration to establish or change transaction limits, ERCOT shall provide upon~~

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~~TAC request to TAC or a TAC-designated subcommittee the historical number of transactions submitted by each CRR Account Holder and the number of active CRR Account Holders aggregated up to the associated Counter-Party for each requested CRR Auction without identifying the names of the CRR Account Holders or Counter-Parties. Upon TAC approval of a change in transaction limits, ERCOT shall post these values as part of the next regularly scheduled CRR Auction Notice. Only Participating CRR Account Holders are allowed to submit transactions for consideration in the relevant CRR Auction.~~

- (be) If the total number of transactions submitted by all Participating CRR Account Holders into the CRR Auction does not exceed the maximum number of transactions available prior to the auction, then the final allocated CRR transaction limit will not apply and all transactions will be accepted.
- (cd) Within one hour after the close of each CRR Auction, ERCOT shall notify all CRR Account Holders of the total number of transactions submitted by all Participating CRR Account Holders and whether or not a transaction adjustment period is necessary. ERCOT may determine that a transaction adjustment period is not necessary if the total number of transactions submitted by all Participating CRR Account Holders does not exceed the number of transactions that can be processed by the CRR Auction system.
- (de) If ERCOT announces a transaction adjustment period, ERCOT shall notify all CRR Account Holders of the final allocated transaction limit and reject all transactions submitted by each Participating CRR Account Holder whose sum total of transactions submitted to the affected CRR Auction exceeds the final allocated transaction limit. Each Participating CRR Account Holder may then adjust their transactions while respecting the final allocated CRR transaction limitation for the affected CRR Auction within one Business Day. ERCOT will then execute the CRR Auction using the updated set of transactions as revised by Market Participants.
- (ef) Each Counter-Party is limited to a total of three CRR Account Holders.
- (fg) ERCOT shall determine a charge for each PTP Option bid awarded in each CRR Auction as described in Section 7.7, Point-to-Point (PTP) Option Award Charge.

[NPRR936: Replace paragraph (2) above with the following upon system implementation:]

- (2) In order to enforce a volume limitation on the number of market transactions (bids and offers) submitted into the CRR Auction, ERCOT shall evaluate the maximum number of transactions which are available prior to the auction, and evenly divide the limit across the Counter-Parties that are associated with CRR Account Holders eligible to submit bids or offers according to paragraph (1) above. This limit shall be designated as the preliminary allocated CRR transaction limit. ~~The preliminary allocated CRR transaction limitation for all Counter-Parties will be communicated as part of the CRR Auction Notice prior to each auction.~~ A CRR Auction Notice will be provided to all

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CRR Account Holders prior to each auction. The CRR Auction Notice will include the following ERCOT determined limitations for each CRR Monthly Auction and each Long-Term Auction Sequence: the preliminary allocated CRR transaction limit; the maximum overall transaction limits; time-of-use transaction limits; and per-CRR Account Holder transaction limits.

- (a) Prior to executing the CRR Auction but after the transaction submission window is closed, ERCOT shall determine which of the Counter-Parties are associated with Participating CRR Account Holders for that CRR Auction. ERCOT shall then calculate a final allocated CRR transaction limit by evenly dividing the number of available transactions across the Counter-Parties associated with Participating CRR Account Holders.
- ~~(b) The Technical Advisory Committee (TAC) shall establish transaction limits for the CRR Auctions for Counter-Parties associated with Participating CRR Account Holders. As part of TAC consideration to establish or change transaction limits, ERCOT shall provide upon TAC request to TAC or a TAC-designated subcommittee the historical number of transactions submitted by each CRR Account Holder and the number of active CRR Account Holders aggregated up to the associated Counter-Party for each requested CRR Auction without identifying the names of the CRR Account Holders or Counter-Parties. Upon TAC approval of a change in transaction limits, ERCOT shall post these values as part of the next regularly scheduled CRR Auction Notice. Only Participating CRR Account Holders are allowed to submit transactions for consideration in the relevant CRR Auction.~~
- (be) If the total number of transactions submitted by all Participating CRR Account Holders into the CRR Auction does not exceed the maximum number of transactions available prior to the auction, then the final allocated CRR transaction limit will not apply and all transactions will be accepted.
- (cd) Within one hour after the close of each CRR Auction, ERCOT shall notify all CRR Account Holders of the total number of transactions submitted by all Participating CRR Account Holders and whether or not a transaction adjustment period is necessary. ERCOT may determine that a transaction adjustment period is not necessary if the total number of transactions submitted by all Participating CRR Account Holders does not exceed the number of transactions that can be processed by the CRR Auction system.
- (de) If ERCOT announces a transaction adjustment period, ERCOT shall notify all CRR Account Holders of the final allocated transaction limit and reject all transactions submitted by each Participating CRR Account Holder associated with a Counter-Party whose sum total of transactions submitted to the affected CRR Auction exceeds the final allocated transaction limit. Each Participating CRR Account Holder may then adjust their transactions while respecting the final allocated CRR transaction limitation for the affected CRR Auction within

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one Business Day. ERCOT will then execute the CRR Auction using the updated set of transactions as revised by Market Participants.

- (ef) ERCOT shall determine a charge for each PTP Option bid awarded in each CRR Auction as described in Section 7.7, Point-to-Point (PTP) Option Award Charge.

ERCOT Impact Analysis Report

NPRR Number	<u>1261</u>	NPRR Title	Operational Flexibility for CRR Auction Transaction Limits
Impact Analysis Date		November 13, 2024	
Estimated Cost/Budgetary Impact		None.	
Estimated Time Requirements		No project required. This Nodal Protocol Revision Request (NPRR) can take effect following Public Utility Commission of Texas (PUCT) approval.	
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

None.

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NOGRR Number	<u>268</u>	NOGRR Title	Related to NPRR1246, Energy Storage Resource Terminology Alignment for the Single-Model Era
Date Posted	February 4, 2025		
Action	Recommended Approval		
Timeline	Normal		
Estimated Impacts	Cost/Budgetary: None Project Duration: No project required		
Proposed Effective Date	Upon implementation of Nodal Protocol Revision Request (NPRR) 1246, Energy Storage Resource Terminology Alignment for the Single-Model Era		
Priority and Rank Assigned	Not applicable		
Nodal Operating Guide Sections Requiring Revision	1.4, Definitions 1.5.2, System Operator Training Requirements 1.5.4, ERCOT Severe Weather Drill 2.1, Operational Duties 2.2.3, Response to Transient Voltage Disturbance 2.2.4, Load Frequency Control 2.2.6, Power System Stabilizers 2.7.6, Unit Dispatch Beyond the Corrected Unit Reactive Limit or Unit Reactive Limit 3.2.2, Changes in Resource Status 3.3.1, Unit Capability Requirements 4.1, Introduction 4.3, Operation to Maintain Transmission System Security 4.5.1, General 4.5.2, Operating Procedures 4.5.3, Implementation 4.5.3.2, General Procedures During EEA Operations 5.1, System Modeling Information 6.1.2.2, Fault Recording and Sequence of Events Recording Equipment Location Requirements 6.1.2.3, Fault Recording and Sequence of Events Recording Data Requirements 6.1.2.4, Fault Recording and Sequence of Events Recording Data Retention and Reporting Requirements 6.1.3.1.2, Dynamic Disturbance Recording Equipment Location Requirements 6.1.3.1.3, Dynamic Disturbance Recording Data Recording and Redundancy Requirements		

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	<p>6.1.3.1.4, Dynamic Disturbance Recording Data Retention and Data Reporting Requirements</p> <p>6.1.5, Maintenance and Testing Requirements</p> <p>6.2.3, Performance Analysis Requirements for ERCOT System Facilities</p> <p>6.2.6.1.1, Dependability</p> <p>6.2.6.1.6, Analysis of System Performance and Associated Protection Systems</p> <p>6.2.6.3.6, Automatic Under-Voltage Load Shedding Protection Systems</p> <p>9.1.2, Compliance with Valid Dispatch Instructions</p> <p>9.3.2, System and Resource Control</p> <p>11.2, Remedial Action Schemes</p> <p>11.2.1, Reporting of RAS Operations</p>
<p>Related Documents Requiring Revision/Related Revision Requests</p>	<p>NPRR1246</p> <p>Planning Guide Revision Request (PGRR) 118, Related to NPRR1246, Energy Storage Resource Terminology Alignment for the Single-Model Era</p> <p>Other Binding Document Revision Request (OBDRR) 052, Related to NPRR1246, Energy Storage Resource Terminology Alignment for the Single-Model Era</p>
<p>Revision Description</p>	<p>This Nodal Operating Guide Revision Request (NOGRR) inserts terminology associated with Energy Storage Resources (ESRs) in the appropriate places throughout the Nodal Operating Guide, aligning provisions and requirements for ESRs with those already in place for Generation Resources and Controllable Load Resources.</p> <p>While several key sections of the Nodal Operating Guide have already been modified to accommodate ESRs in the “combo model” era — in which ESRs are treated as two Resources — numerous other provisions and requirements rely on the blanket provision from NPRR1002, BESTF-5 Energy Storage Resource Single Model Registration and Charging Restrictions in Emergency Conditions, in paragraph (1) of Protocol Section 3.8.5, Energy Storage Resources, as follows:</p> <p style="padding-left: 40px;">“For the purposes of all ERCOT Protocols and Other Binding Documents, all requirements that apply to Generation Resources and Controllable Load Resources shall be understood to apply to Energy Storage Resources (ESRs) to the same extent, except where the Protocols explicitly provide otherwise.”</p> <p>As discussed at meetings in 2020 of the Battery Energy Storage Task Force (BESTF), ERCOT intended for this provision to be temporary, and explained to stakeholders that it would introduce an</p>

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	<p>NPRR and related Revision Requests that incorporated the ESR terminology in all appropriate locations in the Nodal Protocols. This NOGRR accomplishes that objective in the Nodal Operating Guide.</p> <p>This NOGRR is applicable to ESRs in the future single-model era and should be implemented simultaneously with NPRR1246 and NPRR1014, BESTF-4 Energy Storage Resource Single Model.</p> <p>ERCOT invites review of this NOGRR from the Real-Time Co-Optimization plus Batteries Task Force (RTCBTF) and any other applicable groups. It is also worth noting these changes have no system impacts as they reflect the current RTC+B business requirements and interface requirements for Market Participants.</p>
<p>Reason for Revision</p>	<p><input type="checkbox"/> <u>Strategic Plan</u> Objective 1 – Be an industry leader for grid reliability and resilience</p> <p><input type="checkbox"/> <u>Strategic Plan</u> Objective 2 - Enhance the ERCOT region's economic competitiveness with respect to trends in wholesale power rates and retail electricity prices to consumers</p> <p><input type="checkbox"/> <u>Strategic Plan</u> Objective 3 - Advance ERCOT, Inc. as an independent leading industry expert and an employer of choice by fostering innovation, investing in our people, and emphasizing the importance of our mission</p> <p><input checked="" type="checkbox"/> General system and/or process improvement(s)</p> <p><input type="checkbox"/> Regulatory requirements</p> <p><input type="checkbox"/> ERCOT Board/PUCT Directive</p> <p><i>(please select ONLY ONE – if more than one apply, please select the ONE that is most relevant)</i></p>
<p>Justification of Reason for Revision and Market Impacts</p>	<p>This NOGRR improves transparency and ease of access to provisions and requirements for ESR developers and Market Participants. With the implementation of this NOGRR at the time of RTC+B go-live, all references to the Combo-Model will be removed.</p>
<p>ROS Decision</p>	<p>On 9/9/24, ROS voted unanimously to table NOGRR268. All Market Segments participated in the vote.</p> <p>On 10/3/24, ROS voted unanimously to recommend approval of NOGRR268 as amended by the 9/24/24 ERCOT comments. All Market Segments participated in the vote.</p> <p>On 11/7/24, ROS voted unanimously to endorse and forward to TAC the 10/3/24 ROS Report and 7/31/24 Impact Analysis for NOGRR268. All Market Segments participated in the vote.</p>

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Summary of ROS Discussion	<p>On 9/9/24, ERCOT Staff provided an overview of NOGRR268 and expressed a desire for approval of these related Revision Requests prior to go-live of the RTC+B project. Participants requested tabling of NOGRR268 for additional review.</p> <p>On 10/3/24, ERCOT Staff presented the 9/24/24 ERCOT comments.</p> <p>On 11/7/24, there was no discussion.</p>
TAC Decision	<p>On 11/20/24, TAC voted unanimously to recommend approval of NOGRR268 as recommended by ROS in the 11/7/24 ROS Report. All Market Segments participated in the vote.</p> <p>On 1/22/25, TAC voted unanimously to recommend approval of NOGRR268 as recommended by TAC in the 11/20/24 TAC Report as amended by the 1/21/25 ERCOT comments. All Market Segments participated in the vote.</p>
Summary of TAC Discussion	<p>On 11/20/24, there was no additional discussion beyond TAC review of the items below.</p> <p>On 1/22/25, there was no additional discussion beyond TAC review of the items below.</p>
TAC Review/Justification of Recommendation	<p><input checked="" type="checkbox"/> Revision Request ties to Reason for Revision as explained in Justification</p> <p><input checked="" type="checkbox"/> Impact Analysis reviewed and impacts are justified as explained in Justification</p> <p><input checked="" type="checkbox"/> Opinions were reviewed and discussed</p> <p><input checked="" type="checkbox"/> Comments were reviewed and discussed (if applicable)</p> <p><input type="checkbox"/> Other: (explain)</p>
ERCOT Board Decision	<p>On 12/3/24, the ERCOT Board voted unanimously to remand NOGRR268 to TAC.</p> <p>On 2/4/25, the ERCOT Board voted unanimously to recommend approval of NOGRR268 as recommended by TAC in the 1/22/25 TAC Report.</p>

Opinions	
Credit Review	Not applicable
Independent Market Monitor Opinion	IMM has no opinion on NOGRR268.

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ERCOT Opinion	ERCOT supports approval of NOGRR268.
ERCOT Market Impact Statement	ERCOT Staff has reviewed NOGRR268 and believes the market impact for NOGRR268 provides clarity and additional transparency for stakeholders on the applicable provisions and requirements associated with ESRs as the market transitions from the combo model to the single model as part of the RTC+B project.

Sponsor	
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Market Segment	Not applicable

Market Rules Staff Contact	
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Comments Received	
Comment Author	Comment Summary
ERCOT 092424	Proposed edits removing certain initially proposed additions of the term "energy storage" throughout NOGRR268
ERCOT 012225	Proposed additional edits to align with NOGRR262, Provisions for Operator-Controlled Manual Load Shed

Market Rules Notes

Please note the baseline language in the following sections has been updated to reflect the incorporation of the following NOGRRs into the Nodal Operating Guide:

- NOGRR255, High Resolution Data Requirements (incorporated 8/1/24)
 - Section 6.1.2.2
 - Section 6.1.2.3
 - Section 6.1.2.4

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- Section 6.1.3.2
- Section 6.1.3.3
- Section 6.1.3.4
- Section 6.1.4
- NOGRR262, Provisions for Operator-Controlled Manual Load Shed (incorporated 12/1/24)
 - Section 4.5.3
- NOGRR266, Related to NPRR1239, Access to Market Information (incorporated 2/1/25)
 - Section 9.3.2

Proposed Guide Language Revision

1.4 Definitions

Automatic Generation Control (AGC)

Application that receives signals from ERCOT for Regulation deployment and causes ~~Generation Resources~~ providing these Ancillary Services to respond in accordance with their ~~participation factor and~~ ramp rate to meet the received deployments.

Generator ~~or Energy Storage~~ Reactive Power Sign/Direction Terminology

- (1) Lagging power factor operating condition is when MVar flow is out of the Generation Resource (overexcited generator) ~~or Energy Storage Resource (ESR) and is considered to be positive (+) flow, i.e., in the same direction as MW power flow.~~ The generator ~~or energy storage~~ is producing MVAr.
- (2) Leading power factor operating condition is when MVar flow is into the Generation Resource (underexcited generator) ~~or ESR and is considered to be negative (-) flow, i.e., in the opposite direction as MW power flow.~~ The generator is absorbing MVAr.

1.5.2 System Operator Training Requirements

- (1) The System Operator Training Program applies to all operators who are responsible for the Day-Ahead and Real-Time operation of the ERCOT Transmission Grid. Transmission Operators (TOs) and Qualified Scheduling Entity (QSE) operators who represent Generation Resources, Energy Storage Resources (ESRs), and Load Resources shall participate in 32 hours per year of training and drills on system emergencies. QSE operators who do not represent Generation Resources, ESRs, or Load Resources must participate in at least eight hours per year of training and drills in system emergencies.
- (2) For those operators required to obtain 32 hours annually at least eight hours must be from simulations or realistic drills.
- (3) Training should use simulations appropriate to each class of operator and all such training shall meet or exceed established NERC Reliability Standards.

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- (4) Participation in emergency simulations, severe weather drills, ERCOT Black Start training, and portions of the ERCOT Operations Training Seminar that relate to NERC recommended topics may be used to satisfy this requirement.
- (5) ERCOT Black Start training attendance is mandatory for all TOs, QSEs identified in a Black Start restoration plan, Resource Entities that represent Black Start Resources, and other Entities who are notified by ERCOT that their participation is required.

[NOGRR194: Replace paragraph (5) above with the following upon system implementation of NPRR857:]

- (5) ERCOT Black Start training attendance is required for all TOs, Direct Current Tie Operators (DCTOs), QSEs identified in a Black Start restoration plan, Resource Entities that represent Black Start Resources, and other Entities who are notified by ERCOT that their participation is required.
- (6) Attendance at Black Start training is limited to those Entities identified in paragraph (5) above, ERCOT staff, Public Utility Commission of Texas (PUCT), Reliability Monitor, or other Entities deemed by ERCOT to have a legitimate reliability reason to attend.
- (7) Task specific training carried out internally within an Entity will be considered in full compliance with this requirement. Training documentation, including curriculum, training methods, and individual training records, shall be immediately available during any audit.

1.5.4 ERCOT Severe Weather Drill

- (1) An annual severe weather drill will be held to test the scheduling and communication functions of the primary and/or backup control centers and to train operators in emergency procedures. On an annual basis, ERCOT shall:
 - (a) Develop and coordinate, with assistance from the Operations Working Group (OWG), the severe weather drill;
 - (b) Conduct a severe weather drill; and
 - (c) Verify and report Entity participation in the severe weather drill to the OWG, the Reliability Monitor, and the NERC Regional Entity.
- (2) TOs and QSEs that represent Generation Resources and/or ESRs are required to participate in the severe weather drill.
- (3) On an annual basis, OWG shall:
 - (a) Review and critique the results of completed severe weather drills to ensure effectiveness and recommend changes as necessary to ERCOT; and

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- (b) Report results of the severe weather drill to the Reliability and Operations Subcommittee (ROS).

2.1 Operational Duties

- (1) The duties of ERCOT are described in relevant sections of the Protocols and North American Electric Reliability Corporation (NERC) Reliability Standards. These Operating Guides assume that all actions taken will be on components of, or related to, the ERCOT System unless otherwise specified. The primary operational duties of ERCOT are to ensure the reliability of the ERCOT System. In doing this ERCOT shall:
- (2) Perform operational planning:
 - (a) Perform the Reliability Unit Commitment (RUC) processes in order to commit additional resources as needed to maintain reliability;
 - (b) Perform operational ERCOT Transmission Grid reliability studies, including those related to generation, ~~energy storage~~, and load interconnection responsibilities;
 - (c) Review all Outages of Generation Resources, Energy Storage Resources (ESRs), and major transmission lines or components to identify and correct possible failure to meet credible N-1 criteria. This shall include possible failure to meet N-1 criteria not resolved through the Day-Ahead process;
 - (d) Perform load flows and security analyses of Outages submitted by Qualified Scheduling Entities (QSEs) or Transmission Service Providers (TSPs) as a basis for approval or rejection as described in Protocol Section 3.1, Outage Coordination;

[NOGRR177: Replace paragraph (d) above with the following upon system implementation of NPRR857:]

- (d) Perform load flows and security analyses of Outages submitted by Qualified Scheduling Entities (QSEs), Transmission Service Providers (TSPs), or Direct Current Tie Operators (DCTOs) as a basis for approval or rejection as described in Protocol Section 3.1, Outage Coordination;
- (e) Withdraw approval of a scheduled Outage if unable to meet credible N-1 criteria after all other reasonable options are exercised as described in Protocol Section 3.1;
- (f) Serve as the point of contact for initiation of generation ~~or energy storage~~ interconnection to the ERCOT Transmission Grid;
- (g) Forecast Load and Resources for the next seven days for reliability planning; and

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- (h) Ensure that sufficient Resources in the proper location and required Ancillary Services have been committed for all expected Load on a Day-Ahead and Real-Time basis.
- (3) Operate energy and Ancillary Service markets:
 - (a) Administer a Congestion Revenue Rights (CRR) market;
 - (b) Administer a Day-Ahead Market (DAM) including both energy and Ancillary Service;
 - (c) Administer the RUC processes;
 - (d) If necessary, administer a Supplemental Ancillary Service Market (SASM); and
 - (e) Administer a Real-Time energy market using Security-Constrained Economic Dispatch (SCED).

[NOGRR211: Replace paragraph (3) above with the following upon system implementation of NPRR1007:]

- (3) Operate energy and Ancillary Service markets:
 - (a) Administer a Congestion Revenue Rights (CRR) market;
 - (b) Administer a Day-Ahead Market (DAM) including both energy and Ancillary Service;
 - (c) Administer the RUC processes; and
 - (d) Administer a Real-Time Market (RTM) including energy and Ancillary Services using Security-Constrained Economic Dispatch (SCED).

- (4) Supervise the ERCOT System to meet NERC Reliability Standards:
 - (a) Monitor and evaluate ERCOT System conditions on a continuous basis;
 - (b) Coordinate with Transmission Operators (TOs), ERCOT System events to maintain or restore reliability;
 - (c) Dispatch gGeneration Resources and ESRs via the SCED process and deployment of Ancillary Services to control frequency and congestion;
 - (d) Provide access to the ERCOT System on a nondiscriminatory basis;
 - (e) Approve schedules of interchange transactions across the Direct Current Ties (DC Ties); and

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- (f) Direct emergency operations.
- (5) Collect and Disseminate Information:
 - (a) Collect, process, and disseminate market, operational and settlement information;
 - (b) Provide relevant operational information to Market Participants over the Market Information System (MIS);
 - (c) Collect and maintain operational data required by the Public Utility Commission of Texas (PUCT), NERC and Protocols;
 - (d) Receive reports from TOs and QSEs and forward them to the Department of Energy (DOE), NERC, and/or other Governmental Authority as required;
 - (e) Submit reports to DOE, NERC, and/or other Governmental Authority as required; and
 - (f) Record and report accumulated time error.

2.2.3 *Response to Transient Voltage Disturbance*

- (1) Generation Resources and Energy Storage Resources (ESRs) should be designed in accordance with Section 6.2, System Protective Relaying, in order to properly respond to transient voltage disturbances.

2.2.4 *Load Frequency Control*

- (1) ERCOT shall operate the Load Frequency Control (LFC) system to maintain the scheduled frequency at 60 Hz (correcting periodically for time error) and to minimize the use of energy from Resources providing Regulation Service.
- (2) The ERCOT LFC system shall deploy Regulation Service energy, and release Responsive Reserve (RRS) and ERCOT Contingency Reserve Service (ECRS) capacity to Security-Constrained Economic Dispatch (SCED), as necessary, in accordance with Protocol Section 6.5.7.6, Load Frequency Control, to meet North American Electric Reliability Corporation (NERC) Reliability Standards. ERCOT shall purchase Regulation Service to provide satisfactory frequency control performance for the ERCOT Region. ERCOT shall determine the satisfactory amount of Regulation Service, required by statistical analysis of possible Resource Outages and Load forecast error, to expect operation of 95% of hours without deploying RRS.
- (3) QSEs shall use Automatic Generation Control (AGC) to direct the output of ~~generation facilities~~Resources providing Regulation.

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[NOGRR211: Replace Section 2.2.4 above with the following upon system implementation of NPRR1007:]

2.2.4 Load Frequency Control

- (1) ERCOT shall operate the Load Frequency Control (LFC) system to maintain the scheduled frequency at 60 Hz (correcting periodically for time error) and to minimize the use of energy from Resources providing Regulation Service.
- (2) The ERCOT LFC system shall deploy Regulation Service, Responsive Reserve (RRS), and ERCOT Contingency Reserve Service (ECRS) as necessary in accordance with Protocol Section 6.5.7.6.2, LFC Deployment, to meet North American Electric Reliability Corporation (NERC) Reliability Standards. ERCOT shall purchase Regulation Service to provide satisfactory frequency control performance for the ERCOT Region. ERCOT shall determine the satisfactory amount of Regulation Service, required by statistical analysis of possible Resource Outages and Load forecast error, to expect operation of 95% of hours without deploying RRS.
- (3) QSEs shall use Automatic Generation Control (AGC) to direct the output of ~~generation facilities~~ Resources providing Regulation.

2.2.6 Power System Stabilizers

- (1) Synchronously interconnected Generation Resources and synchronously interconnected ESRs with Power System Stabilizers (PSSs) shall keep their PSSs in-service (“On” or energized and performing as designed by the manufacturer) unless the PSS is installed but not in service as described in paragraph (4)(a)(ii) below. When available, the PSS shall be active and responsive at all times the ~~generator~~ Resource is synchronized to the ERCOT Transmission Grid and operating at or above its Low Sustained Limit (LSL). However, if the PSS of a ~~Generation~~ Resource is set to be active and responsive at a point above the LSL for technical reasons, the ~~Generation~~ Resource may request ERCOT to allow an exception to the requirement that the PSS be active anytime the ~~Generation~~ Resource is at or above its LSL. In order to obtain the exception, the ~~Generation~~ Resource shall notify ERCOT and provide the necessary technical information to ERCOT to justify a higher activation point for the PSS.
- (2) Resource Entities shall notify their QSEs of any change in PSS status (e.g. PSS unavailability due to maintenance or failure and when the PSS returns to normal operation). QSEs shall notify ERCOT and the TO at the Point of Interconnection (POI) of any change in PSS status and shall supply PSS status logs to ERCOT upon request per Protocol Section 6.5.5.1, Changes in Resource Status.
- (3) Synchronously interconnected Generation Resources and synchronously interconnected ESRs greater than 10 MW installed after January 1, 2008 and on or before December 1, 2010 shall install a PSS and place the PSS in service by June 1, 2011. Synchronously

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interconnected Generation Resources and synchronously interconnected ESRs greater than 10 MW installed after December 1, 2010 shall install a PSS and place the PSS in-service prior to the Resource Commissioning Date of the Generation Resource or ESR. The Generation Resource or ESR shall establish PSS settings to dampen modes with oscillations within the range of 0.2 Hz to 2 Hz. The PSS settings shall be tested and tuned to ensure the PSS has appropriate damping characteristics. Final PSS settings shall be provided to ERCOT and the TSP within 30 days of the PSS in-service date.

- (4) Synchronously interconnected Generation Resources and synchronously interconnected ESRs greater than 10 MW installed before January 1, 2008 are subject to the following requirements:
 - (a) All Generation Resources and ESRs that are in this category shall notify ERCOT and the TSP:
 - (i) Whether or not a PSS has been installed; and
 - (ii) Whether or not PSS settings have been determined and the PSS has been or will be placed in-service.
 - (b) If a PSS was in-service prior to January 1, 2008, the PSS shall remain in-service with the established PSS settings, provided that ERCOT may direct the Generation Resource or ESR to modify the settings. The PSS settings shall be tested and tuned to ensure the PSS has appropriate damping characteristics.
 - (c) If a PSS is newly installed and/or placed in-service the Generation Resource or ESR shall establish PSS settings to dampen modes with oscillations within the range of 0.2 Hz to 2 Hz. The PSS settings shall be tested and tuned to ensure the PSS has appropriate damping characteristics. Final PSS settings shall be provided to ERCOT and the TSP within 30 days of the PSS in-service date.
- (5) If an excitation system on a synchronously interconnected Generation Resource or synchronously interconnected ESR greater than 10 MW is modified or replaced after January 1, 2008, the ~~Generation Resource~~ shall install a PSS, establish PSS settings to dampen modes with oscillations within the range of 0.2 Hz to 2 Hz, and place the PSS in-service. The settings shall be tested and tuned to ensure the excitation system has appropriate damping characteristics. Final PSS settings shall be provided to ERCOT and the TSP within 30 days of the PSS in-service date.
- (6) If it is determined that a change in PSS settings or the addition of a PSS to a synchronously interconnected Generation Resource or synchronously interconnected ESR would improve overall system performance, ERCOT shall coordinate with the ~~Generation Resource~~ owner to determine appropriate settings. Within 180 days of determining appropriate settings, the ~~Generation Resource~~ owner shall revise the PSS setting and/or install the PSS. Any PSS setting established pursuant to this section shall be established to dampen modes with oscillations as directed by ERCOT and place the PSS in-service. Final PSS settings shall be provided to ERCOT and the TSP within 30 days of the PSS in-service date.

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- (7) At least every ten calendar years, Resource Entities shall conduct a PSS test or verify PSS performance based on operational data for the purpose of model verification on PSSs. All new synchronously interconnected Generation Resources and synchronously interconnected ESR shall conduct a PSS test within five years of the initial PSS test that was approved as part of the commissioning process. All subsequent tests shall be conducted on a ten year cycle. Additionally, if PSS equipment characteristics are modified, the Resource Entity shall conduct a performance test within 120 days of the modification. Industry accepted testing techniques shall be used for testing, measuring and calculating the modeling parameters. The test report must list the test(s) conducted and include the operational data used to verify the modeling parameters. Any models created from the test data must be a standard PSS/E dynamic model or ERCOT and TSP approved user written model. Final PSS settings shall be provided to ERCOT and the TSP within 30 days of the PSS in-service date.
- (a) Resource Entities will provide the test data or verified dynamic models to ERCOT by submittal to the NDCRC application located on the MIS Secure Area by updating its Resource Registration information respectively.
- (8) An exemption may be granted for the testing requirements listed above if the Resource on which the PSS is installed has a current ANCF, as calculated per paragraph (4) of Section 2.2.5, Automatic Voltage Regulators, of 5% or less over the most recent three calendar years preceding the planned testing calendar year. At the end of this ten year timeframe, the current average three year ANCF (for years eight, nine, and ten) will be examined by ERCOT to determine if the exemption can be declared for the next ten year period. If no longer eligible for the ANCF exemption, then model verification must be completed within 365 calendar days of the date the capacity factor exemption expired. Under certain operating conditions, ERCOT may require a ten year test even if the current average three year ANCF is below the 5% threshold.
- (9) The results of PSS tests or PSS performance verification shall be supplied to ERCOT and the TSP within 30 days of a request from ERCOT.

2.7.6 Unit Dispatch Beyond the Corrected Unit Reactive Limit or Unit Reactive Limit

- (1) Each Generation Resource and Energy Storage Resource (ESR) shall respond to ERCOT--instructed voltage control, including exceeding its CURL or URL. For multi-generator buses, ERCOT shall not instruct any single Generation Resource or ESR to operate beyond its CURL or URL until all Generation Resources and ESRs On-Line and interconnected at the same transmission bus, have been instructed to their respective CURLs or URLs.

3.2.2 Changes in Resource Status

- (1) QSEs shall verbally notify ERCOT of unplanned changes in the status of a Load and Generation Resource status as soon as practicable following the event as referenced in Protocol Section 6.5.5.1, Changes in Resource Status.

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- (2) QSEs shall verbally notify ERCOT and/or Transmission Service Provider (TSP) of equipment changes that affect the reactive capability of an operating Generation Resource or Energy Storage Resource (ESR).
- (3) QSEs shall submit a Current Operating Plan (COP) in accordance with Protocol Section 3.9, Current Operating Plan (COP).

3.3.1 Unit Capability Requirements

- (1) In the event that a QSE fails to meet Protocol Section 8.1.1.2, General Capacity Testing Requirements, which requires Seasonal unit capability reporting and testing, ERCOT shall provide this QSE with Notice of its failure to meet the Protocols. This Notice shall be sent to the primary contact of the QSE representing the Generation Resource or Energy Storage Resource (ESR) via email. In addition to this written Notice, ERCOT shall make a reasonable effort to notify the QSE via telephone.
- (2) ERCOT shall allow the QSE three days to correct the omission by submitting ERCOT approved test results. If the ~~generating~~ Resource in question is operated during these three days, and no test results are provided to ERCOT, then the QSE shall be disqualified from provision of Ancillary Services.
- (3) If the ~~generating~~ Resource is not operated and included in a QSE Current Operating Plan (COP) after the notification of the Protocol violation, then ERCOT shall not disqualify the Ancillary Service provider unless or until the ~~Generation~~ Resource is operated and included in the COP that might be depended upon for Ancillary Services.

4.1 Introduction

- (1) Emergency operation is intended to address operating conditions under which the reliability of the ERCOT System is inadequate and there is no solution readily apparent. During a declared system emergency, ERCOT can instruct Transmission Operators (TOs) and Qualified Scheduling Entities (QSEs) to take specific operating actions that would otherwise be discretionary. Upon receiving a Verbal Dispatch Instruction (VDI) from ERCOT, and in compliance with these Operating Guides, the QSEs shall direct relevant Resources or groups of Resources to respond to the instruction. ERCOT shall coordinate with QSEs and TOs to assure that necessary actions are taken to maintain reliability.
- (2) It is essential that good, timely, and accurate communication routinely occur between ERCOT, TOs, and QSEs. QSE and TO personnel shall report unplanned equipment status changes as outlined in this Section. ERCOT System Operators may ask for status updates as required in order to gather information to make decisions on system conditions to determine what type of emergency communication may be appropriate.
- (3) ERCOT may issue communications in the form of Operating Condition Notices (OCNs), Advisories, Watches and Emergency Notices. These communications may relate to but are not limited to, weather, transmission, computer failure, or generation ~~or energy~~.

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~~storage~~ information. ERCOT shall specify the severity of the situation, the area affected, the areas potentially affected, and the anticipated duration of the Emergency Condition. These communications will be issued by ERCOT to inform all TOs and QSEs of the current operating situation. TOs will notify their represented Transmission Service Providers (TSPs) and Load Serving Entities (LSEs). QSEs will in turn notify the appropriate Resources, Retail Electric Providers (REPs) and LSEs. QSEs and TOs shall establish and maintain internal procedures for contingency preparedness or to expedite the resolution of the conditions communicated by ERCOT that threaten system reliability.

- (4) Before deciding which communication to issue, ERCOT must consider the possible severity of the operating situation before an Emergency Condition occurs. If practicable, the market shall be allowed to attempt to mitigate or eliminate any possible Emergency Condition. ERCOT has the responsibility to issue the appropriate communications to facilitate a solution by Market Participants.

4.3 Operation to Maintain Transmission System Security

- (1) ERCOT shall continue to operate according to Security Criteria outlined in Section 2.2.2, Security Criteria, unless an Emergency Condition has been declared by ERCOT.
- (2) Transmission Overload – ERCOT can:
 - (a) Order adjustment to unit generation ~~or energy storage~~ schedules, switching of Transmission Elements or Load interruption to relieve the overloaded Transmission Element;
 - (b) Order a Transmission Element whose loss would not have a significant impact on the reliability of transmission system switched out to increase interconnected system transfers.
- (3) Violation of security criteria – ERCOT can order changes to unit dispatch or commitment to eliminate or avoid a security criteria violation. Normally these changes should be performed through market control mechanisms including Security-Constrained Economic Dispatch (SCED) or Reliability Unit Commitment (RUC) as described in the Protocols, but if an ERCOT Operator finds these mechanisms insufficient to resolve the violation, the ERCOT Operator may require any other action necessary to address the violation.
- (4) Partial Blackout or Blackout – ERCOT shall implement Black Start procedures.

4.5.1 General

- (1) At times it may be necessary to reduce ERCOT System demand because of a temporary decrease in available electricity supply. The reduction in supply could be caused by emergency Outages of generators ~~or Energy Storage Systems (ESSs)~~, transmission equipment, or other critical facilities; by short-term unavailability of fuel, ~~or~~ ~~or~~ generation, ~~or energy storage~~; or by requirements or orders of government agencies. To

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provide an orderly, predetermined procedures for curtailing Demand during such emergencies, ERCOT shall initiate and coordinate the implementation of the Energy Emergency Alert (EEA) in accordance with Protocol Section 6.5.9.4, Energy Emergency Alert.

- (2) The goal of the EEA is to provide for maximum possible continuity of service while maintaining the integrity of the ERCOT System to reduce the chance of cascading outages.

4.5.2 Operating Procedures

- (1) The ERCOT System Operators have the authority to make and carry through decisions that are required to operate the ERCOT System during emergency or adverse conditions. ERCOT will have sufficiently detailed operating procedures for emergency or short supply situations and for restoration of service in the event of a Partial Blackout or Blackout. These procedures will be distributed to the personnel responsible for performing specified tasks to handle emergencies, remedy short supply situations, or restore service. Transmission Service Providers (TSPs) will develop procedures to be filed with ERCOT describing implementation of ERCOT requests in emergency and short supply situations, including interrupting Load, notifying others and restoration of service.

[NOGRR177: Replace paragraph (1) above with the following upon system implementation of NPRR857:]

- (1) The ERCOT System Operators have the authority to make and carry through decisions that are required to operate the ERCOT System during emergency or adverse conditions. ERCOT will have sufficiently detailed operating procedures for emergency or short supply situations and for restoration of service in the event of a Partial Blackout or Blackout. These procedures will be distributed to the personnel responsible for performing specified tasks to handle emergencies, remedy short supply situations, or restore service. Transmission Service Providers (TSPs) and Direct Current Tie Operators (DCTOs) will develop procedures to be filed with ERCOT describing implementation of ERCOT requests in emergency and short supply situations, including interrupting Load, notifying others and restoration of service.

- (2) ERCOT and each TSP will endeavor to maintain transmission ties intact if at all possible. This will:
 - (a) Permit rendering the maximum assistance to an area experiencing a deficiency in generation;
 - (b) Minimize the possibility of cascading loss to other parts of the system; and
 - (c) Assist in restoring operation to normal.

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[NOGRR177: Replace paragraph (2) above with the following upon system implementation of NPRR857:]

- (2) ERCOT and Transmission Operators (TOs) will endeavor to maintain transmission ties intact if at all possible. This will:
 - (a) Permit rendering the maximum assistance to an area experiencing a deficiency in generation ~~or energy storage discharges~~;
 - (b) Minimize the possibility of cascading loss to other parts of the system; and
 - (c) Assist in restoring operation to normal.
- (3) ERCOT's operating procedures will meet the following goals while continuing to respect the confidentiality of market sensitive data. If all goals cannot be respected simultaneously then the priority order listed below shall be respected:
 - (a) Maintain station service for nuclear generating facilities;
 - (b) Securing startup power for power generating plants;
 - (c) Operating generating plants ~~or ESSs~~ isolated from ERCOT without communication;
 - (d) Restoration of service to critical Loads such as:
 - (i) Military facilities;
 - (ii) Facilities necessary to restore the electric utility system;
 - (iii) Law enforcement organizations and facilities affecting public health; and
 - (iv) Communication facilities.
 - (e) Maximum utilization of ERCOT System capability;
 - (f) Utilization of Ancillary Services to the extent permitted by ERCOT System conditions;
 - (g) Utilization of the market to the fullest extent practicable without jeopardizing the reliability of the ERCOT System;
 - (h) Restoration of service to all Customers following major system disturbances, giving priority to the larger group of Customers; and