

Board Report

Obligation, in order to maintain or restore 3,100 MW of PRC to the greatest extent possible.

(a) ~~VECLs~~ may be deployed ~~in any number of 100 MW blocks and~~ at any time in a Settlement Interval at the discretion of ERCOT operators.

(b) Upon deployment of any amount of ~~VECLs~~, ERCOT shall notify all Market Participants via an operations message that such deployment has been made and shall specify the MW capacity of ~~VECL~~ deployed.

(c) ERCOT shall notify QSEs ~~and TOs~~ of the ~~VECLs~~ deployment via an XML message. The deployment time within the ERCOT XML deployment message shall initiate the ~~VECL~~ deployment and the ~~VECL~~ ramp period.

(d) ~~Upon deployment, receipt of an~~ VECL deployment, QSEs shall instruct their ~~VECLs to reduce~~ ~~consumption~~ without delay in a time period not to exceed ~~within~~ 30 minutes from the start of the ~~VECL~~ ramp period, and the deployed ~~VECLs~~ shall comply with those instructions. ~~When responding to this deployment instruction, the VECL shall limit their ramp rate to 20% per minute.~~

(e) QSEs shall promptly notify the ERCOT operator of any VECLs that are unable to comply with a deployment instruction, including the reason for the failure to comply. ~~If an VECL fails to comply with a deployment instruction, ERCOT may instruct the applicable TOTSP or QSE (if the VECL is behind the POI of a generator) to remotely disconnect the VECL. If an VECL that fails to comply with a deployment instruction is co-located with an ERCOT Resource, ERCOT may instruct the Customer's QSE to remotely disconnect the VECL, in which case the QSE shall ensure that the VECL is promptly disconnected from the ERCOT System, that fails to comply with a deployment instruction.~~

(f) ERCOT shall notify QSEs of the termination of the ~~VECLs~~ deployment via an XML recall message. The ERCOT XML recall message shall represent the official notice of the ~~VECLs~~ recall.

(i) If ERCOT has instructed the interconnecting TO to disconnect ~~an~~ ~~VECL~~ for failure to comply with a deployment instruction, ERCOT will also notify the TO once the ~~VECL~~ deployment has been terminated, so that the ~~VECL~~ can be reconnected.

(g) Upon termination of the ~~VECLs~~ deployment, any ~~VECL~~ shall not increase consumption at a rate exceeding 20% per minute.

(h) Upon termination of ~~VECLs~~ deployment, ERCOT shall notify all Market Participants via an operations message that such deployment has been terminated and shall specify the MW capacity of ~~VECLs~~ recalled.

(34) When PRC falls below 3,000 MW and is not projected to be recovered above 3,000 MW within 30 minutes following the deployment of Non-Spin ~~and all~~ ~~Voluntary Early~~

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~~Curtailment Load (VVECL)~~, ERCOT may deploy available contracted ERS-10 and ERS-30 via an XML message. The deployment time within the ERCOT XML deployment message shall represent the beginning of the ERS-10 and ERS-30 ramp periods.

- (a) ERS-10 and ERS-30 may be deployed at any time in a Settlement Interval. ERS-10 and ERS-30 may be deployed either simultaneously or separately, and in any order, at the discretion of ERCOT operators.
- (b) Upon deployment, QSEs shall instruct their ERS Resources in ERS-10 and ERS-30 to perform at contracted levels consistent with the criteria described in Section 8.1.3.1.4, Event Performance Criteria for Emergency Response Service Resources, until either ERCOT releases the ERS-10 and ERS-30 deployment or the ERS-10 and ERS-30 Resources have reached their maximum deployment time.
- (c) ERCOT shall notify QSEs of the recall of ERS-10 and ERS-30 via an XML message. The recall time within the ERCOT XML message shall represent the official notice of ERS-10 and ERS-30 recall.
- (d) Upon release, an ERS Resource shall return to a condition such that it is capable of meeting its ERS performance requirements as soon as practical, but no later than ten hours following the release.

(354) When a Watch is issued for PRC below 3,000 MW and ERCOT expects system conditions to deteriorate to the extent that an EEA Level 2 or 3 may be experienced, ERCOT shall evaluate constraints active in SCED and determine which constraints have the potential to limit generation output.

- (a) Upon identification of such constraints, ERCOT shall coordinate with the TSPs that own or operate the overloaded Transmission Facilities associated with those constraints, as well as the Resource Entities whose generation output may be limited, to determine whether:

[NPRR857: Replace paragraph (a) 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:]

- (a) Upon identification of such constraints, ERCOT shall coordinate with the TSPs and DCTOs that own or operate the overloaded Transmission Facilities associated with those constraints, as well as the Resource Entities whose generation output may be limited, to determine whether:

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- (i) A 15-Minute Rating is available to allow for additional transmission capacity for use in congestion management, if an EEA Level 2 or 3 is declared, and post-contingency actions can be taken within 15 minutes to return the flow to within the Emergency Rating. Such actions may include, but are not limited to, reducing the generation that increased output as a result of enforcing the 15-Minute Rating rather than the Emergency Rating;
- (ii) Post-contingency loading of the Transmission Facilities is expected to be at or below Normal Rating within two hours; or
- (iii) Additional transmission capacity could allow for additional output from a limited Generation Resource by taking one of the following actions:
 - (A) Restoring Transmission Elements that are out of service;
 - (B) Reconfiguring the transmission system; or
 - (C) Making adjustments to phase angle regulator tap positions.

If ERCOT determines that one of the above-mentioned actions allows for additional output from a limited Generation Resource, ERCOT may instruct the TSPs to take the action(s) during the Watch to allow for additional output from the limited Generation Resource.

- (b) ERCOT shall also coordinate with TSPs who own and operate the Transmission Facilities associated with the double-circuit contingencies for the constraints identified above to determine whether the double-circuit failures are at a high risk of occurring due to system conditions, which may include: severe weather conditions forecasted by ERCOT in the vicinity of the double circuit, weather conditions that indicate a high risk of insulator flashover on the double circuit, repeated Forced Outages of the individual circuits that are part of the double circuit in the preceding 48 hours, or fire in progress in the right of way of the double circuit.
- (c) The actions detailed in this Section shall be supplemental to the development and maintenance of CMPs as otherwise directed by the Protocols or Operating Guides.

- (465) When a Watch is issued for PRC below 3,000 MW, QSEs shall suspend any ongoing ERCOT-required Resource performance testing.

16.20 Designation of a Qualified Scheduling Entity by a Voluntary Voluntary Early Curtailment Load

- (1) A Customer that is willing to curtail its Load during the conditions described in paragraph (3), below, and that has secured the consent of each of its interconnecting Transmission and/or Distribution Service Providers (TDSPs) and the Transmission Operator (TO) that represents each of those TDSPs may register its Load as a Voluntary

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Early Curtailment Load (VECL) using Section 23, Form T, Voluntary Early Curtailment Load Designation Form.

(a) A Load shall not be registered as an VECL if:

- (i) it is registered as a Load Resource;
- (ii) it is participating as an Emergency Response Service (ERS) Resource; or
- (iii) it is part of an aggregation that is registered as a Load Resource or as an ERS Resource.

(b) A Customer whose Load is registered as an VECL shall not:

- (i) register the same Load as a Load Resource;
- (ii) include that Load in a participating ERS Resource; or
- (iii) include that Load in an aggregation that is proposed for registration as a Load Resource or as an ERS Resource.

(2) A Customer electing to register its Facility as an Voluntary Early Curtailment Load (VECL) shall designate a Qualified Scheduling Entity (QSE) that will provide accurate telemetry to ERCOT for the following values:

(a) of the Current VECL's Demand in MW; and

(b) VECL deployment instruction issued by the QSE to the Resource Customer in MW.

to ERCOT on behalf of the Customer and The QSE shall timely instruct the VECL to reduce ease consumption consistent with ERCOT instructions in the event of an VECL deployment as described in Section 6.5.9.4.1, General Procedures Prior to EEA Operations. The Customer shall acknowledge that it bears sole responsibility for selecting and maintaining a QSE as its representative. The Customer shall include a written statement from the designated QSE acknowledging that the QSE accepts responsibility for the accurate telemetry of the VECL's Demand and timely instruction to the VECL in the event of a VECL deployment under these Protocols (Section 23, Form T, Qualified Scheduling Entity, Transmission Operator, and Transmission and/or Distribution Service Provider(s) Acknowledgment of Designation for Customer with Large Load). The VECL's QSE designation must be submitted to ERCOT no later than 45 days prior to the VECL's Network Operations Model change date, as described in Section 3.10.1, Time Line for Network Operations Model Changes.

(32) A Customer with one or more VECLs may change its designated QSE with written notice and effective date to ERCOT no later than 45 days prior to the effective date; however, the Customer may not change its designated QSE more than once in any consecutive three-day period. The Customer shall maintain a QSE at all times.

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- (43) ~~If the representation of a Customer with one or more VECLs by its designated QSE will terminate or if the Customer intends to be represented by a different QSE, the Customer shall provide the name of the newly designated QSE to ERCOT along with a written statement from the designated QSE acknowledging that the QSE accepts responsibility for the accurate telemetry of the VECL's Demand and timely instruction to the VECL in the event of an VECL deployment under these Protocols (Section 23, Form T).~~
- (54) ~~A Customer may terminate its VECL registration only with the written consent of each of its interconnecting TDSPs and its TO. The Customer may request termination of its VECL registration by submitting a completed Voluntary Early Curtailment Load Designation Form, that includes the acknowledgement of the Customer and each interconnecting TDSP no later than 45 days prior to the proposed effective date of the change.~~
- (6) ~~The following apply to all~~For each ~~VECLs~~:
- (a) ~~The designated QSE shall install all telemetry required by these Protocols for the requesting Customer and schedule point-to-point data verification with ERCOT.~~
 - (b) ~~The designated QSE shall submit telemetry data descriptions to ERCOT to meet ERCOT's normal model update process.~~
 - (c) ~~The Transmission Service Provider (TSP) or Resource Entity designated QSE as appropriate for a Resource co-located with an VECL, must submit any changes in system topology or telemetry on behalf of the Customer according to Section 3.3.2.1, Information to Be Provided to ERCOT.~~
 - (d) ~~The interconnecting Transmission Service Provider (TSP) must submit any changes in system topology on behalf of the VECL according to Section 3.3.2.1.~~
 - (de) ~~The effective date for the newly designated QSE, TO, or TDSP shall be in accordance with Section 3.10.1.~~
 - (ef) ~~ERCOT may request the Customer to develop a transition implementation plan to be approved by ERCOT that sets appropriate deadlines for completion of all required data and telemetry verification and cutover testing activities with ERCOT.~~

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ERCOT Nodal Protocols

Section 23

Form T: ~~Qualified Scheduling Entity, Transmission Operator, and Transmission and/or Distribution Service Provider(s)~~ Acknowledgment of Designation for Customer with Large Load Voluntary Early Curtailment Load Designation Form

TBD

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Date Received: _____

~~Voluntary Qualified Scheduling Entity (QSE), Transmission Operator (TO), and
Transmission and/or Distribution Service Provider(s) (TDSP(s)) Acknowledgment~~ Early
Curtailment Load Designation Form

~~Acknowledgment by Designated QSE for
Accurate Telemetry and Load Curtailment Responsibilities with ERCOT~~

The Notification must be signed, notarized and delivered to ERCOT. Delivery may be accomplished via email to MPRegistration@ercot.com (if a scanned copy) or via facsimile (Attention: Market Participant Registration) at (512) 225-7079. ERCOT may request additional information as reasonably necessary to support operations under the ERCOT Protocols.

The Customer identified below confirms that it wishes to:

- ☐ register as a Voluntary Early Curtailment Load (VECL)
- ☐ terminate its registration as a VECL

For a Customer registering as ~~a~~ VECL:

This form must be acknowledged by Customer, Qualified Scheduling Entity (QSE), each interconnecting Transmission and/or Distribution Service Provider (TDSP), and each

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interconnecting TDSP's Transmission Operator (TO).

By signing below, each Entity confirms as follows:

The Customer identified below has ~~named~~ designated the QSE listed identified below as its designated QSE to represent the Customer for the purpose of providing accurate telemetry of the Customer's Load to ERCOT at each of the designated Electric Service Identifier(s) (ESI ID(s)) and timely instruction to the Customer to cease consumption consistent with ERCOT instructions in the event of an VECL deployment of Voluntary Early Curtailment Load (VECL).

The Customer's designated QSE, listed designated below, hereby acknowledges that it ~~does~~ represents the Customer and that it ~~shall be~~ is responsible for providing accurate telemetry of the Customer's Load to ERCOT and timely instructing the Customer to cease consumption consistent with ERCOT instructions in the event of an ~~V~~VECL deployment pursuant to the ERCOT Protocols.

If the VECL is co-located with an ERCOT Resource, the QSE identified below confirms that it has the capability to remotely disconnect the Customer if it fails to comply with an VECL deployment instruction.

The Customer's TO and interconnecting TDSP(s), listed identified below, hereby acknowledge and consent to the Customer's registration with ERCOT as an ~~V~~VECL.

The requested effective date for such representation or termination is: _____**

For a Customer requesting termination of its registration as an ~~an~~ VECL:

This form must be acknowledged by Customer and each of its interconnecting TDSPs.

The completed form should be submitted to ERCOT via at MPRegistration@ercot.com.

or

Establish partnership at the earliest possible date - ☐

Acknowledgment by **Customer**:

<u>Signature of Officer or Executive with authority to bind the Customer:</u>	
<u>Printed Name of Officer or</u>	_____

*** Actual effective date will depend on time needed to implement the relationship in ERCOT systems once ERCOT has received all necessary information (a minimum of three Business Days), and may be later than the requested effective date. ERCOT will notify the parties of the actual effective date.*

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<u>Executive with authority to bind the Customer:</u>	
<u>Email Address of Officer or Executive with authority to bind the Customer:</u>	_____
<u>Date:</u>	_____
<u>Name of Customer:</u>	_____
<u>ESI ID(s) of Customer that are subject to this acknowledgment:</u>	_____

Acknowledgment by **QSE**:

<u>Signature of Authorized Representative (AR) for QSE:</u>	
<u>Printed Name of AR:</u>	_____
<u>Email Address of AR:</u>	_____
<u>Date:</u>	_____
<u>Name of Designated QSE:</u>	_____
<u>Data Universal Numbering System (DUNS) of Designated QSE:</u>	_____

Acknowledgment by **Customer**:

<u>Signature of Officer or Executive with authority to bind the Customer:</u>	
<u>Printed Name of Officer or Executive with authority to bind the Customer:</u>	_____
<u>Email Address of Officer or Executive with authority to bind the Customer:</u>	_____
<u>Date:</u>	_____
<u>Name of Customer:</u>	_____
<u>ESI ID(s) of Customer that are subject to this acknowledgment:</u>	_____

Acknowledgment and consent by the interconnecting **TDSP(s)**:

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<u>Signature of Officer or Executive with authority to bind the TDSP(s):</u>	
<u>Printed Name of Officer or Executive with authority to bind the TDSP(s):</u>	_____
<u>Email Address of Officer or Executive with authority to bind the TDSP(s):</u>	_____
<u>Date:</u>	_____

Acknowledgment and consent by ~~the~~each interconnecting TDSP's TO:

<u>Signature of Officer or Executive with authority to bind the TO:</u>	
<u>Printed Name of Officer or Executive with authority to bind the TO:</u>	_____
<u>Email Address of Officer or Executive with authority to bind the TO:</u>	_____
<u>Date:</u>	_____

Acknowledgment and consent by the interconnecting ~~TDSP(s):~~

<u>Signature of Officer or Executive with authority to bind the TDSP(s):</u>	
<u>Printed Name of Officer or Executive with authority to bind the TDSP(s):</u>	_____
<u>Email Address of Officer or Executive with authority to bind the TDSP(s):</u>	_____
<u>Date:</u>	_____

Revised ERCOT Impact Analysis Report

NPRR Number	<u>1238</u>	NPRR Title	Voluntary Registration of Loads with Curtailable Load Capabilities
Impact Analysis Date	June 13, 2025		
Estimated Cost/Budgetary Impact	Between \$700K and \$1.0M		
Estimated Time Requirements	<p>The timeline for implementing this Nodal Protocol Revision Request (NPRR) is dependent upon Public Utility Commission of Texas (PUCT) prioritization and approval.</p> <p>Estimated project duration: 10 to 14 months</p>		
ERCOT Staffing Impacts (across all areas)	<p>Implementation Labor: 79% ERCOT; 21% Vendor</p> <p>Ongoing Requirements: No impacts to ERCOT staffing.</p>		
ERCOT Computer System Impacts	<p>The following ERCOT systems would be impacted:</p> <ul style="list-style-type: none">• Market Management System 69%• Energy Management System 18%• Data and Information Products 4%• Network Model Management System 4%• Data Management & Governance 4%		
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>1267</u>	NPRR Title	Large Load Interconnection Status Report
Date of Decision	June 24, 2025		
Action	Recommended Approval		
Timeline	Normal		
Estimated Impacts	Cost/Budgetary: Between \$100K and \$150K Project Duration: 5 to 8 months		
Proposed Effective Date	Upon system implementation		
Priority and Rank Assigned	Priority – 2026; Rank – 4760		
Nodal Protocol Sections Requiring Revision	3.2.7, Large Load Interconnection Status Report (new)		
Related Documents Requiring Revision/Related Revision Requests	None		
Revision Description	This Nodal Protocol Revision Request (NPRR) requires the publication of a Large Load interconnection status report. Customer information, including Large Load information, is owned by the Customer and is therefore confidential so the information on Large Loads must be aggregated.		
Reason for Revision	<div> <input type="checkbox"/> <u>Strategic Plan</u> Objective 1 – Be an industry leader for grid reliability and resilience <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 <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) <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	There is significant public interest in the creation of a status report for Large Loads.
PRS Decision	<p>On 2/12/25, PRS voted unanimously to table NPRR1267. All Market Segments participated in the vote.</p> <p>On 4/9/25, PRS voted unanimously to recommend approval of NPRR1267 as amended by the 2/28/25 Reliant comments. All Market Segments participated in the vote.</p> <p>On 5/14/25, PRS voted unanimously to endorse and forward to TAC the 4/9/25 PRS Report and 5/13/25 Impact Analysis for NPRR1267 with a recommended priority of 2026 and rank of 4760. All Market Segments participated in the vote.</p>
Summary of PRS Discussion	<p>On 2/12/25, the sponsor provided an overview of NPRR1267 and participants reviewed the 1/22/25 Google comments and 2/11/25 Lancium comments. Participants discussed the proposed reporting dimensions and requested tabling to continue discussions on the appropriate reporting dimensions.</p> <p>On 4/9/25, participants reviewed the 2/24/25 Oncor comments and 2/28/25 Reliant comments.</p> <p>On 5/14/25, participants reviewed the 5/13/25 Impact Analysis and discussed an appropriate priority and rank for NPRR1267.</p>
TAC Decision	On 5/28/25, TAC voted unanimously to recommend approval of NPRR1267 as recommended by PRS in the 5/14/25 PRS Report. All Market Segments participated in the vote.
Summary of TAC Discussion	On 5/28/25, 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)

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	<input type="checkbox"/> Other: (explain)
ERCOT Board Decision	On 6/24/25, the ERCOT Board voted unanimously to recommend approval of NPRR1267 as recommended by TAC in the 5/28/25 TAC Report.

Opinions	
Credit Review	ERCOT Credit Staff and the Credit Finance Sub Group (CFSG) have reviewed NPRR1267 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 NPRR1267.
ERCOT Opinion	ERCOT supports approval of NPRR1267.
ERCOT Market Impact Statement	ERCOT Staff has reviewed NPRR1267 and believes the market impact for NPRR1267, coupled with the implementation of NPRR1234 provides increased publicly available visibility into the characteristics of the growing Large Load interconnection queue.

Sponsor	
Name	Eric Goff / Nabaraj Pokharel
E-mail Address	eric@goftpolicy.com / nabaraj.pokharel@opuc.texas.gov
Company	Residential Consumer / Office of Public Utility Counsel (OPUC) (Joint Sponsors)
Phone Number	512-632-7013
Cell Number	
Market Segment	Residential Consumer

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

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Google 012225	Modified proposed reporting dimensions and modified language regarding protection of Customer data
Lancium 021125	Proposed revisions to the 1/22/25 Google comments with additional reporting dimensions and a date-specific starting point for Large Loads to include in the new report
Oncor 022425	Proposed revisions to the 2/11/25 Lancium comments clarifying report elements
Reliant 022825	Proposed revisions to the 2/24/25 Oncor comments clarifying report elements

Market Rules Notes

None

Proposed Protocol Language Revision

3.2.7 Large Load Interconnection Status Report

- (1) For purposes of this section, a Large Load is inclusive of one or more Facilities at a single site with an aggregate peak Demand greater than or equal to 75 MW behind one or more common Points of Interconnection (POIs) or Service Delivery Points that is seeking interconnection on or after March 25, 2022. ERCOT may expand the criteria for including a Load as a Large Load, provided the defining criteria are clearly stated in the applicable report.
- (2) ERCOT must publish a Large Load Interconnection status report each month to the ERCOT website that aggregates Large Load Interconnection requests across multiple dimensions with as much specificity as possible while maintaining the confidentiality of Customer data, including:
- (a) Location;
 - (ab) Load Zone;
 - (be) TSP;
 - (cd) Load type (as provided to the TSP, such as refinery, steel mill, data center, etc...);
 - (de) Calendar quarter and year in which the interconnecting TSP submitted the project to ERCOT; ~~Interconnection study request date year(or date range);~~
 - (ef) RequestedDesired energization date-quarter and year(or date range); and
 - (f) Average interconnection study duration by TSP; and

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- (fg) Size range;
 - (gh) Interconnection status (as defined by ERCOT to differentiate between operational, approved, under study, etc.); and
 - (hi) Co-location status.
- (3) ~~ERCOT may round MW request sizes, dates, or take other similar~~ shall take actions such as providing ranges of interconnection MW sizes, aggregate loads, and other similar actions to obscure protect, anonymize, and otherwise safeguard confidential and competitively-sensitive Customer data from public disclosure ~~Customer-owned data while to provide information that is roughly accurate instead of precisely accurate.~~ When aggregating Customer data, ERCOT should ensure that at least ~~three~~ five Customers exist in a particular Load type subcategory prior to aggregation, to protect against accidental disclosure. ERCOT may leave a certain category blank or ~~unaggregated~~ aggregated with other Load types to avoid disclosure.
- (4) ERCOT shall report to TAC or its designated subcommittee its methodology for developing the report defined in paragraph (2) above whenever that methodology changes, but at least every two years.

ERCOT Impact Analysis Report

NPRR Number	<u>1267</u>	NPRR Title	Large Load Interconnection Status Report
Impact Analysis Date	March 13, 2025		
Estimated Cost/Budgetary Impact	Between \$100K and \$150K See Comments.		
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: 5 to 8 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">• Resource Integration and Ongoing Operations 49%• Enterprise Integration Corp Services 34%• Data Management & Governance 12%• Web Communications 3%• Content Management 2%		
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

ERCOT plans to manually support NPRR1267 until the associated project can be implemented. The manual implementation will take approximately 1-2 months.

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NPRR Number	<u>1271</u>	NPRR Title	Revision to User Security Administrator and Digital Certificates Opt-out Eligibility
Date of Decision	June 24, 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	16.12, User Security Administrator and Digital Certificates		
Related Documents Requiring Revision/Related Revision Requests	None		
Revision Description	This Nodal Protocol Revision Request (NPRR) allows Comision Federal de Electricidad (CFE), which is registered with ERCOT as a Transmission and/or Distribution Service Provider (TDSP), Load Serving Entity (LSE), and Resource Entity, to opt out of the requirement to designate a User Security Administrator (USA) and receive Digital Certificates.		
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	<p>CFE does not use certificates and is registered with ERCOT primarily for emergency situations when energy is needed to be exported from Mexico to the United States or when energy must be imported from the United States to Mexico. By currently not being able to opt-out of the requirement to designate a USA and receive Digital Certificates, CFE is subject to the requirement to conduct an audit each year under Section 16.12.3, Market Participant Audits of User Security Administrators and Digital Certificates, which includes listing its registered USA and Digital Certificate holders (“Certificate Holders”), and submitting an attestation each October. Given that CFE does not use its Digital Certificates, it would not be in ERCOT’s best interest to terminate CFE’s Standard Form Market Participant Agreement (“SFA”) for failing to comply with the technical requirement of submitting its annual attestation in October (which would mean that there could be a hinderance to importing or exporting energy in emergency situations). This NPRR proposes a solution whereby CFE would be able to opt-out of the requirement to designate a USA and receive Digital Certificates, therefore lessening the risk that CFE will commit a technical violation of the Protocols by not submitting its Digital Certificate Audit Attestation (DCAA), which could result in a breach of paragraph (A) of Section 5, Participant Obligation, of CFE’s SFA and subsequent termination which could hinder ERCOT from importing or exporting energy to and from Mexico during emergency situations.</p>
PRS Decision	<p>On 2/12/25, PRS voted unanimously to table NPRR1271 and refer the issue to WMS. All Market Segments participated in the vote.</p> <p>On 3/12/25, PRS voted unanimously to recommend approval of NPRR1271 as submitted. All Market Segments participated in the vote.</p> <p>On 4/9/25, PRS voted unanimously to endorse and forward to TAC the 3/12/25 PRS Report and 1/28/25 Impact Analysis for NPRR1271. All Market Segments participated in the vote.</p>
Summary of PRS Discussion	<p>On 2/12/25, ERCOT Staff reviewed NPRR1271. Some participants questioned how NPRR1271 differs from current Qualified Scheduling Entity (QSE) procedure and requested additional WMS discussion.</p>

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	<p>On 3/12/25, there was no discussion.</p> <p>On 4/9/25, PRS reviewed the 1/28/25 Impact Analysis.</p>
TAC Decision	On 4/23/25, TAC voted unanimously to recommend approval of NPRR1271 as recommended by PRS in the 4/9/25 PRS Report. All Market Segments participated in the vote.
Summary of TAC Discussion	On 4/23/25, 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</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 6/24/25, the ERCOT Board voted unanimously to recommend approval of NPRR1271 as recommended by the 4/23/25 TAC Report.

Opinions	
Credit Review	ERCOT Credit Staff and the Credit Finance Sub Group (CFSG) have reviewed NPRR1271 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 NPRR1271.
ERCOT Opinion	ERCOT supports approval of NPRR1271.
ERCOT Market Impact Statement	ERCOT Staff has reviewed NPRR1271 and believes that it provides process improvements by allowing CFE to opt out of the requirement to designate a USA and receive Digital Certificates.

Sponsor	
Name	Katherine Gross / Debbie Lightener
E-mail Address	Katherine.Gross@ercot.com / Debbie.Lightener@ercot.com

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Company	ERCOT
Phone Number	(512) 225-7184 / (512) 248-4293
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
WMS 030625	Endorsed NPPRR1271 as submitted

Market Rules Notes

None

Proposed Protocol Language Revision
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16.12 User Security Administrator and Digital Certificates

- (1) Each Market Participant is allowed access to certain ERCOT computer systems through the use of Digital Certificates upon execution of the Standard Form Market Participant Agreement (as provided for in Section 22, Attachment A, Standard Form Market Participant Agreement), and completion of applicable registration and qualification requirements. Digital Certificates expire after one year.
- (2) A User Security Administrator (USA) is responsible for managing the Market Participant's access to non-public ERCOT computer systems through Digital Certificates. A USA may also be responsible for managing the Market Participant's access to the online Resource Integration and Ongoing Operations ("RIOO") system, which does not require a Digital Certificate. Each Market Participant that will receive Digital Certificate(s) must, as part of the application for registration with ERCOT, designate an individual employee or authorized agent as its USA, and optionally, a backup USA. If a Market Participant has designated a backup USA and the primary USA fails to perform, or is unable to perform, the functions required of a USA, then the backup USA shall perform any and all functions required of the primary USA. The Market Participant is responsible for revising its USA list as the need arises. The Market Participant's USA is

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responsible for registering all Market Participant's Digital Certificate holders ("Certificate Holders") and administering the use of Digital Certificates on behalf of the Market Participant. ERCOT Critical Energy Infrastructure Information (ECEII) posted on the Market Information System (MIS) Secure or Certified Area may be accessed only by those individuals that are issued ECEII-eligible Digital Certificates. Each Market Participant that will receive Digital Certificates and having more than one ERCOT functional registration must designate a USA for each registration (which may be the same employee or authorized agent) and shall manage each registration separately for the purposes of this Section. Once the Market Participant completes registration requirements, ERCOT shall send the USA a copy of the Digital Certificate user guide.

- (3) Only Market Participants registered with ERCOT as either a Municipally Owned Utility (MOU) or an Electric Cooperative (EC), and as a Distribution Service Provider (DSP) and/or Load Serving Entity (LSE), may be eligible to opt out of designating a USA and receiving Digital Certificates if the Market Participant demonstrates to ERCOT's satisfaction that it does not need a Digital Certificate to perform its obligations under the ERCOT Protocols, market guides, or other applicable rules. In addition, Comision Federal de Electricidad (CFE) may be eligible to opt out of designating a USA and receiving Digital Certificates upon demonstrating to ERCOT's satisfaction that it does not need a Digital Certificate to perform its obligations under the ERCOT Protocols, market guides, or other applicable rules.
- (4) An eligible Market Participant that wishes to opt out of designating a USA and receiving Digital Certificates shall submit a request form, found on the ERCOT website, confirming its desire to opt out subject to ERCOT's review and approval. ERCOT will notify the requesting Market Participant of its approval or disapproval of the request within 14 Business Days. ERCOT may subsequently revoke, at its sole discretion, Market Participant's election to opt out if the Market Participant's lack of a Digital Certificate causes administrative burdens or reliability concerns. ERCOT will send notice of revocation to the Market Participant who will have ten Business Days to fill out a Notice of Change of Information (NCI) form (Section 23, Form E, Notice of Change of Information) and submit it to ERCOT. Once the NCI is submitted, the request for a Digital Certificate will be subject to the same requirements applicable to the processing of an initial request by a new Market Participant.
- (5) Market Participants that have received approval from ERCOT to opt out of designating a USA and receiving Digital Certificates are not excused from obligations under the ERCOT Protocols, other than the obligations required in this Section 16.12 regarding Digital Certificates. Market Participants who opt out shall still be required to submit the Digital Certificate Audit Attestation (DCAA) required by paragraph (2) of Section 16.12.3, Market Participant Audits of User Security Administrators and Digital Certificates, for the portion of the year, if any, during which they had a USA and Digital Certificate(s).
- (6) A Market Participant that has been granted approval by ERCOT to opt out of designating a USA and receiving Digital Certificates will not have access to information that would ordinarily be retrievable with a Digital Certificate. A Market Participant that has been

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granted approval by ERCOT to opt out of designating a USA and receiving Digital Certificates may, at any time, cancel its opt-out status by submitting an NCI form (Section 23, Form E).

ERCOT Impact Analysis Report

NPRR Number	<u>1271</u>	NPRR Title	Revision to User Security Administrator and Digital Certificates Opt-out Eligibility
Impact Analysis Date	January 28, 2025		
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>1276</u>	NPRR Title	Move OBD to Section 22 – Emergency Response Service Procurement Methodology
Date of Decision	June 24, 2025		
Action	Recommended Approval		
Timeline	Normal		
Estimated Impacts	Cost/Budgetary: Less than \$5k (Operations & Maintenance (O&M)) Project Duration: Not applicable		
Proposed Effective Date	Upon system implementation		
Priority and Rank Assigned	Not applicable		
Nodal Protocol Sections Requiring Revision	3.14.3.1, Emergency Response Service Procurement Section 22, Attachment Q, Emergency Response Service Procurement Methodology (new)		
Related Documents Requiring Revision/Related Revision Requests	Emergency Response Service Procurement Methodology (Upon implementation of this Nodal Protocol Revision Request (NPRR), this will be removed from the Other Binding Documents List.)		
Revision Description	This NPRR incorporates the Other Binding Document “Emergency Response Service Procurement Methodology” into the Protocols to standardize the approval process.		
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	This NPRR is published for transparency and to standardize the approval process for all binding language.
PRS Decision	<p>On 4/9/25, PRS voted unanimously to recommend approval of NPRR1276 as submitted. All Market Segments participated in the vote.</p> <p>On 5/14/25, PRS voted unanimously to endorse and forward to TAC the 4/9/25 PRS Report and 3/10/25 Impact Analysis for NPRR1276. All Market Segments participated in the vote.</p>
Summary of PRS Discussion	<p>On 4/9/25, ERCOT Staff provided an overview of NPRR1276.</p> <p>On 5/14/25, participants reviewed the 3/10/25 Impact Analysis.</p>
TAC Decision	<p>On 5/28/25, TAC voted unanimously to recommend approval of NPRR1276 as recommended by PRS in the 5/14/25 PRS Report. All Market Segments participated in the vote.</p>
Summary of TAC Discussion	On 5/28/25, 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 6/24/25, the ERCOT Board voted unanimously to recommend approval of NPRR1276 as recommended by TAC in the 5/28/25 TAC Report.

Opinions

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Credit Review	ERCOT Credit Staff and the Credit Finance Sub Group (CFSG) have reviewed NPRR1276 and do not believe that it requires changes to credit monitoring activity or the calculation of liability.
Independent Market Monitor Opinion	The IMM has no opinion on NPRR1276.
ERCOT Opinion	ERCOT supports approval of NPRR1276.
ERCOT Market Impact Statement	ERCOT Staff has reviewed NPRR1276 and believes it has a positive market impact by standardizing the approval process for binding language.

Sponsor	
Name	Ann Boren
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Company	ERCOT
Phone Number	512-248-6465
Cell Number	
Market Segment	Not Applicable

Market Rules Staff Contact	
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Phone Number	512-225-7027

Comments Received	
Comment Author	Comment Summary
None	

Market Rules Notes

To improve transparency, existing Other Binding Document language for new Section 22, Attachment Q, is represented as blackline, with only proposed changes marked as redline.

Proposed Protocol Language Revision
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3.14.3.1 Emergency Response Service Procurement

- (1) ERCOT shall issue Requests for Proposals to procure ERS for each Standard Contract Term. The ERS Standard Contract Terms are as follows:
 - (a) December through March;
 - (b) April and May;
 - (c) June through September; and
 - (d) October and November.
- (2) ERCOT shall procure ERS from one or more of the four following ERS service types:
 - (a) Weather-Sensitive ERS-10
 - (b) Non-Weather-Sensitive ERS-10
 - (c) Weather-Sensitive ERS-30
 - (d) Non-Weather-Sensitive ERS-30
- (3) ERS offers shall be submitted only by QSEs capable of receiving Extensible Markup Language (XML) messaging on behalf of represented ERS Resources.
- (4) Each site in an ERS Generator must have an interconnection agreement with its TDSP prior to submitting an ERS offer and must have exported energy to the ERCOT System prior to the offer due date. An ERS Resource that cannot inject energy to the ERCOT System can only be offered as an ERS Load.
- (5) In order to qualify as weather-sensitive, an ERS Load must meet one of the following criteria:
 - (a) The ERS Load must consist exclusively of residential sites; or
 - (b) The ERS Load must consist exclusively of non-residential sites and must qualify as weather-sensitive based on the accuracy of the regression baseline evaluation methodology as described in Section 8.1.3.1.1, Baselines for Emergency Response Service Loads, as an indicator of actual interval Load.
 - (i) ERCOT shall establish minimum accuracy standards for qualification as an ERS Load under the regression baseline evaluation methodology.
 - (ii) An ERS Load must have at least nine months of interval meter data to qualify as weather-sensitive under the regression baseline evaluation methodology.

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- (iii) ERCOT's determination that an ERS Load qualifies as a weather-sensitive ERS Load is independent of ERCOT's determination of which baseline methodologies may be appropriate for purposes of evaluating the ERS Load's performance.
 - (c) If a site with Distributed Renewable Generation (DRG) has been designated by the QSE to be evaluated by using its native load, the default baseline analysis shall be performed using the calculated native load.
- (6) QSEs representing ERS Resources may submit offers for one or more ERS Time Periods within an ERS Standard Contract Term. ERS Time Periods shall be defined by ERCOT in the RFP for that ERS Standard Contract Term. An ERS offer is specific to an ERS Time Period. In submitting an offer, both the QSE and the ERS Resource are committing to provide ERS for that ERS Time Period if selected.
- (7) A QSE may submit separate offers for an ERS Resource to provide any or all of the four ERS service types during the same or different ERS Time Periods in the same ERS Standard Contract Term, but ERCOT shall only award offers for one service type for each ERS Resource.
- (8) The minimum capacity offer for an ERS Load on the weather-sensitive baseline is one half (0.5) MW; all other ERS capacity offers will have a minimum amount that may be offered of one-tenth (0.1) MW. ERS Resources may be aggregated to reach this requirement.
- (9) Offers from ERS Generators must include self-serve capacity and injection capacity amounts greater than or equal to zero for each ERS Time Period offered.
- (10) ERCOT may establish an upper limit, in MWs, on the amount of ERS capacity it will procure for any ERS Time Period in any ERS Standard Contract Term.
- (11) A QSE's offer to provide ERS shall include:
 - (a) The name of the QSE representing the ERS Resource and the name of an individual authorized by the QSE to represent the QSE and its ERS Resource(s);
 - (b) The name of an Entity that controls the ERS Resource, and an affirmation that the QSE has obtained written authorization from the Entity to submit ERS offers on its behalf and to represent the Entity in all matters before ERCOT concerning the Entity's provision of ERS;
 - (c) Any information or data specified by ERCOT, including access to historical meter data, and affirmation by the QSE that it has obtained written authorization from the controlling Entity of the ERS Resource for the QSE to obtain such data;
 - (d) Affirmation that the controlling Entity of the ERS Resource has reviewed P.U.C. SUBST. R. 25.507, Electric Reliability Council of Texas (ERCOT) Emergency Response Service (ERS), these Protocols and Other Binding Documents relating to the provision of ERS, and has agreed to comply with and be bound by such provisions;

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- (e) An agreement by the QSE to produce any written authorization or agreement between the QSE and any ERS Resource it represents, as described in this Section, upon request from ERCOT or the PUCT;
 - (f) Affirmation that no offered capacity from any site in an ERS Resource has been or will be committed to provide any other product, service, or program during any of the hours in the ERS Time Period in the Standard Contract Term for which the offer is submitted. Such prohibited products, services, or programs include, but are not limited to, Ancillary Services, Security-Constrained Economic Dispatch (SCED), or TDSP standard offer programs. As an exception to the foregoing, a QSE may offer a site to provide ERS for an ERS Time Period in the Standard Contract Term even if the QSE has an offer pending for that same site to serve as an MRA during that ERS Time Period and Standard Contract Term; however, if the site is selected to serve as an MRA it will not be permitted to serve as ERS during any ERS Time Period in the ERS Contract Term in which it is obligated to serve as an MRA;
 - (g) Affirmation that the QSE and the controlling Entity the ERS Resource are familiar with any applicable federal, state or local environmental regulations that apply to the use of any generator in the provision of ERS, and that the use of such generator(s) to provide of ERS would not violate those regulations. This provision applies to both ERS Generators and to the use of backup generation by ERS Loads; and
 - (h) Affirmation that each offered ERS Resource satisfies at least one of the conditions set forth in paragraph (9) of Section 3.6.1, Load Resource Participation, and that all of the ERS Resource's offered Demand response capacity will be available if deployed by ERCOT during an emergency.
- (12) Upon request from a QSE, ERCOT shall provide the dates and times for any deployment events or tests of any ERS site during the previous three ERS Standard Contract Terms, provided that the QSE has obtained written authorization from the ERS site to obtain the information from ERCOT. Such QSE requests shall include the following site-specific information: Electric Service Identifier (ESI ID), unique meter identifier (if applicable), or, if the site is in a Non-Opt-In Entity (NOIE) area, site name and site address.
- (13) Sites associated with a Dynamically Scheduled Resource (DSR) may not participate in ERS. Offers for Resources containing sites associated with a DSR will be rejected by ERCOT. If ERCOT determines that any participating site is associated with a DSR, that site will be treated as removed from the Resource on the date the determination was made. An ERS Resource's obligation will not change as a result of any such site removal.

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

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- (14) Each offer submitted by a QSE on behalf of an aggregated ERS Load on a weather-sensitive baseline shall include the QSE's projection of the maximum number of sites in the aggregation during the ERS Standard Contract Term. ERCOT shall review this projection and the information provided regarding the initial size of each aggregated ERS Load and shall reject any offer on behalf of such an ERS Load if the maximum size of the ERS Load projected by the QSE would violate the limits of site participation growth described in paragraph (15) below.
- (15) A QSE may modify the population of an aggregated ERS Load on a weather-sensitive baseline once per month during an ERS Standard Contract Term via a process defined by ERCOT. Such adjustments shall be effective on the first day of each month following the first month. A fully validated ERS Offer form must be received by ERCOT no later than seven Business Days prior to the first day of the month for which is intended to be in effect.
 - (a) During an ERS Standard Contract Term, a QSE may increase the number of sites in an aggregated ERS Load on a weather-sensitive baseline by no more than the greater of the following:
 - (i) 100% of the initial number of sites; or
 - (ii) Two MW times the QSE's projection of the maximum number of sites in the aggregation during the ERS Standard Contract Term, divided by the maximum MW capacity offered for any ERS Time Period for the aggregation.
 - (b) Any sites added to an ERS Load on a weather-sensitive baseline are subject to the same requirements for historical meter data as the other sites in the aggregation, as described in paragraph (4) of Section 8.1.3.1.1.
- (16) For each of the four ERS service types, an ERS Standard Contract Term may consist of a single ERS Contract Period or multiple non-overlapping ERS Contract Periods, as follows:
 - (a) If no ERS Resources' obligations are exhausted for an ERS service type during an ERS Contract Period pursuant to Section 3.14.3.3, Emergency Response Service Provision and Technical Requirements, the ERS Contract Period for that ERS service type shall terminate at the end of the last Operating Day of the ERS Standard Contract Term.
 - (b) If one or more ERS Resources' obligations in a given ERS service type are exhausted pursuant to Section 3.14.3.3, the ERS Contract Period for that ERS service type shall terminate at the end of the Operating Day during which the exhaustion occurred. However, if ERS Resources participating in a service type remain deployed at the end of that Operating Day, the ERS Contract Period for that ERS service type shall terminate at the end of the Operating Day on which those ERS Resources are recalled.
 - (c) If an ERS Contract Period terminates as provided in paragraph (b) above, and one or more ERS Resources' obligations were not exhausted, a new ERS Contract

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Period for the ERS service type shall begin at hour ending 0100 on the following Operating Day. This new ERS Contract Period shall terminate as provided in this Section.

- (d) If ERCOT elects pursuant to paragraph (b) above to renew the obligations of any ERS Resources whose obligations were entirely exhausted, a new ERS Contract Period for the ERS service type shall begin at hour ending 0100 on the Operating Day after ERCOT has notified QSEs that it has elected to renew the obligation. If a new ERS Contract Period was initiated pursuant to paragraph (c) above on an Operating Day prior to ERCOT issuing a notice of renewal under this paragraph, that ERS Contract Period shall terminate at the end of the Operating Day on which ERCOT notified QSEs that the renewal will take place. This new ERS Contract Period shall terminate as provided in this Section.
- (17) An ERS Resource currently obligated to provide an ERS service type during an ERS Time Period and ERS Contract Period may be offered to provide service as an MRA during that same ERS Time Period in the ERS Contract Period. If the ERS Resource is selected to provide service as an MRA during an ERS Time Period in the ERS Contract Period in which it is currently obligated to provide an ERS service type, the ERS Contract Period will be terminated for that ERS service type. The ERS Contract Period for that ERS service type shall terminate at the end of the Operating Day that is five days before the first Operating Day the ERS Resource is obligated to provide service under the MRA Agreement. However, if any ERS Resources participating in that ERS service type are currently deployed at the end of the Operating Day the ERS Contract Period is scheduled to terminate, then the ERS Resource's ERS Contract Period for that ERS service type shall continue until the end of the Operating Day on which all of the ERS Resources participating in that ERS service type have been recalled, at which time the ERS Contract Period will terminate.
- (18) ERS Resources shall be obligated in ERS Contract Periods as follows:
 - (a) Unless an ERS Contract Period is terminated pursuant to paragraph (17) above, for the first ERS Contract Period in an ERS Standard Contract Term, all ERS Resources awarded by ERCOT shall be obligated.
 - (b) ERS Resources shall be obligated for 24 hours of cumulative deployment time for any ERS Contract Period during the December through March ERS Standard Contract Term. The obligated cumulative deployment time for any ERS Contract Period during all other ERS Standard Contract Terms shall be 12 hours.
 - (c) For each of any subsequent ERS Contract Periods for a given ERS service type in an ERS Standard Contract Term, any ERS Resource with remaining obligation due to cumulative deployment time of less than the maximum deployment hours specified for the ERS Standard Contract Term in paragraph (b) above at the end of the last ERS Contract Period shall be obligated for only this remaining deployment time in the new ERS Contract Period.

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- (d) For each of any subsequent ERS Contract Periods in an ERS Standard Contract Term, ERCOT may renew the obligations of certain ERS Resources as follows:
 - (i) During the offer submission process, QSEs shall designate on the ERS offer form, which is posted on the ERCOT website, whether an ERS Resource elects to participate in renewal ERS Contract Periods (“renewal opt-in”). Except as provided in paragraph (iv) below, this election is irrevocable once the ERS Resource has been committed for an ERS Standard Contract Term.
 - (ii) If the obligations of one or more ERS Resources are exhausted before the end of an ERS Standard Contract Term, ERCOT shall determine whether to include renewal opt-ins in the subsequent ERS Contract Period. ERCOT may limit any renewal to one or more ERS Time Periods and/or a specified MW quantity in which obligations have been exhausted.
 - (iii) If ERCOT decides to include renewal opt-ins in a subsequent ERS Contract Period, ERCOT shall promptly notify all ERS QSEs as to the ERS Time Periods and/or any specified MW quantity that it has elected to renew.
 - (iv) By the end of the second Business Day in any renewal ERS Contract Period, a QSE may revoke the renewal opt-in status of any of its committed ERS Resources for any subsequent ERS Contract Periods within that ERS Standard Contract Term. ERCOT shall develop a method for QSEs to communicate such information.
 - (v) By the end of the third Business Day in any ERS Contract Period other than the first ERS Contract Period in an ERS Standard Contract Term, ERCOT shall communicate to QSEs a confirmation of the terms of participation for all of their committed ERS Resources.
- (19) In any 12-month period beginning on December 1st and ending on November 30th, ERCOT shall not commit dollars toward ERS in excess of the ERS cost cap, except for the purpose of renewing ERS Resource obligations during a period where ERS has been exhausted. ERCOT may determine cost limits for each ERS Standard Contract Term in order to ensure that the ERS cost cap is not exceeded.
- (20) If a QSE offers a Weather-Sensitive ERS Load, selects a control group baseline for that ERS Load, and ERCOT determines that the magnitude of the offer relative to the baseline error will prevent accurate determination of the performance, ERCOT shall reject the offer.
- (21) ERCOT shall reduce the available expenditure under the ERS cost cap by the value of the amount of ERS Self-Provision. ERCOT shall value ERS Self-Provision at the clearing price multiplied by the total MW of ERS Self-Provision during each relevant ERS Time Period.

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- (22) ERCOT shall procure ERS Resources for each ERS Time Period using a clearing price. ~~The Section 22, Attachment Q, Emergency Response Service Procurement Methodology, posted on the ERCOT website, is an Other Binding Document that~~ describes the methodology used by ERCOT to procure ERS. ERCOT may consider geographic location and its effect on congestion in making ERS awards. ERCOT may prorate the capacity awarded to an ERS Resource in an ERS Time Period if the capacity offered for that ERS Resource would cost more than ~~the Emergency Response Service Procurement Methodology~~ Section 22, Attachment Q, allows under the time period expenditure limit. Such proration shall only be done if the QSE indicates on its offer for an ERS Resource that the QSE is willing to have the capacity prorated and also has indicated the lowest prorated capacity limit which is acceptable for that ERS Resource. If proration would result in an award below an ERS Resource's designated prorated capacity limit or below the minimum MW offer applicable to the ERS service type as specified in paragraph (8) above, the offer will not be awarded.
- (23) Payments and Self-Provision credits to QSEs representing ERS Resources are subject to adjustments as described in Section 8.1.3.3, Payment Reductions and Suspension of Qualification of Emergency Response Service Resources and/or their Qualified Scheduling Entities. Deployment of ERS Resources will not result in additional payments other than any payment for which the QSE may be eligible through Real-Time energy imbalance or other ERCOT Settlement process.
- (24) QSEs representing ERS Resources selected to provide ERS shall execute a Standard Form Emergency Response Service Agreement, as provided in Section 22, Attachment G, Standard Form Emergency Response Service Agreement.

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ERCOT Nodal Protocols

Section 22

Attachment Q: Emergency Response Service Procurement Methodology

TBD

~~EMERGENCY RESPONSE SERVICE~~

~~Procurement Methodology~~

~~PUCT approved 9/14/23~~

~~Effective Date of 9/15/2023~~

Board Report

Date Approved	Version	Description	Author(s)	Approved By	Effective Date
11/19/13	0.1	ERCOT Board approved NPRR564, Thirty-Minute Emergency Response Service (ERS) and Other ERS Revisions, and associated OBD, Emergency Response Service Procurement Methodology	ERCOT	ERCOT Board	11/20/13
4/8/14	0.2	<p>Revised Section G, Clearing Price. Language grey boxed until effective date of 5/1/14.</p> <p>History:</p> <ul style="list-style-type: none"> 3/11/14 — Notification of proposed revisions 3/27/14 — TAC recommended approval 4/8/14 — ERCOT Board of Directors approved 5/1/14 — Removed grey box from Section G 	ERCOT	ERCOT Board	5/1/14
10/14/14	0.3	<p>Revised Section G, Clearing Price. (Associated NPRR637, Clarification of ERS Language and ERCOT Process for Co-located Resources.) Language grey boxed until effective date of 11/1/14.</p> <p>History:</p> <ul style="list-style-type: none"> 8/21/14 — Notification of proposed revisions 8/28/14 — TAC recommended approval 10/14/14 — ERCOT Board of Directors approved 11/1/14 — Removed grey box from Section G 	ERCOT	ERCOT Board	11/1/14
6/12/18	0.4	Revisions proposed by OBDRR004, Updates to Emergency Response Service Procurement Methodology	ERCOT	ERCOT Board	7/1/18

Board Report

Date Approved	Version	Description	Author(s)	Approved By	Effective Date
10/13/20	0.5	<p>Revisions proposed by OBDRR023, Related to NPPR984, Change ERS Standard Contract Terms. Language grey boxed until effective date of 2/1/21 and upon system implementation of NPPR984</p> <p>History:</p> <ul style="list-style-type: none"> 8/5/20 — Notification of proposed revisions 8/26/20 — TAC recommended approval 10/13/20 — ERCOT Board of Directors approved 2/1/21 — Unboxed footnote in Section E; 10/1/21 — Unboxed remaining language due to system implementation of NPPR984; 12/1/21 — Removed footnote in Section E 	ERCOT	ERCOT Board	2/1/21
4/13/21	0.6	<p>Revisions proposed by OBDRR027, Clarify Implementation Timeline for OBDRR023 (changed effective date of OBDRR023)</p> <p>History:</p> <ul style="list-style-type: none"> 2/2/21 — Notification of proposed revisions 3/24/21 — TAC recommended approval 4/13/21 — ERCOT Board of Directors approved 	ERCOT	ERCOT Board	4/16/21
12/10/21	0.7	<p>Revisions proposed by OBDRR036, Related to NPPR1106, Deployment of ERS Prior to Declaration of EEA</p> <p>History:</p> <ul style="list-style-type: none"> 11/19/21 — Notification of proposed revisions 11/29/21 — TAC recommended approval 12/10/21 — ERCOT Board of Directors approved 	ERCOT	ERCOT Board	12/17/21

Board Report

Date Approved	Version	Description	Author(s)	Approved By	Effective Date
8/25/22	0.8	<p>Revisions proposed by OBDRR042, Related to NPRR1142, ERS Changes to Reflect Updated PUCT Rule Changes re SUBST. R. 25.507</p> <p>History:</p> <ul style="list-style-type: none"> 7/14/22 — Notification of proposed revisions 7/27/22 — TAC recommended approval 8/16/22 — ERCOT Board recommended approval 8/25/22 — PUCT approved 	ERCOT	PUCT	8/26/22
9/14/23	0.9	<p>Revisions proposed by OBDRR047, Revision to ERS Procurement Methodology regarding Unused Funds from Previous Terms</p> <p>History:</p> <ul style="list-style-type: none"> 6/30/23 — Notification of proposed revisions 7/25/23 — TAC recommended approval 8/31/23 — ERCOT Board recommended approval 9/14/23 — PUCT approved 	ERCOT	PUCT	9/15/23

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~~Electric Reliability Council of Texas, Inc. (ERCOT) administers Emergency Response Service (ERS) in accordance with Public Utility Commission of Texas (PUC) Substantive Rule §25.507, Electric Reliability Council of Texas (ERCOT) Emergency Response Service (ERS)¹ and the ERCOT Nodal Protocols. This document is intended to be consistent with these standards, but to the extent any conflict exists, the PUC Rule or Protocols control.~~

¹ ~~<https://www.puc.texas.gov/agency/ruleslaws/subrules/electric/25.507/25.507.pdf>~~

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A. Document Attachment Description

This document attachment describes the mechanism for procuring Emergency Response Service (ERS) and is considered an “Other Binding Document,” as that term is defined in the ERCOT Protocols.

B. ~~Change Control Process~~

~~ERCOT Staff will provide a period for stakeholder review and comment for proposed revisions to this document as follows:~~

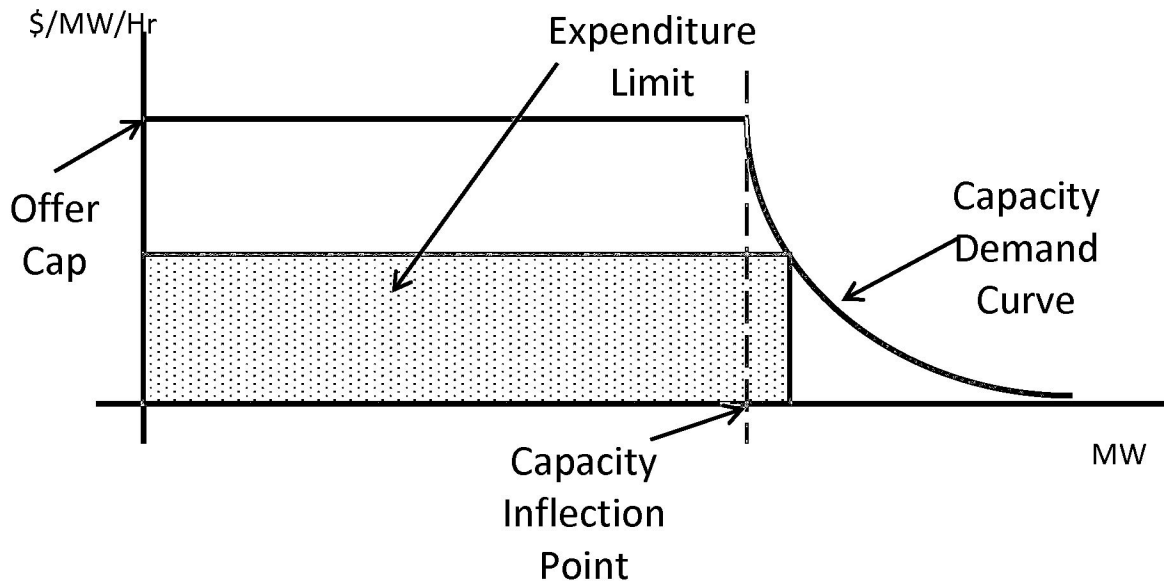
- ~~(1) ERCOT shall post proposed revisions to the Emergency Response Service Procurement Methodology to the ERCOT website.~~
- ~~(2) ERCOT shall also electronically notify stakeholders of the proposed revisions via the TAC and Others distribution list and define the comment period which shall be at least 14 days after initial posting.~~
- ~~(3) To receive consideration, comments should be submitted via email to ERS@ercot.com by the deadline set forth in the notification.~~
- ~~(4) Upon Market Participant written request, ERCOT will conduct a conference call and online review of the submitted comments.~~
- ~~(5) ERCOT will review proposed document revisions with the Technical Advisory Committee (TAC).~~
- ~~(6) ERCOT will submit proposed document revisions for ERCOT Board approval.~~
- ~~(7) Within three Business Days of ERCOT Board approval, ERCOT shall post the revised document to the ERCOT website.~~

BC. ERS Capacity Demand Curve

ERCOT will develop a capacity demand curve for each ERS Time Period, and all ERS products will be procured together within the limits of that curve. ERCOT shall maximize the MW procured subject to the expenditure limit for the relevant Time Period. Each demand curve is derived from the three following parameters, which ERCOT will specify in the Request for Proposal (RFP) for ERS procurement:

- (1) ERS Offer Cap
- (2) ERS Time Period Capacity Inflection Point
- (3) ERS Time Period Expenditure Limit

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CD. ERS Offer Cap

The ERS offer cap establishes a maximum possible procurement price of \$80/MW/hr for every ERS Time Period during the ERS program year. ERCOT will automatically reject any offers above the offer cap.

DE. ERS Expenditure Limit

P.U.C. Substantive Rule 25.507 restricts ERCOT's ERS expenditures to a maximum of \$75 million in a 12-month period, unless otherwise determined by the Public Utility Commission of Texas (PUCT). ERCOT will allocate the \$75 million available expenditure within its ERS program year, which starts with the December through March ERS Standard Contract Term and ends with the October through November ERS Standard Contract Term. During that 12-month period, ERCOT may exceed the \$75 million maximum by up to an additional \$25 million for ERS contract renewals.

No later than 60 days before each new ERS program year, ERCOT will make an initial allocation of the annual expenditure limit to each ERS Time Period in each ERS Standard Contract Term based on the expected risk of deploying ERS in that ERS Time Period, in accordance with the formula detailed below. ERCOT will assign a high (H), moderate (M), or low (L) risk designation to each ERS Time Period and will assign a risk-weighting factor (a value from 1 to 100 with 1 being the lowest risk value and 100 being the highest risk value) for each risk designation. ERCOT's risk assessment will

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consider a number of factors, including, but not limited to, forecasted operating reserves, forecasted Load, Resource outage information, and the obligated cumulative deployment time for an ERS Contract Period as specified for the ERS Standard Contract Term in paragraph (18)(b) of ERCOT ~~Protect~~ Section 3.14.3.1, Emergency Response Service Procurement.

Prior to issuing an RFP for an upcoming ERS Standard Contract Term, ERCOT will update the ERS Time Period Expenditure Limits for each remaining ERS Time Period in the ERS program year to reflect updated forecasts and ERS Expenditure Limits for the remaining ERS Standard Contract Terms within the same ERS program year. Any unused funds from previous ERS Standard Contract Terms in the ERS program year may be reallocated among ERS Contract Periods, including ERS contract renewals, during the same program year at ERCOT's sole discretion. Unless the offer submission deadline for the upcoming ERS Standard Contract Term has passed, ERCOT may update the ERS Time Period Expenditure Limits and issue a revised RFP if funds originally allocated to the upcoming ERS Standard Contract Term must be reallocated to fund an ERS renewal Contract Period in the current ERS Standard Contract Term. ERCOT may revise and reissue the RFP for other reasons if the offer submission date has not yet passed. Any funds remaining at the end of an ERS program year will not be carried forward into a new ERS program year.

For each ERS Time Period, the expenditure limit is calculated as follows:

$$Expenditure\ Limit_{TP} = ERS\ Funds\ Determined\ for\ Allocation_{Program\ Year} \times \frac{Expenditure\ Limit}{Allocation\ Factor_{TP}}$$

Where

$$\frac{Expenditure\ Limit}{Allocation\ Factor_{TP}} = \left[\frac{Risk\ Weighting}{Factor_{TP}} \times \# hrs_{TP} \times OfferCap \right] \div \left[\sum_{TP} \frac{Risk\ Weighting}{Factor_{TP}} \times \# hrs_{TP} \times OfferCap \right]$$

EF. Capacity Inflection Point

The capacity inflection point establishes the point on the capacity demand curve where capacity can only be procured at an offer price less than the ERS Time Period offer cap while respecting the expenditure limit for that ERS Time Period. The capacity inflection point for each time period is calculated as follows:

$$CapInflectionPoint_{TP} = ExpenditureLimit_{TP} \div [\# hrs_{TP} \times OfferCap]$$

Table A below provides hypothetical calculations of the expenditure limits and capacity inflection point for each ERS Time Period in each ERS program year.

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Standard Contract Term	Time Period	Risk Level	Risk Weighting Factor (a)	Time Period Hours (b)	Offer Cap (c)	(a)*(b)*(c)	Expenditure Limit Allocation Factor	ERS Time Period Expenditure Limit	Capacity Inflection Point (MW)
DecMar	TP1	H	100	332	\$ 80	2,656,000	20.11%	15,079,029	567.7
	TP2	L	18	332	\$ 80	478,080	3.62%	2,714,225	102.2
	TP3	L	18	249	\$ 80	358,560	2.71%	2,035,669	102.2
	TP4	H	80	249	\$ 80	1,593,600	12.06%	9,047,417	454.2
	TP5	M	50	249	\$ 80	996,000	7.54%	5,654,636	283.9
	TP6	L	1	152	\$ 80	12,160	0.09%	69,037	5.7
	TP7	L	1	228	\$ 80	18,240	0.14%	103,555	5.7
	TP8	L	10	1112	\$ 80	889,600	6.73%	5,050,566	56.8
AprMay	TP1	L	15	168	\$ 80	201,600	1.53%	1,144,553	85.2
	TP2	L	1	168	\$ 80	13,440	0.10%	76,304	5.7
	TP3	L	1	126	\$ 80	10,080	0.08%	57,228	5.7
	TP4	L	15	126	\$ 80	151,200	1.14%	858,415	85.2
	TP5	L	10	126	\$ 80	100,800	0.76%	572,276	56.8
	TP6	L	1	76	\$ 80	6,080	0.05%	34,518	5.7
	TP7	L	1	114	\$ 80	9,120	0.07%	51,777	5.7
	TP8	L	1	560	\$ 80	44,800	0.34%	254,345	5.7
JunSep	TP1	L	10	340	\$ 80	272,000	2.06%	1,544,238	56.8
	TP2	L	10	340	\$ 80	272,000	2.06%	1,544,238	56.8
	TP3	H	100	255	\$ 80	2,040,000	15.44%	11,581,784	567.7
	TP4	H	100	255	\$ 80	2,040,000	15.44%	11,581,784	567.7
	TP5	L	10	255	\$ 80	204,000	1.54%	1,158,178	56.8
	TP6	L	1	148	\$ 80	11,840	0.09%	67,220	5.7
	TP7	L	1	222	\$ 80	17,760	0.13%	100,830	5.7
	TP8	L	1	1113	\$ 80	89,040	0.67%	505,511	5.7
OctNov	TP1	L	15	168	\$ 80	201,600	1.53%	1,144,553	85.2
	TP2	L	1	168	\$ 80	13,440	0.10%	76,304	5.7
	TP3	L	1	126	\$ 80	10,080	0.08%	57,228	5.7
	TP4	L	15	126	\$ 80	151,200	1.14%	858,415	85.2
	TP5	L	15	126	\$ 80	151,200	1.14%	858,415	85.2
	TP6	L	10	76	\$ 80	60,800	0.46%	345,183	56.8
	TP7	L	10	114	\$ 80	91,200	0.69%	517,774	56.8
	TP8	L	1	561	\$ 80	44,880	0.34%	254,799	5.7

Table A. ERS Time Period Expenditure Limit Allocation and Capacity Inflection Point Calculations

FG. Clearing Price

The highest offer accepted for an ERS Time Period from will set the clearing price for all ERS Resources cleared in that ERS Time Period. All ERS service types specified in the Protocols will be procured using a common ERS capacity demand curve for each ERS Time Period and the highest offer accepted for an ERS Time Period will set the clearing price for all ERS service types.

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If the procurement of all offers at the same price for an ERS Time Period would exceed the ERS Expenditure Limit for that ERS Time Period, ERCOT shall consider each such offer in an order established at random.

If awarding an offer would not exceed the ERS Expenditure Limit that offer will be awarded for the full capacity offered.

If awarding an offer for the full amount of the offered capacity would exceed the ERS Expenditure Limit, the following steps will be taken:

- (1) If awarding an offer for the full amount of the offered capacity would exceed the ERS Expenditure Limit, the following steps will be taken: If the QSE has indicated on its offer that capacity proration is not allowed for that ERS Resource, the offer will be rejected.
- (2) If the QSE has indicated on its offer that capacity proration is allowed for that ERS Resource, and if the capacity following proration is greater than or equal to the Proration Lower Limit specified on the offer, the offer will be accepted and the prorated capacity will be awarded.
- (3) If the QSE has indicated on its offer that capacity proration is allowed by the QSE for that ERS Resource, and if the prorated capacity is less than the Proration Lower Limit specified on the offer, the offer will be rejected.

GH. ERS Capacity provided through ERS Self Provision

For any ERS self-provision, ERCOT will reduce the Time Period expenditure limit for any offers to self-provide part or all of a QSE's ERS Obligation by the clearing price for ERS.

ERCOT Impact Analysis Report

NPRR Number	<u>1276</u>	NPRR Title	Move OBD to Section 22 – Emergency Response Service Procurement Methodology
Impact Analysis Date	March 10, 2025		
Estimated Cost/Budgetary Impact	Less than \$5k, which will be absorbed by the Operations & Maintenance (O&M) budgets of affected department.		
Estimated Time Requirements	No project required. This Nodal Protocol Revision Request (NPRR) can take effect within 1-2 weeks after Public Utility Commission of Texas (PUCT) approval		
ERCOT Staffing Impacts (across all areas)	Implementation Labor: 100% ERCOT; 0% Vendor Ongoing Requirements: No impacts to ERCOT staffing.		
ERCOT Computer System Impacts	The following ERCOT systems would be impacted: Web Communications 100% *EMIL *ercot.com		
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>1282</u>	NPRR Title	Ancillary Service Duration under Real-Time Co-Optimization
Date of Decision	June 24, 2025		
Action	Recommended Approval		
Timeline	Urgent - to allow for ERCOT Board consideration in June 2025 and Public Utility Commission of Texas (PUCT) consideration in July 2025, so the open-loop testing in July 2025 and subsequent phases incorporates this change.		
Estimated Impacts	Cost/Budgetary: None Project Duration: No project required		
Proposed Effective Date	Upon system implementation of PR447, Real-Time Co-Optimization (RTC)		
Priority and Rank Assigned	Not applicable		
Nodal Protocol Sections Requiring Revision	2.2, Acronyms and Abbreviations 5.5.2, Reliability Unit Commitment (RUC) Process 8.1.1.2.1.1, Regulation Service Qualification 8.1.1.2.1.2, Responsive Reserve Qualification 8.1.1.2.1.3, Non-Spinning Reserve Qualification 8.1.1.3.1, Regulation Service Capacity Monitoring Criteria 8.1.1.3.2, Responsive Reserve Capacity Monitoring Criteria 8.1.1.3.4, ERCOT Contingency Reserve Service Capacity Monitoring Criteria		
Related Documents Requiring Revision/Related Revision Requests	Nodal Operating Guide Revision Request (NOGRR) 277, Related to NPRR1282, Ancillary Service Duration under Real-Time Co-Optimization		
Revision Description	<p>This Nodal Protocol Revision Request (NPRR) makes changes to the duration requirements for the following Ancillary Services in preparation for Real-Time Co-optimization plus Batteries (RTC+B):</p> <ul style="list-style-type: none"> • Updates duration requirements for Regulation Service and Responsive Reserve (RRS) to thirty minutes; and • Updates duration requirement for ERCOT Contingency Reserve Service (ECRS) to one hour. <p>This NPRR also updates the requirement for Reliability Unit Commitment (RUC) studies to use a one-hour duration for all Ancillary Service types, excluding Fast Frequency Response (FFR).</p>		

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	<p>ERCOT invites review of this NPRR from the RTC+B Task Force (RTCBTF). The changes proposed in this NPRR have no system impacts because these Ancillary Service durations are being incorporated as parameters in the current RTC+B business requirements.</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>In preparation for the new market paradigm to be implemented with RTC+B, ERCOT revisited the analysis that was conducted under NPRR1096, Require Sustained Two-Hour Capability for ECRS and Four-Hour Capability for Non-Spin, and conducted additional analysis to determine appropriate duration requirements for Ancillary Services. ERCOT shared the results of its analysis and its recommendations with the RTCBTF at its <u>March 25, 2025</u> and <u>April 22, 2025</u> meetings. Following is a summary of ERCOT's analysis and recommendations:</p> <ul style="list-style-type: none"> • Non-Spin duration should remain at least at four hours: Based on historical Non-Spinning Reserve (Non-Spin) risk-relevant deployments and sustained under-forecast error in six hour-ahead net load, the duration requirement for Non-Spin should remain at not less than four hours. This duration analysis for Non-Spin should be periodically revisited to assess its sufficiency especially during extreme events such as those that occurred on May 13, 2022 and March 2, 2025, for which Non-Spin deployments lasted more than four hours. Additionally, the duration requirement for Non-Spin should be

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	<p>revisited upon implementation of Dispatchable Reliability Reserve Service (DRRS).</p> <ul style="list-style-type: none"> ECRS duration should be changed to one hour: Based on the length of historical ECRS risk-relevant deployments, sustained under-forecast error in 30-minute ahead net load, and the need for a margin to account for increases in forecast errors that can be expected with growth in solar Resources, changing from a two-hour duration requirement to a one-hour duration requirement for ECRS is sufficient. However, this duration recommendation may need to be revisited if there are concerns with frequency event recovery and violations of North American Electric Reliability Corporation (NERC) Standard BAL-002, Disturbance Control Standard – Contingency Reserve for Recovery from a Balancing Contingency Event. Regulation Service and RRS duration should be changed to 30 minutes: Based on ERCOT's analysis, changing the duration requirement for Regulation Service and RRS from 15 minutes to 30 minutes is necessary to reduce the risk of ERCOT violating ERCOT's obligation under NERC BAL-001, Real Power Balancing Control Performance, in the event that Security-Constrained Economic Dispatch (SCED) is not available due to unplanned events. Reliability Unit Commitment (RUC): RUC studies should use a one-hour duration for all Ancillary Service types, excluding Fast Frequency Response (FFR) which should continue to require a 15-minute duration. A one-hour duration for RUC studies is appropriate to both respect an Energy Storage Resource's (ESR's) minimum and maximum State of Charge (SOC) values from the Current Operating Plan (COP) and as a deployment duration for use with deployment factors.
<p>PRS Decision</p>	<p>On 5/14/25, PRS voted to grant NPRR1282 Urgent status. There was one abstention from the Consumer (CMC Steel) Market Segment. PRS then voted to recommend approval of NPRR1282 as submitted and to forward to TAC NPRR1282 and the 4/29/25 Impact Analysis. There were nine opposing votes from the Consumer (2) (OPUC, CMC Steel), Independent Generator (5) (Jupiter Power, Engie, Southern Power, Eolian, Invenergy), Independent Power Marketer (IPM) (Vitol), and Municipal (CPS Energy) Market Segments and two abstentions from the Consumer (Occidental) and IPM (Tenaska) Market Segments. All Market Segments participated in both votes.</p>

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Summary of PRS Discussion	<p>On 5/14/25, ERCOT Staff provided an overview of NPRR1282 and the request for Urgent status. Participants reviewed the 5/4/25 TSSA comments, the 5/7/25 Jupiter Power comments, the 5/12/25 ERCOT comments, the 5/12/25 Joint Commenters comments, the 5/13/25 IMM comments, and the 5/13/25 TSSA comments. Participants debated the applicability of past system behaviors and events to RTC, the appropriate duration requirements for Ancillary Services (particularly Non-Spin) under RTC, and the processes by which duration limits set under NPRR1282 would be monitored and analyzed for modification after RTC go-live.</p>
TAC Decision	<p>On 5/28/25, TAC voted to recommend approval of NPRR1282 as recommended by PRS in the 5/14/25 PRS Report. There were two opposing votes from the Independent Generator (Engie, Jupiter Power) Market Segment and one abstention from the IPM (Tenaska) Market Segment. All Market Segments participated in the vote.</p>
Summary of TAC Discussion	<p>On 5/28/25, TAC reviewed the items below and discussed presentations made by the Independent Market Monitor (IMM) and ERCOT regarding the potential impacts of a one-hour duration for Non-Spin versus a four-hour duration. Participants expressed a desire for ongoing review of Ancillary Service duration requirements for potential modification, particularly after RTC go-live.</p>
Explanation of Opposing TAC Votes	<p>Independent Generator/Jupiter Power – Jupiter voted “no” as both Joint Commenter’s proposal in Joint Commenters’ May 12, 2025, comments to decouple duration qualification requirements from Real-Time SOC requirements and the IMM’s proposal for lower duration and Real-Time SOC requirements for Non-Spin are superior to the TAC passed version for both reliability and market outcomes. NPRR1282 as passed by TAC will decrease the amount of MWs from ESRs available to provide reserves during the times like the solar ramp, which will degrade reliability and increase price of reserves. A four-hour SOC requirement for Non-Spin for a 5-min SCED award would mean that an ESR would need to hold SOC for 48 times what SCED needs, which may have serious consequences, like stranded MW or no “foot room” when needed to absorb power when for large load trips.</p> <p>Independent Generator/Engie – Engie agrees with the comments of Jupiter Power above.</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>

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	<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 6/24/25, the ERCOT Board voted unanimously to recommend approval of NPRR1282 as recommended by TAC in the 5/28/25 TAC Report.

Opinions	
Credit Review	ERCOT Credit Staff and the Credit Finance Sub Group (CFSG) have reviewed NPRR1282 and do not believe that it requires changes to credit monitoring activity or the calculation of liability.
Independent Market Monitor Opinion	IMM opposes NPRR1282. The IMM supports the 5/13/25 IMM comments.
ERCOT Opinion	ERCOT supports approval of NPRR1282.
ERCOT Market Impact Statement	ERCOT Staff has reviewed NPRR1282 and believes the market impact for NPRR1282 provides reasonable, study-based duration requirements for these Ancillary Services in preparation for RTC+B go-live, and ERCOT agrees that these duration parameters can be revisited after go-live when there is history with the RTC+B systems implemented and observations regarding market and reliability outcomes.

Sponsor	
Name	Nitika Mago
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Company	ERCOT
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Market Segment	Not applicable

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Comments Received	
Comment Author	Comment Summary
TSSA 050425	Proposed an alternative approach whereby SOC is monitored in aggregate across the system and only enforced when the aggregate SOC and the Physical Responsive Capability (PRC) dip below preset thresholds
Jupiter Power 050725	Provided discussion points for the RTCBTF, advocating for a decoupling of Ancillary Service qualification requirements from operating requirements
ERCOT 051225	Summarized the reason for urgency for NPRR1282 and requested timely consideration of NPRR1282
Joint Commenters 051225	Provided additional edits to the 5/4/25 TSSA comments removing proposed edits which carried system impacts
IMM 051325	Proposed edits to lower the duration requirement for Non-Spin to one hour and presented alternative options to manage the risks the higher duration requirements are meant to address
TSSA 051325	Endorsed the 5/12/25 Joint Commenters comments
APA 052725	Endorsed the 5/13/25 IMM comments
Jupiter Power 061825	Opposed the TAC-recommended version of NPRR1282 and restated support for the IMM's recommended one-hour duration
ERCOT 061825	Provided additional support and explanation for the TAC-recommended version of NPRR1282
Plus Power 061925	Opposed the TAC-recommended version of NPRR1282 and restated support for the IMM's recommended one-hour duration
HGP 062025	Opposed the TAC-recommended version of NPRR1282
Tesla 062325	Opposed the TAC-recommended version of NPRR1282 and restated support for the IMM's recommended one-hour duration

Market Rules Notes

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

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- NPRR1269, RTC+B Three Parameters Policy Issues (incorporated 6/1/25)
 - Section 5.5.2
- NPRR1270, Additional Revisions Required for Implementation of RTC (incorporated 6/1/25)
 - Section 8.1.1.2.1.3

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

- NPRR1235, Dispatchable Reliability Reserve Service as a Stand-Alone Ancillary Service
 - Section 5.5.2

Proposed Protocol Language Revision

2.2 ACRONYMS AND ABBREVIATIONS

HBSOC Hour Beginning Planned State of Charge

5.5.2 Reliability Unit Commitment (RUC) Process

Commented [CP1]: Please note NPRR1235 also proposes revisions to this section.

- (1) The RUC process recommends commitment of Generation Resources, to match ERCOT's forecasted Load including Direct Current Tie (DC Tie) Schedules, subject to all transmission constraints and Resource performance characteristics. The RUC process takes into account Resources already committed in the Current Operating Plans (COPs), Resources already committed in previous RUCs, Off-Line Available Resources having a start-up time of one hour or less, and Resource capacity already committed to provide Ancillary Service. The formulation of the RUC objective function must employ penalty factors on violations of security constraints. The objective of the RUC process is to minimize costs based on the Resource costs described in paragraphs (5) through (9) below. For all hours of the RUC Study Period within the RUC process, Quick Start Generation Resources (QSGRs) with a COP Resource Status of OFFQS shall be considered as On-Line with Low Sustained Limit (LSL) at zero MW. QSGRs with a Resource Status of OFFQS shall only be committed by ERCOT through a RUC instruction in instances when a reliability issue would not otherwise be managed through Dispatch Instructions from Security-Constrained Economic Dispatch (SCED). For On-Line Energy Storage Resources (ESRs), the Hour Beginning Planned State of Charge (HBSOC) values provided in the COP for a given hour are discounted to ensure sufficient SOC is preserved to meet Ancillary Service Resource Responsibilities, as reflected in the COP. Any remaining SOC on the ESR will be considered available for energy dispatch by RUC while respecting the Minimum State of Charge (MinSOC) and Maximum State of Charge (MaxSOC) values provided in the COP.
- (2) The RUC process can recommend Resource decommitment. ERCOT may only decommit a Resource to resolve transmission constraints that are otherwise unresolvable. Qualifying Facilities (QFs) may be decommitted only after all other types of Resources have been assessed for decommitment. In addition, the HRUC process provides decision

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support to ERCOT regarding a Resource decommitment requested by a Qualified Scheduling Entity (QSE).

- (3) ERCOT shall review the RUC-recommended Resource commitments and the list of Off-Line Available Resources having a start-up time of one hour or less to assess feasibility and shall make any changes that it considers necessary, in its sole discretion. During the RUC process, ERCOT may also review and commit, through a RUC instruction, Combined Cycle Generation Resources that are currently planned to be On-Line but are capable of transitioning to a configuration with additional capacity. ERCOT may deselect Resources recommended in DRUC and in all HRUC processes if in ERCOT's sole discretion there is enough time to commit those Resources in the future HRUC processes, taking into account the Resources' start-up times, to meet ERCOT System reliability. After each RUC run, ERCOT shall post the amount of capacity deselected per hour in the RUC Study Period to the MIS Secure Area. A Generation Resource shown as On-Line and available for SCED dispatch for an hour in its COP prior to a DRUC or HRUC process execution, according to Section 5.3, ERCOT Security Sequence Responsibilities, will be considered self-committed for that hour. For purpose of Settlement, snapshot data will be used as specified in paragraph (2) of Section 5.3. ERCOT shall issue RUC instructions to each QSE specifying its Resources that have been committed as a result of the RUC process. ERCOT shall, within one day after making any changes to the RUC-recommended commitments, post to the MIS Secure Area any changes that ERCOT made to the RUC-recommended commitments with an explanation of the changes.

[NPRR1239: Replace paragraph (3) above with the following upon system implementation:]

- (3) ERCOT shall review the RUC-recommended Resource commitments and the list of Off-Line Available Resources having a start-up time of one hour or less to assess feasibility and shall make any changes that it considers necessary, in its sole discretion. During the RUC process, ERCOT may also review and commit, through a RUC instruction, Combined Cycle Generation Resources that are currently planned to be On-Line but are capable of transitioning to a configuration with additional capacity. ERCOT may deselect Resources recommended in DRUC and in all HRUC processes if in ERCOT's sole discretion there is enough time to commit those Resources in the future HRUC processes, taking into account the Resources' start-up times, to meet ERCOT System reliability. After each RUC run, ERCOT shall post the amount of capacity deselected per hour in the RUC Study Period to the ERCOT website. A Generation Resource shown as On-Line and available for SCED dispatch for an hour in its COP prior to a DRUC or HRUC process execution, according to Section 5.3, ERCOT Security Sequence Responsibilities, will be considered self-committed for that hour. For purpose of Settlement, snapshot data will be used as specified in paragraph (2) of Section 5.3. ERCOT shall issue RUC instructions to each QSE specifying its Resources that have been committed as a result of the RUC process. ERCOT shall, within one day after making any changes to the RUC-recommended commitments,

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post to the ERCOT website any changes that ERCOT made to the RUC-recommended commitments with an explanation of the changes.

- (4) A QSE shall notify the ERCOT Operator of any physical limitation that impacts its Resource's ability to start that is not reflected in the Resource's COP or the Resource's startup time, minimum On-Line time, or minimum Off-Line time. The following shall apply:
 - (a) If a Resource receives a RUC Dispatch Instruction that it cannot meet due to a physical limitation described in paragraph (4) above, the QSE representing the Resource shall notify the ERCOT Operator of the inability to fully comply with the instruction and shall comply with the instruction to the best of the Resource's ability. If the QSE has provided the ERCOT Operator notice of that limitation at least seven days prior to the Operating Day in which the instruction occurs, the QSE shall be excused from complying with the portion of the RUC Dispatch Instruction that it could not meet due to the identified limitation.
 - (b) If a QSE provides notice pursuant to paragraph (a) above of a physical limitation that will delay the RUC-committed Resource's ability to reach its LSL in accordance with a RUC Dispatch Instruction, ERCOT shall extend the RUC Dispatch Instruction so that the Resource's minimum run time is respected. However, if the Resource will not be available in time to address the issue for which it received the RUC instruction, ERCOT may instead cancel the RUC Dispatch Instruction.
- (5) A QSE shall be excused from complying with any portion of a RUC Dispatch Instruction that it could not meet due to a physical limitation that was reflected, at the time of the RUC Dispatch Instruction, in the Resource's COP, startup time, minimum On-Line time, or minimum Off-Line time.
- (6) To determine the projected energy output level of each Resource and to project potential congestion patterns for each hour of the RUC, ERCOT shall calculate proxy Energy Offer Curves based on the Mitigated Offer Caps (MOCs) for the type of Resource as specified in Section 4.4.9.4, Mitigated Offer Cap and Mitigated Offer Floor, for use in the RUC. Proxy Energy Offer Curves are calculated by multiplying the MOC by a constant selected by ERCOT from time to time that is no more than 0.10% and applying the cost for all Generation Resource output between High Sustained Limit (HSL) and LSL. The intent of this process is to minimize the effect of the proxy Energy Offer Curves on optimization.
- (7) ERCOT shall use the RUC process to evaluate the need to commit Resources for which a QSE has submitted Three-Part Supply Offers and other available Off-Line Resources in addition to Resources that are planned to be On-Line during the RUC Study Period. All of the above commitment information must be as specified in the QSE's COP. For

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available Off-Line Resources with a cold start time of one hour or less that have not been removed from special consideration under paragraph (9) below pursuant to paragraph (4) of Section 8.1.2, Current Operating Plan (COP) Performance Requirements, the Startup Offers and Minimum-Energy Offer from a Resource's Three-Part Supply Offer shall not be used in the RUC process.

- (8) ERCOT shall create Three-Part Supply Offers for all Resources that did not submit a Three-Part Supply Offer, but are specified as available but Off-Line, excluding Resources with a Resource Status of EMR, in a QSE's COP. For such Resources, excluding available Off-Line Resources with a cold start time of one hour or less that have not been removed from special consideration under paragraph (9) below pursuant to paragraph (4) of Section 8.1.2, ERCOT shall use in the RUC process 100% of any approved verifiable Startup Cost and verifiable minimum-energy cost or if verifiable costs have not been approved, the applicable Resource Category Generic Startup Offer Cost and the applicable Resource Category Generic Minimum-Energy Offer Cost as described specified in Section 4.4.9.2.3, Startup Offer and Minimum-Energy Offer Generic Caps, registered with ERCOT. Also, for Settlement purposes, ERCOT shall use any approved verifiable Startup Costs and verifiable minimum-energy cost for such Resources, or if verifiable costs have not been approved, the applicable Resource Category Generic Startup Offer Cost and Generic Minimum-Energy Offer Cost.
- (9) For all available Off-Line Resources having a cold start time of one hour or less and not removed from special consideration pursuant to paragraph (4) of Section 8.1.2, ERCOT shall scale any approved verifiable Startup Cost and verifiable minimum-energy cost or if verifiable costs have not been approved, the applicable Resource Category Generic Startup Offer Cost and the applicable Resource Category Generic Minimum-Energy Offer Cost as specified in Section 4.4.9.2.3 for use in the RUC process.

The above parameter is defined as follows:

Parameter	Unit	Current Value*
IHRLESSCOSTSCALING	Percentage	Maximum value of 100%
* The current value for the parameter(s) referenced in this table above will be recommended by the Technical Advisory Committee (TAC) and approved by the ERCOT Board. ERCOT shall update parameter value(s) on the first day of the month following ERCOT Board approval unless otherwise directed by the ERCOT Board. ERCOT shall provide a Market Notice prior to implementation of a revised parameter value.		

- (10) The RUC process must treat all Resource capacity providing Ancillary Service as unavailable for the RUC Study Period, unless that treatment leads to infeasibility (i.e., that capacity is needed to resolve some local transmission problem that cannot be resolved by any other means). If an ERCOT Operator decides that the Ancillary Service capacity allocated to that Resource is infeasible based on ERCOT System conditions, then, ERCOT shall inform each affected QSE of the amount of its Resource capacity that does not qualify to provide Ancillary Service, and the projected hours for which this is the case. In that event, the affected QSE may, under Section 6.4.9.1.2, Replacement of Infeasible Ancillary Service Due to Transmission Constraints, either:

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- (a) Substitute capacity from Resources represented by that QSE;
 - (b) Substitute capacity from other QSEs using Ancillary Service Trades; or
 - (c) Ask ERCOT to replace the capacity.
- (11) Factors included in the RUC process are:
- (a) ERCOT System-wide hourly Load forecast allocated appropriately over Load buses;
 - (b) Transmission constraints – Transfer limits on energy flows through the electricity network;
 - (i) Thermal constraints – protect transmission facilities against thermal overload;
 - (ii) Generic constraints – protect the transmission system against transient instability, dynamic instability or voltage collapse;
 - (c) Planned transmission topology;
 - (d) Energy sufficiency constraints;
 - (e) Inputs from the COP, as appropriate;
 - (f) Inputs from Resource Parameters, including a list of Off-Line Available Resources having a start-up time of one hour or less, as appropriate;
 - (g) Each Generation Resource's Minimum-Energy Offer and Startup Offer, from its Three-Part Supply Offer;
 - (h) Any Generation Resource that is Off-Line and available but does not have a Three-Part Supply Offer;
 - (i) Forced Outage information; and
 - (j) Inputs from the eight-day look ahead planning tool, which may potentially keep a unit On-Line (or start a unit for the next day) so that a unit minimum duration between starts does not limit the availability of the unit (for security reasons).
- (12) The HRUC process and the DRUC process are as follows:
- (a) The HRUC process uses current Resource Status for the initial condition for the first hour of the RUC Study Period. All HRUC processes use the projected status of transmission breakers and switches starting with current status and updated for each remaining hour in the study as indicated in the COP for Resources and in the Outage Scheduler for transmission elements.

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- (b) The DRUC process uses the Day-Ahead forecast of total ERCOT Load including DC Tie Schedules for each hour of the Operating Day. The HRUC process uses the current hourly forecast of total ERCOT Load including DC Tie Schedules for each hour in the RUC Study Period.
 - (c) The DRUC process uses the Day-Ahead weather forecast for each hour of the Operating Day. The HRUC process uses the weather forecast information for each hour of the balance of the RUC Study Period.
- (13) A QSE that has one or more of its Resources RUC-committed to provide Ancillary Services must increase its Ancillary Service Supply Responsibility by the total amount of RUC-committed Ancillary Service quantities. The QSE may only use a RUC-committed Resource to meet its Ancillary Service Supply Responsibility during that Resource's RUC-Committed Interval if the Resource has been committed by the RUC process to provide Ancillary Service, or the Resource is a Combined Cycle Generation Resource that was RUC-committed to transition from one On-Line configuration to a different configuration with additional capacity. For cases in which the commitment was to provide Ancillary Service, the QSE shall indicate the exact amount and type of Ancillary Service for which it was committed as the Resource's Ancillary Service Resource Responsibility and Ancillary Services Schedule for the RUC-Committed Intervals for both telemetry and COP information provided to ERCOT. Upon deployment of the Ancillary Services, the QSE shall adjust its Ancillary Services Schedule to reflect the amounts requested in the deployment.
- (14) A QSE with a Resource that is not a Reliability Must-Run (RMR) Unit or has not received an Outage Schedule Adjustment (OSA) that has been committed in a DRUC or HRUC process may opt out of the RUC Settlement (or "buy back" the commitment) by setting the COP status of the RUC-committed Resource to ONOPTOUT for the first hour of a contiguous block of RUC-Committed Hours in the Opt Out Snapshot. All the configurations of the same Combined Cycle Train shall be treated as the same Resource for the purpose of creating the block of RUC-Committed Hours. A RUC-committed Combined Cycle Generation Resource may opt out of the RUC Settlement by setting the COP status of any Combined Cycle Generation Resource within the same Combined Cycle Train as the RUC-committed Resource to ONOPTOUT for the first hour of a contiguous block of RUC-Committed Hours in the Opt Out Snapshot. A Combined Cycle Generation Resource that is RUC-committed from one On-Line configuration in order to transition to a different configuration with additional capacity may opt out of the RUC Settlement following the same rule for RUC-committed Combined Cycle Generation Resources described above. A QSE that opts out of RUC Settlement forfeits RUC Settlement for the affected Resource for a given block of RUC Buy-Back Hours. A QSE that opts out of RUC Settlement treatment must make the Resource available to SCED for all RUC Buy-Back Hours. All hours in a contiguous block of RUC-Committed Hours that includes the RUC Buy-Back Hour shall be considered RUC Buy-Back Hours. If a contiguous block of RUC-Committed Hours spans more than one Operating Day and a QSE wishes to opt out of RUC Settlement for the RUC-Committed Hours in the second or subsequent Operating Day, the QSE must set its COP status to

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ONOPTOUT for the first hour of the first Operating Day in the Opt Out Snapshot of the first Operating Day.

- (15) ERCOT shall, as soon as practicable, post to the MIS Secure Area a report identifying those hours that were considered RUC Buy-Back Hours, along with the name of each RUC-committed Resource whose QSE opted out of RUC Settlement.

[NPRR1239: Replace paragraph (15) above with the following upon system implementation:]

- (15) ERCOT shall, as soon as practicable, post to the ERCOT website a report identifying those hours that were considered RUC Buy-Back Hours, along with the name of each RUC-committed Resource whose QSE opted out of RUC Settlement.

- (16) A Resource that has a Three-Part Supply Offer cleared in the Day-Ahead Market (DAM) and subsequently receives a RUC commitment for the Operating Hour for which it was awarded will be treated as if the telemetered Resource Status was ONOPTOUT for purposes of Section 6.5.7.3, Security Constrained Economic Dispatch, and Section 6.5.7.3.1, Determination of Real-Time On-Line Reliability Deployment Price Adder.

- (17) A Resource that has self-committed for an Operating Hour after the RUC Snapshot was taken but before the RUC commitment has been communicated through an XML message for that RUC process and that Operating Hour is included in a block of RUC-committed hours for that RUC process will be treated as if the Resource Status was ONOPTOUT for purposes of Section 6.5.7.3, Section 6.5.7.3.1, Operating Reserve Demand Curve (ORDC) calculations, and RUC Settlement for the entire block of RUC-committed hours. A QSE that has a Resource that meets these conditions must make the Resource available to SCED for the entire block of RUC-committed hours. ERCOT will send the QSE a notification stating the Operating Day and block of hours for which this occurred.

[NPRR1009, NPRR1032, NPRR1204, NPRR1239, NPRR1245, and NPRR1269: Replace applicable portions of Section 5.5.2 above with the following upon system implementation of the Real-Time Co-Optimization (RTC) project for NPRR1009, NPRR1204, NPRR1245, and NPRR1269; or upon system implementation for NPRR1032 or NPRR1239:]

5.5.2 Reliability Unit Commitment (RUC) Process

- (1) The RUC process recommends commitment of Generation Resources, to match ERCOT's forecasted Load including Direct Current Tie (DC Tie) Schedules and RUC Ancillary Service Demand Curves (ASDCs), subject to all transmission constraints and Resource performance characteristics. The RUC process takes into account Resources already committed in the Current Operating Plans (COPs), Resources already committed in previous RUCs, and Off-Line Available Resources having a start-up time of one hour or less. For On-Line Energy Storage Resources (ESRs), using RUC

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duration requirements for energy and Ancillary Services, RUC-projected dispatch for energy and Ancillary Service in one interval shall respect the ESR's minimum and maximum State of Charge (SOC) values from the COP, while incorporating any adjustments under paragraph (19)(d) below. In addition, using the Ancillary Service Deployment Factors and their respective deployment duration requirements, the SOC required to support these dispatch levels for energy and Ancillary Services will match as closely as possible the difference between the adjusted COP values of the next interval's Hour Beginning Planned SOC (HBSOC) and the current interval's ~~Hour Beginning Planned SOC~~ HBSOC. The formulation of the RUC objective function must employ penalty factors on violations of security constraints and violations of ESR COP ~~Hour Beginning Planned SOC~~ HBSOC. The objective of the RUC process is to minimize costs based on the Resource costs described in paragraphs (11) through (15) below. ESR energy dispatch costs and Ancillary Service Offer costs are not included in the RUC objective function.

- (2) ERCOT shall create an ASDC for each Ancillary Service for use in RUC. The ASDCs for each Ancillary Service for use in RUC shall be substantively the same as the ASDCs defined in Section 4.4.12, Determination of Ancillary Service Demand Curves for the Day-Ahead Market and the Real-Time Market. Specific to RUC, the ASDC for Non-Spin shall not extend beyond the Ancillary Service Plan for Non-Spin for the relevant Operating Hour. ERCOT shall post the ASDCs for RUC to the ERCOT website following each execution of the RUC process.
- (3) ERCOT shall post the following Ancillary Service Deployment Factor data on the ERCOT website:
 - (a) Following each execution of RUC, ERCOT shall post the Ancillary Service Deployment Factors used by that RUC process for each hour in the RUC Study Period;
 - (b) No later than 0600 in the Day-Ahead for each Operating Day, ERCOT shall post the Ancillary Service Deployments Factors that are projected to be used in the RUC process for that Operating Day; and
 - (c) Following each month, ERCOT shall post the average, minimum, and maximum Ancillary Service Deployment Factors used in the RUC process by type of Ancillary Service and hour of the day for the month.
- (4) For all hours of the RUC Study Period within the RUC process, Quick Start Generation Resources (QSGRs) with a COP Resource Status of OFFQS shall be considered as On-Line with Low Sustained Limit (LSL) at zero MW. QSGRs with a Resource Status of OFFQS shall only be committed by ERCOT through a RUC instruction in instances when a reliability issue would not otherwise be managed through Dispatch Instructions from Security-Constrained Economic Dispatch (SCED).
- (5) In addition to On-Line qualified Generation Resources and ESRs, the RUC engine shall consider a COP Resource status of OFFQS for QSGRs that are qualified for ERCOT

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Contingency Reserve Service (ECRS), as being eligible to provide ECRS constrained by the Ancillary Service capability in the COP.

- (6) In addition to On-Line qualified Generation Resources and ESRs, the RUC engine shall consider a COP Resource Status of OFFQS for QSGRs that are qualified for Non-Spinning Reserve (Non-Spin), as being eligible to provide Non-Spin constrained by the Ancillary Service Capability in the COP. The RUC engine shall also consider a COP Resource Status of OFF (Off-Line but available for commitment in the DAM and RUC) for a Resource that is qualified for Non-Spin, as being eligible to provide Non-Spin constrained by the Ancillary Service capability in the COP.
- (7) In addition to On-Line qualified Generation Resources and ESRs, the RUC engine shall consider a COP Resource Status of ONL for Load Resources that are qualified for Ancillary Services, as being eligible to provide Ancillary Services constrained by the Ancillary Service Capability in the COP. The RUC engine will not consider any Load Resources for dispatch of energy.
- (8) The RUC constraints in the RUC engine shall use 60 minutes as the duration for energy and for Ancillary Services, excluding Responsive Reserve (RRS) provided using Fast Frequency Response, for which duration shall be 15 minutes. These same duration requirements will be used to enforce a constraint on each ESR's dispatch for energy and Ancillary Services using Ancillary Service deployment factors, for a given hour, such that the calculated State of Charge (SOC) at the end of that hour is equal to the next hour's COP value of HBSOC.
- (98) The RUC process can recommend Resource decommitment. ERCOT may only decommit a Resource to resolve transmission constraints that are otherwise unresolvable. Qualifying Facilities (QFs) may be decommitted only after all other types of Resources have been assessed for decommitment. In addition, the HRUC process provides decision support to ERCOT regarding a Resource decommitment requested by a Qualified Scheduling Entity (QSE).
- (109) ERCOT shall review the RUC-recommended Resource commitments and the list of Off-Line Available Resources having a start-up time of one hour or less to assess feasibility and shall make any changes that it considers necessary, in its sole discretion. During the RUC process, ERCOT may also review and commit, through a RUC instruction, Combined Cycle Generation Resources that are currently planned to be On-Line but are capable of transitioning to a configuration with additional capacity. ERCOT may deselect Resources recommended in DRUC and in all HRUC processes if in ERCOT's sole discretion there is enough time to commit those Resources in the future HRUC processes, taking into account the Resources' start-up times, to meet ERCOT System reliability. After each RUC run, ERCOT shall post the amount of capacity deselected per hour in the RUC Study Period to the ERCOT website. A Generation Resource shown as On-Line and available for SCED dispatch for an hour in its COP prior to a DRUC or HRUC process execution, according to Section 5.3, ERCOT Security Sequence Responsibilities, will be considered self-committed for that

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hour. For purpose of Settlement, snapshot data will be used as specified in paragraph (2) of Section 5.3.

- (110) ERCOT shall issue RUC instructions to each QSE specifying its Resources that have been committed as a result of the RUC process. ERCOT shall, within one day after making any changes to the RUC-recommended commitments, post to the ERCOT website any changes that ERCOT made to the RUC-recommended commitments with an explanation of the changes.
- (124) ERCOT shall use the RUC process to evaluate the need to commit Resources for which a QSE has submitted Three-Part Supply Offers and other available Off-Line Resources in addition to Resources that are planned to be On-Line during the RUC Study Period. All of the above commitment information must be as specified in the QSE's COP. For available Off-Line Resources with a cold start time of one hour or less that have not been removed from special consideration under paragraph (17) below pursuant to paragraph (4) of Section 8.1.2, Current Operating Plan (COP) Performance Requirements, the Startup Offers and Minimum-Energy Offer from a Resource's Three-Part Supply Offer shall not be used in the RUC process.
- (132) ERCOT shall create Three-Part Supply Offers for all Resources that did not submit a Three-Part Supply Offer, but are specified as available but Off-Line, excluding Resources with a Resource Status of EMR, in a QSE's COP. For such Resources, excluding available Off-Line Resources with a cold start time of one hour or less that have not been removed from special consideration under paragraph (15) below pursuant to paragraph (4) of Section 8.1.2, ERCOT shall use in the RUC process 100% of any approved verifiable Startup Cost and verifiable minimum-energy cost or if verifiable costs have not been approved, the applicable Resource Category Generic Startup Offer Cost and the applicable Resource Category Generic Minimum-Energy Offer Cost as described specified in Section 4.4.9.2.3, Startup Offer and Minimum-Energy Offer Generic Caps, registered with ERCOT. Also, for Settlement purposes, ERCOT shall use any approved verifiable Startup Costs and verifiable minimum-energy cost for such Resources, or if verifiable costs have not been approved, the applicable Resource Category Generic Startup Offer Cost and Generic Minimum-Energy Offer Cost.
- (143) A QSE shall notify the ERCOT Operator of any physical limitation that impacts its Resource's ability to start that is not reflected in the Resource's COP or the Resource's startup time, minimum On-Line time, or minimum Off-Line time. The following shall apply:
 - (a) If a Resource receives a RUC Dispatch Instruction that it cannot meet due to a physical limitation described in paragraph (5) above, the QSE representing the Resource shall notify the ERCOT Operator of the inability to fully comply with the instruction and shall comply with the instruction to the best of the Resource's ability. If the QSE has provided the ERCOT Operator notice of that limitation at least seven days prior to the Operating Day in which the instruction

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occurs, the QSE shall be excused from complying with the portion of the RUC Dispatch Instruction that it could not meet due to the identified limitation.

- (b) If a QSE provides notice pursuant to paragraph (a) above of a physical limitation that will delay the RUC-committed Resource's ability to reach its LSL in accordance with a RUC Dispatch Instruction, ERCOT shall extend the RUC Dispatch Instruction so that the Resource's minimum run time is respected. However, if the Resource will not be available in time to address the issue for which it received the RUC instruction, ERCOT may instead cancel the RUC Dispatch Instruction.

(154) A QSE shall be excused from complying with any portion of a RUC Dispatch Instruction that it could not meet due to a physical limitation that was reflected, at the time of the RUC Dispatch Instruction, in the Resource's COP, startup time, minimum On-Line time, or minimum Off-Line time.

(165) To determine the projected energy output level of each Resource and to project potential congestion patterns for each hour of the RUC, ERCOT shall calculate proxy Energy Offer Curves based on the Mitigated Offer Caps (MOCs) for the type of Resource as specified in Section 4.4.9.4, Mitigated Offer Cap and Mitigated Offer Floor, for use in the RUC. Proxy Energy Offer Curves are calculated by multiplying the MOC by a constant selected by ERCOT from time to time that is no more than 0.10% and applying the cost for all Generation Resource output between High Sustained Limit (HSL) and LSL. The intent of this process is to minimize the effect of the proxy Energy Offer Curves on optimization. For ESRs, energy dispatch costs are not considered in determining projected energy output levels.

(176) ERCOT shall calculate proxy Ancillary Service Offer Curves for use in RUC based on validated Ancillary Service Offers as specified in Section 4.4.7.2, Ancillary Service Offers. For all Resources that do not have a valid Ancillary Service Offer but are qualified to provide an Ancillary Service, ERCOT shall create an Ancillary Service Offer Curve for use in RUC as described in Section 6.5.7.3, Security Constrained Economic Dispatch. Proxy Ancillary Service Offer Curves for use in RUC are calculated by multiplying the Ancillary Service Offer by a constant selected by ERCOT from time to time that is no more than 0.1%, and are extended between the HSL and LSL. Notwithstanding the presence or absence of a proxy Ancillary Service Offer, Ancillary Service provision in RUC shall be limited by the Resource's Ancillary Service capabilities as reflected in the COP. For ESRs, Ancillary Service Offer costs are not considered in determining projected Ancillary Service awards.

(187) For all available Off-Line Resources having a cold start time of one hour or less and not removed from special consideration pursuant to paragraph (4) of Section 8.1.2, ERCOT shall scale any approved verifiable Startup Cost and verifiable minimum-energy cost or if verifiable costs have not been approved, the applicable Resource Category Generic Startup Offer Cost and the applicable Resource Category Generic Minimum-Energy Offer Cost as specified in Section 4.4.9.2.3 for use in the RUC process.

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The above parameter is defined as follows:

Parameter	Unit	Current Value*
IHRLESSCOSTSCALING	Percentage	Maximum value of 100%
* The current value for the parameter(s) referenced in this table above will be recommended by the Technical Advisory Committee (TAC) and the ERCOT Board and approved by the Public Utility Commission of Texas (PUCT). ERCOT shall update parameter value(s) on the first day of the month following PUCT approval unless otherwise directed. ERCOT shall provide a Market Notice prior to implementation of a revised parameter value.		

(198) Factors included in the RUC process are:

- (a) ERCOT System-wide hourly Load forecast allocated appropriately over Load buses;
- (b) ERCOT's Ancillary Service Plans in the form of ASDCs;
- (c) Transmission constraints – Transfer limits on energy flows through the electricity network;
 - (i) Thermal constraints – protect transmission facilities against thermal overload;
 - (ii) Generic constraints – protect the transmission system against transient instability, dynamic instability or voltage collapse;
- (d) Planned transmission topology;
- (e) Energy sufficiency constraints, including RUC duration requirements for energy and Ancillary Services;
- (f) Inputs from the COP, as appropriate;
- (g) Inputs from Resource Parameters, including a list of Off-Line Available Resources having a start-up time of one hour or less, as appropriate;
- (h) Each Generation Resource's Minimum-Energy Offer and Startup Offer, from its Three-Part Supply Offer;
- (i) Any Generation Resource that is Off-Line and available but does not have a Three-Part Supply Offer;
- (j) Forced Outage information;
- (k) Inputs from the eight-day look ahead planning tool, which may potentially keep a unit On-Line (or start a unit for the next day) so that a unit minimum duration

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between starts does not limit the availability of the unit (for security reasons); and

- (l) Ancillary Service Deployment Factors.

(2019) The HRUC process and the DRUC process are as follows:

- (a) The HRUC process uses current Resource Status for the initial condition for the first hour of the RUC Study Period. All HRUC processes use the projected status of transmission breakers and switches starting with current status and updated for each remaining hour in the study as indicated in the COP for Resources and in the Outage Scheduler for transmission elements.
- (b) The DRUC process uses the current hourly forecast of total ERCOT Load including DC Tie Schedules up to the physical rating of the DC Tie for each hour of the Operating Day. The HRUC process uses the current hourly forecast of total ERCOT Load including DC Tie Schedules up to the physical rating of the DC Tie for each hour in the RUC Study Period.
- (c) The DRUC process uses the Day-Ahead weather forecast for each hour of the Operating Day. The HRUC process uses the weather forecast information for each hour of the balance of the RUC Study Period.
- (d) For the HRUC, DRUC, and Weekly Reliability Unit Commitment (WRUC) processes, a feasibility check on the COP submitted ~~Hour Beginning Planned SOCHBSOC~~ will be performed. This check may adjust the ~~Hour Beginning Planned SOCHBSOC~~ used in the RUC process. The feasibility check looks sequentially across all intervals in the RUC Study Period to validate whether a particular interval's COP ~~Hour Beginning Planned SOCHBSOC~~ is achievable from the previous interval. If it is not feasible, then RUC will adjust the ~~Hour Beginning Planned SOCHBSOC~~ to the closest achievable value.

(210) A QSE with a Resource that is not a Reliability Must-Run (RMR) Unit or has not received an Outage Schedule Adjustment (OSA) that has been committed in a DRUC or HRUC process may opt out of the RUC Settlement (or "buy back" the commitment) by setting the COP status of the RUC-committed Resource to ONOPTOUT for the first hour of a contiguous block of RUC-Committed Hours in the Opt Out Snapshot. All the configurations of the same Combined Cycle Train shall be treated as the same Resource for the purpose of creating the block of RUC-Committed Hours. A RUC-committed Combined Cycle Generation Resource may opt out of the RUC Settlement by setting the COP status of any Combined Cycle Generation Resource within the same Combined Cycle Train as the RUC-committed Resource to ONOPTOUT for the first hour of a contiguous block of RUC-Committed Hours in the Opt Out Snapshot. A Combined Cycle Generation Resource that is RUC-committed from one On-Line configuration in order to transition to a different configuration with additional capacity may opt out of the RUC Settlement following the same rule for RUC-committed Combined Cycle Generation Resources described above. A QSE that opts out of RUC Settlement forfeits

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RUC Settlement for the affected Resource for a given block of RUC Buy-Back Hours. A QSE that opts out of RUC Settlement treatment must make the Resource available to SCED for all RUC Buy-Back Hours. All hours in a contiguous block of RUC-Committed Hours that includes the RUC Buy-Back Hour shall be considered RUC Buy-Back Hours. If a contiguous block of RUC-Committed Hours spans more than one Operating Day and a QSE wishes to opt out of RUC Settlement for the RUC-Committed Hours in the second or subsequent Operating Day, the QSE must set its COP status to ONOPTOUT for the first hour of that the first Operating Day in the Opt Out Snapshot of the first Operating Day.

- (22+) ERCOT shall, as soon as practicable, post to the ERCOT website a report identifying those hours that were considered RUC Buy-Back Hours, along with the name of each RUC-committed Resource whose QSE opted out of RUC Settlement.
- (232) A Resource that has a Three-Part Supply Offer cleared in the Day-Ahead Market (DAM) and subsequently receives a RUC commitment for the Operating Hour for which it was awarded will be treated as if the Resource Status was ONOPTOUT for purposes of Section 6.5.7.3 and Section 6.5.7.3.1, Determination of Real-Time Reliability Deployment Price Adders.
- (243) A Resource that has self-committed for an Operating Hour after the RUC Snapshot was taken but before the RUC commitment has been communicated through an XML message for that RUC process and that Operating Hour is included in a block of RUC-committed hours for that RUC process will be treated as if the Resource Status was ONOPTOUT for purposes of Section 6.5.7.3, Section 6.5.7.3.1, and RUC Settlement for the entire block of RUC-committed hours. A QSE that has a Resource that meets these conditions must make the Resource available to SCED for the entire block of RUC-committed hours. ERCOT will send the QSE a notification stating the Operating Day and block of hours for which this occurred.

8.1.1.2.1.1 Regulation Service Qualification

- (1) A QSE control system must be capable of receiving Regulation Up Service (Reg-Up) and Regulation Down Service (Reg-Down) control signals from ERCOT's Load Frequency Control (LFC) system, and of directing its Resources to respond to the control signals, in an upward and downward direction to balance Real-Time Demand and Resources. A QSE providing Reg-Up or Reg-Down shall provide communications equipment to receive telemetered control deployments of power from ERCOT.

[NPRR1011 and NPRR1014: Replace applicable portions of paragraph (1) above with the following upon system implementation of the Real-Time Co-Optimization (RTC) project for NPRR1011; or upon system implementation for NPRR1014:]

- (1) A QSE control system must be capable of receiving Regulation Up Service (Reg-Up) and Regulation Down Service (Reg-Down) control signals from ERCOT's Load

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Frequency Control (LFC) system, and of directing its Resources to respond to the control signals, in an upward and downward direction to balance Real-Time Demand and Resources. A QSE representing Resources qualified to provide Reg-Up or Reg-Down shall provide communications equipment to receive telemetered control deployments of power from ERCOT.

- (2) A QSE shall demonstrate to ERCOT that they have the ability to switch control to constant frequency operation as specified in the Operating Guides. ERCOT's direction to the QSE to operate on constant frequency will be considered a Dispatch Instruction.
- (3) A QSE providing Reg-Up or Reg-Down shall provide ERCOT with the data requirements of Section 6.5.5.2, Operational Data Requirements. Resources providing Reg-Up or Reg-Down must be capable of delivering the full amount of regulating capacity offered to ERCOT within five minutes.
- (4) A Resource providing Fast Responding Regulation Service (FRRS) shall be capable of independently detecting and recording system frequency with an accuracy of at least one mHz and a resolution of no less than 32 samples per second. The Resource shall also be capable of measuring and recording MW output with a resolution of no less than 32 samples per second.

[NPRR1011 and NPRR1014: Delete paragraph (4) above upon system implementation of the Real-Time Co-Optimization (RTC) project for NPRR1011; or upon system implementation for NPRR1014; and renumber accordingly.]

- (5) A Reg-Up and Reg-Down qualification test for each Resource is conducted during a continuous 60-minute period agreed on in advance by the QSE and ERCOT. QSEs may qualify a Resource to provide Reg-Up or Reg-Down, or both, in separate testing. ERCOT shall administer the following test requirements:
 - (a) ERCOT shall confirm the date and time of the test with the QSE.
 - (b) For the 60-minute duration of the test, when market and reliability conditions allow, the ERCOT Control Area Operator shall send a random sequence of increasing ramp, hold, and decreasing ramp control signals to the QSE for a specific Resource. ERCOT shall maintain a duration interval, for each increasing ramp, hold, or decreasing ramp sequence, of no less than two minutes. The control signals may not request Resource performance beyond the HSL, LSL, and ramp rate limit agreed on prior to the test. During the test, ERCOT shall structure the test sequence such that at least one five-minute test interval is used to test the Resource's ability to achieve the entire amount of Reg-Up or Reg-Down requested for qualification.
 - (c) ERCOT shall measure and record the average real power output for each minute of the Resource(s) being tested represented by the QSE. During at least one five

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minute duration interval selected to evaluate each of the Reg-Up and Reg-Down amounts being tested, the Generation/Controllable Load Resource Energy Deployment Performance (GREDP/CLREDP) calculated in accordance with Section 8.1.1.4.1, Regulation Service and Generation Resource/Controllable Load Resource Energy Deployment Performance, and Ancillary Service Capacity Performance Metrics, over the entire five minute interval must be less than or equal to 3.5%. Additionally, in all other test sequence intervals, the Resource's measured GREDP/CLREDP must be less than or equal to 5% as calculated for the entire duration of each test interval.

[NPRR963 and NPRR1014: Replace applicable portions of paragraph (c) above with the following upon system implementation:]

- (c) ERCOT shall measure and record the average real power output for each minute of the Resource(s) being tested represented by the QSE.
 - (i) During at least one five minute duration interval selected to evaluate each of the Reg-Up and Reg-Down amounts being tested, the Generation/Controllable Load Resource/Energy Storage Resource Energy Deployment Performance (GREDP/CLREDP/ESREDP) calculated in accordance with Section 8.1.1.4.1, Regulation Service and Generation Resource/Controllable Load Resource/Energy Storage Resource Energy Deployment Performance, and Ancillary Service Capacity Performance Metrics, over the entire five minute interval must be less than or equal to 3.5%.
 - (ii) Additionally, in all other test sequence intervals, the Resource's measured GREDP/CLREDP/ESREDP must be less than or equal to 5% as calculated for the entire duration of each test interval.
 - (iii) During at least one five-minute duration interval selected to evaluate each of the Reg-Up and Reg-Down amounts being tested, the Energy Storage Resource Energy Deployment Performance (ESREDP) calculated in accordance with Section 8.1.1.4.1, Regulation Service and Generation Resource/Controllable Load Resource Energy Deployment Performance, and Ancillary Service Capacity Performance Metrics, over the entire five minute interval must be less than or equal to 3.0%.
 - (iv) For an Energy Storage Resource (ESR), in all other test sequence intervals, the Resource's measured ESREDP must be less than or equal to 3.0% as calculated for the entire duration of each test interval.
- (d) On successful demonstration of the above test criteria, ERCOT shall qualify that the Resource is capable of providing Regulation Service and shall provide a copy of the certificate to the QSE and the Resource.

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- (6) A QSE may also qualify a Resource to provide Fast Responding Regulation Up Service (FRRS-Up), Fast Responding Regulation Down Service (FRRS-Down), or both. In addition to the test criteria described in paragraph (5) above, ERCOT shall verify the following capabilities through testing:
- (a) The Resource will be required to demonstrate that it can deploy within 60 cycles of either (i) receipt of a deployment signal from ERCOT, or (ii) a deviation of frequency in excess of ± 0.09 Hz from 60 Hz.
 - (b) Upon deployment, the Resource will be required to demonstrate that it can sustain the deployment for a minimum of eight minutes at a minimum level of 95% and a maximum level of 110% of the proposed maximum capacity obligation.
 - (c) ERCOT shall use the Resource's high-resolution recorded frequency and MW output data to determine whether the Resource met its performance obligations during the test.
 - (d) On successful demonstration of the above test criteria, ERCOT shall qualify that the Resource is capable of providing FRRS and shall provide a copy of the certificate to the QSE and the Resource.
 - (e) A QSE representing a Resource qualified to provide FRRS shall not offer to provide more FRRS than the maximum capacity obligation that the Resource is qualified to provide, as shown in the certificate provided to the QSE and the Resource.

[NPRR1011 and NPRR1014: Replace applicable portions of paragraph (6) above with the following upon system implementation of the Real-Time Co-Optimization (RTC) project for NPRR1011; or upon system implementation for NPRR1014:]

- (5) The maximum quantity of Reg-Up or Reg-Down that an individual Resource is qualified to provide is limited to the amount of Ancillary Service that can be sustained by the Resource for at least ~~30~~45 minutes.

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

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- (e) Controllable Load Resources (CLRs).
- (2) The amount of RRS provided by individual Generation Resources or CLRs is limited by the ERCOT-calculated maximum MW amount of RRS for the Generation Resource or CLR subject to its verified droop performance as described in the Nodal Operating Guide. The default value for any newly qualified Generation Resource or CLR 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 immediately responsive to system frequency or be interrupted by action of under-frequency relays with settings as specified by the Operating Guides.
- (4) Any QSE providing RRS shall provide communications equipment to provide ERCOT with telemetry for the output of the Resource.
- (5) Resources capable of FFR providing RRS must provide a telemetered output signal, including breaker status and status of the frequency detection device.
- (6) 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.
- (7) Generation Resources providing RRS shall have their Governors in service.
- (8) Generation Resources and Resources capable of FFR providing RRS shall have a Governor droop setting that is no greater than 5.0%.
- (9) 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

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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.

- (c) For CLRs 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 CLR given the current operating conditions of the system and determine the CLR's qualification to provide RRS.
- (d) For Load Resources, excluding CLRs, 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;
 - (e) Controllable Load Resources (CLRs); and
 - (f) Energy Storage Resources (ESRs).
- (2) The amount of RRS provided by individual Generation Resources, CLRs, or ESRs is limited by the ERCOT-calculated maximum MW amount of RRS for the Generation Resource, CLR, or ESR subject to its verified droop performance as described in the Nodal Operating Guide. The default value for any newly qualified Generation Resource, CLR, 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

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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.
- (4) Any QSE representing a Resource qualified to provide RRS shall provide communications equipment to provide ERCOT with telemetry for the output of the Resource.
- (5) Resources capable of FFR providing RRS must provide a telemetered output signal, including breaker status and status of the frequency detection device.
- (6) 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.
- (7) Generation Resources offering to provide RRS shall have their Governors in service.
- (8) Generation Resources and Resources capable of FFR providing RRS shall have a Governor droop setting that is no greater than 5.0%.
- (9) 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) 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 ~~3045~~ minutes. For all other Resources excluding non-CLRs 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-CLR 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

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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.
- (c) For CLRs 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 CLR given the current operating conditions of the system and determine the CLR's qualification to provide RRS.
- (d) For Load Resources, excluding CLRs, 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.

8.1.1.2.1.3 Non-Spinning Reserve Qualification

- (1) Each Resource providing Non-Spin must be capable of being synchronized and ramped to its Ancillary Service Schedule for Non-Spin within 30 minutes. Non-Spin may be provided from Generation Resource capacity that can ramp within 30 minutes or Load Resources capable of unloading within 30 minutes. Non-Spin may only be provided from capacity that is not fulfilling any other energy or capacity commitment.
- (2) A Load Resource providing Non-Spin must provide a telemetered output signal.
- (3) Each Generation Resource and Load Resource providing Non-Spin must meet additional technical requirements specified in this Section.
- (4) QSEs using a Controllable Load Resource to provide Non-Spin must be capable of responding to ERCOT Dispatch Instructions in a similar manner to QSEs using Generation Resource to provide Non-Spin.
- (5) Each QSE shall ensure that each Resource is able to meet the Resource's obligations to provide the Ancillary Service Resource Responsibility. Each Generation Resource and

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Controllable Load Resource providing Non-Spin must meet additional technical requirements specified in this Section.

- (6) For any Resource requesting qualification for Non-Spin, a qualification test for each Resource to provide Non-Spin 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 (selected by ERCOT when market and reliability conditions allow and not previously disclosed to the QSE), ERCOT shall notify the QSE by using the messaging system and requesting that the QSE provide an amount of Non-Spin from each Resource equal to the amount for which the QSE is requesting qualification. The QSE shall acknowledge the start of the test.
 - (b) For Generation Resources: during the test window, ERCOT shall send a message to the QSE representing a Generation Resources to deploy Non-Spin. ERCOT shall monitor the adjustment of the Generation Resource's Non-Spin Ancillary Service Schedule within five minutes for Resources On-Line. ERCOT shall measure the test Resource's response as described under Section 8.1.1.4.3, Non-Spinning 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 Non-Spin.
 - (c) For Load Resources, ERCOT shall send an instruction to deploy Non-Spin. ERCOT shall measure the Resource's response as described under Section 8.1.1.4.3.

[NPRR1011 and NPRR1270: Replace Section 8.1.1.2.1.3 above with the following upon system implementation of the Real-Time Co-Optimization (RTC) project:]

8.1.1.2.1.3 Non-Spinning Reserve Qualification

- (1) Each Off-Line Resource being offered in to provide Non-Spin must be capable of being synchronized and ramped to its Ancillary Service award for Non-Spin within 30 minutes. Non-Spin may be provided from Generation Resource capacity that can ramp within 30 minutes or Load Resources capable of unloading within 30 minutes. Non-Spin may only be provided from capacity that is not fulfilling any other energy or capacity commitment.
- (2) Resources are required to undergo a qualification test to provide Non-Spin when the Resource is On-Line, which shall at least include the ability to provide applicable telemetry and market submissions. The amount of Non-Spin for which the Resource is qualified when On-Line is limited to the amount of capacity that can be ramped or unloaded within 30 minutes.

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- (3) A Controllable Load Resource offering to provide Non-Spin must be qualified to participate in SCED and must provide a telemetered output signal, including breaker status.
- (4) Each Resource providing Non-Spin when Off-Line or providing Non-Spin as a Load Resource other than a Controllable Load Resource must meet additional technical requirements specified in this Section.
- (5) QSEs using a Controllable Load Resource to provide Non-Spin must be capable of responding to ERCOT Dispatch Instructions in a similar manner to QSEs using Generation Resource to provide Non-Spin.
- (6) Each QSE shall ensure that each Resource is able to meet the Resource's obligations to provide the Ancillary Service award.
- (7) For any Resource requesting qualification for providing Non-Spin when Off-Line or providing Non-Spin as a Load Resource other than a Controllable Load Resource, a qualification test for each Resource to provide Non-Spin 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 (selected by ERCOT when market and reliability conditions allow and not previously disclosed to the QSE), ERCOT shall notify the QSE by using the messaging system and requesting that the QSE provide an amount of Non-Spin from each Resource equal to the amount for which the QSE is requesting qualification. The QSE shall acknowledge the start of the test.
 - (b) For the Resources being tested during the test window, ERCOT shall send a message to the QSE representing a Resource to deploy Non-Spin. ERCOT shall measure the test Resource's response as described under Section 8.1.1.4.3, Non-Spinning Reserve Service Energy Deployment Criteria. ERCOT shall evaluate the response of the Resource given the current operating conditions of the system and determine the Resource's qualification to provide Non-Spin.
- (8) The maximum quantity of Non-Spin that an individual Resource is qualified to provide is limited to the amount of Non-Spin that can be sustained by the Resource for at least four~~one~~ hours.

8.1.1.3.1 Regulation Service Capacity Monitoring Criteria

- (1) ERCOT shall continuously monitor the capacity of each Resource to provide Reg-Up and Reg-Down. When determining this available capacity, ERCOT shall consider for each Resource with REG status, the actual generation or Load, the Ancillary Service Schedule for Reg-Up and Reg-Down, the HSL, the LSL, ramp rates, any other commitments of Ancillary Service capacity.

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[NPRR1011: Replace paragraph (1) above with the following upon system implementation of the Real-Time Co-Optimization (RTC) project:]

- (1) ERCOT shall continuously monitor the capacity of each Resource to provide Reg-Up and Reg-Down. When determining this available capacity, ERCOT shall consider for each Resource the Resource Status, the actual generation or Load, the Ancillary Service award for Reg-Up and Reg-Down, the HSL, the LSL, ramp rates, and the Resource's qualification to provide Reg-Up and Reg-Down.
- (2) For the Reg-Up and Reg-Down capability provided for a Resource to ERCOT by the Resource's QSE, the amount of Reg-Up or Reg-Down reflected in that capability must be limited to the amount of Reg-Up or Reg-Down that can be sustained by the Resource for at least 30~~15~~ minutes.

8.1.1.3.2 Responsive Reserve Capacity Monitoring Criteria

- (1) ERCOT shall continuously monitor the capacity of each Resource to provide RRS. ERCOT shall consider for each Resource providing RRS capacity, actual generation or Load, the Ancillary Service Schedule for RRS, the HSL, the LSL, and any other commitments of Ancillary Service capacity.
- (2) For Load Resources not deployed by a Dispatch Instruction from ERCOT, the amount of RRS capacity provided must be measured as the Load Resource's average Load level in the last five minutes.
- (3) A Resource that is capable of providing RRS and that has a Resource Status code of ONRR is considered to be providing frequency responsive capability to the extent that it is not using that capacity to provide energy.

[NPRR1011: Replace Section 8.1.1.3.2 above with the following upon system implementation of the Real-Time Co-Optimization (RTC) project:]

8.1.1.3.2 Responsive Reserve Capacity Monitoring Criteria

- (1) ERCOT shall continuously monitor the capacity of each Resource to provide RRS. ERCOT shall consider for each Resource the Resource Status, actual generation or Load, the Ancillary Service award for RRS, the HSL, the LSL, any other Resource-specific RRS capabilities telemetered by the QSE, and the Resource's qualification to provide RRS.
- (2) For Load Resources, excluding Controllable Load Resources, that have an RRS award, the amount of RRS capacity provided must be measured as the Load Resource's average Load level in the last five minutes.

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- (3) A Resource that is capable of providing RRS and that has a Resource Status code of ONSC and an RRS award is considered to be providing frequency responsive capability to the extent that it is not using that capacity to provide energy or other Ancillary Services.
- (4) For Resources that are providing RRS and are available for Dispatch by SCED, for the RRS capability provided for a Resource to ERCOT by the Resource's QSE, the amount of RRS reflected in that capability must be limited to the amount of RRS that can be sustained by the Resource for at least ~~30~~15 minutes. For all other Resources excluding non-Controllable Load Resources providing FFR, for the RRS capability provided for a Resource to ERCOT by the Resource's QSE, the amount of RRS reflected in that capability must be limited to the amount of RRS that can be sustained by the Resource for at least one hour. Any non-Controllable Load Resources qualified to provide FFR, for the FFR capability provided for a Resource to ERCOT by the Resource's QSE, the amount of FFR reflected in that capability must be limited to the amount of FFR that can be sustained by the Resource for at least 15 minutes.

8.1.1.3.4 ERCOT Contingency Reserve Service Capacity Monitoring Criteria

- (1) ERCOT shall continuously monitor the capacity of each Resource to provide ECRS. ERCOT shall consider for each Resource providing ECRS capacity, the On-Line versus Off-Line status, actual generation or Load, the Ancillary Service Schedule for ECRS, the HSL, the LSL, ramp rates, relay status, and any other commitments of Ancillary Service capacity.
- (2) For Load Resources not deployed by a Dispatch Instruction from ERCOT, the amount of ECRS capacity provided must be measured as the Load Resource's average Load level in the last five minutes.
- (3) A Resource that is capable of providing ECRS and that has a Resource Status code of ONECRS is considered to be providing capacity to the extent that it is not using that capacity to provide energy.

[NPRR1011: Replace Section 8.1.1.3.4 above with the following upon system implementation of the Real-Time Co-Optimization (RTC) project:]

8.1.1.3.4 ERCOT Contingency Reserve Service Capacity Monitoring Criteria

- (1) ERCOT shall continuously monitor the capacity of each Resource to provide ECRS. ERCOT shall consider for each Resource the Resource Status, the On-Line versus Off-Line status, actual generation or Load, the Ancillary Service award for ECRS, the HSL, the LSL, ramp rates, relay status, and the Resource's qualification to provide ECRS.

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- (2) For the ECRS capability provided for a Resource to ERCOT by the Resource's QSE, the amount of ECRS reflected in that capability must be limited to the amount of ECRS that can be sustained by the Resource for at least one ~~two consecutive~~ hours.
- (3) For Load Resources, excluding Controllable Load Resources, that have an ECRS award, the amount of ECRS capacity provided must be measured as the Load Resource's average Load level in the last five minutes.
- (4) A Resource that is capable of providing ECRS and that has a Resource Status code of ONSC and an ECRS award is considered to be providing capability to the extent that it is not using that capacity to provide energy or other Ancillary Services.

ERCOT Impact Analysis Report

NPRR Number	<u>1282</u>	NPRR Title	Ancillary Service Duration under Real-Time Co-Optimization
Impact Analysis Date	April 29, 2025		
Estimated Cost/Budgetary Impact	None.		
Estimated Time Requirements	No project required. This Nodal Protocol Revision Request (NPRR) can take effect upon implementation of PR447, Real-Time Co-Optimization (RTC). See Comments.		
ERCOT Staffing Impacts (across all areas)	Ongoing Requirements: No impacts to ERCOT staffing.		
ERCOT Computer System Impacts	No impacts to ERCOT computer systems.		
ERCOT Business Function Impacts	No impacts to ERCOT business functions.		
Grid Operations & Practices Impacts	No impacts to ERCOT grid operations and practices.		

Evaluation of Interim Solutions or Alternatives for a More Efficient Implementation

None offered.

Comments

There are no additional impacts to this NPRR beyond what was captured in PR447, Real-Time Co-optimization.

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OBDRR Number	<u>054</u>	OBDRR Title	TDSP(s) Pre-Production Verification Testing
Date of Decision	June 24, 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		
Other Binding Document Requiring Revision	Texas Market Test Plan (TMTP)		
Related Documents Requiring Revision/Related Revision Requests	None		
Revision Description	<p>This Other Binding Document Revision Request (OBDRR) creates a process by which Market Participants will be required by the Transmission and/or Distribution Service Provider (TDSP) to successfully test retail transactions prior to their Data Universal Numbering System (DUNS) being activated in a TDSP's production system.</p> <p>This pre-production verification will provide TDSP(s) reassurances of Market Participant's production readiness based upon successful testing utilizing current transaction operating systems and processors.</p>		
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		

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	<div style="margin-bottom: 10px;"> <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: 10px;"> <input checked="" type="checkbox"/> General system and/or process improvement(s) </div> <div style="margin-bottom: 10px;"> <input type="checkbox"/> Regulatory requirements </div> <div style="margin-bottom: 10px;"> <input type="checkbox"/> ERCOT Board/PUCT Directive </div> <p><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>On May 7, 2024, CenterPoint Energy received a request to activate four Competitive Retailers (CRs) in our production systems. This request was made to CenterPoint Energy and other TDSPs eight years after we completed retail market testing on January 28, 2016.</p> <p>During 2016, CenterPoint Energy’s transactional operating systems was a legacy Customer information system. In 2020, our legacy Customer information system was decommissioned and replaced with a new transaction processing and billing management system. As part of our annual systems’ maintenance we have implemented service packs that provides the latest version of cyber security patches and enhanced transactional processing performance.</p> <p>In short, our production systems in 2016 that were utilized for retail market testing with all four CRs cannot be compared to the production operating systems currently in place today that process and manages Texas Standard Electronic Transactions (Texas SETs) for the entire Texas retail market. Furthermore, if there were system changes by one or all of these four CRs during this eight-year period that were not successfully tested those system changes could have negative implications that impact our production systems, even our trading partners.</p> <p>TDSPs understand there is a need for Market Participants to have flexibility when it comes to retail testing that allows new CRs faster access in the retail market. We recognize, as part of certification, that the outcome of successful testing may provide Customers with new options for competitive pricing and retail services. However, allowing eight years to expire between ERCOT’s retail market flight testing and Market Participants’ request for their DUNS to be added to TDSPs’ production system may inject risk to impacted TDSP’s production systems and potentially the ERCOT market.</p>

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RMS Decision	<p>On 4/1/25, RMS voted unanimously to recommend approval of OBDRR054 as submitted. All Market Segments participated in the vote.</p> <p>On 5/13/25, RMS voted unanimously to endorse and forward to TAC the 4/1/25 RMS Report and the 4/16/25 Impact Analysis for OBDRR054. All Market Segments participated in the vote.</p>
Summary of RMS Discussion	<p>On 4/1/25, RMS reviewed OBDRR054 and its preliminary Texas SET discussions. ERCOT expressed support for OBDRR054 with the request to verify with Texas SET any additional, non-binding documentation related to TDSP production readiness qualification, to which CenterPoint Energy agreed.</p> <p>On 5/13/25, RMS reviewed the 4/16/25 Impact Analysis.</p>
TAC Decision	<p>On 5/28/25, TAC voted unanimously to recommend approval of OBDRR054 as recommended by RMS in the 5/13/25 RMS Report. All Market Segments participated in the vote.</p>
Summary of TAC Discussion	<p>On 5/28/25, 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 6/24/25, the ERCOT Board voted unanimously to recommend approval of OBDRR054 as recommended by TAC in the 5/28/25 TAC Report.</p>

Opinions	
Credit Review	Not applicable
Independent Market Monitor Opinion	IMM has no opinion on OBDRR054.

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ERCOT Opinion	ERCOT supports approval of OBDRR054.
ERCOT Market Impact Statement	ERCOT Staff has reviewed OBDRR054 and believes that it provides improvements by creating a process in which Market Participants will be required by the TDSP to successfully test retail transactions prior to their DUNS being activated in a TDSP's production system.

Sponsor	
Name	Kathy Scott
E-mail Address	Kathy.Scott@CenterPointEnergy.com
Company	CenterPoint Energy
Phone Number	713-582-8654
Cell Number	713-582-8654
Market Segment	Investor Owned Utility (IOU)

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	

Market Rules Notes
None
Proposed Other Binding Document Language Revision

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1 OVERVIEW

1.1 Certification Plan

- (1) Market Participants must be certified to conduct business in the Texas electric choice market. The purpose of this document is to define the market plan for testing commercial operations systems and business processes to support the Texas electric choice market. This document addresses testing requirements and procedures between ERCOT and Market Participants and point-to-point testing between Market Participants. The Texas Market Test Plan (TMTP) applies to Market Participants doing business in the Texas electric choice market.
- (2) The TMTP addresses the following:
 - (a) Flight requirements for Market Participants and ERCOT;
 - (b) Flight Administrator and success criteria;
 - (c) Flight guidelines;
 - (d) Flight details and phases;
 - (e) Testing scenarios for qualification in the Texas electric choice market.
- (3) Market Participants and ERCOT must adhere to the Nodal Protocols, with particular emphasis on:
 - (a) Protocol Section 15, Customer Registration;
 - (b) Protocol Section 16, Registration and Qualification of Market Participants;
 - (c) Protocol Section 19, Texas Standard Electronic Transaction.
- (4) Market Participants are obligated to comply with the TMTP. In the event of a conflict between the TMTP and the ERCOT Protocols or Public Utility Commission of Texas (PUCT) Substantive Rules, the ERCOT Protocols and PUCT Substantive Rules take precedence over the TMTP.
- (5) Each Market Participant in the Texas electric choice market has specific requirements that shall be met before it will be allowed to begin production processing. The ERCOT Protocols and PUCT rules specify many of these requirements in detail. Market Participants shall thoroughly understand these requirements.
- (6) Additional certification requirements that fall outside the scope of this document may be specified by the PUCT and/or ERCOT.

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1.2 Texas Market Test Plan Revision

- (1) The Texas Standard Electronic Transaction (Texas SET) Working Group is responsible for maintaining and updating the information in the Texas Market Test Plan (TMTP), as defined in Protocol Section 19.8, Retail Market Testing. Changes to the TMTP shall be reviewed by the Texas SET Working Group and approved by the Retail Market Subcommittee (RMS).

2 PRE-FLIGHT ACTIVITIES

- (1) The following pre-flight activities shall be met before a Market Participant enters flight qualification:
 - (a) New Competitive Retailers (CRs):
 - (i) Apply for and receive a Data Universal Numbering System (DUNS) Number;
 - (ii) Submit the appropriate registration form and application fee to ERCOT;
 - (iii) If registering as a Retail Electric Provider (REP), apply for REP certification with the Public Utility Commission of Texas (PUCT);
 - (iv) Register for an upcoming flight using ERCOT's Flight Testing application. Registration must be submitted by the Authorized Representative or the Backup Authorized Representative;
 - (v) Submit testing specifications through ERCOT's Flight Testing application. Trading partners are required to document specific details of any manually-assisted processes in the comments section of the testing specification form on ERCOT's Flight Testing application;
 - (vi) Work with ERCOT Client Services on next steps to enter the Texas electric choice market.
 - (b) Existing CRs and Transmission and/or Distribution Service Providers (TDSPs):
 - (i) Register for an upcoming flight using ERCOT's Flight Testing application. Registration must be submitted by the Authorized Representative or the Backup Authorized Representative;
 - (ii) Submit testing specifications through ERCOT's Flight Testing application. Trading partners are required to document specific details of any manually-assisted processes in the comments section of the testing specification form on ERCOT's Flight Testing application.
 - (c) CRs Adding a DUNS + 4:

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- (i) An Existing CR testing a DUNS + 4 entity shall submit the appropriate registration form and application fee to ERCOT;
 - (ii) If registering as a REP, apply for REP certification with the PUCT;
 - (iii) Register for an upcoming flight using ERCOT's Flight Testing application. Registration must be submitted by the Authorized Representative or the Backup Authorized Representative;
 - (iv) Submit testing specifications through ERCOT's Flight Testing application. Trading partners are required to document specific details of any manually-assisted processes in the comments section of the testing specification form on ERCOT's Flight Testing application.
- (d) New TDSP:
- (i) Apply for and receive a DUNS Number;
 - (ii) Submit the appropriate registration form to ERCOT;
 - (iii) Send an "Intent to Test" email to participate in the next test flight to RetailMarketTesting@ercot.com from the Authorized Representative or Backup Authorized Representative;
 - (iv) Submit testing specifications through ERCOT's Flight Testing application. Trading partners are required to document specific details of any manually-assisted processes in the comments section of the testing specification form on ERCOT's Flight Testing application; and
 - (v) Work with ERCOT Client Services on next steps to enter the Texas electric choice market.
- (e) Non-Opt-In Entity (NOIE):
- (i) NOIEs who plan to submit their usage to ERCOT via North American Energy Standards Board (NAESB) will be required to test in one of ERCOT's test flights in order to do so;
 - (ii) Send an "Intent to Test" email to participate in the next test flight to RetailMarketTesting@ercot.com from the Authorized Representative or Backup Authorized Representative; and
 - (iii) Submit testing specifications through ERCOT's Flight Testing application. Trading partners are required to document specific details of any manually-assisted processes in the comments section of the testing specification form on ERCOT's Flight Testing application.

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3 STANDARDS

- (1) Market Participants participating in the Texas electric choice market must use Texas Standard Electronic Transactions (Texas SETs)/the American National Standards Institute X12 (ANSI X12) Electronic Data Interchange (EDI) which will be transported using the North American Energy Standards Board (NAESB) Electronic Delivery Mechanism (EDM). For more information on those standards refer to the Texas SET Implementation Guides and the Texas Data Transport & MarkeTrak Systems Working Group (TDTMS) NAESB EDM v1.6 Implementation Guide for retail operations.
- (2) Market Participants may not refuse to test the basic processes necessary to ensure that the retail systems operated by the Market Participants interface properly with both ERCOT's systems and other Market Participants' systems. Market Participants may elect to not participate in testing optional processes as identified in this document but will inform their trading partners and the Market Flight Administrator in advance. As much as possible, the same automated processes that will be used in production should be used during testing. Where not possible, any areas that require manually-assisted processes shall be documented in advance in the comments section of the testing specification form on ERCOT's Flight Testing application and communicated to trading partners at the beginning of the testing cycle.
- (3) All entities participating in ERCOT's technical qualification testing will use dedicated test environments that are representative of their production environments.
- (4) All parties shall send Functional Acknowledgements (FA/997) for all EDI transactions during testing. Functional Acknowledgements provide a critical audit trail, and all parties shall monitor acknowledgements sent and received.

4 FLIGHT RESPONSIBILITIES

- (1) Responsibilities specific to testing and validating Market Participants' systems and processes are contained in this section. The following responsibilities shall be met before a Market Participant receives qualification that its systems are ready to go into production with its trading partners.

4.1 Flight Breakdown

4.1.1 *Prior to Technical Qualification Testing*

- (1) Prior to testing, Competitive Retailers (CRs) shall:
 - (a) Implement a dedicated test system that closely resembles production. Receive, review, and load the test Electric Service Identifiers (ESI IDs) and associated zip codes from Transmission and/or Distribution Service Provider (TDSP); and
 - (b) Review Testing Frequently Asked Questions (FAQs) (link at Section 9, Appendices, Appendix A, Resources).

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- (2) Prior to testing, TDSPs shall:
 - (a) Establish a test bed of ESI IDs and zip codes, including enough ESI IDs to cover all required scripts for each of the CRs;
 - (b) Provide ERCOT and CRs with all required test bed data through ERCOT's Flight Testing application; and
 - (c) Review Testing FAQs prior to testing (link at Appendix A).
- (3) Prior to testing, ERCOT shall:
 - (a) Review Testing FAQs prior to testing (link at Appendix A);
 - (b) Validate the test ESI IDs and associated zip codes from the TDSP.

4.1.2 During Technical Qualification Testing (occurs during Business Hours on a Retail Business Day)

- (1) During testing, CRs shall:
 - (a) Establish technical connectivity with ERCOT and TDSP trading partners. Connectivity schedules are arranged by the dates stated in the Approved Test Flight Schedule located on the ERCOT website;
 - (b) As applicable, participate in testing conference calls as designated by the Flight Administrator;
 - (c) Adhere to the established test schedule by sending transactions on the given day in accordance with the corresponding test script. If a CR cannot complete its assigned tasks, the CR will need to contact its ERCOT testing team representative and/or trading partner testing representative;
 - (d) Contact the ERCOT testing team representative and/or trading partner testing representative in the event transactions are not received in accordance with the corresponding test script.
- (2) During testing, TDSPs shall:
 - (a) Establish technical connectivity with ERCOT and CR trading partners. Connectivity schedules are arranged by the dates stated in the Approved Test Flight Schedule located on the ERCOT website;
 - (b) As applicable, participate in testing conference calls as designated by the Flight Administrator;
 - (c) Adhere to the established test schedule by sending transactions by the given day in accordance with the corresponding test script. If the TDSP cannot complete its

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assigned tasks, the TDSP will need to contact its ERCOT testing team representative and/or trading partner testing representative;

- (d) Contact the ERCOT testing team representative and/or trading partner testing representative in the event transactions are not received in accordance with the corresponding test script.
- (3) During testing, ERCOT shall:
- (a) Establish technical connectivity with TDSP and CR trading partners. Connectivity schedules are arranged by the dates stated in the Approved Test Flight Schedule located on the ERCOT website;
 - (b) Organize testing conference calls as needed;
 - (c) Adhere to the established test schedule;
 - (d) Contact affected Market Participants in the event they are unable to send transactions in accordance with the corresponding test script;
 - (e) Contact affected Market Participants in the event they did not receive transactions in accordance with the corresponding test script.

4.1.3 Production

- (1) During production, CRs shall:
- (a) Complete all trading partner agreements necessary prior to moving into production. This will be determined by the individual TDSP;
 - (b) Receive a qualification letter from ERCOT;
 - (c) Continue to work with the Public Utility Commission of Texas (PUCT), TDSPs, and ERCOT Client Services to complete any additional requirements prior to going into production.
- (2) During production, TDSPs shall:
- (a) Receive a qualification letter from ERCOT;
 - (b) Continue to work with the PUCT, CRs, and ERCOT Client Services to complete any additional requirements prior to going into production.
- (3) During production, ERCOT shall:
- (a) Distribute qualification letters;
 - (b) Assist Market Participants with production migration.

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5 FLIGHT ADMINISTRATOR REQUIREMENTS

- (1) The Flight Administrator will act as a neutral facilitator throughout testing and is the final authority on all levels of business process qualification among trading partners, including verification that a party has successfully passed testing and is eligible to go into production. Failure to meet agreed-upon expectations for qualification may result in actions up to and including failure to qualify for the current flight.
- (2) Primary duties for the Flight Administrator will be to:
 - (a) Follow escalation procedures set forth in the Texas Market Test Plan (TMTP);
 - (b) Moderate testing and report as necessary on test status, including progress and issues, to ERCOT, the Retail Market Subcommittee (RMS), the Texas Standard Electronic Transaction (Texas SET) Working Group, other appropriate subcommittees as needed, and/or the Public Utility Commission of Texas (PUCT);
 - (c) Verify testing eligibility of Market Participants with ERCOT;
 - (d) Ensure that Market Participants' testing specifications are updated with the current testing contacts displayed on ERCOT's Flight Testing application;
 - (e) Ensure the testing specifications are provided by all testing Market Participants by the testing specifications deadline;
 - (f) Ensure that Market Participants participating in the flight have completed all requirements necessary prior to testing, as found in Section 4.1.1, Prior to Technical Qualification Testing, of this document;
 - (g) Develop a consolidated list of Frequently Asked Questions (FAQs) and post on the ERCOT website;
 - (h) Attend Texas SET Working Group meetings or send appropriate representation;
 - (i) Review and provide input to the Texas SET Working Group agenda prior to meetings;
 - (j) Assist the Texas SET Working Group in developing a standard test plan for point-to-point and end-to-end business processes;
 - (k) Assist the Texas SET Working Group in developing test scripts;
 - (l) Facilitate end-to-end testing between ERCOT and Market Participants and point-to-point business processes between trading partners;
 - (m) Facilitate flight conference calls as needed with Market Participants;

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- (n) Act as an issue resolution agent for technical and process issues among Market Participants;
- (o) Confirm that Market Participants have completed ERCOT's technical qualification testing;
- (p) Verify adherence to Texas SET standards by all Market Participants and ERCOT;
- (q) Maintain current flight testing status on ERCOT's Flight Testing application;
- (r) Adhere to the RMS-approved flight tasks/timelines.

6 ESCALATION PROCEDURES

- (1) Market Participants shall attempt to work through any issues with their trading partners. The Flight Administrator may be contacted to assist in resolution of an issue if the Market Participants are unable to resolve on their own. If a resolution cannot be found, the Flight Administrator will determine if the Market Participants should retest in a subsequent flight. In the event a Market Participant is not responsive, the Flight Administrator will contact the Authorized Representative. If resolution is not achieved, the issue will be escalated through the appropriate Technical Advisory Committee (TAC) subcommittee.
- (2) If ERCOT has a testing issue, the Texas Standard Electronic Transaction (Texas SET) Working Group leadership may be contacted to assist in resolution. Texas SET leadership may contact the Retail Market Subcommittee (RMS) leadership and ERCOT senior management if appropriate.

7 TEXAS RETAIL MARKET TESTING WEBSITE

- (1) The Flight Administrator maintains the Texas Retail Market Testing website that details the current status of the testing process. The URL for this website can be found in Section 9, Appendices, Appendix A, Resources.
- (2) This website includes:
 - (a) Link to the Texas Market Test Plan (TMTP);
 - (b) Test scripts;
 - (c) Link to the Approved Test Flight Schedule timelines;
 - (d) Updates on changes or special circumstances concerning retail market flight testing;
 - (e) Link to the Texas Standard Electronic Transaction (Texas SET) Working Group page on the ERCOT website containing the Texas SET Working Group meeting schedule;

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- (f) Frequently Asked Questions (FAQs) on the testing process;
- (g) Market links.

7.1 Testing Specifications

- (1) Each Market Participant will provide testing specifications on ERCOT's Flight Testing application. Testing specifications include basic contact information and specific testing communications information required for effective testing. ERCOT's Flight Testing application contains production specifications. It also identifies processes that will be tested, including optional functions that the Market Participant may wish to test.

7.1.1 *Contacts*

- (1) Testing Market Participants shall provide daily and emergency contact information for the test lead and the test lead alternate. The Authorized Representative or Backup Authorized Representative may be contacted to assist with issue resolution.
- (2) Business contacts must be employees of the Market Participant, not from a vendor or Market Interface Service Provider (MISP). Technical contacts, on the other hand, may be from a vendor or MISP.

7.1.2 *Exceptions to the Test Plan*

- (1) This test plan details full testing requirements for Market Participants. There are legitimate scenarios where a party will not support a feature or scenario that is identified in a test script. In these cases, a party can claim an exception to the test plan. Exceptions shall be documented in the comments section of the testing specifications in ERCOT's Flight Testing application, and shall be approved by the Flight Administrator. The Flight Administrator will review exceptions on a case-by-case basis to determine the potential impact on the market. Parties that claim approved exceptions will not be required to test those features. Once approved, this information will be shared with trading partners.

7.1.3 *Manually-Assisted Processes*

- (1) Any areas that require manually-assisted processes shall be documented in advance in the comments section of the testing specifications page of ERCOT's Flight Testing application and communicated to trading partners at the beginning of the testing cycle. The American National Standards Institute X12 (ANSI X12) formatted files shall never be altered manually.

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7.2 Testing to Production Checklist

- (1) Once testing has been completed, the Market Participant should access the Testing to Production Checklists located on the Texas Retail Market Testing page on the ERCOT website.
- (2) ERCOT and Transmission and/or Distribution Service Providers (TDSPs) are responsible for reviewing and updating the Testing to Production Checklists annually. Any updates should be sent to ClientServices@ercot.com.

8 FLIGHT DEFINITIONS, TESTING COORDINATION, AND SCHEDULE

- (1) Pursuant to Public Utility Commission of Texas (PUCT) rules, any entity intending to participate in the Texas electric choice market must successfully qualify their retail commercial applications through Texas retail market testing and maintain that qualification in accordance with Texas Standard Electronic Transaction (Texas SET) version upgrades. Therefore, for new Market Participants seeking ERCOT qualification, testing must take place during in-flight testing.
- (2) For current Market Participants, testing may be required when changes occur to market-facing systems impacting connectivity, Electronic Data Interchange (EDI) translation, and/or other back-end processes. It is recommended for current Market Participants to test with trading partners and ERCOT to ensure changes are implemented appropriately. Testing for current Market Participants may take place during in-flight or out-of-flight testing. Testing scenarios for in-flight and out-of-flight testing is outlined in Sections 8.1, In-Flight Testing, and 8.2, Coordinated Out-of-Flight Testing, as documented below.
- (3) At the Transmission and/or Distribution Service Provider's (TDSP's) discretion using Good Utility Practices, Market Participants may be required to successfully complete pre-production verification testing before the Market Participant's Data Universal Numbering System (DUNS) can be implemented in the TDSP's production systems. Coordinated out-of-flight testing for this scenario is referenced in Section 8.2.4, TDSP Pre-Production Verification, and Section 8.3, Coordinated Emergency Testing, below.

8.1 In-Flight Testing

- (1) Market Participants are required to test the following enhancements during the in-flight period of the approved market Flight Schedule.

8.1.1 *New Market Participant*

- (1) All new Market Participants shall qualify their retail commercial applications during the in-flight period of a scheduled market test flight.

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8.1.2 Retail Market Subcommittee (RMS) Approved Market Enhancements

- (1) All Market Participants, including ERCOT, may be required to complete qualification through Texas retail market testing in circumstances including, but not limited to:
 - (a) Retail Market Guide revisions;
 - (b) Texas Standard Electronic Transaction (Texas SET) Working Group enhancements;
 - (c) Public Utility Commission of Texas (PUCT) rule makings;
 - (d) Market-wide software upgrades.

8.1.3 Market Participant Adding a New Service Territory/New Trading Partnership with a Municipally Owned Utility (MOU) or Electric Cooperative (EC)

- (1) All new Municipally Owned Utility (MOU) or Electric Cooperative (EC) trading partnerships shall go through the in-flight testing process as described in the Texas Market Test Plan (TMTP) during a scheduled market test flight.

8.1.4 Market Participant Changes to a Non-Established Market Interface Service Provider

- (1) A Market Participant that chooses to change to a new Market Interface Service Provider (MISP) that has not successfully completed ERCOT's technical qualification testing for another Market Participant in the service territory in question is considered a Non-Established Market Interface Service Provider (MISP).
- (2) A Market Participant may not switch to a Non-Established MISP as an emergency. A switch to a Non-Established MISP by a Market Participant is not considered for out-of-flight testing and does require full Texas retail market testing. This Market Participant is required to execute tests during an in-flight market test flight.

8.1.5 Current Market Participant adds a new additional Data Universal Numbering System (DUNS) Number for a certified Retail Electric Provider (REP)

- (1) A Market Participant who has completed ERCOT's technical qualification testing in the Texas electric choice market with the current Texas Standard Electronic Transaction (Texas SET) version determines that it needs to establish a new additional Data Universal Numbering System (DUNS) number (DUNS or DUNS + 4) for a certified Retail Electric Provider (REP) under that Market Participant's existing umbrella. In this instance the certified Market Participant in a specific service territory is simply adding a new trade name and DUNS number that will be utilizing the same Load Serving Entity (LSE), banking relationships, back-end systems, Transmission and/or Distribution Service Provider (TDSP) territories, functionality, and the same established Electronic Data

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Interchange (EDI) Provider. If any of these criteria differ from the original DUNS, the Competitive Retailer (CR) will need to test during the in-flight period and use the New CR track.

8.1.6 Additional Functionality

- (1) Market Participants may test additional functionality that could include the following:
 - (a) Continuous Service Agreement (CSA); and
 - (b) PUCT option changes.

8.2 Coordinated Out-of-Flight Testing

- (1) It may be necessary for a current Market Participant to test changes outside of an in-flight testing period. The impacted Market Participant should give the impacted trading partners ten (10) Business Days advance notice in order to coordinate a mutually agreed out-of-flight testing schedule. Coordinated out-of-flight testing requests are limited to the following:

8.2.1 Current Market Participant Adds a New Service Territory/New Trading Partnership

- (1) A new service territory/new trading partnership is defined as a current Market Participant who has completed ERCOT's technical qualification testing with the current Texas SET version that is adding a Transmission and/or Distribution Service Provider (TDSP) trading partnership. Market Participants that want to add a Municipally Owned Utility (MOU) or Electric Cooperative (EC) trading partnership must do schedule testing during the in-flight timeframe.

8.2.2 Current Market Participant Changes to an "Established" Market Interface Service Provider

- (1) A Market Participant who has completed testing qualification with the current Texas SET version determines that it needs to change its Market Interface Service Provider (MISP) to another MISP that is currently serving another Market Participant in a specified service territory or to an Established MISP.
- (2) Market Participants may not test with two different MISPs at the same time. If a Market Participant chooses to test for a change of MISPs during a Texas SET version release, that Market Participant must use the same MISP in production.

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8.2.3 *Bank Changes*

- (1) A Market Participant may need to change the bank that they currently use in the market. When such changes occur, it is the responsibility of the Market Participant to coordinate a mutually agreed upon testing schedule with its trading partners. Banking changes are point-to-point; therefore, the ERCOT Flight Administrator is not required to be notified for this change.

8.2.3.1 Payment and/or Remittance Type Changes

- (1) Market Participants are required to notify trading partners of payment type changes (e.g., from Automated Clearing House (ACH) to wire or vice versa). When such changes occur, it is the responsibility of the Market Participant to coordinate a mutually agreed upon testing schedule with its trading partners and ensure payment and/or remittance type changes tested match the method used in production. Banking changes are point-to-point; therefore, the ERCOT Flight Administrator is not required to be notified for this change.

8.2.4 *TDSP Pre-Production Verification*

- (1) Market Participants may be required by the TDSP to successfully complete pre-production verification testing. It is the responsibility of the TDSP to coordinate a mutually agreed-upon testing criteria and schedule with its impacted trading partner(s). This point-to-point level of pre-production verification testing will be scheduled between the TDSP and the impacted Market Participant(s); therefore, the ERCOT flight administrator will not be required to be notified.

8.3 Coordinated Emergency Testing

- (1) In the event of an emergency situation, it is the responsibility of the Market Participant to coordinate a mutually agreed upon testing schedule with its trading partners. Coordinated Emergency Testing situations include, but are not limited to:
 - (a) System failures of a Market Participant or its subcontracted entity;
 - (b) Disaster recovery;
 - (c) Business continuity plan execution;
 - (d) Cybersecurity incidents; and
 - (e) Current bank used by a Market Participant goes out of business.

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8.4 Flight Schedule

- (1) The Texas Standard Electronic Transaction (Texas SET) Working Group is responsible for drafting a Flight Schedule to be recommended for approval by the Retail Market Subcommittee (RMS). The Flight Schedule will inform Market Participants of the dates and tasks for each flight. The approved Flight Schedule will be posted on the ERCOT website no later than December 1st of the preceding year. A link is provided in Section 9, Appendices, Appendix A, Resources, of this document.

8.5 NOIE testing requirements

- (1) Non Opt-In Entity (NOIE) testing is different from normal flight testing. NOIEs are not bound to the Flight Schedules, but must test between blackout periods. The Flight Administrator is the final authority on testing availability and timelines. NOIEs will test submitting usage through North American Energy Standards Board (NAESB). NOIE testing will include connectivity testing and other activities as requested by the NOIE and coordinated with the ERCOT Flight Administrator.

9 APPENDICES

Appendix A - Resources

The Texas Retail Market Testing Website (<http://www.ercot.com/services/rq/lse/trt>) includes but is not limited to:

- Master Flight Calendar
- RMS Approved Test Flights
- Testing Requirements Matrix
- FAQs for Retail Testing

Texas SET Implementation Guidelines, Transaction Names and Swimlane Diagrams:

<http://www.ercot.com/mktrules/guides/txset/>

ERCOT Nodal Protocols:

<http://www.ercot.com/mktrules/nprotocols/>

ERCOT Registration:

<http://www.ercot.com/services/rq>

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Appendix B – Glossary of Terms & Acronyms Used in this Document not defined in Section 2 of the ERCOT Protocols

ANSI X12 - The American National Standards Institute X12 standard which defines formats and procedures for exchanging documents.

Current Market Participant - For use in the Texas Market Test Plan (TMTP) is defined as a Market Participant that has successfully completed a previous flight test for the current Texas Standard Electronic Transaction (Texas SET) version and has an active relationship with ERCOT.

EDI Provider - Used for testing purposes by a Market Participant who is certified in the Texas marketplace with the current Texas SET version.

EDM- Electronic Delivery Mechanism

Established Market Interface Service Provider (MISP) - An organization or company that provides both connectivity and translation services to another Market Participant in the same service territory and that has successfully tested in the marketplace provided they tested using the current Texas SET version.

Existing CR (*see* Current Market Participant)

Existing Market Participant (*see* Current Market Participant)

Market Interface Service Provider (MISP) - A Market Participant's internal organization or an outsourced company that provides both connectivity and translation services for a retail Market Participant.

NAESB – North American Energy Standards Board

New Market Participant or New CR for use in the TMTP - Defined as a Market Participant that has not successfully completed a previous flight test for the current Texas SET release or has terminated their relationship with ERCOT.

Non-Established Market Interface Service Provider (MISP) - A Market Participant's internal organization or an outsourced company that provides both connectivity and translation services for a Market Participant that has not successfully completed ERCOT's technical qualification testing for another Market Participant in the service territory in question.

TMTP - Texas Market Test Plan

Trading Partner - Entities that exchange Electronic Data Interchange (EDI) transactions

ERCOT Impact Analysis Report

OBDRR Number	<u>054</u>	OBDRR Title	TDSP(s) Pre-Production Verification Testing
Impact Analysis Date	April 16, 2025		
Estimated Cost/Budgetary Impact	None.		
Estimated Time Requirements	No project required. This Other Binding Document Revision Request (OBDRR) 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

PGRR Number	<u>125</u>	PGRR Title	Update of LSIPA Compliance Attestation
Date of Decision	June 24, 2025		
Action	Recommended Approval		
Timeline	Urgent – To avoid further delay of the development of new generation within ERCOT relating to Section 8, Attachment D, Attestation Regarding Compliance with the Lone Star Infrastructure Protection Act, lacking an option for an Entity to specify that its Affiliate(s) meeting the citizenship, ownership, or headquarter criteria under the Lone Star Infrastructure Protection Act (LSIPA) will not have access to the project, ERCOT's systems, or confidential data.		
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		
Planning Guide Sections Requiring Revision	5.2.2, Initiation of Generator Interconnection or Modification 5.2.4, Duty to Update Project Information and Respond to ERCOT and TDSP Requests for Information 8, Attachment D, Attestation Regarding Compliance with the Lone Star Infrastructure Protection Act		
Related Documents Requiring Revision/Related Revision Requests	None		
Revision Description	This Planning Guide Revision Request (PGRR) makes the LSIPA attestation in the Planning Guide consistent with the language in ERCOT's existing Protocol Section 23, Form Q, Attestation Regarding Market Participant Citizenship, Ownership, or Headquarters. Specifically, it adds language that would permit an Interconnecting Entity (IE) or property owner to demonstrate compliance under LSIPA even if it has a subsidiary or Affiliate that falls under any of the citizenship or headquarter criteria of LSIPA, so long as the subsidiary does not have direct or remote access to or control of the project, the real property utilized by the project, the Resource Integration and Ongoing Operations (RIOO) system, the		