

# **Filing Receipt**

Filing Date - 2023-09-08 11:58:59 AM

**Control Number - 54445** 

Item Number - 28

#### PROJECT NO. 54445

CY 2023 REVIEW OF RULES	§	PUBLIC UTILITY COMMISSION
ADOPTED BY THE INDEPENDENT	§	OF TEXAS
ORGANIZATION	§	

### NOTICE OF RECOMMENDED APPROVAL OF REVISION REQUESTS BY ERCOT BOARD OF DIRECTORS

Effective June 8, 2021, rules adopted by Electric Reliability Council of Texas, Inc. (ERCOT) under delegated authority from the Public Utility Commission of Texas (Commission) are subject to Commission oversight and review and may not take effect before receiving Commission approval.

At its meeting on August 31, 2023, the ERCOT Board of Directors (Board) recommended Commission approval of the following proposed revisions to the ERCOT rules (Revision Requests) (Nodal Protocol Revision Requests (NPRRs), Load Profiling Guide Revision Request (LPGRR), Nodal Operating Guide Revision Requests (NOGRRs), Other Binding Document Revision Requests (OBDRRs), Planning Guide Revision Requests (PGRRs), Retail Market Guide Revision Request (RMGRR), and Resource Registration Glossary Revision Requests (RRGRRs)):

- NPRR1150, Related to NOGRR230, WAN Participant Security;
- NPRR1163, Related to LPGRR070, Discontinuation of Interval Data Recorder (IDR)
   Meter Weather Sensitivity Process;
- NPRR1164, Black Start and Isochronous Control Capable Identification;
- NPRR1165, Revisions to Requirements of Providing Audited Financial Statements and Providing Independent Amount;
- NPRR1171, Requirements for DGRs and DESRs on Circuits Subject to Load Shedding;
- NPRR1173, Changes Consistent With the Options Available to an MOU and EC Entering Retail Competition in the ERCOT Market;
- NPRR1174, Market Participant's Return of Settlement Funds to ERCOT Following Receipt of Overpayment;
- NPRR1175, Revisions to Market Entry Financial Qualifications and Continued Participation Requirements;
- NPRR1176, Update to EEA Trigger Levels;

- NPRR1182, Inclusion of Controllable Load Resources and Energy Storage Resources in the Constraint Competitiveness Test Process;
- NPRR1183, ECEII Definition Clarification and Updates to Posting Rules for Certain Documents without ECEII;
- NPRR1185, HDL Override Payment Provisions for Verbal Dispatch Instructions;
- NPRR1189, Updates to Language to Clarify the Allowable Regulation Ancillary Service Trades;
- LPGRR070, Discontinuation of Interval Data Recorder (IDR) Meter Weather Sensitivity Process;
- NOGRR215, Limit Use of Remedial Action Schemes;
- NOGRR230, WAN Participant Security;
- NOGRR247, Change UFLS Stages and Load Relief Amounts;
- NOGRR249, Communication of System Operating Limit Exceedances;
- NOGRR250, Related to NPRR1171, Requirements for DGRs and DESRs on Circuits Subject to Load Shedding;
- NOGRR251, Add Cold Weather Conditions to Template for Emergency Operations Plan;
- NOGRR252, Related to NPRR1176, Update to EEA Trigger Levels;
- OBDRR045, Additional Revisions to Demand Response Data Definitions and Technical Specifications;
- OBDRR048, Implementation of Operating Reserve Demand Curve (ORDC) Multi-Step Price Floor;
- PGRR103, Establish Time Limit for Generator Commissioning Following Approval to Synchronize;
- PGRR108, Related to NPRR1183, ECEII Definition Clarification and Updates to Posting Rules for Certain Documents without ECEII;
- RMGRR174, Related to NPRR1173, Changes Consistent With the Options Available to an MOU and EC Entering Retail Competition in the ERCOT Market;
- RRGRR033, Related to NPRR1164, Black Start and Isochronous Control Capable Identification;

- RRGRR035, Related to NPRR1171, Requirements for DGRs and DESRs on Circuits
   Subject to Load Shedding; and
- VCMRR034, Excluding RUC Approved Fuel Costs from Fuel Adders.

Included for Commission review are the Board Reports—each of which includes an ERCOT Market Impact Statement—and ERCOT Impact Analyses for these Revision Requests.

Dated: September 8, 2023 Respectfully submitted,

/s/ Jonathan Levine

Chad V. Seely
Senior Vice President and General Counsel
Texas Bar No. 24037466
(512) 225-7035 (Phone)
(512) 225-7079 (Fax)
chad.seely@ercot.com

Jonathan Levine Assistant General Counsel Texas Bar No. 24067323 (512) 225-7017 (Phone) (512) 225-7079 (Fax) jonathan.levine@ercot.com

**ERCOT** 

8000 Metropolis Drive (Building E), Suite 100 Austin, Texas 78744

ATTORNEYS FOR ELECTRIC RELIABILITY COUNCIL OF TEXAS, INC.

NPRR Number	<u>1150</u>	NPRR Title	Related to NOGRR230, WAN Participant Security		
Date of Decision	on	August 31, 2023			
Action		Recommended Approval			
Timeline		Normal			
Proposed Effe Date	ctive	Upon implementation of Nodal Operating Guide Revision Request (NOGRR) 230, WAN Participant Security			
Priority and Ra Assigned	ank	Not app	olicable		
Nodal Protoco Sections Requ Revision		2.1, Definitions 2.2, Acronyms and Abbreviations 16.2.1, Criteria for Qualification as a Qualified Scheduling Entity			
Related Docur Requiring Revision/Relat Revision Requ	ted	NOGRR230			
Revision Description		This Nodal Protocol Revision Request (NPRR) adds a requirement in Section 16.2.1 that states if a Qualified Scheduling Entity (QSE) represents a Resource Entity, Emergency Response Service (ERS) Resource, or another QSE and receives or transmits Wide Area Network (WAN) Data, as that term is defined in Section 2.1, then it must maintain connection to a Secure Private Network (SPN) as described in Nodal Operating Guide Section 7, Telemetry and Communication.			
		This NPRR also adds two definitions ('Wide Area Network (WAN)' and 'Wide Area Network (WAN) Participant') which were previously located in Nodal Operating Guide Section 1.4, Definitions.			
Reason for Revision			dresses current operational issues. ets Strategic goals (tied to the <u>ERCOT Strategic Plan</u> or		
		directed by the ERCOT Board).  Market efficiencies or enhancements			
		☐ Administrative ☐ Regulatory requirements			

	Other: (explain) (please select all that apply)		
Business Case	This NPRR accompanies NOGRR230 which addresses requirements relating to the WAN Participants and the use of an SPN.		
	On 10/13/22, PRS voted to table NPRR1150. There was one abstention from the Consumers (Occidental) Market Segment. All Market Segments participated in the vote.		
	On 11/11/22, PRS voted unanimously to table NPRR1150 and refer the issue to the Reliability and Operations Subcommittee (ROS). All Market Segments participated in the vote.		
PRS Decision	On 5/10/23, PRS voted to recommend approval of NPRR1150 as amended by the 4/20/23 ERCOT comments. There was one abstention from the Investor Owned Utility (IOU) (Lone Star Transmission) Market Segment. All Market Segments participated in the vote.		
	On 6/14/23, PRS voted unanimously to endorse and forward to TAC the 5/10/23 PRS Report and 9/28/22 Impact Analysis for NPRR1150. All Market Segments participated in the vote.		
	On 10/13/22, participants reviewed the 10/12/22 ERCOT comments and requested that NPRR1150 be tabled in anticipation of further discussion regarding NOGRR230 at the November 7, 2022 ROS meeting.		
Summary of PRS Discussion	On 11/11/22, participants reviewed the 10/24/22 ERCOT, 10/26/22 ERCOT, and 11/4/22 ACES comments and requested that NPRR1150 be tabled and referred to ROS in anticipation of continued NOGRR230 discussion.		
	On 5/10/23, participants reviewed the 4/20/23 ERCOT comments and noted the May 4, 2023 ROS vote to recommend approval of NOGRR230 as amended by the 4/20/23 ERCOT comments.		
	On 6/14/23, participants reviewed the 9/28/22 Impact Analysis.		
TAC Decision	On 6/27/23, TAC voted unanimously to recommend approval of NPRR1150 as recommended by PRS in the 6/14/23 PRS Report. All Market Segments participated in the vote.		
Summary of TAC Discussion	On 6/27/23, TAC reviewed the ERCOT Opinion, ERCOT Market Impact Statement, and Independent Market Monitor (IMM) Opinion		

	for NPRR1150.
ERCOT Board Decision	On 8/31/23, the ERCOT Board voted unanimously to recommend approval of NPRR1150 as recommended by TAC in the 6/27/23 TAC Report.

Opinions		
Credit Review	ERCOT Credit Staff and the Credit Finance Sub Group (CFSG) have reviewed NPRR1150 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 NPRR1150.	
ERCOT Opinion	ERCOT supports approval of NPRR1150.	
ERCOT Market Impact Statement	ERCOT Staff has reviewed NPRR1150 and believes that it has a positive market impact by addressing current operational issues by adding a requirement that states if a QSE represents a Resource Entity, ERS Resource, or another QSE and receives or transmits WAN Data, then it must maintain connection to an SPN.	

Sponsor		
Name Mike Allgeier		
E-mail Address Michael.Allgeier@ercot.com		
Company	ERCOT	
Phone Number	one Number 512-248-4750	
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
ERCOT 101222	Clarified that the "network" referenced in paragraph (1)(c) of Section 16.2.1 is the ERCOT WAN and removed the reference to the WAN in paragraph (1)(n) because the WAN requirement does not necessarily apply to all the Entities listed in that Section
ERCOT 102422	Relocated four definitions from Nodal Operating Guide Section 1.4 to Section 2.1 in association with NOGRR230's 10/24/22 ERCOT comments
ERCOT 102622	Rebuilt the 10/24/22 ERCOT comments on top of the 10/12/22 ERCOT comments and struck a reference made to Nodal Operating Guide Section 1.4 located in paragraph (1)(n) of Section 16.2.1
ACES 110422	Proposed the use of multiple secure Internet connections as a more reliable method of mitigating Denial of Service (DoS) and Distributed Denial of Service (DDoS) attacks and added a new definition, "Secure Dual Homed Internet" (SDHI), to Section 2.1
ROS 120722	Requested PRS continue to table NPRR1150
ERCOT 042023	Aligned Protocol language with NOGRR230 4/20/23 ERCOT comments which allow use of other networks than an SPN if the network provides equivalent protection against internet DoS or DDoS attacks
ROS 060123	Endorsed NPRR1150 as amended by the 4/20/23 ERCOT comments

#### **Market Rules Notes**

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

NPRR1127, Clarification of ERCOT Hotline Uses (incorporated 12/1/22)
 Section 16.2.1

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

- NPRR1162, Single Agent Designation for a QSE and its Sub-QSEs for Voice Communications over the ERCOT WAN
  - o Section 16.2.1
- NPRR1165, Revisions to Requirements of Providing Audited Financial Statements and Providing Independent Amount

- Section 16.2.1
- NPRR1175, Revisions to Market Entry Financial Qualifications and Continued Participation Requirements
  - o Section 16.2.1

#### **Proposed Protocol Language Revision**

#### 2.1 **DEFINITIONS**

#### Secure Private Network (SPN)

A network that is utilized to transmit Wide Area Network (WAN) Data between a Resource and WAN Participant, including any portions of the network that are owned or controlled by intermediate Entities. The SPN must utilize network service vendors that provide a service level agreement for the network and the components of the SPN shall not utilize the Internet. The SPN infrastructure must be designed to avoid outages relating to a Denial of Service (DoS) or Distributed Denial of Service (DDoS) attacks that may affect a Market Participant's Internet-connected equipment. Examples of an SPN would include dedicated connections such as Multi-Protocol Label Switching (MPLS), Time Division Multiplexing Digital Signal 1 (TDM DS1), Metro Ethernet, or other networks that do not rely upon the Internet and are approved by ERCOT's telecommunications and security groups.

#### Wide Area Network (WAN)

The WAN is a fully redundant, highly available network designed for Real-Time data transport and used by ERCOT and WAN Participants to communicate and exchange certain data as described in Nodal Operating Guide Section 7, Telemetry and Communication.

#### Wide Area Network (WAN) Data

Any data that has been received from or will be transmitted to ERCOT across the WAN in the format of Inter-Control Center Communication Protocol (ICCP) Data or Resource-Specific Extensible Markup Language (XML) Data.

#### Wide Area Network (WAN) Participant

A Transmission Operator (TO), Qualified Scheduling Entity (QSE) representing a Resource, QSE representing an Emergency Response Service (ERS) Resource, Data Agent-Only QSE (designated under ERCOT's QSE Agency Agreement form), or other Market Participant that is required under the ERCOT Protocols to gather, transmit, or exchange Inter-Control Center Communication Protocol (ICCP) Data, Resource-Specific Extensible Markup Language (XML) Data, or any of the operational voice data described in Nodal Operating Guide Section 7.1, ERCOT Wide Area Network.

#### 2.2 ACRONYMS AND ABBREVIATIONS

#### SPN Secure Private Network

#### 16.2.1 Criteria for Qualification as a Qualified Scheduling Entity

- (1) To become and remain a Qualified Scheduling Entity (QSE), an Entity must meet the following requirements:
  - (a) Submit a properly completed QSE application for qualification, including any applicable fee, necessary disclosures, and designation of Authorized Representatives, each of whom is responsible for administrative communications with the QSE and each of whom has enough authority to commit and bind the QSE and the Entities it represents;
  - (b) Sign a Standard Form Market Participant Agreement;
  - (c) Sign any required Agreements relating to use of the ERCOT <u>Wide Area</u> <u>nNetwork (WAN)</u>, software, and systems;
  - (d) Demonstrate to ERCOT's reasonable satisfaction that the Entity is capable of performing the functions of a QSE;
  - (e) Demonstrate to ERCOT's reasonable satisfaction that the Entity is capable of complying with the requirements of all ERCOT Protocols and Operating Guides;
  - (f) Satisfy ERCOT's creditworthiness and capitalization requirements as set forth in this Section, unless exempted from these requirements by Section 16.17, Exemption for Qualified Scheduling Entities Participating Only in Emergency Response Service;
  - (g) Be generally able to pay its debts as they come due. ERCOT may request evidence of compliance with this qualification only if ERCOT reasonably believes that a QSE is failing to comply with it;
  - (h) Provide all necessary bank account information and arrange for Fedwire system transfers for two-way confirmation;
  - Be financially responsible for payment of Settlement charges for those Entities it represents under these Protocols;
  - (j) Comply with the backup plan requirements in the Operating Guides;
  - (k) Maintain a 24-hour, seven-day-per-week scheduling center with qualified personnel for the purposes of communicating with ERCOT relating to Day-Ahead and Operating Day exchange of market and operational obligations in

**Commented [JT1]:** Please note NPRR1162, NPRR1165, and NPRR1175 also propose revisions to this section.

- representing Load, Resources, and market positions. Those personnel must be responsible for operational communications and must have sufficient authority to commit and bind the QSE and the Entities that it represents. This requirement applies to QSE Level 2, 3, and 4, as defined in Section 2.1, Definitions;
- (1) Maintain a scheduling center for the hours of 0900 to 1700 Central Prevailing Time (CPT) on Business Days with qualified personnel for the purposes of communicating with ERCOT relating to Day-Ahead and Operating Day exchange of market and operational obligations in representing Load, Resources, and market positions. Those personnel must be responsible for operational communications and must have sufficient authority to commit and bind the QSE and the Entities that it represents. This requirement applies to QSE Level 1, as defined in Section 2.1;
- (m) Demonstrate and maintain a working functional interface with all required ERCOT computer systems; and
- (n) Allow ERCOT, upon reasonable notice, to conduct a site visit to verify information provided by the QSE.; and
- (no) If a QSE represents a Resource Entity, Emergency Response Service (ERS)
   Resource, or another QSE and receives or transmits Wide Area Network (WAN)
   Data, as that term is defined in Nodal Operating Guide Section 1.4, Definitions, it must maintain connection to the ERCOT WAN and a Secure Private Network (SPN) or equivalent network as described in Nodal Operating Guide Section 7.1.2, WAN Participant Responsibilities Telemetry and Communication.
- (2) If a QSE chooses to use Electronic Data Interchange (EDI) transactions to receive Settlement Statements and Invoices, it must participate in and successfully complete testing as described in Section 19.8, Retail Market Testing, before starting operations with ERCOT as a QSE.
- (3) A QSE or QSE applicant must be able to demonstrate to ERCOT's reasonable satisfaction that none of its Principals were or are Principals of any Entity with an outstanding payment obligation that remains owing to ERCOT under any Agreement or these Protocols. For purposes of this Section, ERCOT will only consider disqualifying those Principals of the QSE or QSE applicant who were Principals of the other Entity at a time during which the unpaid financial obligation remained owing to ERCOT or during the 120-day period prior to the date on which the unpaid financial obligation first became due and owing to ERCOT.
- (4) If any of a QSE's or QSE applicant's Principals were or are Principals of a terminated Market Participant with an obligation for Default Uplift Ratio Share allocated under Section 9.19.1, Default Uplift Invoices, the terminated Market Participant must be current on all payment obligations for Default Uplift Invoices in order for the QSE to remain, or QSE applicant to become, a registered QSE. For purposes of this Section, ERCOT will only consider as disqualifying those Principals of the QSE or QSE applicant who were

Principals of the other Entity at a time during which the other Entity was not current on its payment obligation for Default Uplift Invoices or 120 days prior to the date the other Entity first failed to pay a Default Uplift Invoice.

- (5) A QSE shall promptly notify ERCOT of any change that a reasonable examiner may deem material to the QSE's ability to continue to meet the requirements set forth in this Section, and any material change in the information provided by the QSE to ERCOT that may adversely affect the reliability or safety of the ERCOT System or the financial security of ERCOT. This includes any changes in the Principals of the QSE. If the QSE fails to so notify ERCOT of such change within two Business Days after becoming aware of the change, then ERCOT may, after providing notice to each Entity represented by the QSE, refuse to allow the QSE to perform as a QSE and take any other action ERCOT deems appropriate, in its sole discretion, to prevent ERCOT or Market Participants from bearing potential or actual risks, financial or otherwise, arising from those changes, and in accordance with these Protocols.
- (6) Subject to the following provisions of this paragraph, a QSE may partition itself into any number of subordinate QSEs ("Subordinate QSEs"). If a single Entity requests to partition itself into more than four Subordinate QSEs, ERCOT may implement the request subject to ERCOT's reasonable determination that the additional requested Subordinate QSEs will not be likely to overburden ERCOT's staffing or systems. ERCOT shall adopt an implementation plan allowing phased-in registration for these additional Subordinate QSEs in order to mitigate system or staffing impacts. However, ERCOT may not unreasonably delay that registration.
- (7) Each Subordinate QSE must be treated as an individual QSE for all purposes including communications and control functions except for liability, financial security, and financial liability requirements under this Section. That liability, financial security, and financial liability is cumulative for all Subordinate QSEs for the single Entity signing the QSE Agreement.
- (8) Continued qualification as a QSE is contingent upon compliance with all applicable requirements in these Protocols. ERCOT may suspend a QSE's rights as a Market Participant when ERCOT reasonably determines that it is an appropriate remedy for the Entity's failure to satisfy any applicable requirement.
- (9) Each QSE, or its designated QSE agent, representing one or more Resources shall be connected to the ERCOT Wide Area Network (WAN) and maintain 24-hour, seven-dayper-week operations and Hotline communications with ERCOT. Each QSE representing one or more Resources shall answer each QSE Hotline call.

# **ERCOT Impact Analysis Report**

NPRR Number	<u>1150</u>	NPRR Title	Related to NOGRR230, WAN Participant Security	
Impact Analysis Date		September 28, 2022		
Estimated Cost/Budgeta	ary Impact	None.		
Estimated Time Requirements		No project required. This Nodal Protocol Revision Request (NPRR) can take effect upon implementation of Nodal Operating Guide Revision Request (NOGRR) 230, WAN Participant Security.		
ERCOT Staffi (across all ar		Ongoing Requirements: No impacts to ERCOT staffing.		
ERCOT Comp System Impa		No impacts to ERCOT computer systems.		
ERCOT Busin Function Imp		No impacts to ERCOT business functions.		
Grid Operation Practices Imp		No impacts to ERCOT grid operations and practices.		

Evaluation of Interim Solutions or Alternatives for a More Efficient Implementation

None offered.

	Comments
None.	

NPRR Number	<u>1163</u>	NPRR Title	Related to LPGRR070, Discontinuation of Interval Data Recorder (IDR) Meter Weather Sensitivity Process
Date of Decis	ion	August 31, 2023	
Action	Action Recommended Approval		mended Approval
Timeline		Normal	
Proposed Effective (LP)		(LPGRI	nplementation of Load Profiling Guide Revision Request R) 070, Discontinuation of Interval Data Recorder (IDR) Meter er Sensitivity Process
Priority and F Assigned	Rank	Not app	olicable
Nodal Protoc Sections Req Revision		2.2, ACRONYMS AND ABBREVIATIONS 11.4.3, Interval Consumption Data Estimation 11.4.3.1, Weather Responsiveness Determination (delete) 11.4.3.2, Weather Sensitive Proxy Day Method 11.4.3.3, Non-Weather Sensitive Proxy Day Method	
Related Docu Requiring Revision/Rela Revision Req	ated	LPGRR070	
Revision Des	cription	This Nodal Protocol Revision Request (NPRR) discontinues the process of evaluating Interval Data Recorder (IDR) Meters to determine if they are Weather Sensitive (WS), in alignment with LPGRR070.	
Business Cas	se	The weather sensitivity classifications Non-Weather Sensitive (NWS) or WS are only used during IDR estimation if ERCOT has not received interval data for the Operating Day. The classification of Electric Service Identifiers (ESI IDs) with IDRs into a WS group and a NWS group determines the proxy day method used for estimation purposes. Since the inception of the BUSLRG and BUSLRGDG profile type codes, which allow for daily submission of interval data, there has been a significant drop in the number of IDR Meters. By the end of this year, CenterPoint plans to begin their conversion of IDR Meters to BUSLRG/BUSLRGDG profile type codes which will lead to another significant drop. The Profiling Working Group (PWG) and other retail Market Participants have discussed the development of this NPRR which reflects the conclusion that the process of evaluating IDR Meters to determine if they are WS is no longer necessary. Discontinuation of this process will allow the	

	Transmission and/or Distribution Service Providers (TDSPs) to focus their efforts on more important matters.  Additionally, this NPRR specifies that ERCOT shall use the NWS proxy day method for BUSLRG and BUSLRGDG profile types even though their weather sensitivity classification is set to WS.
	On 3/8/23, PRS voted unanimously to table NPRR1163 and refer the issue to the Retail Market Subcommittee (RMS). All Market Segments participated in the vote.
PRS Decision	On 4/13/23, PRS voted unanimously to recommend approval of NPRR1163 as amended by the 3/28/23 ERCOT comments. All Market Segments participated in the vote.
	On 5/10/23, PRS voted to endorse and forward to TAC the 4/13/23 PRS Report and the 2/14/23 Impact Analysis for NPRR1163. There was one abstention from the Investor Owned Utility (IOU) (Lone Star Transmission) Market Segment. All Market Segments participated in the vote.
Summary of PRS Discussion	On 3/8/23, participants reviewed NPRR1163. Market Participants commented that there are still a number of IDR Meters that will remain due to technical limitations, and emphasized the importance of Initial Settlement accuracy.
Diodection:	On 4/13/23, participants reviewed the 3/28/23 ERCOT comments. On 5/10/23, participants reviewed the Impact Analysis.
TAC Decision	On 5/23/23, TAC voted to table NPRR1163. There was one abstention from the Independent Generator (Luminant) Market Segment. All Market Segments participated in the vote. On 6/27/23, TAC voted unanimously to recommend approval of
	NPRR1163 as recommended by PRS in the 5/10/23 PRS Report. All Market Segments participated in the vote.
Summary of TAC Discussion	On 5/23/23, TAC reviewed the ERCOT Opinion, ERCOT Market Impact Statement, and Independent Market Monitor (IMM) Opinion for NPRR1161, and discussed tabling NPRR1163 to allow TAC to consider NPRR1163 and LPGRR070 together.
	On 6/27/23, there was no discussion.
ERCOT Board Decision	On 8/31/23, the ERCOT Board voted unanimously to recommend approval of NPRR1163 as recommended by TAC in the 6/27/23 TAC Report.

	Opinions			
Credit Review  ERCOT Credit Staff and the Credit Finance Sub Group (CFSG) has reviewed NPRR1163 and do not believe that it requires changes to credit monitoring activity or the calculation of liability.				
Independent Market Monitor Opinion	1M has no opinion on NPRR1163.			
ERCOT Opinion	ERCOT supports approval of NPRR1163.			
ERCOT Market Impact Statement	ERCOT Staff has reviewed NPRR1163 and believes the market impact for NPRR1163 is that it appropriately discontinues the process of evaluating Interval Data Recorder (IDR) Meters to determine if they are Weather Sensitive, a process that has become unnecessary with the increased use of BUSLRG/BUSLRGDG profile type codes.			

Sponsor	
Name ERCOT	
E-mail Address Randy.Roberts@ercot.com	
Company	ERCOT
Phone Number	512-248-3943
Cell Number	
Market Segment	Not Applicable

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

Comments Received			
Comment Author Comment Summary			
RMS 030823	Requested PRS to table NPRR1163 and refer the issue to RMS		
ERCOT 032823	Specified that ERCOT shall use the NWS proxy day method for BUSLRG and BUSLRGDG profile types even though their classification is set to WS		

RMS 040523	Endorsed NPRR1163 as amended by the 3/28/23 ERCOT	
	11VIO 040323	comments

#### **Market Rules Notes**

Please note that the following NPRR also proposes revisions to the following section:

- NPRR1174, Market Participant's Return of Settlement Funds to ERCOT Following Receipt of Overpayment
  - o Section 2.2

#### **Revised Proposed Protocol Language**

#### 2.2 ACRONYMS AND ABBREVIATIONS

Commented [EWG1]: Please note NPRR1174 also proposes revisions to this section.

**4-CP** 4-Coincident Peak

AAA American Arbitration Association
AAN Advance Action Notice

AASP Average Aggregated Set Point

ACE Area Control Error

ACH Automated Clearing House
ACL Available Credit Limit
ADR Alternative Dispute Resolution

**AEIC** Association of Edison Illuminating Companies

**AGC** Automatic Generation Control **AGR** Aggregate Generation Resource AIL Aggregate Incremental Liability ALA Applicable Legal Authority **ALR** Aggregate Load Resource Adjusted Metered Load **AML AMP** Automatic Mitigation Plan Advanced Metering System **AMS** 

ANSI ASC X12 American National Standards Institute Accredited Standards Committee

X12

AREP Affiliated Retail Electric Provider
ARR Adjusted RPS Requirement
ASDC Ancillary Service Demand Curve
AVR Automatic Voltage Regulator

BLT Block Load Transfer
BSS Black Start Service

CAO Control Area Operator

CARD CRR Auction Revenue Distribution
CCD+ Cash Concentration and Disbursement Plus

**CCF** Capacity Conversion Factor

**CCN** Certificate of Convenience and Necessity

CCT Constraint Competitiveness Test
CEO Chief Executive Officer
CFC Constant Frequency Control
CFE Comision Federal de Electricidad

**CFTC** Commodity Futures Trading Commission

CIM Common Information Model
CMLTD Current Maturities of Long-Term Debt

CMP Constraint Management Plan
CMZ Congestion Management Zone
COP Current Operating Plan
CPS Control Performance Standard
CPT Central Prevailing Time
CR Competitive Retailer

CR Competitive Retailer
CRR Congestion Revenue Right

**CRRBA** Congestion Revenue Right Balancing Account

CSA Continuous Service Agreement
CSV Comma Separated Value
CTX Corporate Trade Exchange

**DAM**Day-Ahead Market**DAS**Data Aggregation System

**DASPP**Day-Ahead Settlement Point Price**DASWCAP**Day-Ahead System-Wide Offer Cap

DC Direct Current
DC Tie Direct Current Tie

**DCAA** Digital Certificate Audit Attestation

**DCTO** Direct Current Tie Operator

**DESR** Distribution Energy Storage Resource

**DG** Distributed Generation

**DGR** Distribution Generation Resource

**DLC**Direct Load Control**DLF**Distribution Loss Factor**DME**Decision Making Entity

DRG Distributed Renewable Generation
DRUC Day-Ahead Reliability Unit Commitment

DSC Debt Service Coverage
DSP Distribution Service Provider
DSR Dynamically Scheduled Resource

[NPRR1000: Delete the acronym "DSR" above upon system implementation.]

**DUNS** Data Universal Numbering System

**DUNS #** DUNS Number

e-Tag Electronic Tag

**EAF** Equivalent Availability Factor **EAL** Estimated Aggregate Liability

**EC** Electric Cooperative

**ECEII** ERCOT Critical Energy Infrastructure Information

ECI Element Competitiveness Index ECRS ERCOT Contingency Reserve Service

EDI Electronic Data Interchange
EEA Energy Emergency Alert
EFT Electronic Funds Transfer
ELSE External Load Serving Entity

**EMMS** Energy and Market Management System

EMS Energy Management System
EPRI Electric Power Research Institute
EPS ERCOT-Polled Settlement

**ERCOT** Electric Reliability Council of Texas, Inc.

**ERCOT Board** The Board of Directors of the Electric Reliability Council of Texas, Inc.

ERS Emergency Response Service
ESI ID Electric Service Identifier
ESR Energy Storage Resource

**ESREDP** Energy Storage Resource Energy Deployment Performance

**ESS** Energy Storage System

**F&A** Finance and Audit

**FASD** First Available Switch Date **FCE** Future Credit Exposure

Fed Federal

FERC Federal Energy Regulatory Commission

**FFR** Fast Frequency Response **FFSS** Firm Fuel Supply Service

FFSSR Firm Fuel Supply Service Resource

FGR Flowgate Right
FIP Fuel Index Price

FIS Full Interconnection Study
FME Frequency Measurable Event

FOP Fuel Oil Price FPA Federal Power Act

**FRC** Frequency Responsive Capacity

FRR Final RPS Requirement

FRRS Fast Responding Regulation Service
FRRS-Down Fast Responding Regulation Down Service
FRRS-Up Fast Responding Regulation Up Service

[NPRR1013: Delete the acronyms "FRRS"," FRRS-Down", and "FRRS-Up" above upon system implementation of the Real-Time Co-Optimization (RTC) project.]

**GADS** Generation Availability Data System

**GREDP** Generation Resource Energy Deployment Performance

**GSU** Generator Step-Up

GTBD Generation To Be Dispatched
GTC Generic Transmission Constraint
GTL Generic Transmission Limit

**HASL** High Ancillary Service Limit

### [NPRR1013: Delete the acronym "HASL" above upon system implementation of the Real-Time Co-Optimization (RTC) project.]

**HCAP** High System-Wide Offer Cap

**HDL** High Dispatch Limit

**HE** Hour Ending

HELHigh Emergency LimitHIOHigh Impact Outage

HITE High Impact Transmission Element

HRL High Reasonability Limit

**HRUC** Hourly Reliability Unit Commitment

HSL High Sustained Limit HWR High Winter Ratio

Hz Hertz

IBR Inverter-Based Resource

ICCP Inter-Control Center Communications Protocol

IDRInterval Data RecorderIEInterconnecting EntityIELInitial Estimated LiabilityIGEInduction Generator EffectsIHLFIntra-Hour Load Forecast

IHPPF Intra-Hour Photo Voltaic Power Forecast
IHWPF Intra-Hour Wind Power Forecast
IMM Independent Market Monitor

IMRE Independent Market Information System Registered Entity

IOUInvestor Owned UtilityIPMIndependent Power Marketer

**IROL** Interconnection Reliability Operating Limit

**IRR** Intermittent Renewable Resources

kV Kilovolt

kVA Kilovolt-Ampere

**kVAr** Kilovolt-Ampere reactive

**kVArh** Kilovolt-Ampere reactive hour

kW KilowattkWh Kilowatt-Hour

**LASL** Low Ancillary Service Limit

[NPRR1013: Delete the acronym "LASL" above upon system implementation of the Real-Time Co-Optimization (RTC) project.]

**LCAP** Low System-Wide Offer Cap LDL Low Dispatch Limit Low Emergency Limit LEL Load Frequency Control LFC **LMP** Locational Marginal Price LPC Low Power Consumption LRL Low Reasonability Limit Load Ratio Share LRS **LSE** Load Serving Entity Low Sustained Limit LSL

MCPCMarket Clearing Price for CapacityMDASMeter Data Acquisition SystemMISMarket Information SystemMMBtuMillion British Thermal Units

MOC Mitigated Offer Cap MOU Municipally Owned Utility **MPC** Maximum Power Consumption **MPT** Main Power Transformer **MRA** Must-Run Alternative **MRE** Meter Reading Entity Mid-Term Load Forecast **MTLF MVA** Megavolt Ampere

MVAr Mega Volt-Amperes reactive

MW Megawatt
MWh Megawatt Hour

NCBI Notice of Change of Banking Information

NCI Notice of Change of Information

**NERC** North American Electric Reliability Corporation

NESC National Electrical Safety Code NFRC Non-Frequency Responsive Capacity

[NPRR1013: Delete the acronym "NFRC" above upon system implementation of the Real-Time Co-Optimization (RTC) project.]

NIST National Institute of Standards and Technology

**NOIE** Non-Opt-In Entity

**NOMCR** Network Operations Model Change Request

Non-Spin Non-Spinning Reserve NSA Network Security Analysis

NSO Notification of Suspension of Operations

NWS Non-Weather Sensitive
NWSIDR Non-Weather Sensitive IDR

O&M Operations and Maintenance
OAE Outage Adjustment Evaluation
OCN Operating Condition Notice
ORDC Operating Reserve Demand Curve

[NPRR1013: Delete the acronym "ORDC" above upon system implementation of the Real-Time Co-Optimization (RTC) project.]

OSA Outage Schedule Adjustment

**PCAP** Pre-Contingency Action Plan

PCRR Pre-Assigned Congestion Revenue Right

**PMI** Private Microgrid Island Peaker Net Margin **PNM POLR** Provider of Last Resort **POC** Peaking Operating Cost **POCC** Point of Common Coupling POI Point of Interconnection **POIB** Point of Interconnection Bus Power Operating System POS Physical Responsive Capability PRC **PRM** Planning Reserve Margin PRR Protocol Revision Request **PRS** Protocol Revision Subcommittee

**PSS** Power System Stabilizer

PTB Price-to-Beat PTP Point-to-Point

**PUCT** Public Utility Commission of Texas

**PURA** Public Utility Regulatory Act, Title II, Texas Utility Code

**PURPA** Public Utility Regulatory Policy Act

**PV** PhotoVoltaic

**PVGR** PhotoVoltaic Generation Resource

**PVGRPP** PhotoVoltaic Generation Resource Production Potential

**PWG** Profiling Working Group

**QF** Qualifying Facility

QSE Qualified Scheduling Entity
QSGR Quick Start Generation Resource

RAP Remedial Action Plan
RAS Remedial Action Scheme
RDF Reserve Discount Factor
REC Renewable Energy Credit

Reg-DownRegulation DownReg-UpRegulation Up

REP Retail Electric Provider
RID Resource ID
RIDR Representative IDR
RMR Reliability Must-Run

**RMS** Retail Market Subcommittee

**ROS** Reliability and Operations Subcommittee

RPG Regional Planning Group
RPP Renewable Production Potential
RPS Renewable Portfolio Standard

**RRS** Responsive Reserve

**RSASM** Reconfiguration Supplemental Ancillary Services Market

[NPRR1013: Delete the acronym "RSASM" above upon system implementation of the Real-Time Co-Optimization (RTC) project.]

RTEP Real-Time Energy Price
RTM Real-Time Market

RTSWCAP Real-Time System-Wide Offer Cap
RUC Reliability Unit Commitment

**RUCAC** Reliability Unit Commitment for Additional Capacity

SASM Supplemental Ancillary Services Market

[NPRR1013: Delete the acronym "SASM" above upon system implementation of the Real-Time Co-Optimization (RTC) project.]

SCADA Supervisory Control and Data Acquisition
SCED Security-Constrained Economic Dispatch
SCUC Security-Constrained Unit Commitment

**SDRAMP** SCED Down Ramp Rate **SFT** Simultaneous Feasibility Test

SGIA Standard Generation Interconnection Agreement

**SMOG** Settlement Metering Operating Guide

**SODESS** Settlement Only Distribution Energy Storage System

SODGSettlement Only Distribution GeneratorSOESSSettlement Only Energy Storage System

**SOG** Settlement Only Generator

**SOTESS** Settlement Only Transmission Energy Storage System

SOTG Settlement Only Transmission Generator SOTSG Settlement Only Transmission Self-Generator

**SRR** Statewide RPS Requirement

SSCI Subsynchronous Control Interaction

SSO Subsynchronous Oscillation
SSR Subsynchronous Resonance
STEC South Texas Electric Cooperative

STLF Short-Term Load Forecast

STPPF Short-Term Photo Voltaic Power Forecast

**STWPF** Short-Term Wind Power Forecast

SURAMPSCED Up Ramp RateSWCAPSystem-Wide Offer Cap

[NPRR1013: Delete the acronym "SWCAP" above upon system implementation of the Real-Time Co-Optimization (RTC) project.]

**SWGR** Switchable Generation Resource

**T&D** Transmission and Distribution **TAC** Technical Advisory Committee

**TDSP** Transmission and/or Distribution Service Provider

TDTWG Texas Data Transport Working Group
TEPPF Total ERCOT PhotoVoltaic Power Forecast

TEWPFTotal ERCOT Wind Power ForecastTIERTimes/Interest Earning RatioTGRTransmission Generation Resource

TLFTransmission Loss FactorTMTPTexas Market Test PlanTOTransmission Operator

**TOAP** Temporary Outage Action Plan **TOU** Time Of Use

TOUS Time Of Use Schedule
TPE Total Potential Exposure
TSP Transmission Service Provider

TTPT Texas Test Plan Team
TUO Total Usable Offset

**TWC** Texas Water Code

TX SET Texas Standard Electronic Transaction

UDSP Updated Desired Set Point
UFE Unaccounted For Energy
UFLS Under-Frequency Load Shed

URL Unit Reactive Limit

USA User Security Administrator
USD United States Dollar or U.S. Dollar

UVLS Under-Voltage Load Shed

VAr Volt-Ampere reactive
VDI Verbal Dispatch Instruction
VEE Validation, Editing and Estimating

VSS Voltage Support Service

**WAN** Wide Area Network

WGR Wind-powered Generation Resource

WGRPP Wind-powered Generation Resource Production Potential

WMS Wholesale Market Subcommittee
WRUC Weekly Reliability Unit Commitment

WS Weather Sensitive
WSIDR Weather Sensitive IDR
WSL Wholesale Storage Load

**XML** Extensible Markup Languag*e* 

#### 11.4.3 Interval Consumption Data Estimation

- (1) ERCOT will estimate all ESI IDs with Interval Data Recorders (IDRs) for which consumption data has not been received for the Operating Day. The method for estimating interval data for ESI IDs with IDRs Meters Meters is a "Weather Response Informed Proxy Day" technique. This approach seeks to increase estimation accuracy by segmenting ESI IDs with IDRs Meters Meters into two groups based on a known indicator of Load; (i.e., weather). The classification of ESI IDs with IDRs Meters Meters into a wWeather\_sSensitive (WS) group and a nNon-wWeather\_sSensitive (NWS) group determines the proxy day method used for estimation purposes. The proxy day estimation method for each group captures the factors that best predict the ESI ID-specific Load shape for the Operating Day.
- (2) The NWS proxy day method will be used for estimating interval data for IDRs where the profile type code is BUSLRG or BUSLRGDG.
- (3) The WS proxy day method will be used for estimating interval data for IDRs where the profile type code is not BUSIDRRQ, BUSLRG, or BUSLRGDG.

- (2) The Weather Sensitive Proxy Day Method will be used for estimating interval data for ESI IDs with Advanced Meters or Municipally Owned Utility (MOU) / Electric Cooperative (EC) Non BUSIDRRQ IDRs.
- 11.4.3.1 Weather Responsiveness Determination
- (1) ERCOT shall perform the weather responsiveness test for all ESI IDs with IDR Meters as specified below.
- (2) For each ESI ID with an IDR Meter, two variables shall be calculated for each Business Day on which the ESI ID is active and for which actual interval data is available during the time period (June 1st September 30th) immediately preceding the date the test is run:
  - (a) Daily kWh; and
  - (b) Average Weather Zone daily dry bulb temperature.

Average Weather Zone Daily Dry Bulb Temperature = ((MAX + MIN) / 2)

The above variables are defined as follows:

<del>Variable</del>	Unit	Description
MAX		Maximum Weather Zone daily dry bulb temperature.
MIN		Minimum Weather Zone daily dry bulb temperature.

- (3) For each ESI ID an R-square (Pearson Product Moment Coefficient of Determination) shall be calculated between these two variables, and all ESI IDs with R-square greater than or equal to 0.6 shall be classified as weather sensitive and all ESI IDs with an R-square less than 0.6 shall be classified as non-weather sensitive.
- (4) The weather responsiveness determination shall be performed annually between November 1st and November 15th.
- (5) No later than November 20th, ERCOT shall produce a report that contains the ESI IDs that require profile code modifications as a result of the weather responsiveness test. This report shall be published to Market Participants in a data extract via the Market Information System (MIS) Certified Area by November 20th.
- (6) If an ESI ID is inactive or de energized at the time the weather responsiveness test is performed, or if it is de energized for 50% or more of the time period beginning June 1<sup>st</sup> and ending September 30<sup>th</sup>, it shall retain its current weather sensitivity classification and shall not be re evaluated until the following year.
- (7) If, for a specific ESI ID, 50% or more of the data required for the calculations described above is missing, the ESI ID shall retain its current weather sensitivity classification.
- (8) Beginning on December 1<sup>st</sup>, and continuing monthly thereafter until May of the following year, ERCOT shall repeat the weather responsiveness test. These tests shall be limited to ESI IDs that had some missing data during the previous time period when the most recent

- weather responsiveness test was performed. As above, ERCOT shall produce a report that contains the ESI IDs requiring profile code modifications and shall publish the report via the MIS Certified Area.
- (9) TSPs and/or DSPs shall successfully complete at least 99% of the weather sensitivity code modifications (Load Profile ID changes) no later than 90 days after the ESI ID appears on the ERCOT report. Load Profile ID changes shall be effective as of the most current meter read date.
- (10) On a monthly basis, ERCOT shall produce a report of ESI IDs that are overdue in having their weather sensitivity codes modified by the above referenced tests.
- (11) As a part of the Load Profile Class assignment, TSPs and/or DSPs will assign a non-weather sensitive classification to all newly installed IDR Meters and a weather sensitive classification to all Advanced Meters and MOU/EC Non-BUSIDERQ IDES.

#### 11.4.3.2 Weather Sensitive Proxy Day Method

- (1) For ESI IDs <u>estimateddesignated</u> as Weather Sensitive IDR (WSIDR), ERCOT will use this <u>weather sensitiveWS</u> proxy day <u>selection</u> method. ESI IDs within the same Weather Zone will be grouped together. The proxy days will be the same for all ESI IDs within each of the Weather Zones. This method incorporates the following:
  - (a) To determine eligible proxy days, select all days (of matching weekday/weekend day type and time period) within five degrees of the maximum temperature of the target Operating Day based on the previous 365 days and then limit the selection to those days that have their maximum temperatures occurring within two hours of the maximum temperature hour of occurrence of the Operating Day. The maximum temperature separation criterion provides initial assurance that the eligible day will have a similar diurnal temperature pattern as the target Settlement Operating Day.
  - (b) Perform two tests on each potential proxy day identified in item (a) above:
    - (i) Temperature magnitude test sums the squared differences between the hourly temperatures of the target Operating Day and the hourly temperatures of the potential proxy day; and
    - (ii) Temperature shape test calculates the incremental change in temperature from hour to hour during the day and sums the squared differences between the corresponding values of the target Operating Day and the potential proxy day.
  - (c) Each potential proxy day for each test described in item (b) above is ranked in ascending order based on the sum of squared differences.
  - (d) A final ranking is performed with the temperature magnitude test weighted more heavily than the shape test. The weighting factors are 70% and 30%.
  - (e) Select the top three ranked eligible days.

- (f) For each ESI ID, do the following:
  - (i) Use the top ranked proxy day for the target Operating Day, if available;
  - (ii) If the top ranked proxy day data is not available, use the second ranked proxy day data as the estimate;
  - (iii) If the second ranked proxy day data is not available, use the third proxy day; and
  - (iv) If no data is available for any of the proxy days selected, then default to the non-weather sensitive NWS proxy day method selection list.; and(v)

    If still no estimate is generated when the non-weather sensitive method is used, the IDR data will be estimated using the default profile class average profile for the Operating Day.

#### 11.4.3.3 Non-Weather Sensitive Proxy Day Method

- (1) For ESI IDs <u>estimateddesignated</u> as Non-Weather Sensitive IDR (NWSIDR), ERCOT will use <u>this NWSa method for proxy day methoddetermination</u>. This method incorporates the following:
  - (a) Use the most recent proxy day for which data is available as the estimate for the target Operating Day. From historical ESI ID specific interval data, choose the most recent occurrence of the appropriate day of the week (Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday) corresponding to the day of the week of the Operating Day (holidays are treated as Sundays) within the most recent 12 months of the Operating Day; or
  - (b) If there is no historic interval data available according to item (a) above, the IDR data will be estimated using the default profile assigned to the ESI ID for the Operating Day. If non-interval consumption data with a meter read within 12 months of the Operating Day is available, and if the ESI ID was profiled with a non-interval meter data type code within 90 days of the Operating Day, the default profile shall be estimated and/or scaled in accordance with Section 11.4.2, Non-Interval Missing Consumption Data Estimation.

## **ERCOT Impact Analysis Report**

NPRR Number	<u>1163</u>	NPRR Title	Related to LPGRR070, Discontinuation of Interval Data Recorder (IDR) Meter Weather Sensitivity Process
Impact Analys	sis Date	February 1	4, 2023
Estimated Cost/Budgeta	ry Impact	None.	
Estimated Tir Requirements	315 51	No project required. This Nodal Protocol Revision Request (NPRR) can take effect following implementation of Load Profiling Guide Revision Request (LPGRR) 070, Discontinuation of Interval Data Recorder (IDR) Meter Weather Sensitivity Process.	
ERCOT Staffing Impacts (across all areas)		Ongoing R	equirements: No impacts to ERCOT staffing.
ERCOT Comp System Impac		No impacts to ERCOT computer systems.	
ERCOT Busir Function Imp	- 1 - 1 - 1 - 1	No impacts to ERCOT business functions.	
Grid Operations & Practices Impacts		No impacts	s 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 the Impact Analysis for LPGRR070.

NPRR Number	<u>1164</u>	NPRR Title	Black Start and Isochronous Control Capable Identification
Date of Decis	ion	August 31, 2023	
Action		Recom	mended Approval
Timeline		Normal	
Proposed Eff Date	ective	Upon s	ystem implementation
Priority and F Assigned	Rank	Priority	– 2023; Rank – 3810
Nodal Protoc Sections Req Revision		3.10.7.	finitions 1.3, Transmission Breakers and Switches Black Start
Related Docu Requiring Revision/Rela Revision Req	ated	Resource Registration Glossary Revision Request (RRGRR) 033, Related to NPRR1164, Black Start and Isochronous Control Capable Identification	
Revision Des	cription	This Nodal Protocol Revision Request (NPRR) requires that Resource Entities identify whether a physical Resource has the potential capability (even if unverified) to be called upon or used during a black start emergency or if it has the capability for isochronous control, and requires that Resource Entities and Transmission Service Providers (TSPs) identify if a breaker or switch has a Synchroscope or Synchronism Check Relay. This NPRR defines the terms Black Start Capable Resource, Isochronous Control Capable Resource, Synchroscope, and Synchronism Check Relay.	
Reason for R	evision	Addresses current operational issues.  Meets Strategic goals (tied to the ERCOT Strategic Plan or directed by the ERCOT Board).  Market efficiencies or enhancements  Administrative  Regulatory requirements  X Other: (explain) (please select all that apply)	

	Currently, black start training utilizes a list of units that may be black start capable, but that are not contracted Black Start Resources, and a separate list of units that are capable of isochronous control. These lists are both manually maintained and are based on knowledge and experience of ERCOT Qualified Scheduling Entities (QSEs) and Transmission Operators (TOs) over several years of black start training. Both of these capabilities have been used in some simulations of the black start training to incorporate into the training the additional challenges of the contracted Black Start Resources or cranking path to the next start unit being unavailable. In these training simulations, alternative options must be innovated to still create alternative, stable black start cranking paths or accomplish short time frame Critical Load restorations. This training technique helps to challenge operators to utilize system fundamentals as well as black start strategies and principles to accomplish objectives with critical thinking.
Business Case	There are currently no explicit requirements for identification of breakers or switches with a Synchroscope or Synchronism Check Relay. This NPRR also requires that breakers and switches identify if this equipment has these capabilities. Situational awareness of these capabilities helps to identify synchronization points and ensure that voltage, frequency, and phase angle permissives are within range to allow the closing of the breakers and switches.
	To help provide clarity and consistency of the required designations, ERCOT has proposed definitions for a Black Start Capable Resource, Isochronous Control Capable Resource, Synchroscope, and Synchronism Check Relay as well.
	By requiring this information to be maintained in the Network Operations Model and Resources Registration data, ERCOT can then integrate it with the Energy Management System (EMS) and associated simulator to ensure this designation is maintained by the Resource Entities and TSPs as capabilities change and as new physical Resources are interconnected to the ERCOT System. This will then ensure this information is maintained for use in black start training and, if needed, for situational awareness during a Blackout.
	On 3/8/23 PRS voted unanimously to table NPRR1164 and refer the issue to ROS. All Market Segments participated in the vote.
PRS Decision	On 7/13/23, PRS voted unanimously to recommend approval of NPRR1164 as submitted. All Market Segments participated in the vote.
	On 8/10/23, PRS voted unanimously to endorse and forward to TAC the 7/13/23 PRS Report and 2/21/23 Impact Analysis for NPRR1164

	with a recommended priority of 2023 and rank of 3810. All Market Segments participated in the vote.		
Summary of PRS Discussion	On 3/8/23, ERCOT Staff reviewed NPRR1164. Participants expressed concern for certifying as black start-capable untested Resources that are not offered in to provide Black Start Service (BSS); ERCOT Staff noted that Operators informally look at the information contemplated in NPRR1164 as part of black start training. Participants requested the Black Start Working Group (BSWG) review NPRR1164, and noted that an open session of BSWG may be necessary.		
	On 7/13/23, participants noted the 7/7/23 ROS comments endorsing NPRR1164 as submitted.		
	On 8/10/23, participants reviewed the 2/21/23 Impact Analysis and the proposed priority and rank for NPRR1164.		
TAC Decision	On 8/22/23, TAC voted unanimously to recommend approval of NPRR1164 as recommended by PRS in the 8/10/23 PRS Report as revised by TAC. All Market Segments participated in the vote.		
Summary of TAC Discussion	On 8/22/23, TAC reviewed the ERCOT Opinion, ERCOT Market Impact Statement, Independent Market Monitor (IMM) Opinion, and Business Case for NPRR1164, and a proposed reference clarification to the definition of Black Start Capable Resource.		
ERCOT Board Decision	On 8/31/23, the ERCOT Board voted unanimously to recommend approval of NPRR1164 as recommended by TAC in the 8/22/23 TAC Report.		

	Opinions		
Credit Review	ERCOT Credit Staff and the Credit Finance Sub Group (CFSG) have eviewed NPRR1164 and do not believe that it requires changes to credit monitoring activity or the calculation of liability.		
Independent Market Monitor Opinion	MM has no opinion on NPRR1164.		
ERCOT Opinion	ERCOT supports approval of NPRR1164.		
ERCOT Market Impact Statement	ERCOT Staff has reviewed NPRR1164 and believes the market impact for NPRR1164 is improved Black Start training capabilities and, if needed, improved situational awareness during a Blackout, as lists of units that are Black Start capable and are capable of isochronous control will be maintained in the Network Operations		

Model and Resource Registration data, and may be integrated with
the ERCOT operations tools.

Sponsor		
Name	Stephen Solis	
E-mail Address	Stephen.Solis@ercot.com	
Company	ERCOT	
Phone Number	512-248-6772	
Cell Number	512-426-4721	
Market Segment	Not Applicable	

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

Comments Received		
Comment Author	Comment Summary	
ROS 041023	Requested PRS continue to table NPRR1164 for further review by the Network Data Support Working Group (NDSWG) and System Protection Working Group (SPWG)	
Oncor 061623	Documented Oncor's understanding of the implementation plans for NPRR1164	
ROS 070723	Endorsed NPRR1164 as submitted	

## **Market Rules Notes**

None

## **Proposed Protocol Language Revision**

### 2.1 **DEFINITIONS**

## **Black Start Capable Resource**

A physical Resource that can start without support of the ERCOT Transmission Grid and that a Resource Entity believes can meet the Black Start capability tests in Section 8.1.1.2.1.5, System Black Start Capability Qualification and Testing, excluding the 72 hour Back-up Fuel requirement in paragraph (1)(g) 72 hours Back-up Fuel requirement.

#### **Isochronous Control Capable Resource**

A Resource that is capable of controlling frequency in isochronous control mode instead of droop control mode during a Blackout or Partial Blackout.

## **Synchronism Check Relay**

A relay that electrically determines if the difference in voltage magnitude, frequency and phase angle falls within allowable limits for a breaker or switch to close. The Synchronism Check Relay will either allow or prevent closing depending on its settings.

### **Synchroscope**

A piece of equipment that is used to monitor voltage waveforms from the two sides of an open circuit breaker or disconnect switch to ensure that the voltage magnitude, frequency, and phase angle are close enough to close the breaker or switch.

#### 3.10.7.1.3 Transmission Breakers and Switches

- (1) ERCOT's Network Operations Model must include all transmission breakers and switches, the operation of which may cause a change in the flow on transmission lines or Electrical Buses. Breakers and switches may only be connected to defined Electrical Buses.
- (2) Each TSP and Resource Entity shall provide ERCOT with the following information, subject to the naming conventions in Section 3.10.7.1, Modeling of Transmission Elements and Parameters:

[NPRR857: Replace paragraph (2) 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:]

(2) Each TSP, DCTO, and Resource Entity shall provide ERCOT with the following information, subject to the naming conventions in Section 3.10.7.1, Modeling of Transmission Elements and Parameters:

- (a) Equipment owner(s);
- (b) Equipment operator(s);
- (c) The Transmission Element name;
- (d) The substation name;
- (e) Connectivity;
- (f) Normal status;
- (g) Synchronism Ceheck Relay phase angle limits that are applied to operator-initiated, non-automated control actions of TSP-owned transmission breakers; and

[NPRR857: Replace item (g) 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:]

- (g) Synchronism <u>Ceheck R</u>relay phase angle limits that are applied to operatorinitiated, non-automated control actions of TSP-owned or DCTO-owned transmission breakers; and
- (h) Other data necessary to model Transmission Element(s).
- (3) ERCOT shall develop methods to accurately model changes in transmission line loading resulting from Load rollover schemes transferring more than ten MW. This may include modeling distribution circuit breakers, dead line sensing, or other methods that signal when the Load should be transferred from one transmission line to another transmission line. ERCOT may employ heuristic rule sets for all manual Load transfers and for automated transfers where feasible. ERCOT application software is required to model the effects of automatic or manual schemes in the field transfer Load under line outage conditions. Each TSP and as applicable, Resource Entity, shall define the Load rollover schemes under Section 3.10.7.2, Modeling of Resources and Transmission Loads, and furnish this information to ERCOT. Transmission field (right-of-way) switches must be connected to a named Electrical Bus and be included in the Network Operations Model.

[NPRR857: Replace paragraph (3) above with the following upon system implementation and satisfying the following conditions: (1) Southern Cross provides ERCOT with funds to cover the entire estimated cost of the project; and (2) Southern Cross has signed an interconnection agreement with a TSP and the TSP gives ERCOT written notice that Southern Cross has provided it with: (a) Notice to proceed with the construction of the

interconnection; and (b) The financial security required to fund the interconnection facilities:]

(3) ERCOT shall develop methods to accurately model changes in transmission line loading resulting from Load rollover schemes transferring more than ten MW. This may include modeling distribution circuit breakers, dead line sensing, or other methods that signal when the Load should be transferred from one transmission line to another transmission line. ERCOT may employ heuristic rule sets for all manual Load transfers and for automated transfers where feasible. ERCOT application software is required to model the effects of automatic or manual schemes in the field transfer Load under line outage conditions. Each TSP and as applicable, each DCTO and Resource Entity, shall define the Load rollover schemes under Section 3.10.7.2, Modeling of Resources and Transmission Loads, and furnish this information to ERCOT. Transmission field (right-of-way) switches must be connected to a named Electrical Bus and be included in the Network Operations Model.

#### 3.14.2 Black Start

- (1) Each Generation Resource providing BSS must meet the requirements specified in North American Electric Reliability Corporation (NERC) Reliability Standards and the Operating Guides.
- (2) Each Generation Resource providing BSS must meet the technical requirements specified in Section 8.1.1, QSE Ancillary Service Performance Standards, and Section 8.1.1.1, Ancillary Service Qualification and Testing.
- (3) Bids for BSS are due on or before February 15<sup>th</sup> of each three-year period. Bids must be evaluated based on evaluation criteria attached as an appendix to the request for bids and contracted by December 31<sup>st</sup> for the following three-year period. ERCOT shall ensure BSSs are arranged, provided, and deployed as necessary to reenergize the ERCOT System following a Blackout or Partial Blackout.
  - (a) Resources shall disclose any weather-related limitations that could affect the Resource's ability to provide BSS using the form provided in Section 22, Attachment M, Generation Resource Disclosure Regarding Bids for Black Start Service, as part of a bid to provide BSS.
  - (b) BSS bids shall include the hourly stand-by price and the BSS Back-up Fuel costs where applicable.
  - (c) When a Resource is selected to provide BSS, the Black Start Resource shall be required to complete all applicable testing requirements as specified in Section 8.1.1.2.1.5, System Black Start Capability Qualification and Testing.
  - (d) ERCOT shall provide a list of all prospective Black Start Resources that responded to the RFP for BSS to the impacted TSPs no later than seven days after

the date on which bids for BSS are due. Any feedback from affected TSPs shall be limited to the identification of transmission constraints that may adversely impact the ability of the Black Start Resource to energize the Next Start Resource and shall be due to ERCOT by March 1st of that year. ERCOT shall share the feedback with the QSE representing the prospective Black Start Resource as soon as practicable. The QSE representing the Black Start Resource shall have the option to provide a response to any feedback provided by an affected TSP.

- (4) ERCOT may schedule unannounced Black Start testing, to verify that BSS is operable as specified in Section 8.1.1.2.1.5.
- (5) QSEs representing Generation Resources contracting for BSSs shall participate in training and restoration drills coordinated by ERCOT.
- (6) ERCOT shall periodically determine and review the location and number of Black Start Resources required, as well as any special transmission or voice communication needs required. ERCOT and providers of this service shall meet the requirements as specified in the Operating Guides and in NERC Reliability Standards.
- (7) A Resource Entity representing a Black Start Resource may request that an alternate Generation Resource which is connected to the same black start primary and secondary cranking path as the original Black Start Resource be substituted in place of the original Black Start Resource during the three year term of an executed Standard Form Black Start Agreement (Section 22, Attachment D, Standard Form Black Start Agreement) if the alternate Generation Resource meets testing and verification under established qualification criteria to ensure BSS.
  - (a) ERCOT, in its sole discretion, may reject a Resource Entity's request for an alternate Generation Resource and will provide the Resource Entity an explanation of such rejection.
  - (b) If ERCOT accepts the alternative Generation Resource as the substituted Black Start Resource, such acceptance shall not affect the original terms, conditions and obligations of the Resource Entity under the Standard Form Black Start Agreement. The Resource Entity shall submit to ERCOT an Amendment to Standard Form Black Start Agreement (Section 22, Attachment I, Amendment to Standard Form Black Start Agreement) after qualification criteria has been met.
- (8) For the purpose of the Black Start Hourly Standby Fee as described in Section 6.6.8.1, Black Start Hourly Standby Fee Payment, the Black Start Service Availability Reduction Factor shall be determined by using the availability for the original Black Start Resource and any substituted Black Start Resource(s), as appropriate for the rolling 4380-hour period of the evaluation.
- (9) Each Generation Resource selected to provide BSS shall be prepared and able to provide BSS at any time as may be required by ERCOT, subject only to the limitations described in ERCOT Protocols or the Black Start Agreement.

- (10) Each Generation Resource selected to provide BSS shall be able to utilize BSS Back-up Fuel for BSS and shall maintain a contracted amount of BSS Back-up Fuel to run the Black Start Resource for a minimum of 72 hours at its maximum output. The Generation Resource shall maintain the contracted amount of BSS Back-up Fuel at all times during the duration of the BSS contract term unless performing a BSS Back-up Fuel Switching Test or the Generation Resource is operating pursuant to a Black Start deployment event. This requirement does not apply to Resources that do not rely on purchased fuel.
- (11) A Black Start Resource may utilize the contracted amount of BSS Back-up Fuel outside of BSS if ERCOT determines it is necessary during an Energy Emergency Alert (EEA) event.
- (12) A Black Start Resource is not obligated to contract its full on site fuel storage capability for BSS Back-up Fuel. On site backup fuel in excess of the contracted BSS Back-up Fuel amount may be used by the Generation Resource at the discretion of the Generation Resource and ERCOT shall not prevent the Black Start Resource from utilizing the excess fuel, nor shall the Black Start Resource be required to request permission from ERCOT to utilize fuel in excess of the contracted BSS Back-up Fuel amount.
- (13) ERCOT may, at its discretion, waive the BSS Back-up Fuel requirement stated in this Section, in whole or in part, if ERCOT deems necessary in order to procure a sufficient number or preferred combination of Generation Resources to provide BSS.
- (14) A Resource Entity that submits a bid or is contracted to provide BSS or serve as an alternate to provide BSS with a Switchable Generation Resource (SWGR):
  - (a) Shall not nominate the SWGR to satisfy supply adequacy or capacity planning requirements in any Control Area other than the ERCOT Region during the term of the BSS contract;
  - (b) Shall submit a report to ERCOT in compliance with paragraph (2) of Section 16.5.4, Maintaining and Updating Resource Entity Information, indicating that the SWGR does not have any contractual requirement in a non-ERCOT Control Area during the term of the BSS contract; and
  - (c) Shall take any further action requested by ERCOT to ensure that ERCOT will be classified as the "Primary Party" for the SWGR under any agreement between ERCOT and another Control Area Operator during the term of the BSS contract.
- (15) If a Resource Entity with a SWGR is contracted to provide BSS or designated as an alternate to provide BSS, the Resource Entity shall have its Black Start plan procedures approved by ERCOT. In the event of a Partial Blackout or Blackout of the ERCOT System, the Resource Entity with a SWGR shall immediately:
  - (a) Effectuate its Black Start plan procedures to be available to provide BSS; and
  - (b) Provide BSS as directed by ERCOT or the local Transmission Operator (TO).

- (16) Each Resource Entity shall identify in its Resources Registration data if its Resource is a Black Start Capable Resource and an Isochronous Control Capable Resource.
- (17) Each Resource Entity and each TSP shall identify in the Network Operations Model if a modeled breaker or switch it operates or directs the operation of has a Synchroscope and a Synchronism Check Relay associated with the breaker or switch.

# **ERCOT Impact Analysis Report**

NPRR Number	<u>1164</u>	NPRR Title	Black Start and Isochronous Control Capable Identification		
Impact Analysis Date		February 21, 2023			
Estimated Cost/Budgetary Impact		Between \$75k and \$125k			
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: 6 to 9 months			
ERCOT Staffing Impacts (across all areas)		Implementation Labor: 100% ERCOT; 0% Vendor Ongoing Requirements: No impacts to ERCOT staffing.			
ERCOT Comp System Impa		• Grid • Ene • Res	ing ERCOT systems would be impacted:  d Modeling Systems 46% ergy Management Systems 38% source Integration and Ongoing Operations (RIOO) 8% a Management & Analytic Systems 8%		
ERCOT Busin Function Imp		ERCOT will update its business processes to implement this NPRR.			
Grid Operation Practices Imp		No impacts	s to ERCOT grid operations and practices.		

Evaluation of Interim Solutions or Alternatives for a More Efficient Implementation

None offered.

Comments	
None.	

NPRR Number	<u>1165</u>	NPRR Title	Revisions to Requirements of Providing Audited Financial Statements and Providing Independent Amount		
Date of Decision		August 31, 2023			
Action		Recommended Approval			
Timeline		Normal			
Proposed Effective Date		Upon system implementation			
Priority and Rank Assigned		Priority – 2	Priority – 2023; Rank – 3800		
Nodal Protocol Sections Requiring Revision		16.2.1, Criteria for Qualification as a Qualified Scheduling Entity 16.11, Financial Security for Counter-Parties 16.11.5, Monitoring of a Counter-Party's Creditworthiness and Credit Exposure by ERCOT 16.11.8, Conversion of Letters of Credit and Surety Bonds to Cash Collateral 16.16.1, Counter-Party Criteria 16.16.2, Annual Certification 16.16.3, Verification of Risk Management Framework 16.17, Exemption for Qualified Scheduling Entities Participating Only in Emergency Response Service 22, Attachment J, Annual Certification Form to Meet ERCOT Additional Minimum Participation Requirements			
Related Doo Requiring Revision/Re Revision Re	elated	Guarantee Credit App	Agreement (being repealed) lication		
Revision De	escription	market ent ERCOT Co and Conge changes in Remov Requiri Amoun Remov	ring minimum capitalization requirements; ing all ERCOT Counter-Parties to post Independent		

	Referencing International Financial Reporting Standards (IFRS) rather than retired International Accounting Standards (IAS).	
Reason for Revision	Addresses current operational issues.  Meets Strategic goals (tied to the <u>ERCOT Strategic Plan</u> or directed by the ERCOT Board).  Market efficiencies or enhancements  Administrative  Regulatory requirements  Other: (explain) (please select all that apply)	
Business Case	NPRR1112, Elimination of Unsecured Credit Limits, eliminates unsecured credit extended to ERCOT Counter-Parties effective October 1, 2023.  The Protocols currently allow Counter-Parties to avoid posting Independent Amounts based on their own financial statements. A Counter-Party may also avoid posting the Independent Amount by providing its parent's or a third-party's financial statements. This is accomplished by posting a Guarantee Agreement with a face-value of a nominal amount (generally, \$5,000).  Allowing Counter-Parties to avoid paying the Independent Amount is inconsistent with the policy underlying NPRR1112, which eliminated unsecured credit. Under the proposed revision, all Counter-Parties will be required to post an Independent Amount, which further protects ERCOT marketplace from potential losses.  Additionally, financial statements of a non-parent company do not provide useful information to ERCOT in evaluating the financial condition of Counter-Parties. However, it is beneficial for ERCOT to be able to review financial statements of either the Counter-Party or its Ultimate Parent. This NPRR clarifies that financial statements of either the Counter-Party or its Ultimate Parent are required by ERCOT, and adds a definition of Ultimate Parent to be "an Entity that is not controlled by any other Entity."	
PRS Decision	On 4/13/23, PRS voted unanimously to table NPRR1165 and refer the issue to the Credit Finance Sub Group (CFSG). All Market Segments participated in the vote.  On 6/14/23, PRS voted to recommend approval of NPRR1165 as amended by the 4/28/23 ERCOT comments. There was one	

	opposing vote from the Municipal (CPS Energy) Market Segment. All Market Segments participated in the vote.
	On 7/13/23, PRS voted to endorse and forward to TAC the 6/14/23 PRS Report and 2/23/23 Impact Analysis for NPRR1165 with a recommended priority of 2023 and rank of 3800. There were three abstentions from the Independent Generator (Eolian) and Municipal (2) (CPS Energy, GEUS) Market Segments. All Market Segments participated in the vote.
	On 4/13/23, ERCOT Staff provided an overview of NPRR1165.
Summary of PRS Discussion	On 6/14/23, participants reviewed the 4/28/23 ERCOT comments, the 5/23/23 CFSG comments, and ERCOT Staff reviewed the purpose of NPRR1165.
	On 7/13/23, there was no discussion
TAC Decision	On 7/25/23, TAC voted to recommend approval of NPRR1165 as recommended by PRS in the 7/13/23 PRS Report. There was one opposing vote from the Municipal (CPS Energy) Market Segment. All Market Segments participated in the vote.
Summary of TAC Discussion	On 7/25/23, TAC reviewed the ERCOT Opinion, ERCOT Market Impact Statement, and Independent Market Monitor (IMM) Opinion for NPRR1165.
ERCOT Board Decision	On 8/31/23, the ERCOT Board voted unanimously to recommend approval of NPRR1165 as recommended by TAC in the 7/25/23 TAC Report.

Opinions		
Credit Review	See 6/26/23 CFSG Comments	
Independent Market Monitor Opinion	IMM has no opinion on NPRR1165.	
ERCOT Opinion	ERCOT supports approval of NPRR1165.	
ERCOT Market Impact Statement	ERCOT Staff has reviewed NPRR1165 and believes the market impact for NPRR1165 strengthens ERCOT's market entry eligibility and continued participation requirements for ERCOT Counter-Parties (i.e., QSEs and CRR Account Holders).	

Sponsor	
Name	Katherine Gross / Sanchir Dashnyam

E-mail Address	Katherine.Gross@ercot.com / Sanchir.Dashnyam@ercot.com
Company	ERCOT
Phone Number	512-225-7184 / 832-212-1800
Cell Number	216-224-3943 / 832-212-1800
Market Segment	Not applicable

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

Comments Received		
Comment Author	Comment Summary	
DC Energy 032423	Proposed revisions to the definition of "Ultimate Parent"	
ERCOT 042823	Proposed additional revisions to the 3/24/23 DC Energy comments to remove the phrase "fully consolidating" from the term, "Ultimate Parent"	
CFSG 052323	Endorsed NPRR1165 as amended by the 4/28/23 ERCOT comments	
CFSG 062623	Noted NPRR1165 has positive credit impacts	

#### **Market Rules Notes**

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

- NPRR1150, Related to NOGRR230, WAN Participant Security
  - o Section 16.2.1
- NPRR1162, Single Agent Designation for a QSE and its Sub-QSEs for Voice Communications over the ERCOT WAN
  - o Section 16.2.1
- NPRR1175, Revisions to Market Entry Financial Qualifications and Continued Participation Requirements
  - o Section 16.2.1

#### **Proposed Protocol Language Revision**

#### 16.2.1 Criteria for Qualification as a Qualified Scheduling Entity

Commented [CP1]: Please note NPRRs 1150, 1162, and 1175 also propose revisions to this section.

- (1) To become and remain a Qualified Scheduling Entity (QSE), an Entity must meet the following requirements:
  - (a) Submit a properly completed QSE application for qualification, including any applicable fee, necessary disclosures, and designation of Authorized Representatives, each of whom is responsible for administrative communications with the QSE and each of whom has enough authority to commit and bind the QSE and the Entities it represents;
  - (b) Sign a Standard Form Market Participant Agreement,
  - (c) Sign any required Agreements relating to use of the ERCOT network, software, and systems;
  - (d) Demonstrate to ERCOT's reasonable satisfaction that the Entity is capable of performing the functions of a QSE;
  - (e) Demonstrate to ERCOT's reasonable satisfaction that the Entity is capable of complying with the requirements of all ERCOT Protocols and Operating Guides;
  - (f) Satisfy ERCOT's creditworthiness and capitalization requirements as set forth in this Section, unless exempted from these requirements by Section 16.17, Exemption for Qualified Scheduling Entities Participating Only in Emergency Response Service;
  - (g) Be generally able to pay its debts as they come due. ERCOT may request evidence of compliance with this qualification only if ERCOT reasonably believes that a QSE is failing to comply with it;
  - (h) Provide all necessary bank account information and arrange for Fedwire system transfers for two-way confirmation;
  - Be financially responsible for payment of Settlement charges for those Entities it represents under these Protocols;
  - (j) Comply with the backup plan requirements in the Operating Guides;
  - (k) Maintain a 24-hour, seven-day-per-week scheduling center with qualified personnel for the purposes of communicating with ERCOT relating to Day-Ahead and Operating Day exchange of market and operational obligations in representing Load, Resources, and market positions. Those personnel must be responsible for operational communications and must have sufficient authority to commit and bind the QSE and the Entities that it represents. This requirement applies to QSE Level 2, 3, and 4, as defined in Section 2.1, Definitions;
  - (1) Maintain a scheduling center for the hours of 0900 to 1700 Central Prevailing Time (CPT) on Business Days with qualified personnel for the purposes of

communicating with ERCOT relating to Day-Ahead and Operating Day exchange of market and operational obligations in representing Load, Resources, and market positions. Those personnel must be responsible for operational communications and must have sufficient authority to commit and bind the QSE and the Entities that it represents. This requirement applies to QSE Level 1, as defined in Section 2.1;

- (m) Demonstrate and maintain a working functional interface with all required ERCOT computer systems; and
- (n) Allow ERCOT, upon reasonable notice, to conduct a site visit to verify information provided by the QSE.
- (2) If a QSE chooses to use Electronic Data Interchange (EDI) transactions to receive Settlement Statements and Invoices, it must participate in and successfully complete testing as described in Section 19.8, Retail Market Testing, before starting operations with ERCOT as a QSE.
- (3) A QSE or QSE applicant must be able to demonstrate to ERCOT's reasonable satisfaction that none of its Principals were or are Principals of any Entity with an outstanding payment obligation that remains owing to ERCOT under any Agreement or these Protocols. For purposes of this Section, ERCOT will only consider disqualifying those Principals of the QSE or QSE applicant who were Principals of the other Entity at a time during which the unpaid financial obligation remained owing to ERCOT or during the 120-day period prior to the date on which the unpaid financial obligation first became due and owing to ERCOT.
- (4) If any of a QSE's or QSE applicant's Principals were or are Principals of a terminated Market Participant with an obligation for Default Uplift Ratio Share allocated under Section 9.19.1, Default Uplift Invoices, the terminated Market Participant must be current on all payment obligations for Default Uplift Invoices in order for the QSE to remain, or QSE applicant to become, a registered QSE. For purposes of this Section, ERCOT will only consider as disqualifying those Principals of the QSE or QSE applicant who were Principals of the other Entity at a time during which the other Entity was not current on its payment obligation for Default Uplift Invoices or 120 days prior to the date the other Entity first failed to pay a Default Uplift Invoice.
- (5) A QSE shall promptly notify ERCOT of any change that a reasonable examiner may deem material to the QSE's ability to continue to meet the requirements set forth in this Section, and any material change in the information provided by the QSE to ERCOT that may adversely affect the reliability or safety of the ERCOT System or the financial security of ERCOT. This includes any changes in the Principals of the QSE. If the QSE fails to so notify ERCOT of such change within two Business Days after becoming aware of the change, then ERCOT may, after providing notice to each Entity represented by the QSE, refuse to allow the QSE to perform as a QSE and take any other action ERCOT deems appropriate, in its sole discretion, to prevent ERCOT or Market Participants from

bearing potential or actual risks, financial or otherwise, arising from those changes, and in accordance with these Protocols.

- (6) Subject to the following provisions of this paragraph, a QSE may partition itself into any number of subordinate QSEs ("Subordinate QSEs"). If a single Entity requests to partition itself into more than four Subordinate QSEs, ERCOT may implement the request subject to ERCOT's reasonable determination that the additional requested Subordinate QSEs will not be likely to overburden ERCOT's staffing or systems. ERCOT shall adopt an implementation plan allowing phased-in registration for these additional Subordinate QSEs in order to mitigate system or staffing impacts. However, ERCOT may not unreasonably delay that registration.
- (7) Each Subordinate QSE must be treated as an individual QSE for all purposes including communications and control functions except for liability, financial security, and financial liability requirements under this Section. That liability, financial security, and financial liability is cumulative for all Subordinate QSEs for the single Entity signing the QSE Agreement.
- (8) Continued qualification as a QSE is contingent upon compliance with all applicable requirements in these Protocols. ERCOT may suspend a QSE's rights as a Market Participant when ERCOT reasonably determines that it is an appropriate remedy for the Entity's failure to satisfy any applicable requirement.
- (9) Each QSE, or its designated QSE agent, representing one or more Resources shall be connected to the ERCOT Wide Area Network (WAN) and maintain 24-hour, seven-dayper-week operations and Hotline communications with ERCOT. Each QSE representing one or more Resources shall answer each QSE Hotline call.

#### 16.11 Financial Security for Counter-Parties

- (1) The term "Financial Security" in this Section means the collateral amount posted with ERCOT in any of the forms listed in Section 16.11.3, Alternative Means of Satisfying ERCOT Creditworthiness Requirements.
- (2) The term "Secured Collateral" in this Section means the collateral posted by a Counter-Party with ERCOT in the form of an unconditional, irrevocable letter of credit, a surety bond naming ERCOT as the beneficiary, or cash.

[NPRR1112: Delete paragraph (2) above upon system implementation and October 1, 2023, and renumber accordingly.]

(3) The term "Remainder Collateral" in this Section means the Secured Collateral minus Total Potential Exposure Secured (TPES) minus Net Positive Exposure of approved Congestion Revenue Right (CRR) Bilateral Trades minus Available Credit Limit (ACL) locked for CRR Auction, calculated in accordance with paragraph (3) of Section 16.11.4.6.1, Credit Requirements for CRR Auction Participation.

[NPRR1112: Replace paragraph (3) above with the following upon system implementation and October 1, 2023:]

- (2) The term "Remainder Collateral" in this Section means the Financial Security minus Total Potential Exposure Secured (TPES) minus Net Positive Exposure of approved Congestion Revenue Right (CRR) Bilateral Trades minus Available Credit Limit (ACL) locked for CRR Auction, calculated in accordance with paragraph (3) of Section 16.11.4.6.1, Credit Requirements for CRR Auction Participation.
- (4) The term "Ultimate Parent" in this Section is defined as the most distant fully consolidating parent that prepares consolidated financial statements within the hierarchical ownership structurerefers to an Entity that is not controlled by any other Entity.

#### 16.11.5 Monitoring of a Counter-Party's Creditworthiness and Credit Exposure by ERCOT

- ERCOT shall monitor the creditworthiness and credit exposure of each Counter-Party-or
  its guarantor, if any. To enable ERCOT to monitor creditworthiness, each Counter-Party
  shall provide to ERCOT:
  - (a) Its own or its <u>Ultimate Parentguarantor</u>'s quarterly (semi-annually, if the <u>Ultimate Parentguarantor</u> is foreign and rated by a rating agency acceptable to ERCOT) unaudited financial statements not later than 60 days (90 days if the <u>Ultimate Parentguarantor</u> is foreign and rated by a rating agency acceptable to ERCOT) after the close of each of the issuer's fiscal quarters; if an issuer's financial statements are publicly available electronically and the issuer provides to ERCOT sufficient information to access those financial statements, then the issuer is considered to have met this requirement.
  - (b) Its own or its <u>Ultimate Parentguarantor</u>'s annual audited financial statements not later than 120 days after the close of each of the issuer's fiscal year; if an issuer's financial statements are publicly available electronically and the issuer provides to ERCOT sufficient information to access those financial statements, then the issuer is considered to have met this requirement. ERCOT may extend the period for providing interim unaudited or annual audited statements on a case-by-case basis. Annual audited financial statements must be prepared in accordance with U.S. Generally Accepted Accounting Principles (GAAP) or <u>Financial Reporting Standards (IFRS)International Accounting Standards (IAS)</u>.
  - (c) For paragraphs (a) and (b) above, financial statements shall include the Counter-Party's or its <u>Ultimate Parentguarantor</u>'s:
    - Statement of Financial Position (balance sheet) as of the applicable quarterly or annual ending date;
    - (ii) Statement of Income (or Profit and Loss); and

- (iii) Statement of Cash Flows.
- (d) Notice of a material change. A Counter-Party that has been granted an Unsecured Credit Limit pursuant to Section 16.11.2, Requirements for Setting a Counter-Party's Unsecured Credit Limit, shall inform ERCOT within one Business Day if it has experienced a material change in its operations, financial condition or prospects that might adversely affect the Counter-Party and require a revision to its Unsecured Credit Limit. ERCOT may require the Counter-Party to meet one of the credit requirements of Section 16.11.3, Alternative Means of Satisfying ERCOT Creditworthiness Requirements.
- (2) A Counter-Party is responsible at all times for maintaining:
  - (a) Secured Collateral in an amount equal to or greater than that Counter-Party's
    - (i) TPES; plus
    - (ii) Net Positive Exposure of approved CRR Bilateral Trades; plus
    - (iii) ACL locked for CRR Auction, if any; and
  - (b) Remainder Collateral plus Financial Security defined as guarantees in paragraph
     (a) of Section 16.11.3 in an amount equal to or greater than that Counter-Party's
    - (i) TPEA; minus
    - (ii) Unsecured Credit Limit.
- (3) ERCOT shall promptly notify each Counter-Party of the need to increase its Financial Security, including whether Secured Collateral must be provided, and allow the Counter-Party time, as defined in paragraph (6)(a) below, to provide additional Financial Security to maintain compliance with this Section.
- (4) When either the Counter-Party's TPEA or TPES as defined in Section 16.11.4, Determination and Monitoring of Counter-Party Credit Exposure, reaches 90% of its requirement, ERCOT shall use reasonable efforts to electronically issue a warning to the Counter-Party's Authorized Representative and credit contact advising the Counter-Party that it should consider increasing its Financial Security. However, failure to issue that warning does not prevent ERCOT from exercising any of its other rights under this Section.
- (5) ERCOT may suspend a Counter-Party when:
  - (a) That Counter-Party's TPES as defined in Section 16.11.4, equals or exceeds 100% of its Secured Collateral; or
  - (b) That Counter-Party's TPEA as defined in Section 16.11.4 equals or exceeds 100% of the sum of its Unsecured Credit Limit and its Remainder Collateral.

The Counter-Party is responsible at all times for managing its activity within both its TPEA and its TPES or increasing its Financial Security to avoid reaching its limits. Any failure by ERCOT to send a Notice as set forth in this Section does not relieve the Counter-Party from the obligation to maintain appropriate Financial Security in amounts equal to or greater than that Counter-Party's TPES and TPEA as defined in Section 16.11.4.

- (6) To the extent that a Counter-Party fails to maintain Secured Collateral in amounts equal to or greater than its TPES or Remainder Collateral in amounts equal to or greater than its TPEA, each as defined in Section 16.11.4:
  - (a) ERCOT shall promptly notify the Counter-Party of the amount by which its Financial Security must be increased, including whether Secured Collateral must be provided and allow it:
    - (i) Until 1500 on the second Bank Business Day from the date on which ERCOT delivered the Notice to increase its Financial Security if ERCOT delivered its Notice before 1500; or
    - (ii) Until 1700 on the second Bank Business Day from the date on which ERCOT delivered Notification to increase its Financial Security if ERCOT delivered its Notice after 1500 but prior to 1700.

ERCOT shall notify the QSE's Authorized Representative(s) and Credit Contact if it has not received the required security by 1530 on the Bank Business Day on which the security was due; however, failure to notify the Counter-Party's representatives or contact that the required security was not received does not prevent ERCOT from exercising any of its other rights under this Section.

- (b) At the same time ERCOT notifies the Counter-Party that is the QSE, ERCOT may notify each LSE and Resource represented by the Counter-Party that the LSE or Resource may be required to designate a new QSE if its current QSE fails to increase its Financial Security.
- (c) ERCOT is not required to make any payment to that Counter-Party unless and until the Counter-Party increases its Financial Security, including any Secured Collateral required. The payments that ERCOT will not make to a Counter-Party include Invoice receipts, CRR revenues, CRR credits, reimbursements for short payments, and any other reimbursements or credits under any other agreement between the Market Participant and ERCOT. ERCOT may retain all such amounts until the Counter-Party has fully discharged all payment obligations owed to ERCOT under the Counter-Party Agreement, other agreements, and these Protocols.
- (d) ERCOT may reject any bids or offers in a CRR Auction from the Counter-Party until it has increased its Financial Security, including any Secured Collateral required. ERCOT may reject any bids or offers from the Counter-Party in the DAM until it has increased its Financial Security.

- (7) If a Counter-Party increases its Financial Security as required by ERCOT by the deadline in paragraph (6)(a) above, then ERCOT may notify each LSE and Resource represented by the Counter-Party.
- (8) If a Counter-Party increases its Financial Security as required by ERCOT by the deadline in paragraph (6)(a) above, then ERCOT shall release any payments held.

[NPRR1112: Replace Section 16.11.5 above with the following upon system implementation and October 1, 2023:]

# 16.11.5 Monitoring of a Counter-Party's Creditworthiness and Credit Exposure by ERCOT

- ERCOT shall monitor the creditworthiness and credit exposure of each Counter-Party or its guarantor, if any. To enable ERCOT to monitor creditworthiness, each Counter-Party shall provide to ERCOT:
  - (a) Its own or its <u>Ultimate Parentguarantor</u>'s quarterly (semi-annually, if the <u>Ultimate Parentguarantor</u> is foreign and rated by a rating agency acceptable to ERCOT) unaudited financial statements not later than 60 days (90 days if the <u>Ultimate Parentguarantor</u> is foreign and rated by a rating agency acceptable to ERCOT) after the close of each of the issuer's fiscal quarters; if an issuer's financial statements are publicly available electronically and the issuer provides to ERCOT sufficient information to access those financial statements, then the issuer is considered to have met this requirement.
  - (b) Its own or its <u>Ultimate Parentguarantor</u>'s annual audited financial statements not later than 120 days after the close of each of the issuer's fiscal year; if an issuer's financial statements are publicly available electronically and the issuer provides to ERCOT sufficient information to access those financial statements, then the issuer is considered to have met this requirement. ERCOT may extend the period for providing interim unaudited or annual audited statements on a case-by-case basis. Annual audited financial statements must be prepared in accordance with U.S. Generally Accepted Accounting Principles (GAAP) or <u>International Accounting Standards (IAS)Financial Reporting Standards</u> (IFRS).
  - (c) For paragraphs (a) and (b) above, financial statements shall include the Counter-Party's or its <u>Ultimate Parentguarantor</u>'s:
    - (i) Statement of Financial Position (balance sheet) as of the applicable quarterly or annual ending date;
    - (ii) Statement of Income (or Profit and Loss); and
    - (iii) Statement of Cash Flows.

- (d) Notice of a material change. A Counter-Party shall inform ERCOT within one Business Day if it has experienced a material change in its operations, financial condition or prospects that might adversely affect the Counter-Party.
- (e) Any guarantor of a Counter Party that submits its own financial statements pursuant to this section must provide a guarantee in one of the standard form documents approved by the ERCOT Board of Directors and be approved by ERCOT. No modifications of such forms are permitted.
- (2) A Counter-Party is responsible at all times for maintaining:
  - (a) Financial Security in an amount equal to or greater than that Counter-Party's
    - (i) TPES; plus
    - (ii) Net Positive Exposure of approved CRR Bilateral Trades; plus
    - (iii) ACL locked for CRR Auction, if any; and
  - (b) Remainder Collateral in an amount equal to or greater than that Counter-Party's TPEA.
- (3) ERCOT shall promptly notify each Counter-Party of the need to increase its Financial Security and allow the Counter-Party time, as defined in paragraph (6)(a) below, to provide additional Financial Security to maintain compliance with this Section.
- (4) When either the Counter-Party's TPEA or TPES as defined in Section 16.11.4, Determination and Monitoring of Counter-Party Credit Exposure, reaches 90% of its requirement, ERCOT shall use reasonable efforts to electronically issue a warning to the Counter-Party's Authorized Representative and credit contact advising the Counter-Party that it should consider increasing its Financial Security. However, failure to issue that warning does not prevent ERCOT from exercising any of its other rights under this Section.
- (5) ERCOT may suspend a Counter-Party when:
  - (a) That Counter-Party's TPES as defined in Section 16.11.4, equals or exceeds 100% of its Financial Security; or
  - (b) That Counter-Party's TPEA as defined in Section 16.11.4 equals or exceeds 100% of its Remainder Collateral.

The Counter-Party is responsible at all times for managing its activity within both its TPEA and its TPES or increasing its Financial Security to avoid reaching its limits. Any failure by ERCOT to send a Notice as set forth in this Section does not relieve the Counter-Party from the obligation to maintain appropriate Financial Security in

amounts equal to or greater than that Counter-Party's TPES and TPEA as defined in Section 16.11.4.

- (6) To the extent that a Counter-Party fails to maintain Financial Security in amounts equal to or greater than its TPES or Remainder Collateral in amounts equal to or greater than its TPEA, each as defined in Section 16.11.4:
  - (a) ERCOT shall promptly notify the Counter-Party of the amount by which its Financial Security must be increased and allow it:
    - (i) Until 1500 on the second Bank Business Day from the date on which ERCOT delivered the Notice to increase its Financial Security if ERCOT delivered its Notice before 1500; or
    - (ii) Until 1700 on the second Bank Business Day from the date on which ERCOT delivered Notification to increase its Financial Security if ERCOT delivered its Notice after 1500 but prior to 1700.

ERCOT shall notify the QSE's Authorized Representative(s) and Credit Contact if it has not received the required security by 1530 on the Bank Business Day on which the security was due; however, failure to notify the Counter-Party's representatives or contact that the required security was not received does not prevent ERCOT from exercising any of its other rights under this Section.

- (b) At the same time ERCOT notifies the Counter-Party that is the QSE, ERCOT may notify each LSE and Resource represented by the Counter-Party that the LSE or Resource may be required to designate a new QSE if its current QSE fails to increase its Financial Security.
- (c) ERCOT is not required to make any payment to that Counter-Party unless and until the Counter-Party increases its Financial Security. The payments that ERCOT will not make to a Counter-Party include Invoice receipts, CRR revenues, CRR credits, reimbursements for short payments, and any other reimbursements or credits under any other agreement between the Market Participant and ERCOT. ERCOT may retain all such amounts until the Counter-Party has fully discharged all payment obligations owed to ERCOT under the Counter-Party Agreement, other agreements, and these Protocols.
- (d) ERCOT may reject any bids or offers in a CRR Auction from the Counter-Party until it has increased its Financial Security. ERCOT may reject any bids or offers from the Counter-Party in the DAM until it has increased its Financial Security.
- (7) If a Counter-Party increases its Financial Security as required by ERCOT by the deadline in paragraph (6)(a) above, then ERCOT may notify each LSE and Resource represented by the Counter-Party.

(8) If a Counter-Party increases its Financial Security as required by ERCOT by the deadline in paragraph (6)(a) above, then ERCOT shall release any payments held.

[NPRR1023: Insert Section 16.11.8 below upon system implementation and renumber accordingly:]

#### 16.11.8 Conversion of Letters of Credit and Surety Bonds to Cash Collateral

(1) To facilitate Settlement of Market Participant Invoices arising in consequence of a Payment Breach or other Default by a Market Participant, including but not limited to those described in Section 16.11.6.1.4, Repossession of CRRs by ERCOT, Section 16.11.6.1.5, Declaration of Forfeit of CRRs, and Section 16.11.6.1.6, Liquidation of Repossessed or Forfeited CRRs, ERCOT may at its sole discretion initiate conversion of guarantees, letters of credit, or surety bonds held as Financial Security to cash collateral.

#### 16.16.1 Counter-Party Criteria

- (1) In order to participate in the ERCOT Real-Time, Day-Ahead and Congestion Revenue Right (CRR) markets, in addition to satisfying any other eligibility requirements set forth in the ERCOT Protocols, each Counter-Party must satisfy, and at all times remain in compliance with, the following requirements:
  - (a) Expertise in Markets. All employees or agents transacting in ERCOT markets pursuant to the ERCOT Protocols have had appropriate training and/or experience and are qualified and authorized to transact on behalf of the Counter-Party.
  - (b) <u>Market Operational Capabilities</u>. Counter-Party has appropriate market operating procedures and technical abilities to promptly and effectively respond to all ERCOT market communications.
  - (c) <u>Allowable Contract Participants</u>. Each Counter-Party must be one of the following:
    - (i) An "Appropriate Person" as defined in sections 4(c)(3)(A) through (J) of the Commodity Exchange Act (7 U.S.C. § 6(c)(3)(A)-(J));
    - (ii) An "Eligible Contract Participant," as defined in section 1a(18)(A) of the Commodity Exchange Act (7 U.S.C. § 1a(18)(A)) and in Commodity Futures Trading Commission (CFTC) regulation 1.3(m) (17 C.F.R. § 1.3(m)); or
    - (iii) A "person who actively participates in the generation, transmission, or distribution of electric energy," as that term is defined in the CFTC's final exemption order (78 Fed. Reg. 19,879).

ERCOT may request necessary information to verify compliance with this requirement.

- (d) <u>CapitalizationIndependent Amount</u>. Counter-Party, or an acceptable guarantor, shall provide an Independent Amountmaintain minimum capital as follows:
  - (i) For a Counter-Party seeking authorization to participate or participating in all ERCOT markets:
    - (A) \$10 million in total assets; or
    - (B) \$1 million in:
      - (1) Unencumbered assets for unrated Electric Cooperative (EC) and Municipal systems; or
      - (2) Tangible Net Worth for all other Entities.
  - (ii) For a Counter Party seeking authorization to participate or participating in all ERCOT markets except for the CRR market:
    - (A) \$5 million in total assets; or
    - (B) \$500,000 in:
      - (1) Unencumbered assets for unrated EC and Municipal systems; or
      - (2) Tangible Net Worth for all other Entities.
  - (iii) To fulfill the capitalization requirements above, a Counter Party must provide:
    - (A) Audited financial statements of the Counter Party or its guarantor in accordance with Section 16.11, Financial Security for Counter-Parties; and

[NPRR1112: Replace paragraph (A) above with the following upon system implementation and October 1, 2023:1

- (A) Audited financial statements of the Counter-Party or its guarantor in accordance with Section 16.11.5, Monitoring of a Counter-Party's Creditworthiness and Credit Exposure by ERCOT; and
- (B) If for a guarantor, a guarantee on one of the standard form documents approved by the ERCOT Board, for an amount no less

than the minimum necessary to meet the capitalization requirements.

- (iv) Regardless of whether the Counter Party or an acceptable guarantor meets the capitalization criteria above, ERCOT may nevertheless require the Counter-Party to meet the capitalization criteria by posting an Independent Amount in the event that the Counter-Party or a guarantor has a material change that may adversely affect the Counter-Party's or an acceptable guarantor's financial condition in conjunction with or subsequent to the most recent audited annual or unaudited quarterly financial statements. The Counter-Party shall notify ERCOT within one day after a material adverse change has occurred. The final determination of a material adverse change is solely within ERCOT's discretion.
- (v) In the event audited financial statements do not meet the capitalization requirements, or there has been a material adverse change in the financial condition of the Counter-Party or acceptable guarantor in conjunction with or subsequent to the most recent audited annual or unaudited quarterly financial statements, Counter-Party will provide an Independent Amount in the form and amount necessary to participate in the ERCOT markets as follows:
- (iA) For a Counter-Party seeking authorization to participate or participating in all ERCOT markets, \$500,000 Independent Amount.
- (iii) For a Counter-Party seeking authorization to participate or participating in all ERCOT markets except for the CRR market, \$200,000 Independent Amount.
- (iiiC) For purposes of assessment of the Independent Amount, ERCOT will deem a Counter-Party that is or is applying to be a CRR Account Holder as having a desire to participate in all ERCOT markets.
- (iv) Financial Security posted pursuant to this section is fully available to ERCOT in the event of the Counter-Party's Payment Breach.
- (VE) ERCOT shall add the Independent Amount to that Counter-Party's Total Potential Exposure Secured (TPES) pursuant to Section 16.11 and designate it as the Independent Amount. ERCOT will require Financial Security for the Independent Amount in the same way as it does for other TPES elements.
- (viF) Any non-payment of the Independent Amount is considered a Payment Breach pursuant to Section 16.11.6, Payment Breach and Late Payments by Market Participants. ERCOT may use any of the remedies provided in Section 16.11.6 to collect the Independent Amount for each Counter-Party.

(e) <u>Risk Management Capabilities</u>. Each Counter-Party shall maintain appropriate, comprehensive risk management capabilities with respect to the ERCOT markets in which the Counter-Party transacts or wishes to transact. ERCOT may review documentation supporting a Counter-Party's risk management framework as part of its processes for verifying the implementation of a Counter-Party's risk management framework as described in Section 16.16.3, Verification of Risk Management Framework.

#### 16.16.2 Annual Certification

- (1) Each Counter-Party must submit to ERCOT annually a notarized certificate, signed by an officer or executive with authority to bind the Counter-Party, in the form of Section 22, Attachment J, Annual Certification Form to Meet ERCOT Additional Minimum Participation Requirements, certifying that the Counter-Party is in compliance with each of the Counter-Party criteria and agrees to procedures for verification of its risk management framework as described in Section 16.16.3, Verification of Risk Management Framework.
- (2) The certificate must be received by ERCOT no later than 120 days after the close of the fiscal year of the Counter-Party or its <u>parentguarantor</u>. ERCOT may extend the period for providing the certificate on a case-by-case basis.
- (3) For new entry Counter-Parties, the certificate must be received by ERCOT prior to participation in any ERCOT markets.
- (4) A Counter-Party shall notify ERCOT within one day if it has experienced a material adverse change that would make its most recent annual certificate inaccurate.

#### 16.16.3 Verification of Risk Management Framework

- (1) ERCOT will periodically perform or cause to be performed procedures to assess the risk management framework of Counter-Parties, including its implementation.
- (2) ERCOT may retain a third party either to assess the sufficiency of the Counter-Party's risk management framework or to provide guidance and advice as to what constitutes appropriate content with respect to generally accepted risk management practices in their respective markets, commensurate and proportional in sophistication, scope and frequency to the volume of transactions and the nature and extent of risk taken by the Counter-Party.
- (3) ERCOT shall identify the nature and scope of generally accepted risk management practices in their respective markets by which Counter-Party risk management frameworks will be assessed. Key elements will include:
  - (a) The risk management framework is documented in a risk policy addressing market and credit risks that has been approved by a Counter-Party's risk management function which includes appropriate corporate persons or bodies that are independent of the Counter-Party's trading functions, such as a risk

management committee, a designated risk officer, participant Counter-Party's board or board committee, or, if applicable, a board or committee of the Counter-Party's parent company.

- (b) A Counter-Party maintains an organizational structure with clearly defined roles and responsibilities that clearly segregate trading and risk control functions.
- (c) There is clarity of authority specifying the transactions into which traders are allowed to enter.
- (d) A Counter-Party ensures that traders have adequate training and/or experience relative to their delegations of authority in systems and the markets in which they transact.
- (e) As appropriate, a Counter-Party has risk limits in place to control risk exposures.
- (f) A Counter-Party has reporting in place to ensure risks are adequately communicated throughout the organization.
- (g) A Counter-Party has processes in place for independent confirmation of executed transactions.
- (h) A Counter-Party performs a periodic valuation or mark-to-market of risk positions, as appropriate.
- (4) The ERCOT Board may approve minimum standards under an Other Binding Document.
- (5) Upon notice of being selected for verification, a Counter-Party will make available or submit to ERCOT, or a third party acting on ERCOT's behalf, such documentation as is necessary to provide evidence of the sufficiency and implementation of its risk management framework. Such information may include, but not be limited to, documents of the following nature: risk policies, organizational charts, Delegations of Authority, training records, risk limit structure, reporting frameworks, and relevant procedures, all in a level of detail acceptable to ERCOT. Along with such documentation, a Counter-Party will provide a written explanation to ERCOT or its agent of how its risk management framework conforms to the risk management standards noted above. Requested information and documents must be made available for review by ERCOT, or a third party acting on ERCOT's behalf, 30 days after Notice of the request. ERCOT will provide Counter-Party Notice of inadequate documentation and will give Counter-Party ten Business Days to correct the inadequacy. At ERCOT's sole discretion, these deadlines may be extended on a case-by-case basis.
- (6) If necessary, Counter-Parties will support the verification process by, among other things, making appropriate personnel available for interviews, permitting on-site observation of credit and risk management processes and procedures, and providing written responses to written inquiries on a timely basis. A Counter-Party may request that ERCOT or a third party performing verification on ERCOT's behalf perform the review on-site at the

Counter-Party's location. Any resulting additional expenses will in this case be the sole responsibility of the Counter-Party making the request.

- (7) ERCOT will perform procedures to verify the risk management framework at least annually for any Counter-Party if that Counter-Party or its <u>parentguarantor</u>:
  - (a) Is ineligible for unsecured credit under Section 16.11.2, Requirements for Setting a Counter-Party's Unsecured Credit Limit; and

# [NPRR1112: Replace paragraph (a) above with the following upon system implementation and October 1, 2023:]

- (a) Has had one or more late payments or represents a Qualified Scheduling Entity (QSE) or CRR Account Holder that has short-paid Settlement Invoices in the year preceding the date of the annual certificate; and
- (b) Has had exposure in CRR Obligations in the ERCOT CRR market during the year preceding the date of the annual certificate.
  - Notwithstanding the above, ERCOT will perform risk management framework verification procedures on other Counter-Parties at its sole discretion.
- (8) Upon completion of its review, ERCOT will notify the Counter-Party whether or not any material deficiencies were noted. If material deficiencies exist, ERCOT may, in its sole discretion, establish in consultation with the Counter-Party, a remediation plan for any deficiencies. The remediation period allowed for specific deficiencies should be consistent with the severity of those deficiencies and may have incremental deadlines. The total remediation period will not exceed 90 days, unless extended, at ERCOT's sole discretion, on a case-by-case basis.
- (9) Risk management deficiencies remaining beyond the ERCOT-defined remediation periods constitute a material breach under the Counter-Party's Standard Form Market Participant Agreement as provided for in Section 22, Attachment A, Standard Form Market Participant Agreement. Upon a material breach, ERCOT may, in addition to any other rights or remedies ERCOT has under any agreement, these Protocols or at common law, suspend any or all future activities in the ERCOT market, pending remediation of deficiencies. An action by ERCOT to suspend activities in the ERCOT market is subject to the provisions of Section 20, Alternative Dispute Resolution Process.
- (10) Participation in ERCOT markets is contingent on verification by ERCOT, or by a third party acting on ERCOT's behalf, that the proposed measures have been implemented.
- (11) If a Counter-Party provides evidence that its risk management framework has been deemed sufficient for transacting in another Regional Transmission Operator/Independent

- System Operator market in the United States, ERCOT may elect to forego verification processes.
- (12) In conjunction with providing its annual certificate, if a Counter-Party certifies that there has been no material change in its risk management capabilities since the framework was last verified, ERCOT may elect to forego verification. ERCOT may not forego verification more than once in any 24-month period.

# 16.17 Exemption for Qualified Scheduling Entities Participating Only in Emergency Response Service

- (1) A Qualified Scheduling Entity (QSE) that is not also registered as a Congestion Revenue Rights (CRR) Account Holder, that does not participate in the Day-Ahead Market (DAM) or Real-Time Market (RTM), that represents only Emergency Response Service (ERS) Resources, and whose Total Potential Exposure (TPE) (as calculated in Section 16.11.4.1, Determination of Total Potential Exposure for a Counter-Party) is zero may request designation as an ERS-only QSE.
- (2) A QSE must submit a written request for designation as an ERS-only QSE at least five Business Days before the desired effective date of the designation.
- (3) Upon determining that the QSE has addressed all financial risk to ERCOT's satisfaction, ERCOT shall designate the QSE as an ERS-only QSE, and shall notify the QSE of that designation in writing.
- (4) Except as provided in paragraph (5) below, an ERS-only QSE is exempt from the following requirements:
  - (a) The requirement to maintain sufficient collateral under Sections 16.11.1, ERCOT Creditworthiness Requirements for Counter-Parties, and 16.11.5, Monitoring of a Counter-Party's Creditworthiness and Credit Exposure by ERCOT;
  - (b) The requirement to submit financial statements and any notice of material changes under paragraph (1) of Section 16.11.5; and
  - (c) All requirements under Section 16.16, Additional Counter-Party Qualification Requirements.
- (5) If ERCOT posts an RTM True-Up Statement or RTM Resettlement Statement providing for a resettlement of any ERS Time Period, and as a result of that resettlement alone, ERCOT determines that an ERS-only QSE has a positive TPE as calculated in Section 16.11.4.1, ERCOT will require that QSE to comply with Section 16.11.5, excluding paragraph (1), until its TPE again equals zero. If the QSE fails to pay when due any payment or Financial Security obligation owed to ERCOT, ERCOT may terminate the QSE's ERS-only status.
- (6) ERCOT shall ensure that its systems prevent participation by ERS-only QSEs in the DAM and RTM.

- (7) A QSE must request termination of its ERS-only status in writing. Termination of ERS-only status will be effective only upon ERCOT's written confirmation that the QSE has satisfied all creditworthiness and capitalization requirements applicable to QSEs.
- (8) Nothing in this Section affects an ERS-only QSE's obligation under paragraph (5) of Section 16.2.1, Criteria for Qualification as a Qualified Scheduling Entity, to provide ERCOT notice of any material change that could adversely affect the reliability or safety of the ERCOT System. Additionally, ERCOT may at any time require any ERS-only QSE to demonstrate that its risk management policies and practices are sufficient to ensure that it will be capable of meeting its ERS performance requirements during any ERS Standard Contract Term for which it has submitted an offer or for which it is committed to provide ERS.

#### **ERCOT Nodal Protocols**

#### **Section 22**

# Attachment J: Annual Certification Form to Meet ERCOT Additional Minimum Participation Requirements

October 1, 2013

Annual Certification Form to Meet ERCOT Additional Minimum Participation Requirements

Counter-Party Name: Counter-Party Name ("Counter-Party")
I,

- Expertise in Markets. All employees or agents transacting in ERCOT markets pursuant to the ERCOT Protocols have had appropriate training and/or experience and are qualified and authorized to transact on behalf of the Counter-Party.
- Market Operational Capabilities. Counter-Party has appropriate market operating procedures and technical abilities to promptly and effectively respond to all ERCOT market communications.
- 3. <u>Capitalization.</u> Counter Party has read and agrees to the capitalization requirements as detailed in the ERCOT Protocols.
- 34. **Risk Management Capabilities.** Counter-Party maintains appropriate, comprehensive risk management capabilities with respect to the ERCOT markets in which the Counter-Party transacts or wishes to transact.
- 45. **Verification of Risk Management Framework.** Counter-Party has read and agrees to the requirements for verification of its risk management framework as detailed in the ERCOT Protocols.

Risk management framework verification processes undertaken by ERCOT or a third party acting on ERCOT's behalf are by necessity limited in scope and nature and cannot address their appropriateness or sufficiency with respect to the full range of risks that may face a Counter-Party or that all such capabilities and controls are in fact operating as purported. In performing an assessment of risk management framework, ERCOT or its agent rely on the assertions and documentary evidence produced by the Counter-Party, and accept no liability for the consequences of insufficient implementation or effectiveness in mitigating risks of the Counter-Party or the impact of risks upon the financial strength of the Counter-Party with respect to ERCOT or other Independent System Operator/Regional Transmission Operator - administered markets.

By checking this box, I further certify and represent that there has been	n
no material change in internal risk management capabilities since last	
verified by ERCOT.	

- By checking this box, I further certify and represent that Counter-Party is:
  - (a) An "Appropriate Person" as defined in sections 4(c)(3)(A) through (J) of the Commodity Exchange Act (7 U.S.C. § 6(c)(3)(A)-(J));
  - (b) An "Eligible Contract Participant" as defined in section 1a(18)(A) of the Commodity Exchange Act (7 U.S.C. § 1a(18)(A)) and in

Commodity Futures Trading Commission (CFTC) regulation 1.3(m) (17 C.F.R. § 1.3(m)); or

- (c) In the business of:
  - (i) Generating, transmitting or distributing electric energy; or
  - (ii) Providing electric energy services that are necessary to support the reliable operation of the transmission system.

	This area is provided for the Counter-Party to provide any additional information or clarification necessary with respect to this Certification.
Date:	
	e:
Γitle:	
Subscribe	d and sworn before me a notary public in the and for the County of , this
State of _	in and for the County of, this
day of	, 20
Notary Pu	ublic Signature)
My comm	ission expires:

# **ERCOT Impact Analysis Report**

NPRR Number	<u>1165</u>	NPRR Title	Revisions to Requirements of Providing Audited Financial Statements and Providing Independent Amount
Impact Analy	sis Date	February 2	23, 2023
Estimated Cost/Budgetary Impact		Between \$	50k and \$100k
Estimated Time Requirements		Request (N Texas (PU	ne for implementing this Nodal Protocol Revision NPRR) is dependent upon Public Utility Commission of CT) prioritization and approval.  project duration: 5 to 8 months
ERCOT Staffing Impacts (across all areas)			ation Labor: 100% ERCOT; 0% Vendor equirements: No impacts to ERCOT staffing.
ERCOT Computer System Impacts			ing ERCOT systems would be impacted: dit Management Systems (CMM) 100%
ERCOT Business Function Impacts		ERCOT wi	Il update its business processes to implement this
Grid Operations & Practices Impacts		No impacts	s to ERCOT grid operations and practices.

Evaluation of Interim Solutions or Alternatives for a More Efficient Implementation

None offered.

	Comments
None.	

NPRR Number	1171	NPRR Title	Requirements for DGRs and DESRs on Circuits Subject to Load Shedding		
Date of Decis	ion	August	August 31, 2023		
Action		Recom	mended Approval		
Timeline		Normal			
Proposed Eff Date	ective	Upon s	ystem implementation		
Priority and F Assigned	Rank	Priority	– 2024; Rank – 4050		
Nodal Protocol Sections Requiring Revision		Energy 3.16, S 23, For Genera	Distribution Generation Resources (DGRs) and Distribution Storage Resources (DESRs) tandards for Determining Ancillary Service Quantities m Q, Interconnection Circuit Designation for Distribution tion Resources (DGRs) and Distribution Energy Storage ces (DESRs) (new)		
Related Documents Requiring Revision/Related Revision Requests		NPRR1 to Load Resour Related	Operating Guide Revision Request (NOGRR) 250, Related to 171, Requirements for DGRs and DESRs on Circuits Subject I Shedding ce Registration Guide Revision Request (RRGRR) 035, It to NPRR1171, Requirements for DGRs and DESRs on Subject to Load Shedding		
		reliabilit (DGRs) are see	odal Protocol Revision Request (NPRR) clarifies various ty requirements for Distribution Generation Resources ) and Distribution Energy Storage Resources (DESRs) that sking qualification to provide Ancillary Service(s) and/or ate in Security-Constrained Economic Dispatch (SCED), as		
Revision Des	cription	on a part Sen	agraph (1) of Section 3.8.6 allows for a DGR/DESR situated a circuit subject to disconnection during Load shed events to icipate in the Day-Ahead Market (DAM) and provide Ancillary vices allowed by Section 3.18, Resource Limits in Providing illary Service;		
		Anc	tion 3.16 recognizes that ERCOT will establish limits on illary Services that may be provided by DGRs/DESRs on uits subject to disconnection during Load shed events; and		

	New Section 23, Form Q, establishes a formal notification process for the Distribution Service Provider (DSP) to indicate whether the interconnecting feeder for the DGR/DESR is subject to Load shed and whether the DSP has determined that there are operational restrictions on the DGR/DESR.
	Addresses current operational issues.
	Meets Strategic goals (tied to the <u>ERCOT Strategic Plan</u> or directed by the ERCOT Board).
Reason for Revision	X Market efficiencies or enhancements
Readon for Revision	Administrative
	Regulatory requirements
	Other: (explain) (please select all that apply)
Business Case	ERCOT has noted a marked increase in interest in proposed interconnections of Resources on the Distribution System and the provision of Ancillary Services by those Resources. The Public Utility Commission of Texas (PUCT) has asked ERCOT to review all Ancillary Services provided by DGRs and DESRs and review which may be provided by a Resource on a distribution circuit that may be subject to Under-Frequency Load Shed (UFLS), Under-Voltage Load Shed (UVLS), or Load shed during an Energy Emergency Alert (EEA) event.  In response to the PUCT's request, this NPRR identifies the Ancillary Services that can be provided by DGRs and DESRs on feeders subject to Load shedding.
	On 4/13/23, PRS voted unanimously to table NPRR1171 and refer the issue to ROS. All Market Segments participated in the vote.
PRS Decision	On 7/13/23, PRS voted unanimously to recommend approval of NPRR1171 as submitted. All Market Segments participated in the vote.
	On 8/10/23, PRS voted unanimously to endorse and forward to TAC the 7/13/23 PRS Report and 3/29/23 Impact Analysis for NPRR1171 with a recommended priority of 2024 and rank of 4050. All Market Segments participated in the vote.
Summary of PRS Discussion	On 4/13/23, some participants expressed concern for operational limitations, reporting accuracy, and reliability. Participants requested further review by ROS.

	On 7/13/23, participants noted the 7/7/23 ROS comments endorsing NPRR1171 as submitted. On 8/10/23, participants reviewed the 3/29/23 Impact Analysis, and
	the proposed rank and priority for NPRR1171.
TAC Decision	On 8/22/23, TAC voted unanimously to recommend approval of NPRR1171 as recommended by PRS in the 8/10/23 PRS Report as amended by the 8/18/23 ERCOT comments. All Market Segments participated in the vote.
Summary of TAC Discussion	On 8/22/23, TAC reviewed the ERCOT Opinion, ERCOT Market Impact Statement, Independent Market Monitor (IMM) Opinion, and Business Case for NPRR1171, and the 8/18/23 ERCOT comments to correct baseline language. Participants offered to develop a problem statement to determine if a workshop and/or additional NPRR is needed to address issues associated with transmission and distribution utility mobile generation implementation issues.
ERCOT Board Decision	On 8/31/23, the ERCOT Board voted unanimously to recommend approval of NPRR1171 as recommended by TAC in the 8/22/23 TAC Report.

Opinions		
Credit Review	ERCOT Credit Staff and the Credit Finance Sub Group (CFSG) have reviewed NPRR1171 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 NPRR1171.	
ERCOT Opinion	ERCOT supports approval of NPRR1171.	
ERCOT Market Impact Statement	ERCOT Staff has reviewed NPRR1171 and believes the market impact for NPRR1171 is identification of Ancillary Services that can be provided by DGRs and DESRs on feeders subject to Load shedding.	

Sponsor		
Name Clayton Stice		
E-mail Address	clayton.stice2@ercot.com	
Company	ERCOT	

Phone Number	512-248-6806
Cell Number	512-627-5020
Market Segment	Not Applicable

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

Comments Received		
Comment Author	Comment Summary	
ROS 050423	Requested PRS continue to table NPRR1171 for further review by the Operations Working Group (OWG)	
Tesla 050923	Suggested distribution connected resources should be allowed to provide all Ancillary Services based on a risk assessment; the scope of NPRR1171 should clearly exclude application to aggregated distributed energy resources; and that limiting the provision of Ancillary Services year-round to avoid distribution system interruptions is an undue burden	
TAEBA 061423	Suggested the scope of NPRR1171 should clearly exclude application to aggregated distributed energy resources, and that ERCOT should be explicit that behind-the-meter resources are eligible under rule changes to Section 3.8.6 if their capacity is large enough to perform Ancillary Services	
ROS 070723	Endorsed NPRR1171 as submitted	
ERCOT 081823	Reinstated baseline inadvertently omitted from paragraph (1) of Section 3.8.6 in order to show the language intentionally struck	

#### **Market Rules Notes**

Please note that administrative revisions have been made to the language, authored as "ERCOT Market Rules".

Please note that the following  $\mathsf{NPRR}(s)$  also propose revisions to the following  $\mathsf{section}(s)$ :

- NPRR1183, ECEII Definition Clarification and Updates to Posting Rules for Certain Documents without ECEII
  - o Section 3.16

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

- NPRR863, Creation of ERCOT Contingency Reserve Service and Revisions to Responsive Reserve (unboxed 6/9/23)
  - o Section 3.16

#### **Proposed Protocol Language Revision**

# 3.8.6 Distribution Generation Resources (DGRs) and Distribution Energy Storage Resources (DESRs)

- (1) As a condition for the interconnection of a DGR or DESR, the affected Resource Entity, after consultation with the relevant Distribution Service Provider (DSP), shall provide documentation from the DSP to ERCOT stating that the interconnecting distribution eircuit will not be disconnected as part of an Energy Emergency Alert (EEA) Level 3, an under frequency Load shedding event, or an under voltage Load shedding event, unless required for DSP local system maintenance or during a DSP local system emergency, submit an executed Section 23, Form Q, Interconnection Circuit Designation for Distribution Generation Resources (DGRs) and Distribution Energy Storage Resources (DESRs)
  - (a) The DSP shall indicate that the interconnecting distribution circuit for the DGR or DESR is subject to Load shed if the DSP determines that the distribution circuit may be disconnected as part of an Energy Emergency Alert (EEA) Level 3 Load shedding event, an Under-Frequency Load Shed (UFLS) event, or an Under-Voltage Load Shed (UVLS) events.
  - (b) The DSP shall indicate that the interconnecting distribution circuit for the DGR or DESR is not subject to Load shed if the DSP determines that the distribution circuit will not be disconnected for any Load shed purpose during any of the events listed in paragraph (a) above. This condition may be met where:
    - (i) A DGR or DESR is connected to a distribution circuit which the DSP has excluded from Load shedding events, which may include, but is not limited to, a distribution circuit that interconnects only DGRs or DESRs; or
    - (ii) A DGR or DESR is connected to a distribution circuit where a recloser or other sectionalizing device excludes the DGR or DESR from Load shedding events on the distribution circuit.
  - (c) If the DSP has indicated that the interconnecting distribution circuit may be subject to Load shed, the DGR or DESR may qualify to provide only the

following Ancillary Services, subject to the limits established by ERCOT pursuant to Section 3.16, Standards for Determining Ancillary Service Quantities:

- (i) Non-Spinning Reserve Service (Non-Spin); and
- (ii) Regulation Down Service (Reg-Down).
- (d) If the DSP has indicated that the interconnecting distribution circuit is not subject to Load shed, then the DGR or DESR shall not be subject to the Ancillary Service qualification limitations described in paragraph (c) above.
- (e) The DSP shall identify on Section 23, Form Q, whether the DSP has identified any operational limitations for the DGR or DESR based on known system limitations and planning or operational studies, including studies performed in accordance with Planning Guide Section 5.4.2, Submission of Interconnection Agreement and TSP and/or DSP Studies and Technical Requirements.

  Temporary limitations, such as may occur during maintenance outage conditions, are not required to be reported on Section 23, Form Q.
- (a2) If a DSP-subsequently at any time after the interconnection of a DGR or DESR determines that any circuit to which a the DGR or DESR is interconnected will need to be subject to disconnectLoad sheded during these any of the Load shedding events listed in paragraph (1)(a) above, or that a DGR or DESR will need to be moved electrically relocated to a circuit that will be subject to disconnectLoad sheded during these Load shedding events:
  - (ai) The DSP shall promptly <u>notify ERCOT and notify</u> the designated contact for the DGR or DESR;
  - (bii) The Resource Entity for the DGR or DESR shall promptly notify submit an updated Section 23. Form Q, to ERCOT of this factand shall make a corresponding update to itsvia the Resource Registration processdata; and
  - (ciii) The Ancillary Service qualification limitations in paragraph (1)(c) above will apply to Tthe DGR or DESR-will immediately be disqualified from offering to provide any Ancillary Service.
- (3b) If a DGR or DESR is interconnected to a circuit that is subject to Load shed and then either is relocated to a different circuit that is not subject to Load shed during any of the Load shed events listed in paragraph (1)(a) above or Upon receivesing notification from the DSP that the DGR or DESR is no longer subject to disconnection Load shed during any of these Load shedding events, and that no known system limitations or changes have occurred that would inhibit the DGR or DESR from complying with Ancillary Service performance requirements, the Resource Entity for the DGR or DESR shall notify submit an updated Section 23, Form Q, to ERCOT of this fact via the and shall make a corresponding update to its Resource Registration process data and will, at that time, be eligible to offer to provide Ancillary Services if the Resource is otherwise qualified to do so.

(42) For a proposed conversion of an existing Settlement Only Distribution Generator (SODG) to a DGR or DESR, the Resource Entity will follow the generation interconnection process outlined in Planning Guide Section 5, Generator Interconnection or Modification the interconnecting DSP will evaluate the proposed conversion and will determine whether it is electrically and operationally feasible. If the interconnecting DSP determines that the conversion is not electrically or operationally feasible, the DSP may disallow the conversion.

# [NPRR995: Replace paragraph (42) above with the following upon system implementation:]

- (42) For a proposed conversion of an existing Settlement Only Distribution Generator (SODG) to a DGR or for a proposed conversion of an existing Settlement Only Distribution Energy Storage System (SODESS) to a DESR, the Resource Entity will follow the generation interconnection process outlined in Planning Guide Section 5, Generator Interconnection or Modification the interconnecting DSP will evaluate the proposed conversion and will determine whether it is electrically and operationally feasible. If the interconnecting DSP determines that the conversion is not electrically or operationally feasible, the DSP may disallow the conversion.
- (3) The Resource Node for a DGR or DESR shall be fixed at a single Electrical Bus in the ERCOT Network Operations Model.
  - (a) If a DSP determines that a topology change has altered, or is expected to alter, the electrical path connecting the DGR or DESR to the ERCOT Transmission Grid for a period longer than 60 days:
    - (i) The DSP shall promptly notify the interconnecting Transmission Service Provider (TSP) and the designated contact for the DGR or DESR, and the interconnecting TSP shall notify ERCOT; and
    - (ii) The Resource Entity shall submit a change request to ERCOT via the Resource Registration process.

#### 3.16 Standards for Determining Ancillary Service Quantities

- (1) ERCOT shall comply with the requirements for determining Ancillary Service quantities as specified in these Protocols and the ERCOT Operating Guides.
- (2) ERCOT shall, at least annually, determine with supporting data, the methodology for determining the quantity requirements for each Ancillary Service needed for reliability, including:
  - (a) The percentage or MW limit of ERCOT Contingency Reserve Service (ECRS) allowed from Load Resources providing ECRS:

**Commented [EWG1]:** Please note NPRR1183 also proposes revisions to this section.

(b) The maximum amount (MW) of Responsive Reserve (RRS) that can be provided by Resources capable of Fast Frequency Response (FFR);

#### [NPRR1128: Replace item (b) above with the following upon system implementation:]

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

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

- (e) The minimum capacity required from Resources providing RRS using Primary Frequency Response shall not be less than 1,150 MW.
- (3) The ERCOT Board shall review and approve ERCOT's methodology for determining the minimum Ancillary Service requirements, any minimum capacity required from SCED dispatchable Resources to provide Non-Spin, the maximum amount of Non-Spin that can be provided by DGRs and DESRs that are interconnected to a distribution circuit that is subject to Load shed, the minimum capacity required from Resources providing Primary Frequency Response to provide RRS, the maximum amount of RRS that can be provided by Resources capable of FFR, and the maximum amount of Reg-Up and Reg-Down that can be provided by Resources providing FRRS-Up and FRRS-Down.

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

(3) The ERCOT Board shall review and approve ERCOT's methodology for determining the minimum Ancillary Service requirements, any minimum capacity required from SCED dispatchable Resources to provide Non-Spin, the maximum amount of Non-Spin that can be provided by DGRs and DESRs that are interconnected to a distribution circuit that is subject to Load shed, the minimum capacity required from Resources providing Primary Frequency Response to provide RRS, the maximum amount of RRS that can be provided by Resources capable of FFR, and the Operating

Hours where prioritizing procurement of FFR up to the maximum FFR amount is beneficial in improving reliability.

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

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

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

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

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

- paragraph (5) above, provided that RRS from these Resources shall be limited to 60% of the total ERCOT RRS requirement.
- (7) However, a QSE may offer more of the Load Resource above the percentage limit established by ERCOT for sale of RRS to other Market Participants. The total amount of RRS using the Load Resource procured by ERCOT is also limited to the capacity established in paragraph (5) above, up to the lesser of the 60% limit or the limit established by ERCOT in paragraph (5) above.
- (8) Monthly, ERCOT shall determine and post on the MIS Secure Area a minimum capacity required from Resources providing ECRS. The amount of Load Resources excluding Controllable Load Resources that may or may not be on high-set under-frequency relays providing ECRS is limited to 50% of the total ERCOT ECRS requirement.
- (9) The amount of ECRS that a QSE can self-arrange using a Load Resource excluding Controllable Load Resources is limited to the lower of:
  - (a) 50% of its ECRS Ancillary Service Obligation; or
  - (b) A reduced percentage of its ECRS Ancillary Service Obligation based on the limit established by ERCOT in paragraph (8) above.
- (10) A QSE may offer more of the Load Resource above the percentage limit established by ERCOT for sale of ECRS to other Market Participants. The total amount of ECRS using the Load Resource excluding Controllable Load Resources procured by ERCOT is also limited to the lesser of the 50% limit or the limit established by ERCOT in paragraph (9) above.
- (11) The maximum MW amount of capacity from Resources providing FRRS-Up is limited to 65 MW. ERCOT may reduce this limit if it believes that this amount will have a negative impact on reliability or if this limit would require additional Regulation Service to be deployed.
- (12) The maximum MW amount of capacity from Resources providing FRRS-Down is limited to 35 MW. ERCOT may reduce this limit if it believes that this amount will have a negative impact on reliability or if this limit would require additional Regulation Service to be deployed.
- (13) Resources can only provide FRRS-Up or FRRS-Down if awarded Regulation Service in the Day-Ahead Market (DAM) for that particular Resource, up to the awarded quantity.

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

### **ERCOT Nodal Protocols**

### Section 23

Form Q: INTERCONNECTION CIRCUIT
DESIGNATION FOR DISTRIBUTION GENERATION
RESOURCES AND DISTRIBUTION ENERGY STORAGE
RESOURCES

**Date TBD** 

	Date Received:	
	IRCUIT DESIGNATION FOR DISTRIBUTE	
GENERATION RESOUR	CES AND DISTRIBUTION ENERGY STORA RESOURCES	<u> (GE</u>
Resource (DESR) must complete Distribution Service Provider (DSI	n Generation Resource (DGR) or Distribution Energy Part I and then submit this form to the interpretation of t	erconnecting
The DSP must indicate in Part II who to Load shed.	ether the circuit interconnecting the DGR or DES	SR is subject
been identified based on known systemicluding studies performed in acc	nether any operational limitations for the DGR or em limitations or as a result of planning or operational cordance with Planning Guide Section 5.4.2, Sugnand/or DSP Studies and Technical Requirements	onal studies. bmission of
the Resource Entity or by any officer	by the Authorized Representative ("AR") or Back with the authority to bind the Resource Entity. Fackup AR for the DSP or any officer with the authority to be a support of the DSP or any officer with the authority and the support of the DSP or any officer with the authority and the support of the support o	art V of this
	t the completed, executed form to ERCOT version). If you need assistance completing this for 248-3900.	
PART I – RESOURCE REG	ISTRATION INFORMATION FOR DGR OR	DESR
DGR or DESR – Resource Entity single Registration information.	hall identify the DGR or DESR as detailed in its	Resource
Resource Name		
GENCODE		
METER ID (if available)		
	NG CIRCUIT INFORMATION FOR DGR O DENTIFIED IN PART I	R DESR
The DSP must check one of the following	owing boxes:	
The distribution circuit interconnec	ting the DGR or DESR is subject to Load shed	

The distribution circuit interconnecting the DGR or DESR is not subject to Load shed			
PART III – IDENTIFICATION WHETHER HAVE BEEN IDENTIFIED FOR DGR			
The DSP shall indicate if any operational limitation	ons have been identified by checking	g one:	
Operational limitations have been identified by operations studies	the DSP as a result of planning or		
No operational limitations were identified by the operations studies	ne DSP as a result of planning or		
If operational limitations have been identified by  PART IV – RESOURCE E			
I affirm that I have the authority to submit this form	n on behalf of the Resource Entity na	med below.	
Name of Resource Entity			
Signature of AR, Backup AR or Officer:			
Printed Name of AR, Backup AR or Officer:			
Date:			
PART V – DISTRIBUTION SERVI	CE PROVIDER AFFIRMATION	Ī	
I affirm that I have personal knowledge of the fa have the authority to execute this form on behalf identified below is the interconnecting DSP for the	of the DSP identified below, and the DGR or DESR identified in Part	hat the DSF I. I further	
affirm that all statements made and information proceed, and complete.	provided in Parts II and III of this fo	rm are true	
Name of Distribution Service Provider			
Signature of AR, Backup AR or Officer:			
Printed Name of AR, Backup AR or Officer:			
Date:			

## **ERCOT Impact Analysis Report**

NPRR Number	<u>1171</u>	NPRR Title	Requirements for DGRs and DESRs on Circuits Subject to Load Shedding
Impact Analy	sis Date	March 29, 2023	
Estimated Cost/Budgetary Impact Between \$350k and \$550k		3350k and \$550k	
Estimated Tir Requirements	-1-10-1	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: 9 to 12 months	
ERCOT Staffi (across all are		Implementation Labor: 50% FRCOT: 50% Vendor	
ERCOT Comp System Impa		The following ERCOT systems would be impacted:  • Market Operation Systems 93% • Energy Management Systems 4% • Data Management & Analytic Systems 3% • Resource Integration and Ongoing Operations (RIOO) 1%	
ERCOT Busin Function Imp		No impacts to ERCOT business functions.	
Grid Operation Practices Imp		No impacts to ERCOT grid operations and practices.	

Evaluation of Interim Solutions or Alternatives for a More Efficient Implementation

None offered.

Comments	
None.	

NPRR Number	1173	NPRR Title	Changes Consistent With the Options Available to an MOU and EC Entering Retail Competition in the ERCOT Market
Date of Decis	Pecision August 31, 2023		31, 2023
Action		Recom	mended Approval
Timeline		Normal	
Proposed Eff Date	ective	Novem	per 1, 2023
Priority and F Assigned	Rank	Not app	olicable
Nodal Protoc Sections Req Revision		15.1.9.1, Request to Initiate Continuous Service Agreement in an Investor Owned Utility Service Territory 15.1.10, Continuous Service Agreement Competitive Retail Processing in Municipally Owned Utility/Electric Cooperative Service Territory 15.1.10.1, Request to Initiate Continuous Service Agreement 16.6, Registration of Municipally Owned Utilities and Electric Cooperatives in the ERCOT Region 24.4, Municipally Owned Utility/Electric Cooperative Transmission and/or Distribution Service Provider to Competitive Retailer Monthly Remittance Advice 24.6, MOU/EC TDSP to CR Maintain Customer Information Reques	
Related Docu Requiring Revision/Rela Revision Req	ated	Retail Market Guide Revision Request (RMGRR) 174, Related to NPRR1173, Changes Consistent With the Options Available to an MOU and EC Entering Retail Competition in the ERCOT Market	
Revision Des	cription	This Nodal Protocol Revision Request (NPRR) provides needed references to the Retail Market Guide to account for Texas Standard Electronic Transaction (TX SET) processing options for Municipally Owned Utility (MOU) or Electric Cooperative (EC) service areas.	
Reason for Revision  Meets Strategic goals (tied to the ERCOT Strategic Find directed by the ERCOT Board).  Market efficiencies or enhancements  Administrative		ets Strategic goals (tied to the <u>ERCOT Strategic Plan</u> or ected by the ERCOT Board).  rket efficiencies or enhancements	

	Regulatory requirements		
	Other: (explain) (please select all that apply)		
Business Case	These changes support options available to an MOU/EC for retail transaction processes upon entry into retail competition.		
PRS Decision	On 5/10/23, PRS voted to recommend approval of NPRR1173 as submitted. There was one abstention from the Investor Owned Utility (IOU) (Lone Star Transmission) Market Segment. All Market Segments participated in the vote.		
	On 6/14/23, PRS voted unanimously to endorse and forward to TAC the 5/10/23 PRS Report and 4/17/23 Impact Analysis for NPRR1173. All Market Segments participated in the vote.		
Summary of PRS Discussion	On 5/10/23, ERCOT Staff reviewed NPRR1173. Participants noted the request that PRS table NPRR1173 and refer the issue to RMS, and that additional discussions can still take place at the June 2023 RMS meeting before the June 2023 PRS meeting.		
	On 6/14/23, participants reviewed the 4/17/23 Impact Analysis.		
	On 6/27/23, TAC voted unanimously to table NPRR1173. All Market Segments participated in the vote.		
TAC Decision	On 8/22/23, TAC voted unanimously to recommend approval of NPRR1173 as recommended by PRS in the 6/14/23 PRS Report. All Market Segments participated in the vote.		
Summary of TAC Discussion	On 6/27/23, TAC reviewed the ERCOT Opinion, ERCOT Market Impact Statement, and Independent Market Monitor (IMM) Opinion for NPRR1173, and discussed tabling NPRR1173 to allow TAC to consider NPRR1173 and RMGRR174 together.		
	On 8/22/23, there was no discussion.		
ERCOT Board Decision	On 8/31/23, the ERCOT Board voted unanimously to recommend approval of NPRR1173 as recommended by TAC in the 8/22/23 TAC Report.		

Opinions		
Credit Review	ERCOT Credit Staff and the Credit Finance Sub Group (CFSG) have reviewed NPRR1173 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 NPRR1173.		
ERCOT Opinion	ERCOT supports approval of NPRR1173.		
ERCOT Market Impact Statement	ERCOT Staff has reviewed NPRR1173 and believes that it has a positive market impact by addressing current operational issues by inserting references to account for TX SET processing options for MOU or EC service areas.		

Sponsor		
Name	Dave Michelsen	
E-mail Address	dave.michelsen@ercot.com	
Company	ERCOT	
Phone Number	512-285-6740	
Cell Number		
Market Segment	Not applicable	

Market Rules Staff Contact		
Name Jordan Troublefield		
E-Mail Address jordan.troublefield@ercot.com		
<b>Phone Number</b> 512-248-6521		

Comments Received		
Comment Author Comment Summary		
RMS 060723	Endorsed NPRR1173 as submitted	

#### **Market Rules Notes**

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

- NPRR1168, Related to RMGRR172, Texas SET V5.0 Continuous Service Agreements Changes (incorporated 8/1/23)
  - o Section 15.1.9.1
  - o Section 15.1.10.1

#### **Proposed Protocol Language Revision**

- 15.1.9.1 Request to Initiate Continuous Service Agreement in an Investor Owned
  Utility Service Territory or in a Municipally Owned Utility/Electric
  Cooperative Service Territory as Indicated in Retail Market Guide Section 8.1,
  Municipally Owned Utility and/or Electric Cooperative Transmission and/or
  Distribution Service Provider Market
- (1) When a CR establishes a CSA at an ESI ID, the CR will send an 814\_18, Establish/Delete CSA Request, to ERCOT. ERCOT will determine if the ESI ID has a CSA on record. If there is a current CSA CR, ERCOT will send notice of CSA termination using the 814\_18, Establish/Delete CSA Request, within one Retail Business Day of receipt of the 814\_18 transaction from the new CSA CR and will respond to the new CSA CR using the 814\_19, Establish/Delete CSA Response, within one Retail Business Day of receipt of the 814\_18 transaction. If there is not a current CSA, ERCOT will respond to the new CSA CR using the 814\_19, Establish/Delete CSA Response, within one Retail Business Day of receipt of the 814\_18 transaction.

[NPRR1095 and NPRR1168: Replace applicable portions of paragraph (1) above with the following upon system implementation of NPRR1095; or upon system implementation of RMGRR172 for NPRR1168; and renumber accordingly:]

- (1) When a CR establishes a CSA at an ESI ID, the CR will send an 814\_18, Establish/Change/Delete CSA Request, to ERCOT. ERCOT will determine if the ESI ID has a CSA on record. If there is not a current CSA, ERCOT will respond to the new CSA CR using the 814\_19, Establish/Change/Delete CSA Response, within one Retail Business Day of receipt of the 814\_18 transaction. ERCOT will hold the CSA in a pending status until the start date of the CSA.
- (2) If there is a current CSA, ERCOT will respond to the new CSA CR using the 814\_19 transaction within one Retail Business Day of receipt of the 814\_18 transaction. ERCOT will hold the CSA in a pending status until the start date of the CSA and on the start date of the new CSA, ERCOT will send notice of CSA termination using the 814\_18 transaction to the current CSA, within one Retail Business Day.
- (2) If a CSA CR wishes to establish CSAs with multiple ESI IDs, the CSA CR must submit an 814\_18 transaction for each ESI ID.
- 15.1.10 Continuous Service Agreement Competitive Retailer Processing in Municipally Owned Utility/Electric Cooperative Service Territory
- (1) This Section sets forth the processes to initiate or terminate a CSA in an MOU or EC service territory, unless otherwise indicated in Retail Market Guide Section 8.1,

  Municipally Owned Utility and/or Electric Cooperative Transmission and/or Distribution Service Provider Market.

#### 15.1.10.1 Request to Initiate Continuous Service Agreement

(1) When a CR establishes a CSA at an ESI ID, the CR will send an 814 18, Establish/Delete CSA Request, to ERCOT. This will be forwarded to the MOU/EC TDSP within one Retail Business Day, unless otherwise indicated in Retail Market Guide Section 8.1, Municipally Owned Utility and/or Electric Cooperative Transmission and/or Distribution Service Provider Market. ERCOT will send the 814 18 transaction, and if an 814 19, Establish/Delete CSA Response, is not received from the MOU/EC TDSP within ten Business Days, ERCOT will cancel the CSA request and send an 814 08, Cancel Request, to the requesting CSA CR and MOU/EC TDSP. Additional 814 18 transactions received on the ESI ID while the first 814 18 transaction is still pending will be rejected at ERCOT. If an 814 18 transaction is received on an ESI ID with an existing CSA relationship, ERCOT will forward the 814 18 transaction to the MOU/EC TDSP within one Retail Business Day, and upon receipt of the 814 19 transaction (accept) from the MOU/EC TDSP, will send an 814 18 transaction to the current CSA CR and an 814 19 transaction to the new CSA CR within one Retail Business Day of receipt of the 814 19 transaction from the MOU/EC TDSP.

[NPRR1095 and NPRR1168: Replace applicable portions of paragraph (1) above with the following upon system implementation of NPRR1095; or upon system implementation of RMGRR172 for NPRR1168; and renumber accordingly:]

- (1) When a CR establishes a CSA at an ESI ID, the CR will send an 814\_18, Establish/Change/Delete CSA Request, to ERCOT. This will be forwarded to the MOU/EC TDSP within one Retail Business Day, unless otherwise indicated in Retail Market Guide Section 8.1, Municipally Owned Utility and/or Electric Cooperative Transmission and/or Distribution Service Provider Market. ERCOT will send the 814\_18 transaction, and if an 814\_19, Establish/Change/Delete CSA Response, is not received from the MOU/EC TDSP within ten Business Days, ERCOT will cancel the CSA request and send an 814\_08, Cancel Request, to the requesting CSA CR and MOU/EC TDSP. Additional 814\_18 transactions received on the ESI ID while the first 814\_18 transaction is still pending will be rejected at ERCOT. Upon receipt of the 814\_19 transaction (accept) from the MOU/EC TDSP, ERCOT will send an 814\_19 transaction to the new CSA CR within one Retail Business Day. ERCOT will hold the CSA in a pending status until the start date of the CSA.
- If an 814\_18 transaction is received on an ESI ID with an existing CSA relationship, ERCOT will forward the 814\_18 transaction to the MOU/EC TDSP within one Retail Business Day, and upon receipt of the 814\_19 transaction (accept) from the MOU/EC TDSP, will send an 814\_19 transaction to the new CSA CR within one Retail Business Day of receipt of the 814\_19 transaction from the MOU/EC TDSP. ERCOT will hold the CSA in a pending status until the start date of the CSA. On the start date of the new CSA, ERCOT will send notice of the CSA termination using the 814\_18 transaction to the current CSA within one Retail Business Day.

(2) If a CSA CR wishes to establish CSAs with multiple ESI IDs, the CSA CR must submit an 814\_18 transaction for each ESI ID.

# 16.6 Registration of Municipally Owned Utilities and Electric Cooperatives in the ERCOT Region

- (1) Each Municipally Owned Utility (MOU) and Electric Cooperative (EC) shall register with ERCOT and sign the Agreements that apply to the functions it performs in the ERCOT Region, regardless of whether planning to be a Non-Opt-In Entity (NOIE) or a Competitive Retailer (CR).
- (2) If an MOU or EC decides to register an affiliate as a CR, it must notify ERCOT of its intentions six months prior to opting in. Each MOU and EC that decides to opt in shall register as a CR and notify ERCOT of its intentions six months prior to opting in.
- (3) Each MOU and EC shall designate a Qualified Scheduling Entity (QSE) with ERCOT on its behalf.
- (43) Each MOU and EC shall assign an Electric Service Identifier (ESI ID) to each NOIE wholesale point of delivery as specified in these Protocols. The ESI IDs must be assigned to a Load Serving Entity (LSE).

# 24.4 Municipally Owned Utility/Electric Cooperative Transmission and/or Distribution Service Provider to Competitive Retailer Monthly Remittance Advice

- (1) This transaction set, from a Municipally Owned Utility's (MOU) Transmission and/or Distribution Service Provider (TDSP) or an Electric Cooperative's (EC) TDSP (MOU/EC TDSP) to the Competitive Retailer (CR) is used by the MOU/EC TDSP to notify the CR of payment details related to a specific Invoice, unless otherwise indicated in Retail Market Guide Section 8.1, Municipally Owned Utility and/or Electric Cooperative Transmission and/or Distribution Service Provider Market. An MOU/EC TDSP must pass an 820\_03, MOU/EC Remittance Advice, for every CR account number even when a cancel and restatement of usage subsequently cancels the original invoice.
- (2) Each Market Participant is responsible for ensuring that the data provided in the 820\_03 transaction is presented in a format that is consistent with the market specifications in the Texas Standard Electronic Transaction (TX SET) Implementation Guide.

#### 24.6 MOU/EC TDSP to CR Maintain Customer Information Request

This transaction set, from a Municipally Owned Utility (MOU)/Electric Cooperative (EC) Transmission and/or Distribution Service Provider (TDSP) to the Competitive Retailer (CR), is used by the MOU/EC TDSP to provide the CR with Customer information (name, address, membership id, and home or contact telephone number) for a particular point of delivery served by both the MOU/EC TDSP and CR and to continually provide the CR updates of such information, unless otherwise indicated in Retail Market Guide Section 8.1, Municipally Owned Utility and/or Electric Cooperative Transmission and/or Distribution Service Provider Market.

MOU/EC TDSPs in a MOU/EC service territory are more likely to have current Customer information due to the fact that they maintain contact with the Customer and perform billing functions.

## **ERCOT Impact Analysis Report**

NPRR Number	<u>1173</u>	NPRR Title	Changes Consistent With the Options Available to an MOU and EC Entering Retail Competition in the ERCOT Market	
Impact Analys	sis Date	April 17, 20	April 17, 2023	
Estimated Cost/Budgeta	nry Impact	None.		
Estimated Tir Requirements		No project required. This Nodal Protocol Revision Request (NPRR) can take effect following Public Utility Commission of Texas (PUCT) approval.		
ERCOT Staffi (across all are	• .	Ongoing Requirements: No impacts to ERCOT staffing.		
ERCOT Comp System Impac		No impacts to ERCOT computer systems.		
ERCOT Busir Function Imp		No impacts to ERCOT business functions.		
Grid Operation Practices Imp		No impacts to ERCOT grid operations and practices.		

Evaluation of Interim Solutions or Alternatives for a More Efficient Implementation

None offered.

	Comments
None.	

NPRR Number 1174	NPRR Market Participant's Return of Settlement Funds to ERCOT Title Following Receipt of Overpayment			
Date of Decision	August 31, 2023			
Action	Recommended Approval			
Timeline	Normal			
Proposed Effective Date	November 1, 2023			
Priority and Rank Assigned	Not applicable			
Nodal Protocol Sections Requiring Revision	2.1, Definitions 2.2, Acronyms and Abbreviations 20, Alternative Dispute Resolution Procedure 20.7, Alternative Dispute Resolution Costs 20.8, Requests for Documents and Data 20.10, Return of Settlement Funds by a Qualified Scheduling Entity or Congestion Revenue Right Account Holder to ERCOT (new) 20.10.1, Applicability (new) 20.10.2, Initiation of Return of Settlement Funds (new) 20.10.3, Process for a Return of Settlement Funds Request (new) 20.10.4, Settlement Following Approved Return of Settlement Funds (new)			
Related Documents Requiring Revision/Related Revision Requests	None			
Revision Description	This Nodal Protocol Revision Request (NPRR) establishes a process that will allow a Qualified Scheduling Entity (QSE) or Congestion Revenue Right (CRR) Account Holder to return Settlement funds to ERCOT in the event that the QSE or CRR Account Holder receives an overpayment from ERCOT.			
Reason for Revision	Addresses current operational issues.      Meets Strategic goals (tied to the <u>ERCOT Strategic Plan</u> or directed by the ERCOT Board).      Market efficiencies or enhancements      Administrative			

	Regulatory requirements
	Other: (explain) (please select all that apply)
Business Case	This NPRR benefits the ERCOT market by allowing QSEs and CRR Account Holders to return an overpayment of Settlement funds so that the market can be resettled and such funds can be distributed to the appropriate Market Participants.
	On 5/10/23, PRS voted to table NPRR1174 and refer the issue to WMS and Credit Finance Sub Group (CFSG). There was one abstention from the Investor Owned Utility (IOU) (Lone Star Transmission) Market Segment. All Market Segments participated in the vote.
PRS Decision	On 7/13/23, PRS voted unanimously to recommend approval of NPRR1174 as amended by the 6/9/23 TPS comments. All Market Segments participated in the vote.
	On 8/10/23, PRS voted unanimously to endorse and forward to TAC the 7/13/23 PRS Report and 4/24/23 Impact Analysis for NPRR1174. All Market Segments participated in the vote.
Summary of PRS	On 5/10/23, ERCOT Staff provided an overview of NPRR1174, noting the similarities to the existing Alternative Dispute Resolution (ADR) process. Participants requested additional review of Settlement and resettlement scenarios by WMS and CFSG.
Discussion	On 7/13/23, participants reviewed the 6/8/23 WMS comments, the 6/9/23 TPS comments, and the 6/26/23 CFSG comments for NPRR1174. On 8/10/23, there was no discussion.
TAC Decision	On 8/22/23, TAC voted unanimously to recommend approval of NPRR1174 as recommended by PRS in the 8/10/23 PRS Report. All Market Segments participated in the vote.
Summary of TAC Discussion	On 8/22/23, TAC reviewed the ERCOT Opinion, ERCOT Market Impact Statement, and Independent Market Monitor (IMM) Opinion for NPRR1174.
ERCOT Board Decision	On 8/31/23, the ERCOT Board voted unanimously to recommend approval of NPRR1174 as recommended by TAC in the 8/22/23 TAC Report.

į	
	Oninions
	Opinions

Credit Review	ERCOT Credit Staff and the CFSG have reviewed NPRR1174 and do not believe that it requires changes to credit monitoring activity or the calculation of liability.
Independent Market Monitor Opinion	IMM supports NPRR1174.
ERCOT Opinion	ERCOT supports approval of NPRR1174.
ERCOT Market Impact Statement	ERCOT Staff has reviewed NPRR1174 and believes the market impact for NPRR1174 provides a clear, cost-effective method to return overpayments to ERCOT for distribution to appropriate Market Participants.

Sponsor			
Name	Austin Rosel / Douglas Fohn / Holly Heinrich		
E-mail Address	Austin.Rosel@ercot.com / Douglas.Fohn@ercot.com / Holly.Heinrich@ercot.com		
Company	ERCOT		
Phone Number	512-248-6686 / 512-275-5997 / 512-275-7436		
Cell Number			
Market Segment	Not applicable		

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

Comments Received		
Comment Author	Comment Summary	
WMS 060823	Endorsed NPRR1174 as submitted	
TPS 060923	Proposed edits removing the requirement to report a Protocol violation in order to return funds to ERCOT	
CFSG 062623	Endorsed NPRR1174 as amended by the 6/9/23 TPS comments	

### **Market Rules Notes**

#### **Proposed Protocol Language Revision**

#### 2.1 **DEFINITIONS**

#### **Return of Settlement Funds (RSF)**

<u>Procedures</u>, outlined in Section 20, Alternative Dispute Resolution Procedure and Procedure for Return of Settlement Funds, for returning to ERCOT the overpayment of Settlement funds.

#### 2.2 ACRONYMS AND ABBREVIATIONS

#### Return of Settlement Funds

# 20 ALTERNATIVE DISPUTE RESOLUTION PROCEDURE AND PROCEDURE FOR RETURN OF SETTLEMENT FUNDS

#### 20.7 Alternative Dispute Resolution Costs and Return of Settlement Funds

(1) Each party shall be responsible for its own costs incurred during an Alternative Dispute Resolution (ADR) or Return of Settlement Funds (RSF) proceeding.

#### 20.8 Requests for Documents and Data

- (1) If, as part of the Alternative Dispute Resolution (ADR) proceeding or Return of Settlement Funds (RSF) proceeding, a party requests documents or data from another party to the ADR or RSF proceeding, the responding party must provide one of the following within 15 days of the request:
  - (a) The requested documents or data;
  - (b) An explanation of why the documents or data should not be produced (*e.g.* relevance); or
  - (c) An explanation of why the information cannot be provided on that date and a reasonable date on which the documents or data will be produced.
- (2) All information provided pursuant to this subsection shall be provided by mail, email, or other mutually agreed-upon method.

# 20.10 Return of Settlement Funds by a Qualified Scheduling Entity or Congestion Revenue Right Account Holder to ERCOT

#### 20.10.1 Applicability

(1) This Section applies to a claim by a Qualified Scheduling Entity (QSE) or Congestion Revenue Right (CRR) Account Holder ("Applicant") that it violated the Protocols, an Other Binding Document, or any other applicable law, and, as a result, received a

- payment or reduction of charge from ERCOT that exceeds the amount that ERCOT should have credited to the QSE or CRR Account Holder for a Charge Type for a given Operating Day or other period of time ("Overpayment").
- (2) An Applicant may use the procedures set forth in this Section to return Settlement funds to ERCOT in the event that it has received an Overpayment. This process shall be known as a Return of Settlement Funds (RSF) proceeding.
- (3) An Applicant that seeks to initiate a RSF proceeding shall file a request with ERCOT, as described in Section 20.10.2, Initiation of Return of Settlement Funds, within one year of the Operating Day at issue. ERCOT may reject a request if it determines that other Protocol processes apply to address the issue.
- (4) If ERCOT denies an Applicant's RSF request, the Applicant may appeal ERCOT's decision to the Public Utility Commission of Texas (PUCT) pursuant to P.U.C. PROC. R. 22.251, Review of Electric Reliability Council of Texas (ERCOT) Conduct.

#### 20.10.2 Initiation of Return of Settlement Funds

- (1) To initiate an RSF proceeding, an Applicant shall complete and submit to the ERCOT Legal Department and the Independent Market Monitor (IMM) the designated form provided on the ERCOT website in the manner required by the form. All written requests shall include the following information:
  - (a) The name of the Applicant initiating the RSF proceeding;
  - (b) The amount of Settlement funds that the Applicant intends to return;
  - (c) A description of the reason(s) for the Applicant's initiation of the RSF proceeding, including references to any statute(s), rule(s), Protocol Section(s), Other Binding Document(s), Agreement(s), or other law(s) that may form all or part of the basis for the RSF;
  - (d) The Operating Day(s) involved in the RSF;
  - (e) A list of all other parties that would be affected by the RSF; and
  - (f) Designation of a senior representative who is responsible for handling matters relating to the RSF proceeding.
- (2) The date on which ERCOT receives the completed RSF written request shall be the RSF initiation date.

#### 20.10.3 Process for a Return of Settlement Funds Request

(1) Unless otherwise specified in these Protocols, the process for the resolution of an Applicant's request to return an Overpayment of Settlement funds filed under this Section

will follow the process established for the resolution of ADRs under Section 20.5, Alternative Dispute Resolution Process.

#### 20.10.4 Settlement Following Approved Return of Settlement Funds

- (1) If resettlement is practicable to address an adjustment required by the resolution of an RSF proceeding, ERCOT shall issue a Resettlement Statement for the affected Operating Day(s) and shall adjust applicable timelines accordingly.
- (2) If a resettlement is not practicable to address an adjustment required by an RSF resolution, ERCOT shall make the adjustments through a separate miscellaneous RSF Invoice that is produced outside of normal Settlement Invoices. The appropriate payments and charges, along with Settlement quality information, shall be supplied to all impacted Market Participants.

## **ERCOT Impact Analysis Report**

NPRR Number	1174	NPRR Title	Market Participant's Return of Settlement Funds to ERCOT Following Receipt of Overpayment	
Impact Analy	sis Date	April 24, 2023		
Estimated Cost/Budgetary Impact		None.		
Estimated Tir Requirement		No project required. This Nodal Protocol Revision Request (NPRR) can take effect following Public Utility Commission of Texas (PUCT) approval.		
ERCOT Staffing Impacts (across all areas)		Ongoing Requirements: No impacts to ERCOT staffing.		
ERCOT Computer System Impacts		No impacts to ERCOT computer systems.		
ERCOT Business Function Impacts		ERCOT will update its business processes to implement this NPRR.		
Grid Operations & Practices Impacts		No impacts to ERCOT grid operations and practices.		

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

Comments	
None.	

NPRR Number	<u>1175</u>	NPRR Title	Revisions to Market Entry Financial Qualifications and Continued Participation Requirements		
Date of Decision		August	August 31, 2023		
Action		Recom	mended Approval		
Timeline		Normal			
Proposed Eff Date	ective	Novem	November 1, 2023		
Priority and F Assigned	Rank	Not Ap	plicable		
Nodal Protocol Sections Requiring Revision  Related Documents Requiring Revision/Related Revision Requests  Revision Description		16.2.1, 16.2.1. 16.2.2.1 16.8.1, 16.8.1. 16.8.2.1 16.11.1 23, For Applica 23, For Form	1.3.1.1, Items Considered Protected Information 16.2.1, Criteria for Qualification as a Qualified Scheduling Entity 16.2.1.1, QSE Background Check Process (new) 16.2.1.1, Data Agent-Only Qualified Scheduling Entities 16.2.2.2, Incomplete QSE Applications 16.8.1, Criteria for Qualification as a CRR Account Holder 16.8.1.1, CRR Account Holder Background Check Process (new) 16.8.2.2, Incomplete CRR Account Holder Applications 16.11.1.2 Review of Counter-Party Eligibility (new) 16.11.1.2.1, Failure to Maintain Eligibility (new) 23, Form A, Congestion Revenue Right (CRR) Account Holder Application for Registration 23, Form G, QSE Application and Service Filing for Registration Form ERCOT Fee Schedule		
		None			
		require Entities Holders Protect Accoun ERCO	odal Protocol Revision Request (NPRR) strengthens It's market entry qualification and continued participation ments for ERCOT Counter-Parties i.e., Qualified Scheduling (QSEs) and Congestion Revenue Right (CRR) Account is, classifies information provided in the background check as ed Information, modifies application forms for QSEs and CRR it Holders, and adds a new background check fee to the Tee Schedule.  PRR makes the following modifications to Section 16, ation and Qualification of Market Participants:		

	<ol> <li>Creates a new background check process as a part of ERCOT's review of current and prospective Counter-Parties;</li> </ol>
	(2) Authorizes ERCOT to review current and prospective Counter-Parties to determine whether they pose an unreasonable financial risk to ERCOT based on their background check;
	(3) Authorizes ERCOT to suspend a QSE or CRR Account Holder if it poses an unreasonable financial risk; and
	(4) Authorizes ERCOT to terminate the registration of a Counter- Party if it is deemed an unreasonable financial risk that cannot be remedied.
	X Addresses current operational issues.
	Meets Strategic goals (tied to the <u>ERCOT Strategic Plan</u> or directed by the ERCOT Board).
Reason for Revision	X Market efficiencies or enhancements
	Administrative
	Regulatory requirements
	Other: (explain) (please select all that apply)
	In an attempt to mitigate market exposure, this NPRR makes changes to qualifications and requirements for prospective and current Counter-Parties. ERCOT's goal is to strike a balance between open access, competition, and barriers to entry, while protecting the integrity of the market.
Business Case	Based on ERCOT's review of various Know Your Customer (KYC) practices and proposals in financial markets and other independent System Operators, and following consultation with ERCOT stakeholders, this NPRR limits overall market exposure by potential bad actors, and helps avoid uplifts to the ERCOT market by reducing risk of bad actors entering or re-entering the ERCOT market as new Entities; reducing risk of Entities/individuals with history of manipulating markets entering the ERCOT market; and reducing risk of Entities/individuals sanctioned in other markets entering the ERCOT market.
	The background check fee proposed in this NPRR is designed to cover the cost of background checks of new and prospective Counter-Parties — a service that will benefit Counter-Parties in mitigating market exposure by bad actors.

	Finally, this NPRR continues to phase out acceptance of paper checks by ERCOT, as well as acceptance of applications by fax or mail (relying on emailed applications instead).
PRS Decision	On 5/10/23, PRS voted to table NPRR1175 and refer the issue to CFSG. There was one abstention from the Investor Owned Utility (IOU) (Lone Start Transmission) Market Segment. All Market Segments participated in the vote.
	On 7/13/23, PRS voted unanimously to recommend approval of NPRR1175 as amended by the 6/26/23 CFSG comments. All Market Segments participated in the vote.
	On 8/10/23, PRS voted unanimously to endorse and forward to TAC the 7/13/23 PRS Report and 4/25/23 Impact Analysis for NPRR1175. All Market Segments participated in the vote.
Summary of PRS Discussion	On 5/10/23, ERCOT Staff reviewed NPRR1175. Participants requested further review by the CFSG for issues such as limitations on what constitutes unreasonable financial risk, and questions regarding civil matters pertaining to conviction of or settlement by parties in cases involving fraud.
	On 7/13/23, participants noted the 6/26/23 CFSG comments endorsing the 6/19/23 ERCOT comments as revised by CFSG. On 8/10/23, participants reviewed the 4/25/23 Impact Analysis.
TAC Decision	On 8/22/23, TAC voted unanimously to recommend approval of NPRR1175 as recommended by PRS in the 8/10/23 PRS Report as revised by TAC. All Market Segments participated in the vote.
Summary of TAC Discussion	On 8/22/23, TAC reviewed the ERCOT Opinion, ERCOT Market Impact Statement, and Independent Market Monitor (IMM) Opinion for NPRR1175, and corrected a typographical error from "loses" to "losses". Participants discussed the applicability of the background check fee to a principal of multiple Market Participants, and that a "complaint" contemplated in the language is limited to financial matters from existing organizations.
ERCOT Board Decision	On 8/31/23, the ERCOT Board voted unanimously to recommend approval of NPRR1175 as recommended by TAC in the 8/22/23 TAC Report.

### Opinions

Credit Review	ERCOT Credit Staff and the CFSG have reviewed NPRR1175 and believe that NPRR1175 will have positive credit implications. See 7/25/23 CFSG comments.
Independent Market Monitor Opinion	IMM has no opinion on NPRR1175.
ERCOT Opinion	ERCOT supports approval of NPRR1175.
ERCOT Market Impact Statement	ERCOT Staff has reviewed NPRR1175 and believes the market impact for NPRR1175 is mitigated exposure to uplifts and bad actors by reducing the risk, by way of background checks, of re/entry to the ERCOT market by participants with a history of market manipulation or sanction by other markets.

Sponsor	
Name	Katherine Gross / Sanchir Dashnyam
E-mail Address	Katherine.Gross@ercot.com / Sanchir.Dashnyam@ercot.com
Company	ERCOT
Phone Number	512-225-7184 / 832-212-1800
Cell Number	216-224-3943 / 832-212-1800
Market Segment	Not Applicable

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

Comments Received	
Comment Author	Comment Summary
ERCOT 061923	Revised language to address concerns raised at the May 17, 2023 CFSG meeting, including expansion of factors that may be considered as an Unreasonable Financial Risk, and third-party background checks
CFSG 062623	Endorsed NPRR1175 as amended by the 6/19/23 ERCOT comments as revised by CFSG

CFSG 072523	Stated that CFSG believes NPRR1175 will have positive credit implications
-------------	---

#### **Market Rules Notes**

Please note administrative revisions have been made to the language, authored as "ERCOT Market Rules".

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

- NPRR1169, Expansion of Generation Resources Qualified to Provide Firm Fuel Supply Service in Phase 2 of the Service
  - Section 1.3.1.1 (incorporated 7/1/23)
- NPRR1166, Protected Information Status of DC Tie Schedule Information
  - Section 1.3.1.1 (incorporated 8/1/23)

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

- NPRR1150, Related to NOGRR230, WAN Participant Security
  - Section 16.2.1
- NPRR1162, Single Agent Designation for a QSE and its Sub-QSEs for Voice Communications over the ERCOT WAN
  - Section 16.2.1
- NPRR1165, Revisions to Requirements of Providing Audited Financial Statements and Providing Independent Amount
  - Section 16.2.1
- NPRR1170, Capturing Natural Gas Delivery Information for Natural Gas Generation Resources
  - o Section 1.3.1.1
- NPRR1181, Submission of Seasonal Coal and Lignite Inventory Declaration
  - Section 1.3.1.1
- NPRR1188, Implement Nodal Dispatch and Energy Settlement for Controllable Load Resources
  - o Section 1.3.1.1
- NPRR1191, Registration, Interconnection, and Operation of Customers with Large Loads; Information Required of Customers with Loads 25 MW or Greater
  - o ERCOT Fee Schedule

#### **Proposed Protocol Language Revision**

#### 1.3.1.1 Items Considered Protected Information

**Commented [EWG1]:** Please note NPRR1170, NPRR1181, and NPRR1188 also propose revisions to this section.

- (1) Subject to the exclusions set out in Section 1.3.1.2, Items Not Considered Protected Information, and in Section 3.2.5, Publication of Resource and Load Information, "Protected Information" is information containing or revealing any of the following:
  - (a) Base Points, as calculated by ERCOT. The Protected Information status of this information shall expire 60 days after the applicable Operating Day;
  - (b) Bids, offers, or pricing information identifiable to a specific Qualified Scheduling Entity (QSE) or Resource. The Protected Information status of part of this information shall expire 60 days after the applicable Operating Day, as follows:
    - (i) Ancillary Service Offers by Operating Hour for each Resource for all Ancillary Services submitted for the Day-Ahead Market (DAM) or any Supplemental Ancillary Services Market (SASM);
    - (ii) The quantity of Ancillary Service offered by Operating Hour for each Resource for all Ancillary Service submitted for the DAM or any SASM;
       and
    - (iii) Energy Offer Curve prices and quantities for each Settlement Interval by Resource. The Protected Information status of this information shall expire within seven days after the applicable Operating Day if required to be posted as part of paragraph (5) of Section 3.2.5 and within two days after the applicable Operating Day if required to be posted as part of paragraph (7) of Section 3.2.5;

## [NPRR1013: Replace paragraph (b) above with the following upon system implementation of the Real-Time Co-Optimization (RTC) project:

- (b) Bids, offers, or pricing information identifiable to a specific Qualified Scheduling Entity (QSE) or Resource. The Protected Information status of part of this information shall expire 60 days after the applicable Operating Day, as follows:
  - Ancillary Service Offers by Operating Hour or Security-Constrained Economic Dispatch (SCED) interval for each Resource for all Ancillary Services submitted for the Day-Ahead Market (DAM) or Real-Time Market (RTM);
  - (ii) The quantity of Ancillary Service offered by Operating Hour or SCED interval for each Resource for all Ancillary Service submitted for the DAM or RTM; and
  - (iii) A Resource's Energy Offer Curve prices and quantities by Operating Hour or SCED interval. The Protected Information status of this

information shall expire within seven days after the applicable Operating Day if required to be posted as part of paragraph (5) of Section 3.2.5 and within two days after the applicable Operating Day if required to be posted as part of paragraph (7) of Section 3.2.5;

- (c) Status of Resources, including Outages, limitations, or scheduled or metered Resource data. The Protected Information status of this information shall expire as follows:
  - (i) For each Forced Outage, Maintenance Outage, or Forced Derate of a Generation Resource or Energy Storage Resource (ESR) that occurs during or extends into an Operating Day, the Protected Information status of the following information shall expire three days after the applicable Operating Day:
    - (A) The name and unit code of the Resource affected;
    - (B) The Resource's fuel type;
    - (C) The type of Outage or derate;
    - (D) The start date/time and the planned and actual end date/time;
    - (E) The Resource's applicable Seasonal net maximum sustainable rating;
    - (F) The available and outaged MW during the Outage or derate; and
    - (G) The entry in the "nature of work" field in the Outage Scheduler and any other information concerning the cause of the Outage or derate;
  - (ii) For each Resource Outage or Forced Derate that occurs during, or that extends into, any time period in which ERCOT has declared an Energy Emergency Alert (EEA), ERCOT may immediately disclose the information identified in paragraph (i) above to a state Governmental Authority, the office of the Governor of Texas, the office of the Lieutenant Governor of Texas, or any member of the Texas Legislature, if requested; and
  - (iii) For all other information, the Protected Information status shall expire 60 days after the applicable Operating Day;
- (d) Current Operating Plans (COPs). The Protected Information status of this information shall expire 60 days after the applicable Operating Day;