|  |  |  |  |
| --- | --- | --- | --- |
| NPRR Number | [1260](https://www.ercot.com/mktrules/issues/NPRR1260) | NPRR Title | Corrections for CLR Requirements Inadvertently Removed |
| Date of Decision | | December 12, 2024 | |
| Action | | Recommended Approval | |
| Timeline | | Normal | |
| Proposed Effective Date | | To be determined | |
| Priority and Rank Assigned | | To be determined | |
| Nodal Protocol Sections Requiring Revision | | 3.17.2, Responsive Reserve Service  8.1.1.2.1.2, Responsive Reserve Qualification | |
| Related Documents Requiring Revision/Related Revision Requests | | None | |
| Revision Description | | This Nodal Protocol Revision Request (NPRR) reinstates requirements applicable to Controllable Load Resources that were inadvertently removed during the process to approve and implement NPRR863, Creation of ERCOT Contingency Reserve Service and Revisions to Responsive Reserve. The changes shown represent existing business requirements that were in place for Controllable Load Resource participation in the Ancillary Services markets prior to and after implementing NPRR863. | |
| Reason for Revision | | [Strategic Plan](https://www.ercot.com/files/docs/2023/08/25/ERCOT-Strategic-Plan-2024-2028.pdf) Objective 1 – Be an industry leader for grid reliability and resilience  [Strategic Plan](https://www.ercot.com/files/docs/2023/08/25/ERCOT-Strategic-Plan-2024-2028.pdf) Objective 2 - Enhance the ERCOT region’s economic competitiveness with respect to trends in wholesale power rates and retail electricity prices to consumers  [Strategic Plan](https://www.ercot.com/files/docs/2023/08/25/ERCOT-Strategic-Plan-2024-2028.pdf) Objective 3 - Advance ERCOT, Inc. as an independent leading industry expert and an employer of choice by fostering innovation, investing in our people, and emphasizing the importance of our mission  General system and/or process improvement(s)  Regulatory requirements  ERCOT Board/PUCT Directive  *(please select ONLY ONE – if more than one apply, please select the ONE that is most relevant)* | |
| Justification of Reason for Revision and Market Impacts | | This NPRR aligns Protocols with existing business requirements for Controllable Load Resources providing Responsive Reserve (RRS) by restoring inadvertently removed language. | |
| PRS Decision | | On 12/12/24, PRS voted unanimously to recommend approval of NPRR1260 as submitted. All Market Segments participated in the vote. | |
| Summary of PRS Discussion | | On 12/12/24, ERCOT Staff provided an overview of NPRR1260. | |

|  |  |
| --- | --- |
| **Opinions** | |
| Credit Review | To be determined |
| Independent Market Monitor Opinion | To be determined |
| ERCOT Opinion | To be determined |
| ERCOT Market Impact Statement | To be determined |

|  |  |
| --- | --- |
| Sponsor | |
| Name | Mark Patterson |
| E-mail Address | [Mark.patterson@ercot.com](mailto:Mark.patterson@ercot.com) |
| Company | ERCOT |
| Phone Number | 512-569-5539 |
| Cell Number | 512-569-5539 |
| Market Segment | Not applicable |

|  |  |
| --- | --- |
| **Market Rules Staff Contact** | |
| **Name** | Cory Phillips |
| **E-Mail Address** | [cory.phillips@ercot.com](mailto:cory.phillips@ercot.com) |
| **Phone Number** | 512-248-6464 |

|  |  |
| --- | --- |
| **Comments Received** | |
| Comment Author | **Comment Summary** |
| None |  |

|  |
| --- |
| Market Rules Notes |

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

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

|  |
| --- |
| Proposed Protocol Language Revision |

3.17.2 Responsive Reserve Service

(1) Responsive Reserve (RRS) is a service used to restore or maintain the frequency of the ERCOT System in response to a significant frequency deviation.

(2) RRS is automatically self-deployed by Resources in a manner that results in real power increases or decreases.

(3) RRS may be provided by:

(a) On-Line Generation Resource capable of providing Primary Frequency Response with the capacity excluding Non-Frequency Responsive Capacity (NFRC);

(b) Resources capable of providing Fast Frequency Response (FFR) and sustaining their response for up to 15 minutes;

(c) Load Resources controlled by high-set under-frequency relays;

(d) Controllable Load Resources; and

(e) Generation Resources operating in synchronous condenser fast-response mode as defined in the Operating Guides.

**8.1.1.2.1.2 Responsive Reserve Qualification**

(1) RRS may be provided by:

(a) On-Line Generation Resource capacity;

(b) Resources capable of providing FFR;

(c) Generation Resources operating in the synchronous condenser fast-response mode;

(c) Load Resources controlled by high-set under-frequency relays; and

(d) Controllable Load Resources.

(2) The amount of RRS provided by individual Generation Resources or Controllable Load Resources is limited by the ERCOT-calculated maximum MW amount of RRS for the Generation Resource or Controllable Load Resource subject to its verified droop performance as described in the Nodal Operating Guide. The default value for any newly qualified Generation Resource or Controllable Load Resource shall be 20% of its HSL. A Private Use Network with a registered Resource may use the gross HSL for qualification and establishing a limit on the amount of RRS capacity that the Resource within the Private Use Network can provide.

(3) A QSE’s Load Resource must be loaded and capable of unloading the scheduled amount of RRS within ten minutes of instruction by ERCOT and must either be immediately responsive to system frequency or be interrupted by action of under-frequency relays with settings as specified by the Operating Guides.

(4) Any QSE providing RRS shall provide communications equipment to provide ERCOT with telemetry for the output of the Resource.

(5) Resources capable of FFR providing RRS must provide a telemetered output signal, including breaker status and status of the frequency detection device.

(6) Each QSE shall ensure that each Resource is able to meet the Resource’s obligations to provide the Ancillary Service Resource Responsibility. Each Resource providing RRS must meet additional technical requirements specified in this Section.

(7) Generation Resources providing RRS shall have their Governors in service.

(8) Generation Resources and Resources capable of FFR providing RRS shall have a Governor droop setting that is no greater than 5.0%.

(9) Resources may be provisionally qualified by ERCOT to provide RRS for 90 days. Within the 90-day provisional window, a Resource must successfully complete one of the Governor tests identified in the Nodal Operating Guide Section 8, Attachment C, Turbine Governor Speed Tests, before being declared fully qualified to provide RRS.

(10) A qualification test for each Resource to provide RRS is conducted during a continuous eight-hour period agreed to by the QSE and ERCOT. ERCOT shall confirm the date and time of the test with the QSE. ERCOT shall administer the following test requirements:

(a) At any time during the window, which is selected by ERCOT when market and reliability conditions allow and not previously disclosed to the QSE, ERCOT shall notify the QSE that it is to provide an amount of RRS from its Resource to be qualified equal to the amount for which the QSE is requesting qualification. The QSE shall acknowledge the start of the test.

(b) For Generation Resources desiring qualification to provide RRS, ERCOT shall send a signal to the Resource’s QSE to deploy RRS indicating the MW amount. ERCOT shall monitor the QSE’s telemetry of the Resource’s Ancillary Service Schedule for an update within 15 seconds. ERCOT shall measure the test Resource’s response as described under Section 8.1.1.4.2, Responsive Reserve Service Energy Deployment Criteria. ERCOT shall evaluate the response of the Generation Resource given the current operating conditions of the system and determine the Resource’s qualification to provide RRS.

(c) For Controllable Load Resources desiring qualification to provide RRS, ERCOT shall send a signal to the Resource’s QSE to deploy RRS indicating the MW amount. ERCOT shall measure the test Resource’s response as described under Section 8.1.1.4.2. ERCOT shall evaluate the response of the Controllable Load Resource given the current operating conditions of the system and determine the Controllable Load Resource’s qualification to provide RRS.

(d) For Load Resources, excluding Controllable Load Resources, desiring qualification to provide RRS, ERCOT shall deploy RRS indicating the MW amount. ERCOT shall measure the test Resource’s response as described under Section 8.1.1.4.2.

(e) On successful demonstration of all test criteria, ERCOT shall qualify that the Resource is capable of providing RRS and shall provide a copy of the certificate to the QSE and the Resource Entity.

|  |
| --- |
| ***[NPRR1011 and NPRR1014: Replace applicable portions of Section 8.1.1.2.1.2 above with the following upon system implementation for NPRR1014; or upon system implementation of the Real-Time Co-Optimization (RTC) project for NPRR1011:]***  **8.1.1.2.1.2 Responsive Reserve Qualification**  (1) RRS may be provided by:  (a) On-Line Generation Resource capacity;  (b) Resources capable of providing FFR;  (c) Generation Resources operating in the synchronous condenser fast-response mode;  (d) Load Resources controlled by high-set under-frequency relays;  (e) Controllable Load Resources; and  (f) Energy Storage Resources (ESRs).  (2) The amount of RRS provided by individual Generation Resources, Controllable Load Resources, or ESRs is limited by the ERCOT-calculated maximum MW amount of RRS for the Generation Resource, Controllable Load Resource, or ESR subject to its verified droop performance as described in the Nodal Operating Guide. The default value for any newly qualified Generation Resource, Controllable Load Resource, or ESR shall be 20% of its HSL. A Private Use Network with a registered Resource may use the gross HSL for qualification and establishing a limit on the amount of RRS capacity that the Resource within the Private Use Network can provide.  (3) A QSE’s Load Resource must be loaded and capable of unloading the scheduled amount of RRS within ten minutes of instruction by ERCOT and must either be immediately responsive to system frequency or be interrupted by action of under-frequency relays with settings as specified by the Operating Guides.  (4) Any QSE representing a Resource qualified to provide RRS shall provide communications equipment to provide ERCOT with telemetry for the output of the Resource.  (5) Resources capable of FFR providing RRS must provide a telemetered output signal, including breaker status and status of the frequency detection device.  (6) Each QSE shall ensure that each Resource is able to meet the Resource’s obligations to provide the RRS award. Each Resource providing RRS must meet additional technical requirements specified in this Section.  (7) Generation Resources offering to provide RRS shall have their Governors in service.  (8) Generation Resources and Resources capable of FFR providing RRS shall have a Governor droop setting that is no greater than 5.0%.  (9) Resources may be provisionally qualified by ERCOT to provide RRS for 90 days. Within the 90-day provisional window, a Resource must successfully complete one of the Governor tests identified in the Nodal Operating Guide Section 8, Attachment C, Turbine Governor Speed Tests, before being declared fully qualified to provide RRS.  (10) For Resources providing RRS and available for dispatch by SCED, the maximum quantity of RRS that a Resource is qualified to provide is limited to the amount of RRS that can be sustained by the Resource for at least 15 minutes. For all other Resources excluding non-Controllable Load Resources providing FFR, the maximum quantity of RRS that a Resource is qualified to provide is limited to the amount of RRS that can be sustained by the Resource for at least one hour. The maximum quantity of FFR that any non-Controllable Load Resource qualified to provide FFR is limited to the amount of FFR that can be sustained by the Resource for at least 15 minutes.  (11) A qualification test for each Resource to provide RRS is conducted during a continuous eight-hour period agreed to by the QSE and ERCOT. ERCOT shall confirm the date and time of the test with the QSE. ERCOT shall administer the following test requirements:  (a) At any time during the window, which is selected by ERCOT when market and reliability conditions allow and not previously disclosed to the QSE, ERCOT shall notify the QSE that it is to provide an amount of RRS from its Resource to be qualified equal to the amount for which the QSE is requesting qualification. The QSE shall acknowledge the start of the test.  (b) For Generation Resources desiring qualification to provide RRS, ERCOT shall send a signal to the Resource’s QSE to deploy RRS indicating the MW amount. ERCOT shall monitor the QSE’s telemetry of the Resource’s Ancillary Service Schedule for an update within 15 seconds. ERCOT shall measure the test Resource’s response as described under Section 8.1.1.4.2, Responsive Reserve Service Energy Deployment Criteria. ERCOT shall evaluate the response of the Generation Resource given the current operating conditions of the system and determine the Resource’s qualification to provide RRS.  (c) For Controllable Load Resources desiring qualification to provide RRS, ERCOT shall send a signal to the Resource’s QSE to deploy RRS indicating the MW amount. ERCOT shall measure the test Resource’s response as described under Section 8.1.1.4.2. ERCOT shall evaluate the response of the Controllable Load Resource given the current operating conditions of the system and determine the Controllable Load Resource’s qualification to provide RRS.  (d) For Load Resources, excluding Controllable Load Resources, desiring qualification to provide RRS, ERCOT shall deploy RRS indicating the MW amount. ERCOT shall measure the test Resource’s response as described under Section 8.1.1.4.2.  (e) On successful demonstration of all test criteria, ERCOT shall qualify that the Resource is capable of providing RRS and shall provide a copy of the certificate to the QSE and the Resource Entity. |