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| NPRR Number | [1224](https://www.ercot.com/mktrules/issues/NPRR1224) | NPRR Title | ECRS Manual Deployment Triggers |
| Date Posted | | March 27, 2024 | |
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| Requested Resolution | | Urgent - Urgent status is necessary to implement the policy approach proposed herein by summer 2024. | |
| Nodal Protocol Sections Requiring Revision | | 6.5.7.6.2.4, Deployment and Recall of ERCOT Contingency Reserve Service | |
| Related Documents Requiring Revision/Related Revision Requests | | None | |
| Revision Description | | This NPRR introduces a trigger that ERCOT may use to manually release ERCOT Contingency Reserve Service (ECRS) from Security-Constrained Economic Dispatch (SCED)-dispatchable Resources when the system power balance constraint is consistently violated and the MW amount of the power balance violation is at least 30 MW for ten consecutive minutes. | |
| 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 | | During the 2024 Ancillary Service methodology discussion at the Technical Advisory Committee (TAC) and the Board of Directors of ERCOT (ERCOT Board), ERCOT was asked to review the methodology used to compute the minimum quantities of ECRS and identify potential alternatives by April 30, 2024, taking into account the analysis that the Independent Market Monitor (IMM) has conducted on the impact of ECRS. This timeline was selected so that proposed changes (if necessary) could be in place by summer 2024.  ERCOT and the IMM have been working on this issue. The IMM recommended a few changes to alleviate its concerns. ERCOT has closely reviewed these recommendations. One proposal was to require ERCOT to release some portion of ECRS in every hour at an energy offer floor via a standing deployment. ERCOT is agreeable to this proposal but notes that this concept may need some system changes (potentially both for systems at ERCOT and on the Market Participant end) and may not be feasible to implement by summer 2024.  Another IMM proposal was to allow ERCOT to manually release ECRS capacity from SCED-dispatchable Resources when the power balance constraint is violated. ERCOT has worked with the IMM to develop this concept further in a manner that would allow it to be implemented by summer 2024. Based on that work, this NPRR proposes to include a trigger that will allow manually releasing ECRS capacity on SCED-dispatchable Resources when the power balance constraint is consistently violated and the MW amount of the power balance violation is at least 30 MW for ten consecutive minutes. ERCOT is open to stakeholder comments regarding alternative values of power balance violation and duration.  When manually releasing SCED-dispatchable ECRS, ERCOT plans to preserve some SCED-dispatchable ECRS to ensure that ERCOT has sufficient capacity that can respond and help recover frequency within the parameters required by NERC Reliability Standards. However, if the power balance constraint violation remains at or above 30 MW, ERCOT will continue to release ECRS in small blocks.  Further, when ECRS capacity from SCED-dispatchable Resources is manually released, ERCOT will recall the manually released ECRS when the triggering condition has ended and the ERCOT System is operating with a steady-state frequency above 59.97 Hz. | |

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| Proposed Protocol Language Revision |

6.5.7.6.2.4 Deployment and Recall of ERCOT Contingency Reserve Service

(1) ECRS is intended to:

(a) Help restore the frequency to 60 Hz within ten minutes of a significant frequency deviation;

(b) Provide energy to avoid, or during the implementation of, an EEA;

(c) Provide backup to Reg-Up; and

(d) Provide energy upon detection of insufficient available capacity for net load ramps.

(2) ERCOT shall deploy ECRS to meet NERC Standards and other performance criteria as specified in these Protocols and the Operating Guides by taking one or more of the following actions:

(a) Automatic Dispatch Instruction signal to release ECRS capacity from Generation Resources and Controllable Load Resources to SCED; and/or

(b) Dispatch Instruction for deployment of energy from Load Resources via electronic Messaging System.

(3) ERCOT shall release ECRS from Generation Resources and Controllable Load Resources to SCED when frequency drops below 59.91 Hz and available Reg-Up is not sufficient to restore frequency. Upon deployment of Off-Line ECRS from a QSGR providing ECRS, the Resource’s Ancillary Service Schedule for ECRS must be adjusted for the ERCOT instructed ECRS deployment and the Resource’s status must be set to OFFQS to be available for dispatch by SCED. Once recalled QSGRs providing ECRS must follow the decommitment process outlined in Section 3.8.3.1, Quick Start Generation Resource Decommitment Decision Process.

(4) Energy from Resources providing ECRS may also be manually deployed by ERCOT pursuant to Section 6.5.9, Emergency Operations.

(5) ERCOT may manually release up to 500 MW of ECRS capacity from SCED-dispatchable Resources when the power balance constraint is violated and the MW amount of power balance constraint violation is at or above 30 MW for at least ten consecutive minutes. Following such an ECRS release, if the power balance constraint violation remains at or above 30 MW, ERCOT may release additional MW of ECRS from SCED-dispatchable Resources.

(6) ERCOT shall use SCED and Non-Spin as soon as practicable to recover ECRS reserves.

(7) Following an ECRS deployment to SCED-dispatchable Resources, the QSE’s obligation to deliver ECRS remains in effect until ERCOT issues a recall instruction or its ECRS obligation expires, whichever occurs first. Following an ECRS deployment to Load Resources, excluding Controllable Load Resources, or Resources operating in synchronous condenser fast-response mode, the QSE’s obligation to deliver ECRS remains in effect until ERCOT issues a recall instruction.

(8) Following a deployment or recall Dispatch Instruction of ECRS, a QSE shall adjust the telemetered ECRS Ancillary Service Schedule for the Resource providing the service and ERCOT shall adjust the HASL based on the QSE’s telemetered Ancillary Service Schedule for ECRS, as described in Section 6.5.7.2, Resource Limit Calculator, to account for such deployment.

(9) For Generation Resources and Controllable Load Resources providing ECRS, Base Points include ECRS energy as well as any other energy dispatched by SCED. A Resource must be able to be fully dispatched by SCED to its ECRS Ancillary Service Resource Responsibility within the ten-minute time frame according to its telemetered Emergency Ramp Rate.

(10) Each QSE providing ECRS shall meet the deployment performance requirements specified in Section 8.1.1.4.2, Responsive Reserve Energy Deployment Criteria.

(11) ERCOT shall issue instructions to release ECRS capacity provided from Generation Resources and Controllable Load Resources to SCED over ICCP and shall issue deployment instructions for Load Resources providing ECRS via XML. Such instructions shall contain the MW requested.

(12) To the extent that ERCOT deploys a Load Resource that is not a Controllable Load Resource and that has chosen a block deployment option, ERCOT shall either deploy the entire Ancillary Service Resource Responsibility or, if only partial deployment is possible, skip the Load Resource with the block deployment option and proceed to deploy the next available Resource.

(13) ERCOT shall recall automatically deployed ECRS capacity once system frequency recovers above 59.97 Hz.

(14) ERCOT shall recall ECRS deployment provided from a Load Resource that is not a Controllable Load Resource once PRC is above a pre-defined threshold, as described in the Operating Guides.

(15) ERCOT shall recall manually released ECRS capacity from SCED-dispatchable Resources when the triggering condition has ended and the ERCOT System is operating with a steady-state frequency above 59.97 Hz.

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| [NPRR1010: Replace Section 6.5.7.6.2.4 above with the following upon system implementation of the Real-Time Co-Optimization (RTC) project:]  **6.5.7.6.2.4Deployment and Recall of ERCOT Contingency Reserve Service**  (1) ECRS is intended to:  (a) Help restore the frequency to 60 Hz within ten minutes of a significant frequency deviation;  (b) Provide energy to avoid, or during the implementation of, an EEA;  (c) Provide backup to Reg-Up; and  (d) Provide energy upon detection of insufficient available capacity for net load ramps.  (2) ERCOT shall deploy ECRS to meet NERC Standards and other performance criteria as specified in these Protocols and the Operating Guides by taking one or more of the following actions:  (a) ERCOT shall issue ECRS deployment Dispatch Instructions, specifying the required MW output, over ICCP for Resources awarded ECRS with a Resource Status of ONSC.  (b) Dispatch Instruction for deployment of energy from Load Resources via electronic Messaging System.  (3) Energy from Resources providing ECRS may also be manually deployed by ERCOT pursuant to Section 6.5.9, Emergency Operations.  (4) ERCOT shall use SCED and Non-Spin as soon as practicable to recover ECRS reserves.  (5) Following a manual ECRS deployment to Load Resources, excluding Controllable Load Resources, or Resources telemetering a Resource Status of ONSC, the QSE’s obligation to deliver ECRS remains in effect until ERCOT issues a recall instruction.  (6) For Generation Resources and Controllable Load Resources providing ECRS, Base Points include ECRS energy as well as any other energy dispatched by SCED. A Resource must be able to be fully dispatched by SCED to its ECRS Ancillary Service award within the ten-minute time frame according to its telemetered ramp rate that reflects the Resource’s capability of providing ECRS.  (7) Each Resource providing ECRS shall meet the deployment performance requirements specified in Section 8.1.1.4.2, Responsive Reserve Energy Deployment Criteria.  (8) ERCOT shall issue deployment instructions for Load Resources providing ECRS via XML. Such instructions shall contain the MW requested.  (9) To the extent that ERCOT deploys a Load Resource that is not a Controllable Load Resource and that has chosen a block deployment option, ERCOT shall either deploy the entire Ancillary Service award or, if only partial deployment is possible, skip the Load Resource with the block deployment option and proceed to deploy the next available Resource.  (10) ERCOT shall recall deployed ECRS capacity provided from Resource telemetering Resource Status of ONSC once system frequency recovers above 59.98 Hz.  (11) ERCOT shall recall ECRS deployment provided from a Load Resource that is not a Controllable Load Resource once PRC is above a pre-defined threshold, as described in the Operating Guides. |