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| NPRR Number | [1224](https://www.ercot.com/mktrules/issues/NPRR1224) | NPRR Title | ECRS Manual Deployment Triggers |
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| Market Segment | Not applicable |

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| Comments |

We would like to provide additional comments clarifying the distinctions between a deployment of ERCOT Contingency Reserve Service (ECRS) under the current Security-Constrained Economic Dispatch (SCED) paradigm vs. a shortage of ECRS under Real-Time Co-optimization (RTC) and the corresponding penalty price on the Ancillary Service Demand Curve (ASDC). The Joint Commenters (Generators) argue that the TAC-approved offer floor is appropriate and consistent with the expected outcomes for ECRS shortages under RTC, and they use approximate illustrations of the hypothetical ASDCs to make this case. This analogy is inappropriate for the following reasons:

1. A “deployment” of ECRS under the current SCED paradigm is not analogous to a “shortage” of ECRS under RTC. A “deployment” in the current iteration of the RTM means that capacity is made available to SCED. If deployed ECRS capacity is dispatched for energy, some other capacity that was producing energy would be dispatched down, and that capacity would then be in reserve. Thus, the total quantity of reserves is unchanged in the moment in which ECRS capacity is deployed to SCED. In subsequent intervals, to the extent demand continues to increase beyond what pre-deployment supply could meet, only a portion of the deployed ECRS capacity would be dispatched, potentially without a corresponding downward dispatch of other generation. It is this portion that is potentially a reduction in the supply of available reserves and applicable to shortage pricing – not the entire 500 MW of ECRS that is deployed to SCED. Even so, comparing this dynamic to a similar situation under RTC is not straightforward because under RTC, SCED could continue to award ECRS capacity to other units without necessarily ever going short.
2. A “shortage” of ECRS under RTC implies that the total availability of reserves has declined to the point that SCED must choose between dispatching increasingly expensive generation vs. going short on reserves and incurring a penalty set by the corresponding ASDC. Assuming a hierarchical pricing of reserves according to their relative reliability value, an ECRS shortage would tend occur only after all the Non-Spinning Reserve (Non-Spin) capacity had been converted to energy, which is not implicit in the trigger conditions associated with manual ECRS deployments set by Nodal Protocol Revision Request (NPRR) 1224. Furthermore, if there were such a shortage of reserves under the current Real-Time Market (RTM) design, that scarcity would be reflected in the price determined by the Operating Reserve Demand Curve (ORDC), thus making the offer floor unnecessary.

Relatedly, the proposed trigger condition of 40 MW of undergen introduces another specious argument in support of an offer floor, i.e., that the offer floor should somehow correspond to the price set by the Power Balance Penalty Curve based on the magnitude of undergen. This argument is also flawed for the following reasons:

1. The magnitude of undergen chosen as the trigger for ECRS deployment is arbitrary and has no basis in economics or reliability. A lower MW threshold for the trigger condition would correspond to a lower price on the Power Balance Penalty Curve, and a higher MW threshold for a trigger condition is counter to promoting reliability because it results in more regulation being exhausted before ECRS can be deployed.
2. Undergen corresponds to a shortage of Regulation reserves, which are, according to the same ASDCs presented by the Joint Commenters, more valuable than ECRS. Thus, there is no reason that the offer floor for deployed ECRS capacity should be equivalent to price of going short on Regulation, which only occurred because of an arbitrarily high trigger condition.

Lastly, the arguments in favor of an offer floor presume that the shortage pricing caused by holding ECRS out of the market is reflective of the value of holding that quantity of ECRS in reserve, and, therefore, that shortage pricing should be preserved after an ECRS deployment. Well before hitting the Power Balance Penalty Curve, withholding ECRS capacity from SCED can cause elevated prices by forcing SCED to dispatch units with higher priced offers or with hurting Shift Factors on binding transmission constraints. Under RTC, SCED would be able to resolve situations like this by re-dispatching energy and Ancillary Services, thus reducing the likelihood of elevated energy prices in the first place.

Even so, this type of shortage pricing is a feature of the ERCOT RTM. The extent to which this type of shortage pricing is appropriate presumes that the quantity of ECRS procured is not overstated, and we disagree with this presumption. Our analysis of 2023 indicated that the level of ECRS procured resulted in zero or near zero marginal improvement in reliability. We contend that, considering Responsive Reserve (RRS) procurement, ECRS was over-procured, and it is not appropriate to preserve or force shortage pricing when excess reserve is made available to SCED. Whether under the current ORDC method or the ASDC method in RTC, a true shortage will be captured by the shortage pricing mechanism and does not need to be forced via rule.

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| Revised Cover Page Language |

None

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| Revised Proposed Protocol Language |

None