IMM Comments on NPRR 1224

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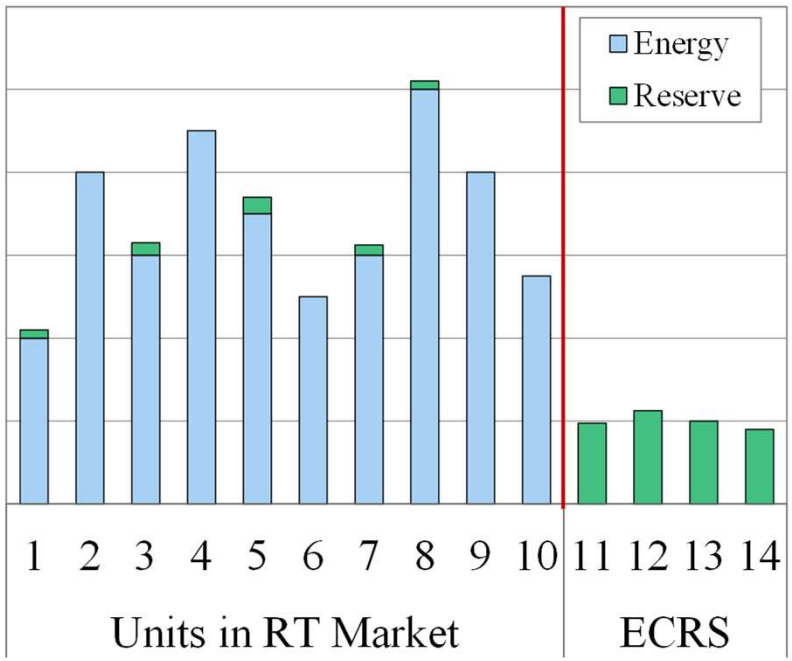
What Happens When ECRS is Deployed?

- Understanding ECRS Deployment is key for evaluation NPRR 1224

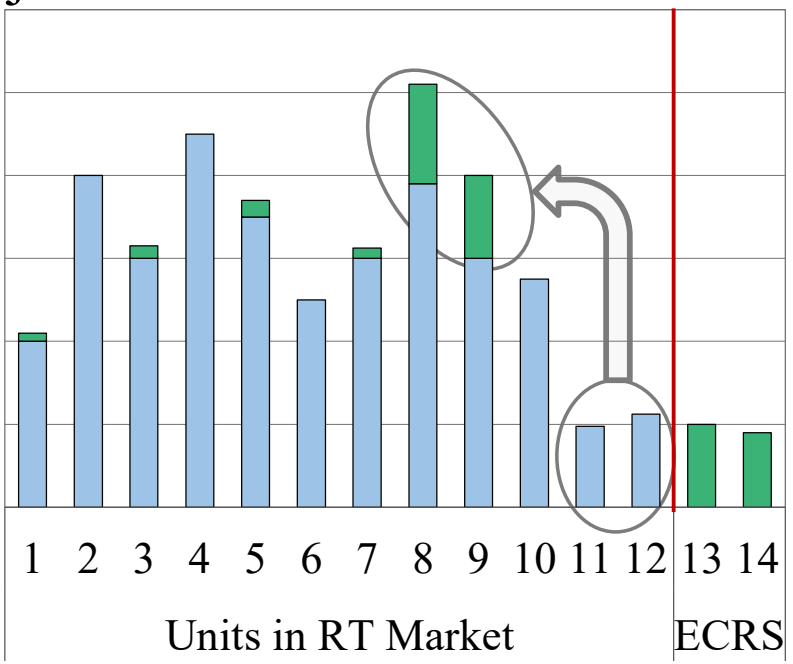
Before Deployment

- 10-minute reserves are procured in advance and sequestered from the real-time dispatch



After Deployment

- Available to the RT market and may be turned on
- Reserves are *not* depleted, they just move to online units



What are the Reliability Implications of Deploying ECRS?

- Refusing the deploy ECRS when the real-time market dispatch (SCED) needs more resources and flexibility diminishes reliability:
  - ✓ Prevents the dispatch from keeping supply and demand in balance, exposing the system to a high risk of frequency deviations
  - ✓ Limits access to resources that are valuable and sometimes essential for managing flows on the transmission system
  - ✓ Reduces the speed with which the reserves can be accessed because ERCOT must wait for them to start (versus having the reserves online)
- Deploying ECRS generally improves reliability by:
  - ✓ Making resources available to the real-time market that are needed to (a) balance supply and demand, and (b) manage congestion
  - ✓ Converting a portion of ERCOT's reserves from offline to online spinning reserves, which can be accessed much more quickly

What are the Economic Implications of Not Deploying ECRS

- The ORDC determines the increased value of reserves and energy when reserves levels drop in shortage or near shortage conditions
- Refusing to deploy ECRS when SCED needs more resources:
  - ✓ Tricks SCED into believing ERCOT is short
  - ✓ This causes it to price shortages that are not real.
- If the system is truly short, *the ORDC will price the shortage*.
  - ✓ Nothing is accomplished by SCED to pricing shortages when it cannot see all the available resources.
- This was the source of the enormous and inefficient market costs we have reported on in 2023

Evaluating NPRR 1224

- Should ERCOT wait to deploy ECRS until SCED is short? **No**
  - ✓ The reliability harm and artificial price spikes happen because SCED is allowed to go into shortage before deployment
  - ✓ Deploying ECRS before it is shortage
- Does the $750 floor to deployed ECRS have a reasonable basis? **No**
  - ✓ Proponents have argued that the floor reflects the shortage value of ECRS (the ECRS demand curve level) under a co-optimized market
  - ✓ This argument conflates: *deploying* ECRS with *depleting* ECRS
  - ✓ These are two different things – deploying ECRS *does not* reduce the reserve capability available to ERCOT – it moves it to online units
  - ✓ Therefore, forcing prices to be set as if the system is short of ECRS is simply not efficient or competitive

Conclusion and Recommendation

- NPRR 1224 constitutes a fundamental departure from the objective of achieving competitive and efficient market outcomes
- In effect, it proposes ERCOT administer a withholding framework where:
  - ✓ Key economic units are physically withheld from the real-time market until the market can not serve the demand for more than 10 minutes; and
  - ✓ Economically withholds these resources after deployment be attaching a $750 offer floor, for which there is no competitive basis
- If conditions were identical to 2023, we estimate this NPRR would generate inefficient and anticompetitive costs exceeding $5.7 Billion.
- We recommend the Board (a) not approve NPRR and (b) direct ERCOT staff to develop procedures that would deploy ECRS in anticipation of a SCED shortage with no delay
- This will improve the reliability of the ERCOT system and help ensure the market outcomes are competitive and efficient.