

Reserve Price Formation Order

High Level Impacts for Demand Response

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Reserve Products

30-minute Reserves

- Met with:
- Secondary Reserve
- Non-Synchronized Reserve
- Synchronized Reserve

Primary Reserves

- Met with:
- Non-Synchronized Reserves
- Synchronized Reserves

Synchronized Reserves

- · Met with:
- Synchronized Reserves

- 30-minute Reserve: reserve capability of resources that can be converted fully into energy within 30 mins
- Primary Reserve: reserve capability of resources that can be fully converted into energy within 10 mins (can be Synch or Non-Synch)
- Secondary Reserve: reserve capability
 of resources that can be fully
 converted into energy within 30 mins
 less Primary Reserve capability

What is changing from today

- Tier 1 and Tier 2 Synchronized Reserve to be collapsed into one market
 - Both Day Ahead and Real Time offers/clearing for Synchronized Reserve
 - 10 minute Synch Reserves adder will change from \$7.50 to the expected value of the penalty (estimated to be \$0.02)
 - Penalty structure similar to current Tier 2 structure
- Change from Day Ahead Scheduling Reserve to Day Ahead Secondary Reserve and addition of Real Time Secondary Reserve market to align with Day Ahead
 - Offer price will no longer be submitted
 - Day Ahead Secondary Reserve assignment is balanced out with Real Time Secondary Reserve assignment in Settlements
- Cap on the percentage of the Minimum Reserve Requirement (MRR) that can be met by demand resources is removed

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Secondary Reserve Eligibility Criteria

- Secondary Reserves for Demand Resources are the amount of MW that can be reduced within 30 minutes minus the amount of MW that can be reduced in 10 minutes
 - Reduce load up to Economic Min within 30 minutes
- Must have a Confirmed economic DR Registration/Dispatch Group
- Need to have one minute meter data available for measurement & verification
- Must be available for Real Time energy in order to be eligible for Secondary Reserves in Real Time
 - In order to provide Secondary Reserves, a valid Real Time energy offer must be submitted for the same MW amount
 - Cannot clear total reduction capability in DA energy market
- Must have a lead time less than or equal to 30 minutes
- Energy min downtime must be less than or equal to 2 hours
 - This ensures that resources can be dispatched for energy in Real Time if needed

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Secondary Reserve Offer Structure

Availability	Offer MW	Offer Price
 Must be available for energy in order to be eligible to clear for Secondary Reserves Reflect availability for Secondary Reserves in Secondary Reserve Offer MW value 	 Consistent with treatment for Synchronized Reserves, Demand Resources will have the ability to specify an offer MW Secondary reserves offer MW must be equal to the energy offer MW Cannot be greater than the total load reduction capability Offer MW = 0 indicates that resource is unavailable for Secondary Reserves No must offer requirement 	 Secondary Reserve is a cost-based market No offer margin allowed Each resource's cost to provide Secondary Reserves is based solely on lost opportunity cost, which for Demand Resources is zero