Reserve Shortage Cost Pricing

Develop a model that overlays reserve shortage cost prices over the top of SCD or EDRP/SCR dispatch prices

Only 10-minute total reserve constraints are monitored in the Reserve Shortage Cost model. Operators must convert 10-minute reserves to spinning reserves if there is a shortage of spin, which is why only the 10-minute total reserve shortages trigger the model.

The shortage cost pricing rule for a statewide 10-minute reserve shortage is to set the reference bus price such that the NYC zonal price becomes $1,000/MWh.

The shortage cost pricing rule for an eastern 10-minute reserve shortage is to set the shadow price of a new proxy Eastern location constraint such that the NYC zonal price becomes $1,000/MWh. The western prices would be unaffected by the changes to the Eastern prices.

The situations in which these pricing rules apply will not apply are: (i) in transitional reserve shortages created by top-of-the-hour schedule changes;(ii) coming out of reserve pickups, and: (iii) during periods of emergency sales to other control areas. These rules are intended to apply to sustained shortages of reserves such as those that occur on peak load days.

Lost opportunity cost rules will be revised for all Reserve Shortage Cost model intervals to ensure that generators continue to have the appropriate financial incentive to follow the SCD basepoints communicated to them.

Pricing rules do not impact the physical dispatch or basepoints sent to units.