Current Status of Resource Adequacy for Imports and Hydropower in CAISO

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Overview

- Background of western markets (EIM and capacity)
- CPUC RA decision
  - Imports
  - New hydro counting rules
- CAISO RA Enhancements
  - Next steps on imports
  - Incorporating forced outages into capacity valuation
The Western Energy Imbalance Market

- Extends ISO real-time market to western entities
- Automated dispatch minimizes cost, facilitates renewables, resolves imbalance, avoids congestion
- Harmonizes with bilateral trading, regional reserve sharing groups
- Preserves BAA autonomy, including compliance, balancing and reserve obligations
- Benefits from EIM operation total $919 million through Q1 2020
CPUC has issued new proposed decisions that will change how imports and hydro resources count for RA

• **Imports (Effective for 2021 RA year)**
  – Attempting to eliminate “speculative supply”
  – Resource specific imports limited to dynamic and pseudo-tied resources
  – Non-resource specific resources must self-schedule or bid no higher than $0/MWh

• **New optional hydro RA counting rules**
  – Previous ten years of same-month bid-in availability offered capacity used to calculate 50 and 10 percent exceedance values
    • 50 percent value is weighted 80 percent, 10 percent value is weighted 20 percent
    • Mechanical outages would be excluded from the calculation
  – Can still rely on existing methodology, but may be subject to additional non-availability charges
CAISO continues advocating for resources specific RA imports in the RA Enhancements stakeholder process

- The CPUC’s imports proposed decision suggested that additional work is needed to for non-dynamic or non-pseudo-tied resource specific imports
- The CAISO is developing additional details to support resource specific RA imports
  - Specifying the resource or group of resources
    - At least the resource BAA
  - Transmission requirements
  - Attestations that the capacity is in excess of BAA need
- Non-specified energy contracts alone should not qualify for Import RA
CAISO is considering how to align hydro UCAP counting with recent CPUC proposed decision on hydro counting

• New proposed methodology not include mechanical outages, which would be subject to RAAIM under existing paradigm

• CAISO has proposed to move many resources to UCAP counting, to reflect forced outage rates
  – CAISO will incorporate forced outages without double counting with optional methodology that considers water availability