

CAISO OVERGENERATION Update Presentation

Power Management Facilities Committee
June 7, 2017



CAISO Overgeneration Operating Procedure

- Effective 3-10-17, version 13.5
- Notification emails from NCPA Schedule Coordinator began 4-12-17
- First overgeneration notification email to staff and affected members was sent 4-13-17 for 4-14-17 through 4-16-17
- There have been no Real-Time overgeneration notifications or instructions so far to date

May 30, 2017 2



Overgeneration Summary

- There were 9 overgeneration day-ahead system operating messages so far this year:
 - 3-30-17 Thursday
 - 3-31-17 through 4-2-17 Fri-Sun
 - 4-8-17 Sat
 - 4-9-17 Sun
 - 4-14-17 through 4-16-17
 Fri-Sun
 - 4-23-17 Sun
 - 4-29-17 through 4-30-17 Sat-Sun
 - 5-13-17 Sat
 - 5-14-17 Sun



CAISO Overgeneration Notification Example

• From the morning hours through the afternoon on Trade Date Sunday, May 14th, the ISO is forecasting over-supply conditions due to mild temperatures, sunny conditions, variable winds and increased hydro run-off. To the extent there are insufficient economic bids in the market to fully mitigate the over-supply and maintain the power balance, the ISO Operators will invoke the Overgeneration Operating Procedure 2390 in Real Time.

May 30, 2017 4



Overgeneration Procedure Summary

- Overgeneration occurs when total supply exceeds total demand in the ISO Balancing Authority Area.
- CAISO requests decremental energy bids and limited self schedules to address the potential for overgeneration.
- The CAISO will try to mitigate overgeneration using market mechanisms before resorting to Exceptional Dispatch instructions.
- The CAISO will provide the estimate of overgeneration in MW and affected hours through a system operating message on realtime.
- Scheduled imports will be reduced for the affected hours. The CAISO may offer energy for sale to adjacent BA's.
- Penalty factors are used to determine priority in cutting schedules
- Self scheduled resources are at risk of being dec'd as needed to maintain reliable operation of the grid. (penalty factor of -400)
- Instructing generating units to go off AGC and reduce to Pmin is a last resort. (penalty factor of -8500)

May 30, 2017 5