California ISO
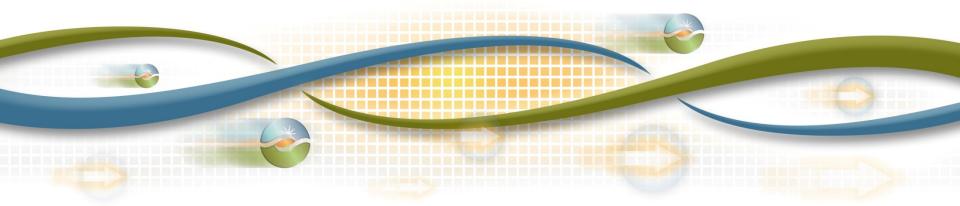
Briefing on day-ahead market run time

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Market Surveillance Committee Meeting
General Session
July 15, 2015

Day-ahead market timeline and processes

Market timeline

10:00   11:00   13:00

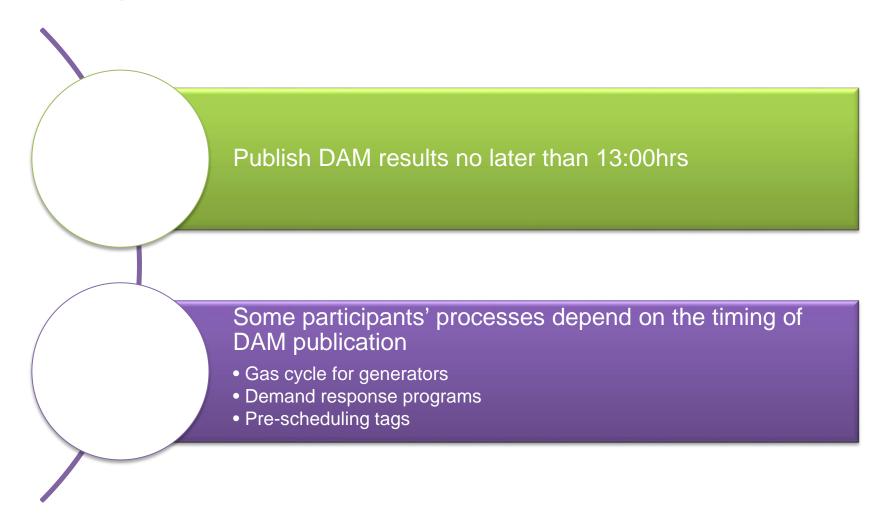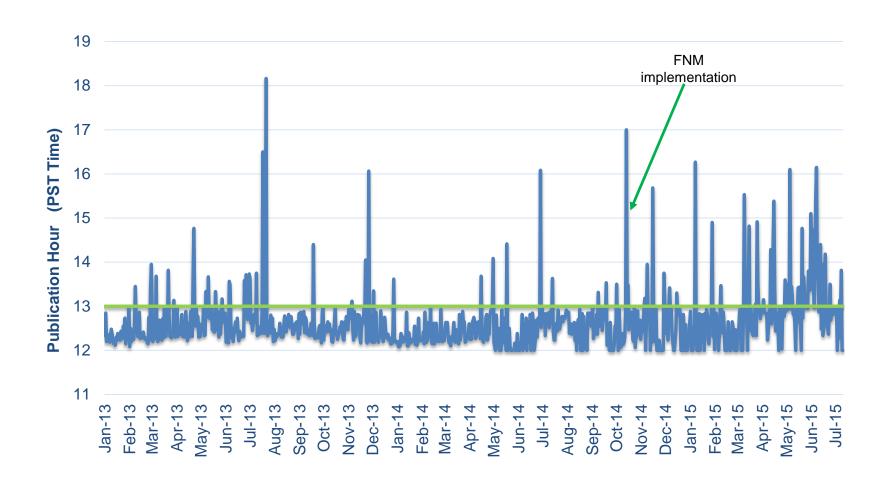| Begin day ahead market (DAM) process	Run market power mitigation (MPM)	Run integrated forward market (IFM)	Run residual unit commitment (RUC)	Publish Results
Pull data from external sources	Evaluate bids for market power	Will clear bid-in supply with bid-in demand plus procure 100% of the ancillary service requirement	Will procure additional capacity as needed	DAM results are published

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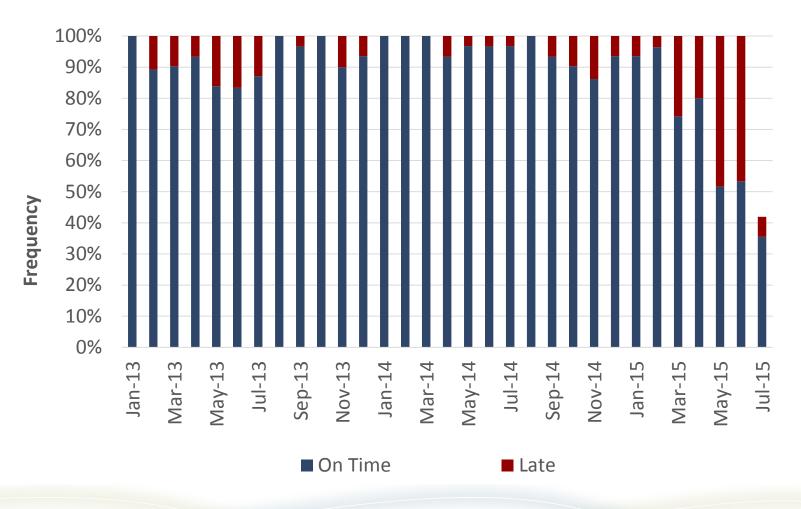
DAM publication

Publish DAM results no later than 13:00hrs

Some participants' processes depend on the timing of DAM publication

- Gas cycle for generators
- Demand response programs
- Pre-scheduling tags

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Daily publication time of DAM results

Monthly frequency of timing of DAM results publication

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General causes of DAM publication delays

Active validation of market results prior to publishing results

Slow run time due to more complex market to solve (more/less constraints enforced in the market)

Unexpected issues arising only in DA+1 run not identified in DA+2.

  Software issues (deployment/defects)

  Bad input data

  Process issues

Direct Current (DC) solutions

The Full Network Model introduced a new level of complexity

The market application is now solving for a more complex system
- Dealing with model and data from multiple BAAs
- From 5,500 to 10,500 pricing locations
- First spring/summer with FNM (Path15 derate, lack of hydro, high loads)
- Software changes

Data/model issues in external BAAs may now impact the overall DAM solution
- Quality of data such as load and distribution factors
- Default switch positions
- Runs more prone to DC solutions

Actions to regain on-time publications

- Upgrade our hardware
- Evaluate how to consider and validate outages in external areas
- Improve the existing process of proactive validation of DA+2 and DA+3 processes, including DC solution escalation to resolution
- Streamline the initial check/validation list of DA+1
- Improve quality of distribution factors
- Improve handling of Default positions in the network model
- Network model upgrade to be deployed on July 23 will have Nevada full network model

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