

Market Update Call Meeting Minutes

March 14, 2019¹

Agenda

- 1) Updates and Meeting Minutes Review Rahul Kalaskar
- 2) Weekly Performance Report Rahul Kalaskar
- 3) Price Correction Reports Jennie Sage
- 4) General Questions/ Comments- Rahul Kalaskar

Meeting Minutes Review and Updates

The February 28th meeting minutes have been posted.

Weekly Market Performance Report

For February 20- March 5, 2019, the markets were generally quiet with local congestion caused by seasonal outages. From March 2-4, there was unusually cold weather in the Pacific Northwest so schedules on the CAISO ties were flowing in the south to north direction when they are usually in the north to south direction.

Questions on the Updates or Weekly Market Performance Report

Q: Can you provide more detail on the congestion that lead to 1000 MW of cuts on the MALIN500 intertie on March 2?

A: We have reviewed the markets and timelines related to this event on March 2 and when the day-ahead market was run on March 1 there was not overload on the constraint. It was in the real-time market on the morning of March 2 that our real-time engineers were reviewing flows and post-contingency overloads and decided that curtailments were needed to maintain reliability. Even after the initial cuts, our contingency analysis tools recommended more curtailments.

Q: Were the curtailments due to a neighboring BA's contingency?

A: The ISO will track this item.

Q: Are the contingencies and constraints the same in the day-ahead and real-time market? **A:** Yes, they are the same.

Q: Was there an outage that caused the NOB congestion on March 2? **A:** Yes, the outage is posted to OASIS.

Q: If NOB was rated 0 MW in the export direction, isn't it an open tie and bids are not permitted?A: Only when an intertie is rated 0 MW in both directions is it an open tie and bids are not permitted on an open tie. NOB was only de-rated in the export direction.

Q: PG&E has been graphing the implied heat rate in the day-ahead market and it impact on prices and has noticed much more volatility in the past 1.5 years, what has changed?

¹ The California ISO (CAISO) hosts this bi-weekly market update conference call, generally at 10:15AM PST bi-monthly on Thursdays. This call is an opportunity for market participants to ask general questions regarding the market. Please send any questions to CIDI system, which includes questions that have proprietary information and that might be commercially sensitive. Only general market-related questions which are neither proprietary, nor non timesensitive should be sent to market_issues@caiso.com.



A: In the day-ahead market, prices are generally set by a marginal unit. The marginal unit can be a thermal generator, intertie or virtual bid. It is important to remember that the objective of the day-ahead optimization is to minimize overall system cost not just marginal clearing price in each hour. Committing a thermal resource incurs startup and minimum load costs that an intertie resource or virtual bid does not so these resources are often the marginal resource, not a thermal generator. The MPPF is the forum for discussions of long-term trends and changes in market performance.

Q: Why wasn't there are public notification of the intertie cuts on March 2?

A: The Operations team did not submit a notice on March 2nd but did on March 3 and March 4.

Q: If day-ahead self-scheduled exports were cut in the real-time market, why didn't the prices reflect the penalty price for this?

A: The price formation will depend on which market the curtailments appear in. If in the HASP, there was no curtailments and the tags were cut after the HASP, then the pricing will not reflect penalty prices. Additional capacity can be released in the fifteen-minute market run because additional ETC capacity is released at this time so the constraint may not be overloaded. We will review the events where self-scheduled exports were cut to see why there were not \$1000 prices.

Review of the Price Correction Report

During the week of February 25-March 1, 2019, the ISO processed 3449 price corrections due to software defects and data input errors. During the week of March 4-8, 2019, the ISO processed 1590 price corrections due to software defects and data input errors. As of trade date, March 1, the ISO received Tariff authority to resolve the CLAP pricing issue that causes a small number of CLAP prices to be corrected in nearly every RTM run.

Questions on Price Correction Report None

General Reminders

- NOTE: The current best practice, and preferred method, of asking questions is to route through the **C**ustomer Inquiry, **D**ispute and Information system, "CIDI".
- Please submit your questions ahead of the call; there are occasions when we have to gather information: submission ahead of time allows us more preparation time to reply.
- To add general comments/questions/requests to the **action item list or meeting agenda**, market participants should also open corresponding CIDI tickets with both the Functional Environment as "Market Performance" and SCID as "XPUB" by close of business (COB) on Mondays.