

Market Update Call Meeting Minutes

August 2, 2018¹

Agenda

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

Meeting Minutes Review and Updates

During the previous call on July 19, 2018, ISO discussed some of the items that were affecting publishing the day-ahead market by 1:00 PM in July. The ISO will discuss this topic during the Market Planning and Performance Forum (MPPF) scheduled for August 29, 2018. There were some pending questions from the prior call which were addressed in the meeting minutes for the July 19, 2018 call and posted on the ISO's website.

Weekly Market Performance Report

The bi-weekly market performance report for July 11 through July 24 shows that there was a sharp increase in the day-ahead bid-in demand starting on July 23, 2018, due to increase in temperatures throughout the state of California. For both these days, the day-ahead DLAP prices increased above \$400, and on July 25, the maximum DLAP price was above \$900. The increase in energy price also increased Ancillary Service prices mainly due to the lost opportunity cost to provide this service. Similarly, on July 24, 2018, the system prices in the real-time market reached \$1000/MWh due high loads.

Questions on the Weekly Market Performance Report

Q. Between July 15 and July 26 the Path 26 is binding in the real-time market. What is the

A. The root cause of the congestion on the Path 26 is high loads in the Southern California driven by increase in temperatures. There are some local outages in the Southern California that is affecting the local generation but there are not specific outages directly affecting the Path 26.

Q. What is the root cause of high prices observed in the day-ahead market?

A. The high day-ahead prices observed on July 23 and 24 are driven by several factors. First, there was high temperature forecast for the entire state of California and rest of the west. Second, due to increase in temperatures in rest of the west, there is high demand for power throughout the state that results in either reduction in imports bids in the day-ahead market or there is an increase in offer price for tie bids. Third, the market observes high prices not during the actual peak but during the net load peak, the net load peak occurs in those hours when the solar output is ramping off during the period of sunset. For such period, the demand and supply bids clear at the steep end of the supply curve which results in high clearing price. We have observe such circumstances in the prior year also.

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 time-sensitive should be sent to market_issues@caiso.com.

Q. Why does the market not observe high price in the real-time market, similar to the day-ahead market?

A. The demand and supply stack can change between day-ahead and real-time which impacts the clearing price.

Q. The IFM market cleared around \$1000 in hour ending 19, so it is expected market would clear all bid in supply. Why did we observe RUC awards?

A. Many factors are considered when looking at the market results for the day-ahead market. The IFM uses virtual plus physical bids to clear, and virtuals can displace physical bids if they are more economical, so the capacity cleared in the IFM could be coming from virtuals not just physical resources. The RUC process then removes the virtuals and compares the demand forecast to the IFM results and any shortfall is procured either from a resource with RA obligation or from RUC bids. For July 25, 2018 we observed virtual supply was cleared above the virtual demand in IFM, in RUC this virtual supply was filled in by RA obligation and RUC bids.

Q. During recent days, the day-ahead market was not published by 1:00 PM. One of the reasons mentioned for late publication is market requires longer time to obtain a solution. Does this have any impact on quality of solution?

A. Even though each iteration of the IFM and MPM was taking longer time to solve, there is no adverse impact on the quality of solution posted at completion of the day-ahead market.

Q. Recently, ISO posted a price correction message for July 28, 2018. Can you provide more details about this correction?

A. For July 28, 2018 there were several constraints binding in the day-ahead market for a contingency, which should have been excluded from this constraint, but they were not excluded due to a software defect. As a result, prices were corrected.

Q. For the day-ahead market, the ISO always attempts to solve with AC power flow. Does ISO have the authority to revert to DC power flow if AC power flow does not converge?

A. If the market cannot solve with AC power flow, the ISO can revert to DC power. This holds true for both day-ahead and real-time markets.

Review of the Price Correction Report

For this week, ISO published two price correction reports. First, for July 9-July 13, 2018. For this period, 3803 intervals were corrected for software defects and data input errors. Second, for July 16-July 20, 2018, the ISO processed price corrections for 2672 intervals due to software defect and data input errors.

Questions on Price Correction Report

None

General Questions

None

General Reminders

- **NOTE:** The current best practice, and preferred method, of asking questions is to route through the Customer Inquiry, Dispute 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.