

Market Update Call Meeting Minutes

June 22, 2017¹

Agenda

- 1) Increased Operating Reserve – **Guillermo Bautista Alderete**
- 2) Meeting Minutes Review – **Rahul Kalaskar**
- 3) Weekly Performance Report – **Rahul Kalaskar**
- 4) Price Correction Reports – **Jennie Sage**
- 5) Actions Items from the previous week - **Rahul Kalaskar**
- 6) General Questions/ Comments

Increased Operating Reserve Market Notice

The ISO issued a market notice on June 12th discussing the need to increase operating reserve to account for a potential loss in solar output: <http://www.caiso.com/Documents/CaliforniaISOTemporaryIncreaseProcurement-OperatingReserves.html>

Following the NERC analysis of a large solar tripping event, the ISO adopted add an additional requirement for the operating reserve procurement target that is related to the risk of solar resources tripping offline. The current operating reserve procurement target is the maximum of the single largest contingency or a blended percentage based on 3% of load and 3% of generation. The ISO will now consider the maximum of the single largest contingency or a blended percentage based on 3% of load and 3% of generation or 25% of projected solar output. So this new procurement target will impact sunlight hours such as HE 8-19. This will be a temporary change to operating reserve procurement until the ISO completes a new stakeholder process that will start in July to determine the best approach to a permanent solution. The ISO has been asked if this will lead to more over-supply conditions and this is an item we will track and analyze and provide an update at the July Market Performance and Planning Forum. The increased operating reserve will be split 50/50 between spin and non-spin and will be pro-rata allocated to the sub-regions.

Questions on Increased Operating Reserve Market Notice

Q: Has the ISO used the 25% of solar amount to set the operating reserve requirement?

A: The new requirement is the maximum of NERC requirement or 25% of solar production; the ISO is using an approximation to reflect that 25% requirement.

Q: Why is it 25%?

A: Based on engineering studies, this percentage was estimate of what would reflect the risk for solar resources tripping offline.

Q: Are services substitutable?

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.

A: Yes, nothing has changed in the ISO's logic for procuring ancillary services, only the overall procurement amount have increased. So cheaper higher quality AS can substitute and fulfill the requirement for lower quality AS.

Q: Is there any change to contingency and non-contingency procurement?

A: No, there is no change. Market participants can specify if the service is contingent or non-contingent in the IFM and all additional ancillary services procured in RTM is contingent.

Q: Is the ISO increasing regulation procurement targets also?

A: No, only operating reserves.

Q: Who is paying for this increased operating reserve?

A: There is no change to the operating reserve cost allocation logic. The additional operating reserve cost is allocated with the same existing method.

Meeting Minutes Review

The meeting minutes for the June 8th call have been posted. An update to the RUC pricing question is provided.

Weekly Market Performance Report

The weekly report covers the time period of May 31-June 13, 2017. The markets were generally quiet. The reasons for real-time price spikes is listed in the report.

Questions on the Weekly Market Performance Report or General Questions

Q: Was a study performed on the higher RUC prices? Has there been a market change?

A: Please review the response provided in the June 8 notes.

Q: For June 5 in the IFM and RTM, the pricing from HE 1-5 is very low and is very different from neighboring days and from other Mondays, can you review?

A: The average price on June 5 between HE 1 through HE 5 dipped below \$15. A similar pattern was observed on other days in June (June 11 and 12). There were no issue identified for these trade dates.

Q: Can we get more information on the congestion impacting the NARROWS2_7_B1 pnode from February to May of this year?

A: To analyze historical patterns of congestion in the IFM market, the ISO provides the following information: Shadow prices of constraints on OASIS and the shift factor information on its market participant portal. The SC needs to sign appropriate non-disclosure agreement to get access to the shift factor information. Using this information SC can identify the impact of constraint on pricing. In general congestion in the IFM market is impacted by demand bids, supply bids (both virtual and physical) and network topology. The ISO also posts transmission outages on the CAISO website.

Q: Can you tell us the drivers behind the high IFM prices on June 21 in HE 19-20? Can you tell us the category of resource that set the high price? Why is the MPM price for HE 20 around \$400 and in IFM it is \$600?

A: This item will be discussed during the upcoming MPPF meeting.

Q: Did the gas constraint bind this week?

A: No, the gas constraint did not bind.

Q: Can you tell us the drivers behind the high energy prices in the RTM on June 19-20 from HE 18-21?

A: There was high loads driven by high temperatures.

Q: Why is the constraint 30505_WEBER _230_30624_TESLA E _230_BR_1 _1 binding from Telsa to Weber in the IFM on June 22? It seems like with hydro conditions it should bind in the other direction.

A: The ISO has validated congestion on the 30505_WEBER _230_30624_TESLA E _230_BR_1 _1 line and found that the direction of congestion was consistent with the system conditions.

Price Correction Reports

During the week of June 5-9, 2017, the ISO processed 4 price corrections due to software defects. During the week of June 12-16, 2017, there were no price corrections.

Questions on Price Correction Report

Q: There has been price correction messages for June 13, 14, 15, and 16 correcting all IFM, RTM and FMM intervals, is this another large correction?

A: There is a software defect impacting the calculation of a few CLAP nodes and they are not receiving the correct congestion and loss component so this correction only impacts a very small amount of nodes.

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.