California Public Utilities Commission
505 Van Ness Ave., San Francisco

MEMORANDUM

Date: April 2, 2024

To: California Independent System Operator, Stakeholder Affairs

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Subject: CPUC Energy Division Policy Proposal on liquidity of bilateral indices

Staff of the California Public Utilities Commission in the Energy Division (CPUC Staff or Staff) develop and administer energy policy and programs to serve the public interest, advise the CPUC, and ensure compliance with CPUC decisions and statutory mandates. The CPUC Energy Division Staff provide objective and expert analyses that promote reliable, safe, and environmentally sound energy services at just and reasonable rates for the people of California.[1] Further, CPUC Staff advocate on behalf of California ratepayers at the Federal Energy Regulatory Commission (FERC), under whose jurisdiction the CAISO tariff falls.

CPUC Staff appreciate this opportunity to propose review of the Liquidity of bilateral indices used in FERC Order 831 implementation.

1. Submission Title

Liquidity of bilateral indices used in FERC Order 831 implementation

2. Has this issue been previously submitted?

CPUC Staff have not previously submitted this request.

CAISO proposed relying on bilateral indices in the initiative "FERC Order 831 – Import bidding and market parameters."[2] CPUC Staff recommend revisiting the issue given current market conditions.

[1] More information about the CPUC Energy Division is available at: https://www.cpuc.ca.gov/about-cpuc/divisions/energy-division.
[2] Available at: https://stakeholdercenter.caiso.com/StakeholderInitiatives/FERC-Order-831-Import-bidding-and-market-parameters.

3. Issue Description: Briefly provide a description of the issue that the proposed initiative is intended to address.

CAISO previously held an initiative to address FERC Order 831 which led to tariff revisions.[3] In its tariff filing, CAISO noted that the Palo Verde bilateral index met CAISO's liquidity criteria, but noted that it would evaluate the indices periodically, as noted below:

> The Commission's current liquidity policy for daily or hourly indices requires that at least one of the following conditions should be met, on average, for all non-holiday weekdays within a 90-day review period:
>
> 1. Average daily volume traded of at least 25,000 MMBtus for gas or 2,000 MWh for power;
> 2. Average daily number of transactions of five or more; or
> 3. Average daily number of counterparties of five or more.
>
> The CAISO analyzed both hubs under these criteria at the time of this filing. The Mid-Columbia index had, across non-holiday weekdays within the 90- day review period, an average of 11,000 MWh, 23 transactions, and 8 counterparties per day. Palo Verde had an average of 2,700 MWh and 5 transactions per day. Based on the analysis, at least one criterion for each hub meets or exceeds the Commission's established criteria. Therefore, the Mid-Columbia and Palo Verde hubs can be considered sufficiently liquid and appropriate for use in the CAISO's tariff and calculated parameters. The CAISO notes that these levels of liquidity also would satisfy the Commission's proposed revised liquidity criteria. *In any case, the CAISO will evaluate these indices periodically to ensure they remain sufficiently liquid.* In the event they become insufficiently liquid, the CAISO will re-evaluate these tariff provisions. (emphasis added)[4]

In this evaluation, CAISO was looking at the published indices, however, in its implementation, CAISO does not use published indices for establishing the maximum import bid prices, but the index prices that are available at 10 am. These transactions could be far less than the number of published transactions. In particular, although the tariff states that at the maximum import bid price is calculated as "110 percent of the greater of the published bilateral index pries for the Mid-Columbia or Palo Verde trading hub locations, multiplied by the hourly shaping factor," the Business Practice Manual for Market Instruments, Appendix P, uses the transactions that are available, as explained in footnote 97:

> For the DAM calculation, the day-ahead electric hub index prices *are a snapshot of the volume weighted average electric hub prices* from the Intercontinental Exchange (ICE). The CAISO captures these prices on non-holiday weekdays between 8 AM – 9 AM Pacific Time. If the ICE electric hub prices are not available between 8 AM – 9 AM Pacific Time for the DAM calculation for any reason, the CAISO will use the most recently available price. For the RTM calculation, the day-ahead electric hub index prices are obtained from the settled volume weighted average electric hub prices from ICE, available the evening prior to the trade date.[5] (Emphasis added).

Thus, CPUC Staff's requests CAISO examine the liquidity of the indices, at the time that these snapshots occur. Given that the Palo Verde index in some cases only has 5 transactions on average (as reported by CAISO in its

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[3] CAISO's cover letter to its FERC filing "Tariff Amendment to Enhance Market Parameters and Import Bidding Related to Order No. 831," FERC Docket ER21-1192, page 22, available at: https://www.caiso.com/Documents/Feb22-2021-TariffAmendment-PricingParameters-OrderNo831-ER21-1192.pdf.

[4] Id. at 22. Footnotes omitted.

[5] CAISO's Business Practice Manual for Market Instruments, Section P.2, page 486, available at: https://bpmcm.cafiso.com/BPM%20Document%20Library/Market%20Instruments/BPM_for_Market%20Instruments_V84_Clean.doc.

tariff filing) and that CAISO is taking a snapshot between 8 and 9 am, CPUC staff are concerned about the liquidity of the index at the time of the snapshot.

As explained later, when the maximum import bid price is above $1,000/kWh, it allows the bid cap to double from $1,000/MWh to $2,000/MWh and, thus, has a profound impact on the outcome of market runs. Further, CPUC Staff suggest that the lack of liquidity and the ability for a small number of entities to potentially manipulate this figure, provides sufficient grounds for CAISO to explore this issue further.

4. Propose Initiative Description: To the extent possible, discuss proposed initiative scope.

Please see discussion above.

5. Business Justification: Does the proposed initiative support ISO strategic objectives or existing ISO initiatives? Identify parties potentially impacted by the proposed initiative. Is the proposed initiative in response to regulatory requirements?

The CAISO does not appear to have a strategic objective that addresses costs, but it does have an obligation to "[r]educ[e], to the extent possible, overall economic cost to [California] consumers."[6] CPUC staff believe that this issue warrants attention.

6. What elements of existing ISO market design do you propose to address?

Please see discussion above.

7. Timing and Urgency: Are there regulatory requirements for implementation dates, or time-sensitive reliability impacts? Are there consequences to not addressing this issue?

Given the importance of markets free of any undue influence, CPUC Staff believe that this issue is time-sensitive. The potential consequence of not addressing this is that an illiquid bilateral market, potentially subject to manipulation given the small number of trades at Palo Verde, could unduly and profoundly affect market clearing prices.

8. Data: Identify existing data and missing data needed to analyze the issue and develop solutions.

CAISO staff would need to provide data on the trades that are used in the "snapshot" for the greater of the Palo Verde or Mid-C bilateral price indices that are used in calculating the maximum import bid prices, which affect whether the bid cap is raised from $1,000/MWh to $2,000/MWh.

[6] Public Utilities Code § 345.5(b)(2).