

**UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION**

**California Independent System) Docket No. ER19-2727-000
Operator Corporation)**

**MOTION TO INTERVENE AND COMMENTS
OF THE DEPARTMENT OF MARKET MONITORING
OF THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION**

Pursuant to Rules 212 and 214 of the Rules of Practice and Procedure of the Federal Energy Regulatory Commission (“FERC” or “Commission”), 18 C.F.R. §§385.212, 385.214, the Department of Market Monitoring (“DMM”), acting in its capacity as the Independent Market Monitor for the California Independent System Operator Corporation (“CAISO”), submits this motion to intervene and comment in the above-captioned proceeding.

In this tariff amendment, the CAISO proposes four general changes to its market rules which would:

1. Allow suppliers to request adjustments to their commitment cost and energy reference levels based on their actual or expected costs that reflect reasonable and prudent procurement practices.
2. Allow suppliers to seek after-the-fact cost recovery of actually incurred costs for which the CAISO did not approve a reference level adjustment request before the market ran.
3. Make permanent the temporary tariff provision that allows the CAISO to calculate reference levels for the day-ahead market based on natural gas price index

information reported by ICE based on next-day gas trading occurring on the morning of the day-ahead market.

4. Make permanent a temporary tariff provision that requires the CAISO to publish two-day-ahead advisory market results to suppliers.¹

In addition, the CAISO proposes to update the reasonableness thresholds used for automated verification of bid adjustment requests based on observed changes in natural gas prices in the same-day market when that price exceeds the next-day market index by 10 percent or more. DMM supports this more dynamic approach for setting reasonableness thresholds, since this will ensure greater market efficiency and reliability than the more static approach originally proposed by the CAISO.

DMM supports each of these four general proposed changes. However, as explained in these comments, DMM continues to believe that several key details of the CAISO's proposed rules for allowing suppliers to request adjustments to their commitment cost and energy reference levels merit further clarification and/or modification.

I. MOTION TO INTERVENE

DMM respectfully requests that the Commission afford due consideration to these comments and motion to intervene, and afford DMM full rights as a party to this proceeding. The mission of DMM, as prescribed in the CAISO tariff pursuant to the Commission's Order 719, is as follows:

¹ *Tariff Amendment to Enhance Commitment Cost and Default Energy Bid Provisions*, California Independent System Operator Corporation, Docket No. ER19-2727, August 30, 2019 ("Transmittal letter").

To provide independent oversight and analysis of the CAISO Markets for the protection of consumers and Market Participants by the identification and reporting of market design flaws, potential market rule violations, and market power abuses.³

The CAISO tariff further states that “DMM shall review existing and proposed market rules, tariff provisions, and market design elements and recommend proposed rule and tariff changes to the CAISO, the CAISO Governing Board, FERC staff, the California Public Utilities Commission, Market Participants, and other interested entities.”⁴ As this proceeding involves CAISO tariff provisions which affect the efficiency and potential for market power in the CAISO markets, it implicates matters within DMM’s purview.

II. COMMENTS

Overview

The first three of the general changes being proposed by CAISO were developed as part of the CAISO’s Commitment Costs and Default Energy Bid Enhancements (CCDEBE) stakeholder initiative which began in November 2016 and was approved by the CAISO Board in March 2018. DMM did not support approval of the CCDEBE proposal by the CAISO Board for two major reasons.

First, the CCDEBE proposal presented to the CAISO Board included a proposal to replace the CAISO’s existing static commitment cost cap with “market-based” commitment cost bids, and implement a dynamic commitment cost local market power test with commitment cost mitigation to the commitment cost reference level triggered by the test.⁵ DMM opposed the CAISO’s proposal for dynamic mitigation of

³ CAISO Tariff Appendix P, Section 1.2.

⁴ CAISO Tariff Appendix P, Section 5.1.

⁵ Transmittal letter, p .65.

commitment costs on the grounds that the final proposal had several key gaps and implementation risk and uncertainties.⁶ This element of the CCDEBE proposal has been deferred by the CAISO and is not included in this tariff filing.

Second, DMM also opposed the CCDEBE proposal approved by the CAISO Board because the commitment cost and energy bid caps used in the real-time market would continue to be based on gas prices in the next day market that occurs the day before each operating day. This static approach failed to address the major reason why bids caps used in the real-time market were in some cases not reflective of actual marginal costs. Since 2015, DMM has been recommending that the CAISO instead adjust bid caps (or reasonableness thresholds used to screen bids) based on gas market data available at the start of each operating day for same-day gas purchases.⁷

DMM's comments opposing the CAISO's 2018 CCDEBE proposal also noted several other concerns related to the lack of detail or clarification about other provisions of the proposed changes. These included (1) questioning the need for significant headroom scalars to cover unspecified "incidental costs";⁸ (2) the proposed *resource specific feedback*

⁶ These gaps included lack of provisions to effectively mitigate economic withholding, gaming of bid cost recovery payments associated with inter-temporal constraints, or market power associated with most manual commitments made by CAISO operators. *Memorandum to ISO Board of Governors, Re: Department of Market Monitoring Comments on CCDEBE Proposal*, March 14, 2018. pp. 3-4: http://www.caiso.com/Documents/Decision_CCDEBEProposal-Department_MarketMonitoringMemo-Mar2018.pdf.

⁷ *Memorandum to ISO Board of Governors, Re: Department of Market Monitoring Comments on CCDEBE Proposal*, March 14, 2018., pp.1-2 and pp. 5-7. http://www.caiso.com/Documents/Decision_CCDEBEProposal-Department_MarketMonitoringMemo-Mar2018.pdf.

⁸ *Comments on Revised Draft Final Proposal for Commitment Cost and Default Energy Bid Enhancements*, Department of Market Monitoring, February 28, 2018, pp. 12-13: <http://www.caiso.com/Documents/DMMComments-CommitmentCostsandDefaultEnergyBidEnhancementsRevisedDraftFinalProposal.pdf>.

loop; and (3) how a supplier's estimate of any risk associated with gas supply limitations or pipeline imbalance charges should be treated when calculating bid caps or reasonableness thresholds.⁹

The CAISO's current filing effectively addresses both of DMM's two main concerns with the 2018 CCDEBE proposal. As previously noted, the proposal for dynamic mitigation of commitment costs has been deferred and is not included in this tariff filing. In addition, the CAISO has added provisions allowing the CAISO to revise reasonableness thresholds used in the real-time market if the same-day gas prices are greater than the next-day gas price by 10% or more.¹⁰

In light of these changes, DMM supports each of the general elements of the CCDEBE proposal included in this tariff filing. However, as explained in DMM's comments during the CCDEBE stakeholder process, DMM continues to question the need to continue to include a 25% headroom scalar in commitment cost bid caps calculated by the CAISO and in requests by suppliers to increase commitment cost bids above these caps based on the suppliers' own determination of their resources' actual costs. As explained in this filing, DMM also continues to believe that additional clarification or changes are needed with respect to how a supplier's estimate of any risk associated with gas supply limitations or pipeline imbalance charges should be treated when calculating bid caps or reasonableness thresholds.

⁹ *Memorandum to ISO Board of Governors, Re: Department of Market Monitoring Comments on CCDEBE Proposal*, March 14, 2018., pp. 7-8.
http://www.caiso.com/Documents/Decision_CCDEBEProposal-Department_MarketMonitoringMemo-Mar2018.pdf.

¹⁰ Transmittal letter, p. 99.

Some key details of the CAISO's proposal merit clarification or modification.

CAISO-calculated reference levels are calculated from gas-price indices and include a 10% headroom scalar for default energy bids and a 25% headroom scalar for default commitment cost bids. CAISO's policy proposal clearly allows suppliers to submit reference level change requests for resource actual costs in excess of the CAISO-calculated reference levels. Suppliers may also submit automated reference level change requests for resource costs up to the reasonableness threshold. And participants may submit manual reference level change requests for resource costs in excess of the reasonableness threshold.

However, DMM believes some of the language in CAISO's transmittal letter implies that suppliers are not permitted to submit Reference Level Change Request values that exceed a resource's actual costs. For example, in the section of the transmittal letter explaining CAISO's right to audit Reference Level Change Requests, CAISO explains:

[T]he supplier must possess information that indicates the resource's actual or expected costs are the same as those submitted in the reference level change request.¹⁶
[Emphasis added]

In the same section of its transmittal letter CAISO clarifies that a supplier will be subject to the consequences of failing an audit if the supplier requests a reference level in excess of the CAISO-calculated reference level when the resource's actual or expected costs do not actually exceed the CAISO-calculated reference level:

Similarly, the CAISO must be able to audit a supplier weeks or even months after the requested adjustment because the CAISO may obtain additional information suggesting the supplier may not have had actual or expected costs that were greater than a resource's reference levels.¹⁷ [Emphasis added]

¹⁶ Transmittal letter, p. 40.

¹⁷ Transmittal letter, p. 41.

The passages above could be read to imply that the CAISO is proposing the following reasonable Reference Level Change Request policy. When a supplier submits a Reference Level Change Request that requests a value that is greater than the CAISO reference levels, the requested reference level may not exceed the resource's *actual or expected costs*. Headroom scalars are specifically designed primarily to cover potential differences between a generator's *actual or expected gas cost* and the next-day gas cost indices used by the CAISO to calculate default energy bids and commitment cost bid caps. Since requested reference levels are based on the supplier's own estimate of *actual or expected costs*, Reference Level Change Requests would not be permitted to include the 10% and 25% headroom scalars that are applied to standard default energy bids and commitment cost bid caps calculated by the CAISO.

However, details of the equations of Appendix D of CAISO's final policy proposal indicate that CAISO is proposing to allow – and actually require – that suppliers add the 10% and 25% headroom scalars onto supplier-determined default energy bids and commitment costs. The proposed tariff language also appears to specifically require suppliers to calculate change requests using a methodology that includes the 10% and 25% headroom scalars. Section 30.11.2.2 of CAISO's proposed tariff language states:

Scheduling Coordinators must calculate their Reference Level Change Request amounts consistent with the methodology used to calculate the Proxy Cost-based Default Start-Up Bid, the Proxy Cost-based Default Minimum Load Bid, and the Variable Cost-based Default Energy Bid.¹⁹

The methodology CAISO uses to calculate the Default Commitment Costs and Default Energy Bids begins with a calculation of a resource's actual costs. However,

¹⁹ Transmittal letter Attachment B-Marked Tariff, p. 63.

CAISO's Default Energy Bids add a 10% headroom scalar onto the calculation of the resource's actual costs (or "proxy energy costs"). CAISO's Default Commitment Cost Bids add a 25% headroom scalar onto the calculation of a resource's actual costs. Therefore, the tariff language above implies that when calculating the value to submit in a Reference Level Change Request, a supplier may use the supplier-determined fuel cost to calculate its proxy costs ("supplier-determined proxy costs") and must then add the 10% or 25% headroom scalars onto the supplier-determined proxy costs.

The tariff language indicates that the policy CAISO is actually proposing does not actually require a "resource's actual or expected costs [to be] the same as those submitted in the reference level change request."²⁰ Since the 25% and 10% headroom scalars allowed or even required to be included are applied in reference levels calculated from supplier-determined fuel costs, this will allow suppliers to request reference levels that are significantly above resources' actual costs. Moreover, this will allow suppliers to request reference levels above the CAISO reference levels even when the CAISO reference levels significantly exceeded resources' actual costs.

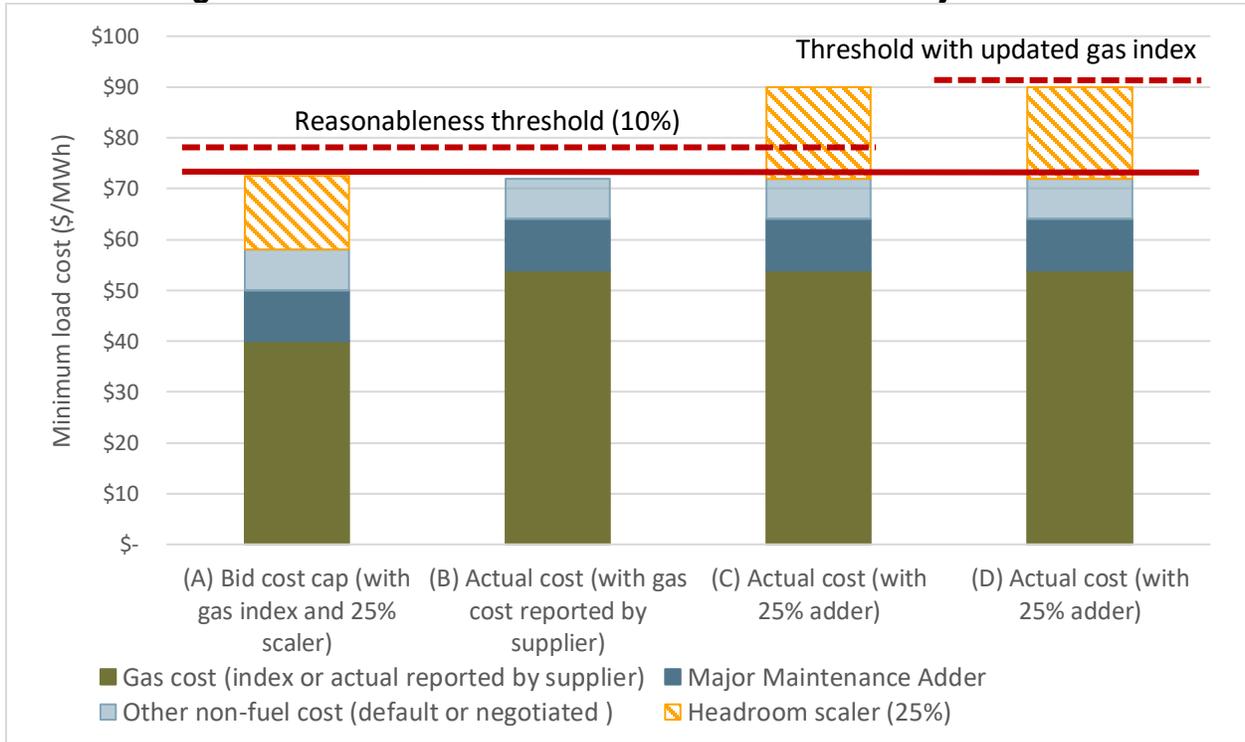
Examples clarifying CAISO's proposal for reference level bid adjustments.

Figure 1 provides a series of illustrative scenarios which illustrate the policy implied by the tariff language of section 30.11.2.2. These illustrative examples are based on a generator's minimum load bid costs and the treatment of these costs under different scenarios and rules.

²⁰ Transmittal letter, p. 40.

- The dark green bars represent the unit's gas costs. Scenario A assumes the unit's gas cost is \$40/MWh based on the next day gas price index used by the CAISO. The other scenarios assume the unit's actual gas cost, as reported by the supplier, is \$54/MWh or 35% higher than the gas cost based on the CAISO gas price index.
- The darker blue bars represent a Major Maintenance Adders (MMA) that was submitted by the supplier and approved by the CAISO of \$10/MWh.
- The lighter blue bars show other non-fuel costs included in the CAISO's calculation of the unit's minimum load energy costs of \$8/MWh. These include variable O&M, greenhouse gas costs, and grid management charges per MWh.
- The striped golden bars in Scenarios A and C represent a 25% headroom scalar for commitment costs applied in these scenarios.
- The solid red line shows the unit's commitment cost bid cap based on the next day gas price index, which equates to a gas cost of the unit of \$40/MWh.
- The dashed red line shows the reasonableness threshold for this unit using the 10% threshold applicable on most days (other than the first trade day of the week). In the first three scenarios, this threshold is based on the unit's gas cost calculated using the next day gas price index (\$40/MWh). Scenario D assumes the CAISO increases the reasonableness threshold in the real-time market to reflect a 25% increase in same day gas prices relative to the next day index. This raises the unit's gas cost used in calculating the threshold from \$40/MWh to \$50/MWh.

Figure 1. Illustrative scenarios of reference level adjustments



	(A) Bid cost cap (with gas index and 25% scalar)	(B) Actual cost (with gas cost reported by supplier)	(C) Actual cost (with 25% adder)	(D) Actual cost (with updated threshold)
Gas cost (index or actual reported by supplier)	\$40.00	\$54.00	\$54.00	\$54.00
Major Maintenance Adder	\$10.00	\$10.00	\$10.00	\$10.00
Other non-fuel cost (default or negotiated)	\$8.00	\$8.00	\$8.00	\$8.00
Headroom scalar (25%)			\$18.00	\$18.00
Total	\$72.50	\$72.00	\$90.00	\$90.00
Reasonableness threshold (10%)			\$77.75	\$91.25
Bid used in market (up to threshold)	\$72.50	\$72.00	\$77.75	\$90.00
Bid cost eligible for ex post recovery			\$12.25	

Scenario A represents a base case with no reference level adjustment request by the supplier. The unit's estimated actual minimum load cost is \$58/MWh and the unit's bid cap is \$72.50/MWh after application of the 25% headroom scalar for commitment costs.

Scenario B assumes the supplier submits a reference level adjustment based on actual gas costs of \$54/MWh or 35% higher than the gas cost based on the CAISO gas price index. In this scenario, the unit's total actual minimum load costs is \$72/MWh without application of the 25% headroom scalar. In this case, the unit's actual minimum load cost of \$72/MWh would still be slightly lower than the unit's \$72.50/MWh bid cap. Thus, without the 25% headroom scalar, the unit would be able to recover its full actual minimum loads costs without any adjustment to the unit's standard bid cap.

Scenario C is the same as Scenario B, but includes the 25% headroom scalar on top of the unit's actual minimum load costs as calculated using the supplier's reported \$54/MWh gas cost. In the scenario, the supplier's bid cost with the 25% headroom scalar is \$90/MWh. Since this is higher than the \$77.50 reasonableness threshold, DMM understands the unit's bid used in the market would be capped at the reasonableness threshold and that the supplier could seek *ex post* cost recovery of another \$12.50/MWh if dispatched to operate that hour. This scenario reflects DMM's understanding of the CAISO's tariff filing.

Scenario D assumes the CAISO increases the reasonableness threshold in the real-time market to reflect a 25% increase in same day gas prices relative to the next day index. This raises the unit's gas cost used in calculating the threshold from \$40/MWh to \$50/MWh and raises the reasonableness threshold from \$77.50 to \$91.25. Since the unit's bid price after the reference level adjustment request (\$90) is lower than the updated reasonableness

threshold, the unit's \$90/MWh bid is used in the market and no portion of the bid is subject to potential ex post cost recovery.

The CAISO has not justified continuing to apply the current 25% headroom scalar to commitment cost bid caps and reference levels calculated from supplier-determined fuel costs.

As explained in DMM's comments during the CCDEBE stakeholder process, DMM continues to question the need for applying the current 25% headroom scalar to commitment cost bid caps calculated by the CAISO and reference level bids based on gas costs submitted by generators.²¹ The CAISO is also proposing to include headroom in commitment cost bids generated when a supplier fails to submit a bid, a change from the current practice which excludes headroom from generated commitment cost bids. The CAISO's filing provides no justification for why reference bids should include the 25% headroom scalar when these reference bids are based on supplier's own estimate of actual or expected gas costs. On the contrary, the CAISO's tariff filing explains that:

The CAISO based the 125 proxy cost bid cap [i.e. 25% headroom scalar] on its analysis related to intra-day gas purchasing costs showing that some bidding headroom is appropriate to allow resources to recover costs associated with day-over-day and intra-day gas price volatility, but that a higher cap is not necessary given the relative rarity of gas price increases greater than 25 percent.²²

Meanwhile, the CAISO's revised draft final CCDEBE proposal includes a passage contending that the 10% and 25% headroom scalars were intended to cover unspecified

²¹ *Comments on Revised Draft Final Proposal for Commitment Cost and Default Energy Bid Enhancements*, February 28, 2018, pp. 11-13. <http://www.aiso.com/Documents/DMMComments-CommitmentCostsandDefaultEnergyBidEnhancementsRevisedDraftFinalProposal.pdf>.

²² Transmittal letter, pp. 7-8. These 10 percent and 25 percent headroom scalars are applied to all components of energy and commitment cost bids – including fuel and non-fuel components. Thus, the unit's actual gas costs must actually be more than 10% or 25% greater than the gas index used by the CAISO for the unit's actual costs to exceed its default energy bid or commitment cost bid cap.

“incidental costs” not covered in the ISO’s estimate of total commitment and energy costs.

In the revised draft final proposal, the CAISO acknowledges that a 10% headroom scalar would be sufficient for these unspecified “incidental costs”:

Currently the California ISO has a cost-based cap on commitment cost bids of 125% of commitment cost reference levels that is intended to account for both incidental costs not included in the estimate and fuel price volatility. Since fuel price volatility under the approach described in this proposal will be accounted for by suppliers requesting reference level adjustments, a 110% commitment cost headroom scalar, the same as for energy cost reference levels, will be more appropriate.²³

The CAISO’s revised draft final proposal included a provision to lower the 25% scalar from 25% to 10% after 18 months, but initially kept the scalar at 25% since “mitigating to reference levels that only include a 110% headroom scalar would make resources worse off than the current approach.”²⁴

In an October 2014 filing to the Commission, the CAISO argued that the 125 percent scalar is sufficient to cover gas volatility plus any other inaccuracies in the CAISO’s estimate of other components of each resource’s operating costs.²⁵

The 125-percent cap will also account for variations in the standard resource-specific costs that are used in the CAISO’s master file, such as the variable operation and maintenance expense, greenhouse gas costs, and natural gas imbalance charges.

The CAISO anticipates that the increased proxy cost bid cap will allow resources to capture the vast majority of costs associated with observed natural gas price volatility.

²³ Second revised draft final proposal, p. 33.

²⁴ Second revised draft final proposal, p. 33.

²⁵ Tariff Amendment to Modify Start-Up and Minimum Load Cost Recovery Mechanisms, ER15-15-001, October 1, 2014, p. 10
http://www.caiso.com/Documents/Oct1_2014_TariffAmendment_CommitmentCostEnhancements_ER15-15.pdf

In response to a deficiency letter from FERC relating to the CAISO October 2014 filing, the CAISO indicated that:

As explained in the October 1 [2014] tariff filing and in this response, the CAISO concluded that a 125-percent proxy cost bid cap is reasonable based on two factors: (a) data showing that both day-over-day and intra-day gas prices in California have experienced some volatility, but that increases of 25 percent or more have been much rarer than price increases below 25 percent; and (b) the fact that the proxy cost formula cannot reflect individual resources' actual operating costs with perfect precision.²⁶

In this November 2014 response, the CAISO specifically noted that the potential fuel-related costs accounted for the most significant category of cost not included in the CAISO's calculation of commitment costs:

The most significant cost category not included in the CAISO's proxy cost formula consists of gas-related costs other than commodity and transportation costs. These include costs associated with intra-day gas purchases, hedging costs, and other risk premiums.²⁷ [Emphasis added]

The CAISO's current filing provides no specific examples of any non-fuel "incidental costs" that are not already captured in the default energy bids and proxy commitment cost bids calculated by the CAISO. In fact, since the start of the ISO's nodal market in 2009, the CAISO has implemented a series of rule changes to ensure that all identified non-fuel costs are directly incorporated into the energy and commitment bid costs before the additional 10% and 25% headroom scalars are applied. Cost-based bids used to calculate resource bid caps have been modified over the years to include grid management charges (GMC), GHG emissions and major maintenance adders (MMAs). Generators can

²⁶ *ISO Response to November 6, 2014 Letter Regarding CAISO Tariff Amendment*, Docket No. ER15-15-001, November 24, 2014, pp. 4-5:
http://www.caiso.com/Documents/Nov25_2014_DeficiencyResponse_CommitmentCosts_ER15-15.pdf.

²⁷ *ISO Response to November 6, 2014 Letter Regarding CAISO Tariff Amendment*, Docket No. ER15-15-001, November 24, , p. 10.
http://www.caiso.com/Documents/Nov25_2014_DeficiencyResponse_CommitmentCosts_ER15-15.pdf.

get special negotiated values for variable O&M and default energy bids. Under the CAISO's CCE3 proposal, generators will be eligible for opportunity cost adders calculated by the ISO or can propose their own opportunity cost adders under a Negotiated Option.

As a result of these various rule changes to ensure that all identified non-fuel cost are included in default energy bids and commitment cost proxy bids, the CAISO's rationale that the 25% headroom scalar are needed to cover additional non-fuel costs is highly questionable and has not been supported by any analysis or empirical examples.

Allowing suppliers to apply the 25% headroom scalars to all supplier-determined costs may undermine the CAISO's ability to perform effective ex post verification of suppliers' actual or expected cost.

The CAISO's proposal "is intended to provide an administratively efficient pre-market verification procedure, while ensuring reference level changes are based on actual or expected fuel or fuel-equivalent costs that are greater than a resource's reference levels."²⁸ However, the gas price index used in CAISO reference levels is a volume weighted average of gas transactions. Since the CAISO's policy is to allow suppliers to include the 10% and 25% headroom scalars in requested reference levels, any supplier that purchased gas at a price even marginally higher than the gas-price index used in the CAISO reference level would be eligible to submit a Reference Level Change Request. Based on historical data, if the headroom scalars are considered part of the supplier's "actual or expected" costs, then over half of all bids from gas resources would therefore be eligible and have an incentive to submit for a Reference Level Change Request.²⁹

²⁸ Transmittal letter, p. 41.

²⁹ See Table 1 and Figures 2 and 3 in these comments.

Thus, rather being a rare occurrence on the small number of days with large gas market price volatility, these requests could be a regular occurrence for many suppliers on most days. This volume of reference level change requests could undermine the CAISO's goal of having an "administratively efficient pre-market verification procedure" which also ensures reference level changes "are based on actual or expected fuel or fuel-equivalent costs that are greater than a resource's reference levels."³⁰ As the CAISO's transmittal letter explains:

The proposed revisions authorize the CAISO to audit automated reference level change requests, even if they fall within the reasonableness thresholds ... The reasonableness thresholds are not intended as "safe harbors" that suppliers can bid up to irrespective of their actual costs. The CAISO must, therefore, have the ability to verify, after-the-fact that the automated reference level change requests are appropriately based on the supplier's actual or expected or costs. Absent such audit authority, suppliers may over time increase their costs used by the CAISO market systems and inflate their costs above their actual or expected costs. This could result in unjustified higher costs to the CAISO market through unsupported and unjustified higher energy and commitment costs.³¹ [Emphasis added]

Thus, allowing suppliers to apply the 10% and 25% headroom scalars to all supplier-determined costs could undermine the CAISO's ability to perform ex post verification of suppliers' actual or expected cost.

CAISO should clarify that suppliers may not incorporate exposure to, or risk of, gas imbalance penalties into Reference Level Change Requests

This proposal requires that Reference Level Change Requests be supported by Documentation of Contemporaneously Available Information which is defined as:

Documents that exist when a Reference Level Change Request is submitted that show the price of fuel or fuel-equivalent is based on next-day procurement for the Day-Ahead Market, and is based on same-day or next-day procurement for the Real-Time Market, except for non-standard gas trading days, in which case the documents must show the

³⁰ Transmittal letter, p .41.

³¹ Transmittal letter, p. 41.

price of procurement for fuel or fuel-equivalent no sooner than the most recent standard gas trading day. Such documentation may include: quotes from natural gas suppliers; gas purchase invoices; evidence of a bid price that was part of an unsuccessful good faith effort to purchase fuel or fuel-equivalent; or other appropriate documentation demonstrating fuel costs or fuel-equivalent costs [Emphasis added].³³

The proposed provisions for After-CAISO Market Process Cost Recovery requires documentation demonstrating reasonable costs and reflecting prudent procurement practices. Section 30.12.3 of CAISO's proposed tariff language states:

Scheduling Coordinators must submit supporting documentation that demonstrates that submitted costs represent actually procured daily fuel costs or fuel-equivalent costs for a given Trading Day that exceed the fuel costs or fuel-equivalent costs the CAISO used to calculate the resource's Reference Levels. These fuel costs or fuel-equivalent costs must be reasonable and reflect prudent procurement practices. [Emphasis added].³⁴

The ISO excludes gas imbalance penalties from After-CAISO Market Process Cost Recovery because "doing so would provide a disincentive for suppliers to follow gas pipeline instructions."³⁵ Allowable documentation for Reference Level Change Requests should likewise exclude gas imbalance penalties and require that costs be reasonable and reflect prudent procurement practices.

Gas imbalance penalties and limitations on gas supply are reflected in market prices at which suppliers may procure gas. As shown in Figure 2, the difference in next day gas prices at SoCal Citygate compared to SoCal Border is clearly correlated with the declaration of Operational Flow Orders (OFOs) and the different gas imbalance charges associated with these OFOs. Thus, allowable documentation for Reference Level Change Requests should exclude documentation of gas imbalance penalties as these costs are reflected in

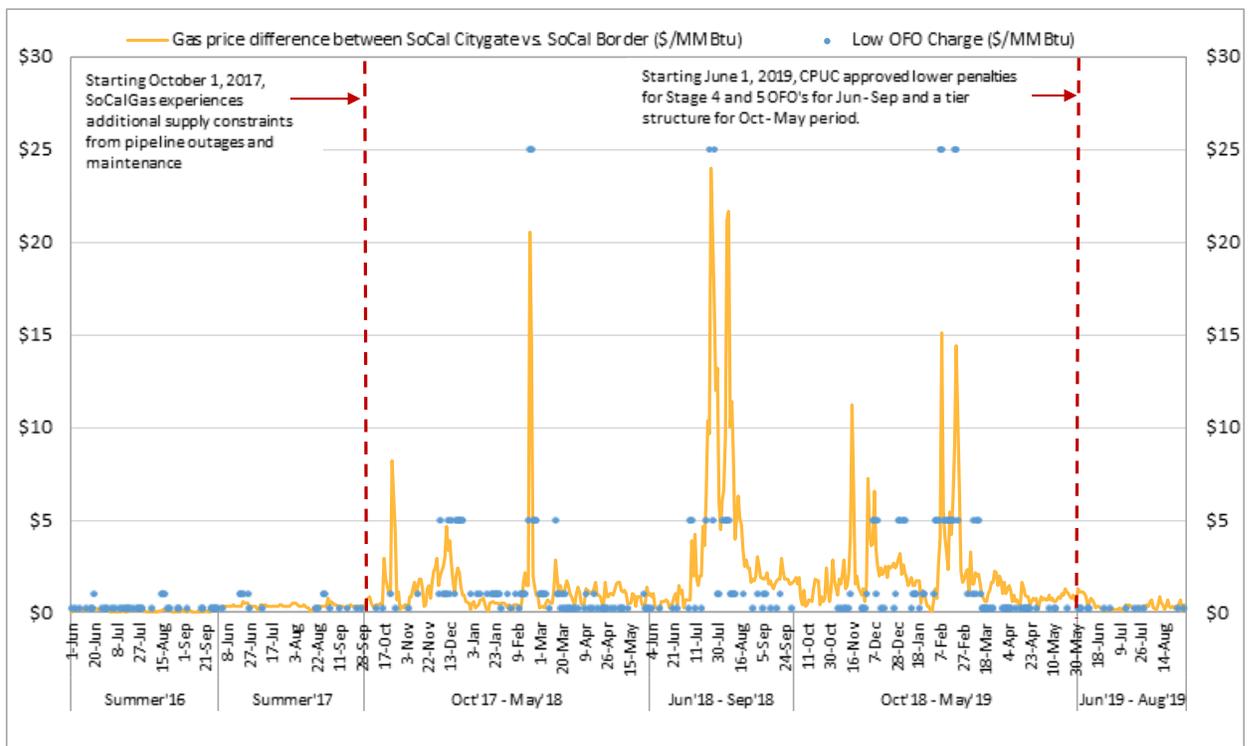
³³ Transmittal letter Attachment A-Clean Tariff, p. 84.

³⁴ Attachment A-Clean Tariff, p. 63.

³⁵ Transmittal letter, p 51.

prevailing gas market prices and because doing so could threaten gas system reliability by providing a disincentive for suppliers to follow gas pipeline instructions. Because gas imbalance penalties are incorporated in prevailing gas prices, CAISO should clarify on Reply that Documentation of Contemporaneously Available Information does not include documentation of exposure to, or risk of, gas imbalance penalties.

Figure 2. Difference in next day gas price at SoCal Citygate vs SoCal Border (\$/MMBtu)



CAISO has not defined important details of its proposed adjustments to reasonableness thresholds for persistent conditions.

CAISO proposes to adjust a resource’s reasonableness thresholds when costs that have not been approved through the automated or manual Reference Level Change Request process are based on fuel costs that are “systematically greater”³⁸ than the fuel

³⁸ Attachment B – Marked Tariff, p. 63.

costs used to calculate CAISO reference levels. DMM appreciates that CAISO has explicitly limited consideration of reasonableness threshold adjustments to situations in which Reference Level Change Requests “were not approved pursuant to Section 30.11”³⁹ (i.e. when CAISO did not approve an automated or manual Change Request). If CAISO had allowed itself to consider reasonableness threshold adjustments for systematic manual Change Requests that were approved (as opposed to only systematic manual Change Requests that were *not* approved), it may have created a loophole in the policy through which suppliers could have submitted manual Change Requests for resource costs below the reasonableness thresholds in order to entice CAISO into a feedback loop adjustment to the resources’ reasonableness thresholds. DMM notes that the potential for this behavior still exists under the proposed tariff language if CAISO is not able to approve all manual Reference Level Change Requests for resource costs below the reasonableness threshold.

The feedback loop policy warrants monitoring because CAISO has not defined important aspects of this policy. CAISO has not defined what it means by the term “systematically greater”. CAISO’s interpretation of what counts as “systematically greater” could have a significant impact on the quantity of resources that receive reasonableness threshold adjustments. Furthermore, CAISO has not defined the length of time an adjustment would be effective or how CAISO would determine the size of an adjustment.

If in practice CAISO makes these adjustments infrequently, these details may not have a significant market impact. However, DMM notes that CAISO should expect significantly more manual Reference Level Change Requests if the CAISO and the

³⁹ Attachment B – Marked Tariff, p. 67.

Commission decide that suppliers can apply the large 10% or 25% headroom scalars to a resource's actual costs in a Reference Level Change Request.

The CAISO's filing shows that the current 10% and 25% headroom scalars reasonably cover supplier's actual gas costs in most cases.

The CAISO filing provides analysis which the CAISO contends indicates that "under the existing tariff provisions supplier in the CAISO market were at risk of not recovering their actual costs on these days a substantial portion of the time."⁴⁰ The CAISO filing also asserts that these findings "are confirmed by the DMM studies" and that "DMM's analyses also show that a substantial portion of the commitment cost and default energy bids used the CAISO market may not be sufficient to recover fuel costs that participant actually incur in real-time."⁴¹

DMM supports the CAISO's general proposal to allow suppliers to submit higher default energy bids and commitment cost bids when gas prices in the same day market rise significantly, so that a supplier's actual or expected costs exceed bid caps based on next day gas prices. However, analysis in the CAISO's transmittal letter and DMM's prior studies show the current 10% and 25% headroom scalars allow suppliers to recover their actual gas costs in all but a relatively small portion of days in which same day gas prices rise more than 10% or 25% above the price indices from the next-day market.⁴² Indeed, the CAISO's own filing elsewhere acknowledges that the current 10 percent and 25% headroom scalars "reasonably accounts for differences the [sic] gas

⁴⁰ Transmittal letter, p.17 and p. 18.

⁴¹ Transmittal letter, pp. 19-20.

⁴² See Transmittal letter, p. 19, Figure 2. Also see Table 1 and Figures 3 and 4 in these comments.

price the CAISO systems use for the day-ahead market and actual same-day gas prices.”⁴³

Table 1 and Figures 3 and 4 further illustrate this point using the same gas market prices for 2018 used in the analysis provided in the CAISO’s filing.⁴⁴ In 2018, significant differences between next day and same-day gas market prices were much more frequent compared to prior years and 2019.⁴⁵ As in other years, these differences were greatest and most frequent on the first trade day of each week in 2018.

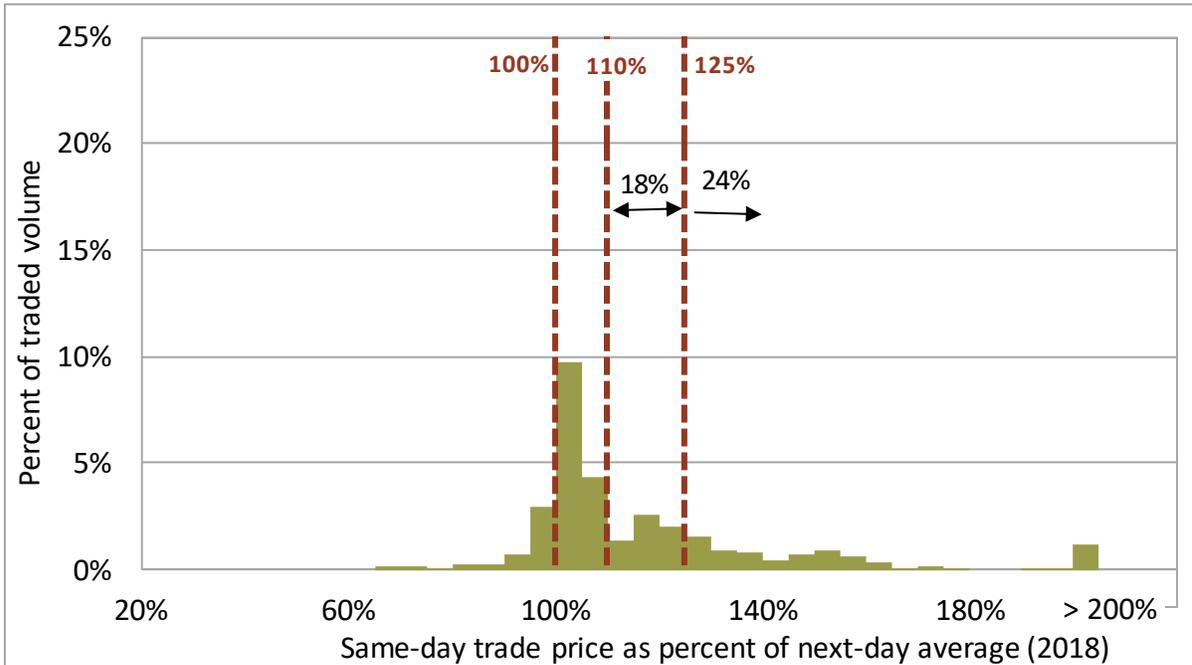
As shown in Table 1 and Figure 3, on the first trade day of each week in 2018, about 24 percent of gas traded in the same day market was sold at a price more than 25% greater than the next-day index. However, as shown in Figure 1, gas cost must be more than 25% higher than the next day index for a supplier’s actual commitment costs to exceed the commitment cost bid caps. On the first trade day of each week, a total of about 42% of same day gas was traded at a price more than 10% greater than the next day price index. On all other trade days, only about 6% of gas traded in the same day market was sold at a price more than 25% greater than the next-day index and about 16% of same day gas was traded at a price more than 10% greater than the next day price index.

⁴³ Transmittal letter, p. 30.

⁴⁴ DMM’s analysis is based on the same combined PG&E Citygate and SoCal Citygate prices during 2018 referenced in the CAISO’s filing. Transmittal letter, p.18.

⁴⁵ Citations to prior DMM reports.

**Figure 3. Same-day gas trade prices as percent of next-day index
(First trade day of week, 2018)**



**Figure 4. Same-day gas trade prices as percent of next-day index
(Other trade days, 2018)**

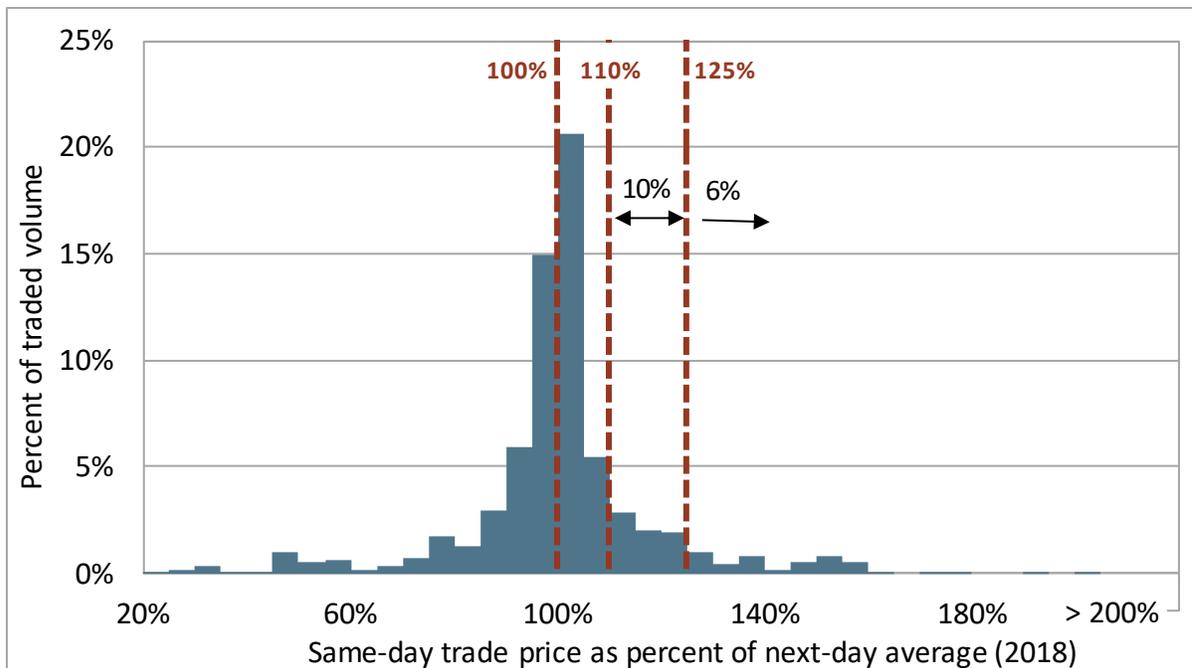


Table 1. Same-day gas trade prices as percent of next-day index

Same day price vs. price index	First trade-day of week	Other trade days
<=100%	14%	45%
100% - 110%%	44%	38%
110% - 125%	18%	10%
>125%	24%	6%
	100%	100%

III. CONCLUSION

DMM supports each of the four general tariff changes proposed by the CAISO and the proposal to update reasonableness thresholds based on observations of same-day gas prices. However, as explained in these comments, DMM does not support several key details of the CAISO's proposed rules for allowing suppliers to request adjustments to their commitment cost and energy reference levels based on their actual or expected costs.

DMM respectfully requests that the Commission afford due consideration to these comments as it evaluates the proposed tariff provisions before it.

Respectfully submitted,

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Dated: September 20, 2019

CERTIFICATE OF SERVICE

I hereby certify that I have served the foregoing document upon the parties listed on the official service lists in the above-referenced proceedings, in accordance with the requirements of Rule 2010 of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2010).

Dated at Folsom, California this 20th day of September, 2019.

1st Grace Clark
Grace Clark