



November 22, 2019

The Honorable Kimberly D. Bose
Secretary
Federal Energy Regulatory Commission
888 First Street, NE
Washington, DC 20426

**Re: California Independent System Operator Corporation
Response to Deficiency Letter
Docket No. ER19-2727-001**

Dear Secretary Bose:

On August 30, 2019, the California Independent System Operator Corporation (CAISO) filed amendments to its tariff to (1) enhance its market rules so suppliers can request adjustments to their CAISO-calculated commitment cost and energy price reference levels to more accurately reflect their costs, and (2) make certain other refinements to the tariff (CCDEBE Tariff Amendment).¹ On October 7, 2019, the CAISO filed a motion for leave to answer and answer to address comments and a limited protest regarding the CCDEBE Tariff Amendment (CCDEBE Answer). On November 4, 2019, the Commission issued a letter to the CAISO stating that the CCDEBE Tariff Amendment is deficient and that additional information is necessary to process it (November 4 Letter). The CAISO provides the additional information below.

The CAISO respectfully requests that the Commission issue an order accepting on a permanent basis the tariff revisions that were previously approved by the Commission to address the limited operability of the Aliso Canyon natural gas storage facility (Aliso Canyon), which are described in section IV.C (*i.e.*, described on pages 53-55) of the transmittal letter for the CCDEBE Tariff Amendment, no later than December 21, 2019 with an effective date of

¹ The term CCDEBE stands for commitment cost and default energy bid enhancements. In addition to the CCDEBE Tariff Amendment, which the CAISO filed in the above-captioned proceeding pursuant to section 205 of the Federal Power Act (FPA), the CAISO separately submitted a filing to comply with Order No. 831 in Docket No. ER19-2757-000, which is pending before the Commission. See *Offer Caps in Markets Operated by Regional Transmission Organizations and Independent System Operators*, Order No. 831, FERC Stats. & Regs. ¶ 31,387 (2016), *order on reh'g and compliance*, Order No. 831-A, 161 FERC ¶ 61,156 (2017).

December 31, 2019.² The Commission previously approved these provisions on a temporary basis, and they expire on December 31, 2019. These will continue to be necessary to address the impact of gas system constraints on the electricity grid after December 31. There is no reason to delay approving the permanent implementation of those measures, which no party opposes. The CAISO asks that the Commission treat those measures as severable from all the other proposals contained in the CCDEBE Tariff Amendment, and timely approve them to ensure a seamless transition into 2020.

Furthermore, the CAISO does not propose any changes in the instant filing to the substance of the tariff revisions described in section IV.C of the transmittal letter for the CCDEBE Tariff Amendment. Thus, the CAISO believes there is no reason for the Commission to establish a new comment period solely for the change in effective date to December 31, 2019 described above. However, if the Commission decides to establish a new comment period for the requested change in effective date, the CAISO respectfully requests waiver of the Commission's notice requirements to permit that December 31 effective date.³ Good cause exists to grant the requested waiver because the CAISO only proposes to change the effective date, not the substance of the tariff revisions as submitted in the CCDEBE Tariff Amendment.

The CAISO also respectfully requests that the Commission issue an order by January 21, 2020 (*i.e.*, 60 days after the CAISO submits this response) accepting the portions of the CAISO's proposal discussed in the balance of the section IV of the transmittal letter for the CCDEBE Tariff Amendment (*i.e.*, sections IV.A, IV.B, and IV.D. of the transmittal letter) with an effective date of no later than April 30, 2020. The CAISO estimates it will need no more than an additional three months after the Commission approves the proposed tariff revisions to evaluate the implications of the Commission's order and make any necessary changes to its systems. This will also provide market participants with sufficient time to do the same and prepare for implementation of the changes proposed in the CCDEBE Tariff Amendment. Subject to the Commission's directive, the CAISO will inform the Commission of the effective date of the tariff amendments once it determines their actual implementation date. To the extent necessary, the CAISO respectfully requests waiver of the Commission's notice

² As described in footnotes 184 and 185 of the transmittal letter for the CCDEBE Tariff Amendment, the affected tariff sections are: new tariff sections 6.5.2.2.3, 6.5.2.3.4, and 6.5.4.2.3; revised tariff sections 39.7.1.1.1.3(a)-(c); and deleted tariff sections 30.4.1.2(b) and 31.6.1(v). In the CCDEBE Tariff Amendment, the CAISO requested that the Commission accept all of the tariff revisions contained therein no later than December 11, 2019. See transmittal letter for CCDEBE Tariff Amendment at 57.

³ Specifically, pursuant to section 35.11 of the Commission's regulations, 18 C.F.R. § 35.11, the CAISO requests waiver of the notice requirements set forth in section 35.3(a)(1) of the Commission's regulations, 18 C.F.R. § 35.3(a)(1).

requirements to permit the requested effective date of no later than April 30, 2020.⁴

I. RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION

A. Request No. 1

CAISO states that it has identified two sets of proposed tariff revisions in this filing that are severable from the other proposed tariff revisions: “(1) permanent implementation of tariff revisions the Commission previously accepted on an interim basis to address the limited operability of Aliso Canyon (see supra section IV.C of this transmittal letter); and (2) clarification of the tariff section that describes the CAISO’s application of a bid-effectiveness threshold to determine when transmission constraints are relaxed and penalty prices are triggered (see supra section IV.D of this transmittal letter).” CAISO also states that tariff sections 39.7.1.1.1.3(a)-(c) are severable from the rest of the filing as part of the previously accepted Aliso Canyon-related tariff revisions discussed in section IV.C of the transmittal letter. CAISO’s proposal to use a Monday-only index to calculate commitment cost bid caps and default energy bids (DEBs) for the day-ahead market that runs on Sundays for the Monday operating day is included in section IV.A of its transmittal letter.

- a. Please specify whether CAISO’s proposal to use a Monday-only index is severable from previously accepted Aliso Canyon-related provisions described in section IV.C of the transmittal letter.*
- b. Please specify whether CAISO’s proposal to use a Monday-only index is severable from the main body of CAISO’s proposal discussed in sections IV.A and IV.B of the transmittal letter.⁵*

1. CAISO Response to Request No. 1) a

The CAISO clarifies that its proposal to use a Monday-only index is severable from the previously accepted Aliso Canyon-related provisions described in section IV.C of the transmittal letter for the CCDEBE Tariff Amendment.

The Aliso Canyon-related provisions described in section IV.C are intended to replace the same provisions the Commission previously approved on a temporary basis through December 31, 2019. The need to continue these

⁴ Again, the CAISO requests such waiver of section 35.3(a)(1) of the Commission’s regulations, pursuant to section 35.3 of those regulations.

⁵ November 4 Letter at 1-2 (citing transmittal letter for CCDEBE Tariff Amendment at 4-5, n.10, and 57 n.195).

requirements beyond December 31, 2019 is not conditioned on or related to the CAISO's ability to use the Monday-only index. Therefore, the Commission should consider the proposal to use the Monday-only index separate and apart from its consideration of the provisions described in section IV.C of the transmittal letter. As noted above, the CAISO respectfully requests the Commission accept the provisions described in section IV.C effective December 31, 2019, to ensure a smooth transition when the currently effective provisions expire.

2. CAISO Response to Request No. 1) b

The CAISO clarifies its proposal to use a Monday-only index is severable from the main body of the CAISO proposal discussed in sections IV.A and IV.B of the transmittal letter for the CCDEBE Tariff Amendment.

The CAISO further clarifies that the Monday-only index is severable from all other changes proposed in the CCDEBE Tariff Amendment. Separate Commission action regarding the Monday-only gas index will not affect the justness and reasonableness of the other elements of the CCDEBE Tariff Amendment. Therefore, the Commission can and should consider the CAISO's proposal to use the Monday-only index separate and apart from its consideration of the other proposed changes.

B. Request No. 2

Under its proposal, CAISO would reflect the Monday-only natural gas price in DEBs when CAISO determines that the Monday-only market is sufficiently liquid. Please explain how CAISO would communicate to market participants that Monday DEB [default energy bid] values will be calculated using Monday-only natural gas prices, as opposed to the weekend strip natural gas prices.⁶

1. CAISO Response to Request No. 2

The CAISO is not proposing to change how it tells market participants which index it uses to calculate the reference levels used in any market run and their updated reference levels. For reference levels used in the day-ahead market, the CAISO publishes the updated reference levels between 8:00 a.m. and 10:00 a.m. of the day on which it conducts the applicable day-ahead market.⁷ Thus, for the day-ahead market for Monday, the CAISO will publish updated reference levels between 8:00 a.m. and 10:00 a.m. on the preceding Sunday. For the real-time market, CAISO publishes on its Open Access Same-

⁶ *Id.* at 2.

⁷ See existing tariff section 6.5.3.1.3.

Time Information System (OASIS) the fuel region gas prices used to calculate reference levels between 10:00 pm and 11:00 pm on the prior day.⁸

Regarding the Monday-only index, in the CCDEBE Tariff Amendment the CAISO has proposed tariff provisions that contain the specific criteria it will apply to determine whether to use the Monday-only index.⁹ Market participants can evaluate whether the index has met these criteria based on the Monday-only index price data, if any, provided by ICE on Friday. The CAISO proposed in the CCDEBE Tariff Amendment that “the CAISO will use the Monday-only gas price index when it is reported by the Intercontinental Exchange three (3) days prior to the Monday Trading Day, provided” that the criteria stated in the tariff are met.¹⁰ Market participants can evaluate the criteria based solely on data provided by ICE¹¹ and thus will know each time that the CAISO is using the Monday-only prices.

C. Request No. 3

In its transmittal letter, CAISO states that it did not include a specification that gas imbalance penalties would be eligible for after-the-fact cost recovery because doing so would violate Commission precedent. In its answer, CAISO clarifies that suppliers would be able to include these costs in reference level adjustments.

- a. *Given that CAISO’s proposed tariff sections contain no prohibition on the after-the-fact recovery of gas imbalance penalties, please explain whether there would be any circumstances under which CAISO would approve the after-the-fact recovery of gas imbalance penalties. To the extent that CAISO approves gas imbalance penalties for inclusion in reference levels, please explain whether a market participant could receive bid cost recovery payments or other uplift payments on this basis.*

⁸ See existing section 6.5.4.2.3. An exception is fuel region prices used to calculate the hydro default energy bid. Pursuant to proposed tariff section 30.11.1.3(a)(ii), the CAISO would update these based on gas prices on the morning of the day of the real-time market if they increase significantly compared to the gas prices published the previous evening that the CAISO market would otherwise use. The CAISO will not publish these updated gas prices because it would violate its user agreement with the Intercontinental Exchange (ICE).

⁹ See transmittal letter for CCDEBE Tariff Amendment at 39-40 (discussing revisions to tariff sections 39.7.1.1.1.3(b)-(c)).

¹⁰ Revised tariff section 39.7.1.1.1.3(c).

¹¹ The CAISO understands that the information on ICE is available by subscription only. However, market participants that trade on ICE platforms using the Monday-only index must subscribe to ICE and would have this information available to them through their subscriptions.

- b. *Please explain what demonstration a market participant would have to make to be eligible to include gas imbalance penalties in its reference levels. Please include specific examples.*
- c. *Please specify whether a market participant could use the potential to incur gas imbalance penalties as a justification for adjusting reference levels up to the reasonableness threshold as part of an automated reference level adjustment.¹²*

1. CAISO Response to Request No. 3) a

In response to this question, the CAISO first clarifies what it meant by the phrase “after-the-fact cost recovery” when discussing recovery of gas penalty costs in this proceeding.¹³ Specifically, the CAISO was referring to a scheduling coordinator’s ability to recover actual fuel costs or fuel-equivalent costs pursuant to proposed new tariff section 30.12, as discussed in section IV.A.1.c of the transmittal letter (*i.e.*, pages 45-47) for the CCDEBE Tariff Amendment. These provisions are substantially similar to provisions currently in effect under Commission-approved tariff sections 30.11 and 30.12.¹⁴ These types of after-the-fact processes are different from other types of uplift payments that are calculated after the market clearing process (*e.g.*, bid cost recovery under existing tariff section 11.8 or payments for exceptional dispatches under existing tariff section 11.5.6).

The CAISO clarifies there are no circumstances under which the CAISO would approve after-the-fact recovery of gas penalty costs under new tariff section 30.12 or of fuel or fuel-related costs under existing tariff sections 30.11 and 30.12. Therefore, a market participant cannot receive bid cost recovery payments or other uplift payments on this basis.

The CAISO did not include this detail in the CCDEBE Tariff Amendment. If the Commission determines, on compliance, that the CAISO should include this detail in its tariff, the CAISO would propose to do so by adding the following underlined language to the end of new tariff section 30.12.1:

30.12.1 Applicability [Not Used]

Scheduling Coordinators may request an additional uplift payment to cover a resource’s actual fuel costs or fuel-equivalent costs associated

¹² November 4 Letter at 2.

¹³ See, *e.g.*, transmittal letter for CCDEBE Tariff Amendment at 45; CCDEBE Answer at 23.

¹⁴ See transmittal letter for CCDEBE Tariff Amendment at 46 & n.147.

with Start-Up Bid Costs, Minimum Load Bid Costs, Transition Bid Costs, and Energy Bid Costs used in the Bid Cost Recovery mechanism, and that are for amounts in a Reference Level Change Request that were not approved pursuant to Section 30.11. Scheduling Coordinators may not request additional uplift payments under this section to cover costs associated with gas company imbalance penalties.

The Commission also asks whether a market participant could receive bid cost recovery payments or other uplift payments if the CAISO includes gas imbalance penalties in reference levels. In this context, the Commission appears to be referring to reference level change requests that would be made pursuant to new tariff section 30.11, which the CAISO references in the CCDEBE Answer. The CAISO did not include this detail in its CCDEBE Tariff Amendment. However, the CAISO stated in the CCDEBE Answer that it is appropriate under certain circumstances (as discussed further below in the response to Request No. 3) b) for suppliers to reflect gas imbalance penalties in their reference level change requests.¹⁵ To be more precise, the CAISO meant to say it may be appropriate for market participants to include gas imbalance penalties in their change requests under tariff section 30.11. However, as discussed in the response below to Request No. 3) c, the CAISO agrees with the Department of Market Monitoring (DMM) that the bulk of these costs should be captured by the fuel price indices the CAISO uses to formulate reference levels.

2. CAISO Response to Request No. 3) b

The Commission asks what demonstration a market participant must make to include gas imbalance penalties in its reference levels. The CAISO did not specifically address in the proposed tariff revisions submitted in the CCDEBE Tariff Amendment whether scheduling coordinators could include gas imbalance penalties in their reference level change requests, nor did the CAISO specify what documentation scheduling coordinators could provide in support of such requests. However, the CAISO recently posted its proposed business practice manual (BPM) revisions for the CCDEBE initiative, which include additional details on the types of penalties (including gas imbalance penalties) that the CAISO would accept in reference level change requests.¹⁶ As discussed below, the CAISO intends to modify its proposed BPM provisions to state that market participants may *not* submit reference level change requests to recover costs associated with gas imbalance penalties. In response to Request No. 3) b, the CAISO also explains below why it originally proposed to allow recovery of such costs pursuant to the BPM revisions it now plans to modify.

¹⁵ See CCDEBE Answer at 22-24.

¹⁶ See proposed revision request (PRR) no. 1203, available at <https://bpmcm.caiso.com/Pages/default.aspx>. This PRR includes proposed new attachment O (entitled "Reference Level Change Requests") to the BPM for Market Instruments.

In the BPM revisions, the CAISO indicated that scheduling coordinators may include in the fuel cost component of a reference level change request any non-compliance charges associated with the specific level of operational flow order, if they submit the reference level change request after the last gas nomination cycle (*i.e.*, the scheduling deadline) has closed to cover the remaining hours of the same-day real-time market.¹⁷ The scheduling coordinator would have had to retain evidence showing notice of fuel transport flow orders (*e.g.*, an operational flow order (OFO) or emergency flow order (EFO)) and associated gas imbalance penalties. The BPM revisions would have only allowed such costs to be included after the last scheduling cycle because, at that point, the supplier cannot schedule gas on the system to avoid the penalties. If the supplier can include penalty costs in its resource's reference level change request, the increased costs will allow the CAISO market to recognize the gas constraints, and consequently the market will not dispatch the resource over other, less expensive resources that may not be subject to the same gas system constraints. The CAISO's original rationale for allowing the inclusion of penalty costs under these specific circumstances is explained further below in the CAISO response to Request No. 4) a.

Although the CAISO can provide these general guidelines, it cannot provide actual examples of what documentation of gas imbalance penalties would be acceptable. The CAISO does not know exactly what documentation scheduling coordinators have in their possession to make these showings. Therefore, the CAISO cannot provide a specific example in response to the Commission's request. For this reason and the other reasons discussed below in response to Request No. 3) c, the CAISO will be modifying its proposed BPM provisions to not allow scheduling coordinators to submit reference level change requests to cover gas imbalance penalties.

3. CAISO Response to Request No. 3) c

The Commission asks whether, under the reference level adjustment, a market participant could use the potential to incur gas imbalance penalties as a justification for adjusting reference levels up to the reasonableness threshold. The CAISO confirms that the BPM revisions in support of the CCDEBE Tariff Amendment, as currently proposed in PRR no. 1203, would allow a market participant to request a reference level change based on the potential to incur gas imbalance penalties, assuming that the change request met the conditions specified in the CAISO response above to Request No. 3) b. The CAISO previously believed this was necessary because the CAISO real-time market

¹⁷ See new section O.1 of attachment O to the BPM for Market Instruments as currently proposed in PRR no. 1203.

might dispatch a resource after the gas scheduling window has closed, requiring the resource to consume gas and incur an OFO penalty.

However, the CAISO no longer believes this is necessary. The CAISO agrees with the DMM that the price indices are likely to capture the bulk of the costs associated with gas imbalance charges.¹⁸ The CAISO notes that the DMM Comments contain useful information showing that gas imbalance penalties and limitations on gas supply are reflected in gas price indices that reflect the prices suppliers face in procuring gas. Figure 2 in the DMM Comments shows that the difference between next-day gas prices at the SoCal Citygate hub and at the SoCal Border hub correlates with the declaration of OFOs and the different gas imbalance charges associated with these OFOs. Thus, most of these imbalance gas penalties should already be captured in the gas price indices used to calculate the resource's reference levels. Any penalties that scheduling coordinators incur would be incremental to those already captured by the indices.

The CAISO did not expressly state in the CCDEBE Tariff Amendment whether market participants could, under certain conditions, include gas imbalance penalties in reference level change requests. In any case, upon further consideration of the DMM data and in responding to the Commission's inquiries, the CAISO intends to modify its proposed BPM provisions to explicitly state that gas imbalance penalties cannot be included in reference level change requests. Because the bulk of the penalty costs are captured in the fuel price indices used by the CAISO, this proposed modification will not degrade the quality of the costs the CAISO uses to clear its markets. Therefore, the CAISO's proposal is just and reasonable even if it does not allow scheduling coordinators to request reference level changes to recover gas imbalance penalty costs not already captured by gas price indices. If the Commission determines, on compliance, that the CAISO tariff should state that market participants cannot include gas imbalance penalties in reference level change requests, the CAISO proposes to do so by adding the following underlined language at the end of proposed new tariff section 30.11.2.1:

30.11.2.1 Applicability

A Scheduling Coordinator may submit a Reference Level Change Request for Default Start-Up Bids, Default Minimum Load Bids, and Default Energy Bids, as applicable. Scheduling Coordinators may not submit Reference Level Change Requests for Bids by Non-Resource-Specific System Resources. Resources under the Registered Cost methodology are not eligible for Reference Level Change Requests for Default Minimum Load Bids or Default Start-Up Bids. Scheduling Coordinators may not submit

¹⁸ See DMM Motion to Intervene and Comments, Docket No. ER19-2727-000, at 20 (Sept. 20, 2019) (DMM Comments).

Reference Level Change Requests to recover costs associated with gas company imbalance penalties.

Regardless, the CAISO does not view the question of whether or not gas imbalance penalty costs can be included in reference level change requests to be a critical or essential element of its overall CCDEBE proposal, and a Commission determination that they should or should not be included will not result in a meaningfully different rate design.

D. Request No. 4

In its answer, CAISO explains that inclusion of gas imbalance penalties could improve gas system reliability by allowing CAISO to consider these costs in the CAISO market.

- a. *Please elaborate and explain using numerical examples. As one example, in situations in which gas imbalance penalties might result from shippers violating system-wide natural gas pipeline operational flow orders, please explain whether, and if so, how CAISO would incorporate such potential gas penalties into commitment and dispatch instructions without jeopardizing the reliability of natural gas pipeline system.¹⁹*

1. CAISO Response to Request No. 4) a

The Commission asks the CAISO to elaborate and provide numerical examples regarding how including gas imbalance penalties could improve gas system reliability. In the CCDEBE Answer, the CAISO stated that allowing a resource to request a reference level change request to recover gas company penalties actually *works in favor* of gas reliability because it allows the CAISO to consider those costs in the CAISO market.²⁰ However, the CAISO did not intend by that statement to suggest any these actions would “improve” gas reliability. Rather, the CAISO’s statement that the CAISO’s actions work in favor of gas reliability merely indicated its belief that the inclusion of gas imbalance penalties in reference level change requests does not adversely affect gas reliability. Improving gas reliability is a much more complex question, and the CAISO was not suggesting it could or should address such issues in this proceeding.

As discussed in the response above to Request No. 3) c, the CAISO intends to modify its proposed BPM revisions to not allow scheduling coordinators to submit reference level change requests to recover gas imbalance

¹⁹ November 4 Letter at 3.

²⁰ CCDEBE Answer at 22 (emphasis added).

penalty costs. Prior to recognizing that existing indices capture the bulk of costs associated with gas imbalance penalties, the CAISO planned to allow recovery of such costs in reference level change requests, under the circumstances explained above, based on the following rationale: If the CAISO were to allow scheduling coordinators to change their reference levels to include gas imbalance penalties, those resources would become more expensive than resources without such costs. This would cause the CAISO market to not dispatch these resources and instead to dispatch less expensive resources. By not dispatching the resources located in constrained areas, the CAISO's actions would not work against gas reliability. Alternatively, if the supplier did not include these fuel costs in its market bids but actually incurred the gas imbalance penalties, the CAISO market would erroneously consider the resource to be more economic and would more likely dispatch the resource. This would potentially undermine gas reliability because it would put more strain on the gas system.

With respect to avoiding jeopardizing the reliability of the natural gas pipeline system, the CAISO coordinates closely with the gas companies to ensure electricity demands on the gas system do not cause or further aggravate gas emergencies. If a gas company informs the CAISO of a gas emergency, or the CAISO learns of an emergency or potential emergency through information made available by the gas company, the CAISO will take appropriate actions to ensure the CAISO can produce a reliable electricity dispatch that considers the gas constraints. The CAISO manages such constraints to ensure it has access to the generation it needs to maintain electric reliability, while also coordinating with the gas company to ensure the CAISO's dispatch does not undermine gas system reliability. For example, in the southern part of the CAISO system, the CAISO may enforce the maximum gas constraint to limit the gas burn out of specific generators in constrained areas.²¹ The CAISO may also manually dispatch certain generators off and manually dispatch certain generators on to address specific gas reliability concerns, while ensuring it can manage electric reliability.²² Although the CAISO ultimately can help the gas companies manage gas reliability by coordinating with them when operating the electric system, it cannot guarantee that, without such coordination, merely allowing a scheduling coordinator to include the gas imbalance penalty in its reference level change requests would not compromise gas reliability.

²¹ See existing tariff section 27.11. This is currently a temporary tariff provision. On October 31, 2019, the CAISO filed a tariff amendment in Docket No. ER20-273-000 to implement a permanent version of the maximum gas constraint. Commission action on that tariff amendment is pending.

²² See Operating Procedure 4120, *Gas Transmission Pipeline Derates or Outages* (available at <http://www.caiso.com/Documents/4120.pdf>) and Operating Procedure 4120C, *SoCalGas Service Area Limitations or Outages* (available at <http://www.caiso.com/Documents/4120C.pdf>).

E. Request No. 5

In its answer, CAISO clarifies that the 10 percent adder used to develop DEBs and 25 percent headroom used for the commitment cost bid cap will also be applied to supplier submitted costs. CAISO states in its transmittal letter, citing prior Commission orders, that “the 10 percent adder is intended to account for differences between the prices individual suppliers actually pay for gas and the average price reported by the published indices” and notes that the “25 percent headroom on the commitment cost bid cap also accounts for this and includes an additional 15 percent to account for gas price volatility and other costs.”

- a. *Given that the Commission approved these scalars based on CAISO’s representation that they would account for variability between an index and actual costs, please explain why it is appropriate to apply them to actual fuel costs. Please support your explanation with one or more numeric example(s) based on historic data.²³*

1. CAISO Response to Request No. 5) a

The Commission asks the CAISO to explain why it is appropriate to apply the 25 and 10 percent adders (*i.e.*, multipliers) for commitment costs and default energy bids, respectively, to actual fuel costs given that the Commission approved those multipliers based on the CAISO’s representation that they would account for variability between an index and actual costs. The Commission also asks that the CAISO support its explanation with one or more numeric example(s) based on historic data.

As a preliminary matter, as part of the overall CCDEBE policy initiative, the CAISO intended to phase in changes to the commitment cost reference level multipliers at the same time it implemented new dynamic commitment cost market power mitigation measures. This dynamic commitment cost market power mitigation would only mitigate resources’ commitment cost bids when the market must commit a resource to unload a transmission constraint.²⁴ In contrast, the CAISO’s current market rules have the effect of potentially mitigating resources’ commitment cost bids in all intervals because the static commitment cost bid cap always applies.²⁵

²³ November 4 Letter at 3 (quoting transmittal letter for CCDEBE Tariff Amendment at 17).

²⁴ See attachment D to CCDEBE Tariff Amendment (CCDEBE Board Memorandum) at 4-5.

²⁵ Today, resources can bid up to 125 percent of their commitment cost reference levels. See transmittal letter for CCDEBE Tariff Amendment at 7 (discussing existing tariff sections 30.4.1.1.1(b), 30.4.1.1.2(b), 30.4.1.1.5, 30.7.9(c), and 30.7.10).

The CAISO planned to propose reducing the commitment cost reference level multiplier from 25 percent to 10 percent after the first 18 months to be comparable with the 10 percent multiplier that applies to default energy bids. The CAISO's main rationale for waiting 18 months to reduce the reference level multipliers from 25 percent to 10 percent was to provide an opportunity to ensure the dynamic market power mitigation measures function as intended and did not instead detect market power when it did not in fact exist, which would still result in mitigation. In that regard, suppliers maintained that they should not have commitment cost reference levels lower than the status quo until it was certain that the new measures did not over-mitigate.²⁶

However, due to the effort that would be required to implement the dynamic commitment cost market power mitigation measures, the CAISO determined before it submitted the CCDEBE Tariff Amendment that it needed to postpone their implementation to phase two of the CCDEBE initiative.²⁷ Consequently, the CAISO did not propose those mitigation measures as part of phase one, *i.e.*, its CCDEBE Tariff Amendment as filed with the Commission. Also, the CAISO did not propose reducing the commitment cost reference level multiplier in phase one because it planned to propose its reduction in combination with implementation of the phase-two dynamic commitment cost mitigation measures.

In the course of preparing this response to Request No. 5) a, the CAISO determined that it cannot provide the Commission with any historic data that would support including the additional 15 percent (*i.e.*, 25 percent as opposed to 10 percent) in the commitment cost reference level. The CAISO explained in the CCDEBE Tariff Amendment that "the 25 percent headroom on the commitment cost bid cap" accounts for the same costs included in the existing 10 percent multiplier and also "includes an additional 15 percent to account for gas price volatility and other costs."²⁸ However, the CAISO is unaware of historic data that supports the need for the additional 15 percent. In contrast, as discussed further

²⁶ See CCDEBE Board Memorandum at 5-6. Along with this change, the CAISO planned to propose that the current commitment cost bid cap, which would only apply when a resource's commitment costs bids are *not* mitigated by the new dynamic commitment cost market power mitigation measures, would increase from the current 125 percent of the resource's commitment cost reference level to 150 percent of the commitment cost reference level for the first 18 months following implementation, and to 300 percent thereafter. Because the dynamic commitment cost market power mitigation test would be in place, the commitment cost bid cap was intended as a backstop measure to protect against the dynamic commitment cost mitigation measures not detecting market power when it actually exists. The CAISO intended the phase-in period to provide an opportunity to ensure the dynamic market power mitigation measures would function as intended. See *id.* at 3-5.

²⁷ See transmittal letter for CCDEBE Tariff Amendment at 20-22.

²⁸ *Id.* at 17.

below, historical data does support using the 10 percent multiplier in both the commitment cost and default energy bid calculations.

The 10 percent multiplier is intended to account for fuel price variations, both from a reference level and from the price submitted in a reference level change request, and to account for incidental and hard-to-quantify costs that are not included in the CAISO's reference level calculations. This is consistent with Commission precedent approving the 10 percent multiplier as a just and reasonable approach to account for these factors. As the Commission recognized when it approved including the 10 percent multiplier in the calculation of variable-cost default energy bids:

We find that the proposed option to set a resource's energy bid at variable cost plus 10 percent is reasonable. Commenters allege that the 10 percent adder fails to account for operating costs such as the risk of natural gas price escalation, cost of emissions credits and the risk of forced outages. However, we note that commenters provide no evidence to demonstrate an inability to recover these costs under this option. In fact, we find that commenters have not supported their allegation that the 10 percent adder will fail to account for natural gas price escalations. The variable cost option is composed of two components consisting of fuel cost and variable O&M [operation and maintenance] costs. The CAISO will calculate the fuel cost component for each bid segment using the heat rate supplied by the resource and the applicable average of four natural gas price indices. We believe the proxy gas price established from the four regional indices will sufficiently *reflect the daily fluctuation in gas prices and allow the 10 percent adder to be used to recover suppliers' incidental costs.*²⁹

Citing that order, the Commission subsequently explained that it "approved the 10 percent adder as an approximation of hard-to-quantify costs".³⁰ Thus, the Commission recognized that the 10 percent multiplier allows suppliers to recover their actual incidental or hard-to-quantify costs not included in the components of the variable-cost default energy bid calculation in addition to accounting for daily gas price fluctuations. Although suppliers will be able to reflect their actual or expected gas-related costs through their reference level change requests, they could still incur incidental or hard-to-quantify costs that are not captured in the commitment cost and default energy bid calculation methodologies, and therefore would not be recovered even with a reference level change request.

²⁹ *Cal. Indep. Sys. Operator Corp.*, 116 FERC ¶ 61,274, at P 1045 (2006) (emphasis added) (citation omitted).

³⁰ *Nev. Power Co., et al.*, 153 FERC ¶ 61,206, at P 55 (2015).

In addition to incidental and hard-to-quantify costs, the 10 percent multiplier is also needed to account for additional fuel price variability. First, there can be fuel price differences between a supplier's actual purchase price and the weighted average price that the gas index price is based on, even if prices do not change throughout the day. As discussed in the CCDEBE Answer, these prices are based on weighted averages that will unavoidably under-represent an individual supplier's actual costs.³¹ For example, consider the update of the gas prices used to calculate resources' reference levels that the CAISO performs each morning based on ICE's then-current weighted-average price of gas transactions. The gas price paid by an individual supplier for gas purchased at the same time ICE calculates that average price may be higher than the weighted average price. If suppliers were not permitted to include the 10 percent multiplier in reference level change requests, the fuel price used to calculate a supplier's adjusted reference level would not sufficiently capture the supplier's actual costs.

Second, there can be fuel price variability between the time the supplier submits a reference level change request and when it actually purchases gas later in the day. Consistent with the direction in Order No. 831 as clarified in Order 831-A, the CAISO proposed in the CCDEBE Tariff Amendment that suppliers may request reference level changes for either *expected* or actual fuel costs.³² The CAISO understands "expected" fuel costs to refer to an estimate of a later actual fuel purchase cost based on an estimated cost that is based on the price of gas at the time the estimate is made.³³ Thus, a supplier's actual costs when the supplier actually purchases gas may be different from its expected costs at the time it submits a reference level change request.³⁴ For example, a supplier may need to purchase additional gas after it receives its day-ahead market schedules around 1:00 p.m. These costs may be different from the

³¹ CCDEBE Answer at 9-10.

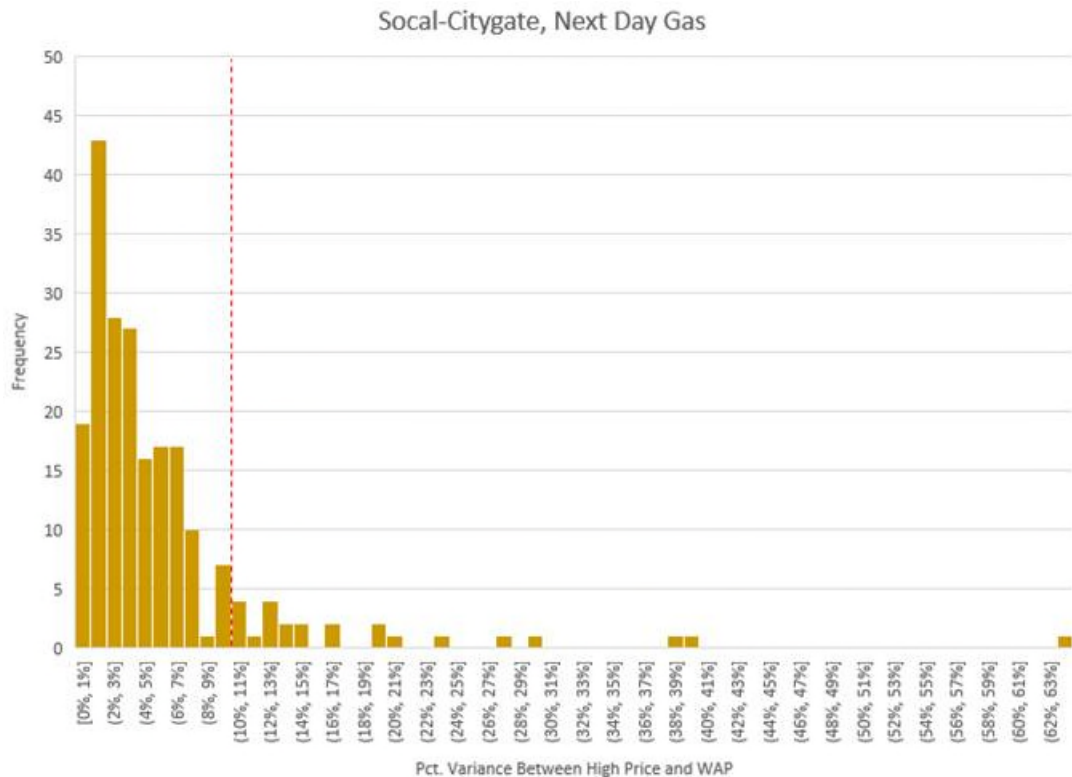
³² See transmittal letter for CCDEBE Tariff Amendment at 26-27 (CAISO proposal to allow suppliers to "submit requests to change their resource's reference levels to reflect the resource's actual or expected fuel or fuel-equivalent costs"); Order No. 831 at P 139 (clarifying that each Independent System Operator or Regional Transmission Organization must "verify that any incremental energy offer above \$1,000/MWh reasonably reflects the associated resource's actual or expected costs prior to using that offer to calculate LMPs [locational marginal prices]"); Order No. 831-A at P 23 (amending regulatory text by "adding the words 'actual or expected' [to] . . . provide more certainty to market participants and more clearly state the Commission's intention that both actual and expected costs over \$1,000/MWh may be submitted for verification").

³³ The CAISO plans to clarify this in the BPM.

³⁴ See Final Version of Opinion on System Market Power Mitigation issued by the CAISO's Market Surveillance Committee at 34-35 (Nov. 5, 2019), available at http://www.caiso.com/Documents/MS-CraftOpiniononSystemMarketPowerMitigation-Nov5_2019.pdf.

estimated costs included in the supplier's day-ahead market bids that are due at 10:00 a.m. and for which it requested a reference level change prior to 10:00 a.m.³⁵ For this reason, the reasonableness thresholds proposed in the CCDEBE Tariff Amendment include an additional adjustment to the fuel prices.³⁶

The following historic data provides an example of how the 10 percent multiplier in reference levels reasonably accommodates differences between prices for individual transactions and the weighted average index prices. The figure below examines next-day gas prices at a representative gas trading hub, the SoCal Citygate hub, from January through October of 2019. The figure illustrates the frequency that the maximum traded price on ICE was greater than the weighted average price index reported for those days. The horizontal axis shows the percentage amount by which the maximum settled price exceeded the weighted average price and the vertical axis illustrates the number of days those differences occurred.



³⁵ The Commission has previously recognized the need for adders to account for such fuel cost uncertainties as part of the cost verification process. See, e.g., *Midcontinent Indep. Sys. Operator, Inc.*, 161 FERC ¶ 61,155, at P 32 (2017).

³⁶ See transmittal letter for CCDEBE Tariff Amendment at 29-31.

This historical data illustrates that including the 10 percent multiplier in the reference levels, as delineated by the dashed line above, reasonably accounts for variability between an index's weighted average price and the highest price of individual transactions, *i.e.*, actual costs as represented by the actual price of the trade.

In addition, the CAISO's proposal to use a 10 percent multiplier to calculate reference level change request amounts is consistent with the Commission's findings regarding 10 percent adders used by PJM Interconnection, L.L.C. (PJM). In the proceeding on PJM's compliance with Order No. 831, the Commission explained that, to satisfy Order No. 831's verification requirement for cost-based incremental energy offers (*i.e.*, energy reference levels or default energy bids), PJM proposed in relevant part to implement a "Maximum Allowable Incremental Cost for a given resource's incremental energy offer segment [that] would be equal to the difference between two values, the Maximum Allowable Operating Rate and the Bid Production Cost for the offer segment under review divided by the incremental increase in MW [megawatts] for the offer segment".³⁷ PJM proposed to calculate the Maximum Allowable Operating Rate value for a resource "based on that resource's heat rate, performance factor, and two adders".³⁸ The first of these adders was "a 10 percent adder in the Fuel Cost component (fuel variance adder) of the Maximum Allowable Incremental Cost to account for the uncertainty involved in fuel price indices," and the second was PJM's existing "10 percent adder that is currently allowed in cost-based incremental energy offers".³⁹ The Commission stated that approval of PJM's proposal would thus result in "two nested 10 percent adders within the Maximum Allowable Operating Rate".⁴⁰

The Commission approved PJM's use of both 10 percent adders to satisfy the verification requirement for cost-based incremental energy offers. First, the Commission determined that "the proposed fuel variance adder is reasonable given that, as PJM states, fuel price indices may be less representative of actual fuel prices during periods of illiquidity and volatility", and that in such circumstances "it is reasonable to make an upward adjustment in the fuel price index data and we find that 10 percent is a reasonable upward adjustment".⁴¹ The Commission also stated that "[t]he second 10 percent adder included in the Maximum Allowable Operating Rate . . . represents the adder that PJM currently

³⁷ *PJM Interconnection, L.L.C.*, 161 FERC ¶ 61,153, at P 21 (2017) (citations omitted).

³⁸ *Id.* at P 22.

³⁹ *Id.*

⁴⁰ *Id.*

⁴¹ *Id.* at P 52. The 10 percent fuel variance adder is currently set forth in Section 6.4.3(a) of Appendix 1 to the PJM Operating Agreement.

allows all resources to include in cost-based incremental energy offers, which the Commission has already found to be reasonable”.⁴² Similarly, the Commission should find it is just and reasonable to use the CAISO’s existing 10 percent default energy bid multiplier in calculating reference levels even when subject to a reference level change request.

F. Request No. 6

Proposed tariff section 30.11.3.1 includes the following statement: “[t]he Scheduling Coordinator must not submit a Reference Level Change Request for the purpose of strategically bidding near the Reasonableness Threshold to bid above actual or expected costs.”

- a. *Please explain the purpose of this provision and give examples of the behavior it is meant to thwart.*
- b. *Please explain how this is consistent with the 10 and 25 percent scalars applied to reference levels for supplier submitted costs.*⁴³

1. CAISO Response to Request No. 6) a

The purpose of the language quoted in Request No. 6 that appears in the CAISO’s proposed new tariff section 30.11.3.1, is to help ensure that scheduling coordinators submit reference level adjustment requests based solely on their actual or expected costs and do not submit reference level adjustment requests to inflate default energy bids or default commitment cost bids. In other words, a scheduling coordinator should not be submitting reference level change requests for the purpose of inflating its default energy bids or default commitment cost bids beyond what they would be if calculated based on its actual or expected costs.

In the Second Revised Draft Final Proposal attached to the CCDEBE Tariff Amendment, the CAISO explained that it would reserve the right to verify reference level change request requirements were followed to mitigate the risk that a supplier may misuse the process to adjust reference levels above a reference level based on its expected or actual costs.⁴⁴ The CAISO further stated it would verify that suppliers were not adjusting reference levels above their cost-based bids and potentially perform an audit on frequently submitted

⁴² 161 FERC ¶ 61,153, at P 53. This 10 percent adder is currently set forth in Section 6.4.2(a) of Appendix 1 to the PJM Operating Agreement.

⁴³ November 4 Letter at 3.

⁴⁴ Attachment C to CCDEBE Tariff Amendment (Second Revised Draft Final Proposal) at 8, 36.

and approved adjustments.⁴⁵ The CAISO warned that it would consider a referral to FERC for suppliers using the reference level adjustment process to inflate their default bids above those based on actual or expected costs.⁴⁶

For example, assume the gas price index price the CAISO uses to calculate a supplier's default energy bid is \$50.00/MWh and the other cost components of its bid are \$4.00/MWh. Consequently, the resource would have a \$59.40/MWh default energy bid and a \$64.90/MWh reasonableness threshold (*i.e.*, the default energy bid calculated with a 10 percent multiplier).⁴⁷ The supplier would only be permitted to request a reference level change if it had actual or expected fuel costs greater than the \$50.00/MWh the CAISO used to calculate its default energy bid. Assume the supplier has a gas quote showing that its expected gas cost would be \$52.00/MWh. In that case the supplier would be permitted to request a reference level change to \$61.60/MWh (*i.e.*, the sum of \$52.00/MWh and \$4.00/MWh multiplied by 110 percent.).

If the Commission determines that additional clarification is necessary regarding this tariff provision, the CAISO would propose, on compliance, to, include the following underlined and strikeout changes:

The Scheduling Coordinator ~~shall~~must not submit a Reference Level Change Request for the purpose of inflating its Default Energy Bids or Default Commitment Cost Bids beyond what these values would be if calculated based on its strategically bidding near the Reasonableness Threshold to bid above actual or expected costs.

2. CAISO Response to Request No. 6) b

Please see the CAISO response above to Request No. 5) a. As discussed in that response, a 10 percent multiplier in default energy bids and default commitment cost bids captures both incidental or hard-to-quantify costs not expressly included in the CAISO's commitment cost and default energy bid methodologies and also captures differences between the price an individual supplier pays for gas and the average price of gas at the time of a reference level change request. The reasonableness thresholds include an additional amount to account for differences between expected costs and actual costs.⁴⁸ For natural

⁴⁵ *Id.* at 36-37. These verification measures are reflected in proposed tariff sections 30.11.3, 30.12.4, and 30.11.3.4, respectively.

⁴⁶ Second Revised Draft Final Proposal at 37.

⁴⁷ This would be the case for days with a published gas price index for which the reasonableness threshold includes a 10 percent multiplier.

⁴⁸ See transmittal letter for CCDEBE Tariff Amendment at 29-31.

gas-fired resources, the reasonableness thresholds for Mondays also include an additional amount to account for greater differences in the gas price of purchases compared with the gas price the CAISO uses to calculate reference levels for Mondays.⁴⁹

II. CONCLUSION

For the reasons explained above and in the CAISO's prior submittals in this proceeding, the CAISO respectfully requests that the Commission issue an order by December 21, 2019 accepting the tariff revisions discussed in section IV.C of the transmittal letter for the CCDEBE Tariff Amendment to be effective December 31, 2019. The CAISO further requests that the Commission issue an order by January 21, 2020 accepting the portions of the CCDEBE Tariff Amendment discussed in sections IV.A, IV.B, and IV.D of the CCDEBE Tariff Amendment, with any further modifications as discussed above, to become effective no later than April 30, 2020.

Respectfully submitted,

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⁴⁹ See *id.* at 35-40.

CERTIFICATE OF SERVICE

I certify that I have served the foregoing document upon the parties listed on the official service list in the captioned proceeding, 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 Washington, D.C., on this 22nd day of November, 2019.

/s/ Daniel Klein

Daniel Klein