

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

**California Independent System            )            Docket No. ER17-110-000  
Operator Corporation                    )**

**ANSWER OF THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR  
CORPORATION TO COMMENTS**

The California Independent System Operator Corporation (CAISO)<sup>1</sup> files this answer to the comments<sup>2</sup> submitted in response to the tariff amendment the CAISO filed in this proceeding on October 14, 2016 (October 14 Amendment).<sup>3</sup> The October 14 Amendment contains proposed tariff revisions to maintain in effect for an additional 12 months (*i.e.*, from November 30, 2016 through November 30, 2017), with some modifications, certain measures the Commission previously approved to address market and operational issues arising from the inoperability of the Aliso Canyon gas storage facility (Aliso Canyon).<sup>4</sup>

Each of the commenters states that it supports or does not oppose at least a portion of the tariff revisions, and some of the commenters support the tariff revisions in their entirety. No commenter opposes any of the tariff revisions.<sup>5</sup>

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<sup>1</sup> Capitalized terms not otherwise defined herein have the meanings set forth in appendix A to the CAISO tariff. References to section numbers are references to sections of the CAISO tariff as revised by the tariff amendment filed in this proceeding, unless otherwise specified.

<sup>2</sup> The following parties filed comments: the CAISO Department of Market Monitoring (DMM); Environmental Defense Fund (EDF); Nevada Power Company and Sierra Pacific Power Company (together, NV Energy); Southern California Edison Company (SCE); and Western Power Trading Forum (WPTF). No party protested the CAISO's filing.

<sup>3</sup> The CAISO files this answer pursuant to Rule 213 of the Commission's Rules of Practice and Procedure, 18 C.F.R., § 385.213.

<sup>4</sup> The Commission previously approved the measures to be effective on an interim basis until November 30, 2016. *Cal. Indep. Sys. Operator Corp.*, 155 FERC ¶ 61,224 (2016) (June 1 Order).

<sup>5</sup> See DMM at 1, 11-12, 17; EDF at 8; NV Energy at 1, 5, 8; SCE at 2; WPTF at 5.

Some of the commenters also propose the actions discussed in this answer. For the reasons explained below, the Commission should accept the October 14 Amendment as filed, subject only to the tariff modifications the CAISO proposes to make in a compliance filing if so ordered by the Commission.

**I. Answer**

**A. The CAISO Has Already Established a Stakeholder Process that Will Consider the Issues DMM Seeks to Address with its Proposal to Adopt an Improved Day-Ahead Gas Price Methodology on a Permanent Basis.**

The CAISO proposes to maintain on an interim basis the tariff provisions accepted in the June 1 Order to improve the accuracy of the gas commodity price indices used to calculate commitment cost proxy costs, generated bids, and default energy bids used by the day-ahead market, so that they reflect the most recent gas commodity price information.<sup>6</sup>

DMM recommends that the CAISO implement these tariff revisions on a permanent basis and that the CAISO also implement this same approach to update gas prices in the real-time market using market information on same-day gas prices each morning.<sup>7</sup> As DMM notes, the CAISO indicated in the October 14 Amendment that DMM and stakeholders will have the opportunity to opine on these issues as part of a bidding initiative scheduled to begin in the fourth quarter of 2016 and to conclude in the fall of 2017.<sup>8</sup> The CAISO has since commenced the commitment costs and default energy bid enhancements stakeholder process

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<sup>6</sup> See transmittal letter for October 14 Amendment at 20-26.

<sup>7</sup> DMM at 1-2, 10-11.

<sup>8</sup> Transmittal letter for October 14 Amendment at 25; DMM comments, attachment E to October 14 Amendment, at 1, 7-8.

to evaluate whether: (1) commitment proxy costs, generated bids, and default energy bids allow scheduling coordinators to accurately reflect and recover their generators' unit-specific marginal costs; and (2) changes to the economic bidding of commitment costs and the associated market power mitigation methodology could increase market benefits when bidding occurs under competitive market dynamics.<sup>9</sup>

The stakeholder process that preceded the October 14 Amendment was designed to address any interim measures the CAISO might need to ensure reliable operations over the next 12 months in the absence of Aliso Canyon. The CAISO recognizes that absent the extension of the measures proposed herein, the current market design could result in an inaccurate representation of commitment costs and default energy bids in the CAISO day-ahead market during the upcoming 12 months. The CAISO also recognizes that these issues can persist beyond the 12-month period even if Aliso Canyon were to return to operability. For this reason, the CAISO has already launched a new stakeholder process to address more closely what further changes may be necessary to ensure its markets reflects costs accurately and compensates resources consistent with those costs. While the CAISO agrees that the improvements to the day-ahead gas price methodology may address the issues identified by DMM, the CAISO also believes more robust changes may be necessary that include or obviate the need for the improvements proposed in the October 14

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<sup>9</sup> See the page on the CAISO website regarding this new stakeholder process, [http://www.caiso.com/informed/Pages/StakeholderProcesses/CommitmentCosts\\_DefaultEnergyBidEnhancements.aspx](http://www.caiso.com/informed/Pages/StakeholderProcesses/CommitmentCosts_DefaultEnergyBidEnhancements.aspx).

Amendment. The Commission should accept the changes proposed in the amendment on an interim basis as proposed by the CAISO and provide the CAISO and stakeholders an opportunity to consider the questions arising in the commitment costs and default energy bid enhancements stakeholder initiative. Upon completion of that stakeholder process, the CAISO will make any necessary filings at the Commission. However, the Commission should not direct the CAISO at this time to adopt the proposal on a permanent basis because the question of whether or not it should be permanent is not before the Commission in this proceeding.

**B. The CAISO Will Monitor the Performance of the Increased Gas Price Applicable to Commitment Cost Caps and Default Energy Bids for the Real-Time Market, and Will Make Any Changes as Appropriate.**

The CAISO proposes to maintain on an interim basis the effectiveness of its tariff provisions allowing an increased gas price used to calculate the commitment costs for gas-fired resources subject to the proxy cost methodology, generated bids for resource adequacy resources, and default energy bids under the variable cost option used for mitigation. Pursuant to the tariff provisions, such commitment costs will continue to be subject to an initial 75-percent increase (sometimes called a scalar) and such generated bids and default energy bids will continue to be subject to an initial 25-percent increase or scalar, unless and until the CAISO determines that the scalar(s) should be adjusted upward or downward.<sup>10</sup>

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<sup>10</sup> See transmittal letter for October 14 Amendment at 26-33.

DMM states that it supports extending – but not modifying – the current scalars at this time, since DMM has not observed any significant detrimental impacts of the existing scalars. In the event DMM observes significant detrimental impacts but no significant benefits, DMM would recommend lowering the scalars.<sup>11</sup> As explained in the October 14 Amendment, the CAISO agrees with DMM that it is important to monitor the performance of the scalars and commits to continue evaluating the markets to determine whether they remain effective in achieving the goals stated in the tariff provisions or whether either or both of the scalars should be adjusted upward or downward to achieve those objectives. The CAISO would discuss any such change with DMM and stakeholders prior to making them. Further, the tariff provisions require the CAISO to issue a market notice specifying any change in the scalars.<sup>12</sup>

WPTF requests that the Commission direct the CAISO to monitor the performance of the 25-percent scalar during the winter period and to make an informational filing to the extent it determines that the scalar may no longer be appropriate.<sup>13</sup> There is no need for such a Commission directive. Again, the CAISO has already committed to monitoring the performance of the scalars, will discuss any proposed change to the scalars with DMM and stakeholders, and will issue a market notice specifying any such change.

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<sup>11</sup> DMM at 1, 3-9.

<sup>12</sup> Transmittal letter for October 14 Amendment at 32-33.

<sup>13</sup> WPTF at 6-7.

WPTF also requests that the Commission direct the CAISO to revise new tariff section 39.7.1.1.1.3(d) to require the CAISO to issue a market notice if it either increases or decreases a scalar.<sup>14</sup> The CAISO agrees that it should have revised the section in that way and proposes to submit the change on compliance with the Commission's order in this proceeding. The section as filed inadvertently did not reflect the CAISO's commitment to provide notice of any adjustment to a scalar.<sup>15</sup>

**C. The Commission Should Not Require any Changes to the Tariff Provisions Maintaining Measures to Address Market Issues Related to the Enforcement of the Natural Gas Constraint.**

The CAISO proposes to maintain its existing tariff provisions related to enforcement of a maximum natural gas constraint. These tariff provisions set forth criteria for designating a transmission constraint as competitive or non-competitive and allow the CAISO to suspend or limit virtual bidding activities that detrimentally affect CAISO market efficiency related to maximum gas constraint enforcement.<sup>16</sup>

WPTF requests that the Commission direct the CAISO to revise its tariff to: (1) set out objective standards the CAISO will use to determine whether system conditions warrant designation of a constraint as uncompetitive or the

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<sup>14</sup> WPTF at 7. As proposed in the October 14 Amendment, the relevant language in the section states that, “[u]pon determining that a subsequent change in the gas price is necessary after the initial increase, the CAISO will issue a Market Notice specifying the amount of the increase.”

<sup>15</sup> See transmittal letter for October 14 Amendment at 33 n.103.

<sup>16</sup> *Id.* at 43-44.

suspension of virtual bidding; and (2) provide a mechanism for notifying market participants when the CAISO decides to invoke these measures.<sup>17</sup>

The Commission should not issue such a directive. In the June 1 Order, the Commission specifically rejected WPTF's request to establish such standards in relation to use of the gas constraint, on the grounds that the Commission "agree[d] with the DMM's analysis finding that the impact of the natural gas constraint on the assessment of competitive paths can only be assessed based on actual system conditions once the constraint is in place."<sup>18</sup> It is equally true that the CAISO can only determine whether suspension of virtual bidding is warranted based on actual system conditions with the constraint in place.<sup>19</sup>

With respect to the manual process for identifying non-competitive constraints when gas nomogram constraints are in the market, the CAISO is developing additional information to include in the business practice manual concerning the process that the CAISO will be following. That process includes

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<sup>17</sup> WPTF at 5-6.

<sup>18</sup> June 1 Order at PP 7, 47, 52. In the June 1 Order, the Commission also did not impose any requirement that the CAISO notify market participants when it determined that a constraint is uncompetitive. Indeed, the Commission has never imposed such a requirement for the CAISO's competitive path assessment. See *Cal. Indep. Sys. Operator Corp.*, 138 FERC ¶ 61,154, at PP 35-38 (2012) (accepting tariff revisions to implement dynamic competitive path assessment for the day-ahead market); *Cal. Indep. Sys. Operator Corp.*, 143 FERC ¶ 61,078, at PP 26-29 (2013) (accepting tariff revisions to implement dynamic competitive path assessment for the day-ahead market).

<sup>19</sup> See June 1 Order at P 80 (conditionally accepting the CAISO's proposal to suspend or limit virtual bidding "when and if it determines that such trading runs counter to market economic efficiency," due in relevant part to the CAISO's "enforcing the new gas constraint differently in the day-ahead and real-time markets") (emphasis added). The Commission also explained that "[d]uring the interim period, with the limited availability of Aliso Canyon and the operational steps that CAISO may undertake to address electric and gas reliability, *there may be times* when promoting price convergence may run contrary to the efficient economic solution of the market." *Id.* (emphasis added).

monitoring the impact of gas nomogram constraints on the reduction of counter-flow to relieve constraints. If the CAISO observes that counter-flow reductions result in uncompetitive conditions, the CAISO will consider the need to designate the constraint as non-competitive under similar future conditions. The important thing to note here is that the CAISO will be basing its determinations on actual observations. WPTF may have had an expectation that the CAISO would be utilizing a process like the default list of non-competitive constraints, which is based on a recent history of the results of the dynamic competitive path assessment.<sup>20</sup> This is not what the CAISO is proposing to do for gas nomogram constraints. In effect, the CAISO will be observing the dynamic competitive path constraint process with gas nomograms in place with the goal of using observations to then replicate what the outcome of the dynamic competitive path assessment would produce if the gas nomogram constraints could be modeled in the dynamic competitive path assessments.

WPTF also requests that the CAISO identify non-competitive constraints designated due to gas nomogram constraints. The CAISO publishes market power mitigation nomogram/branch group competitive paths and market power mitigation intertie constraint competitive paths.<sup>21</sup> The CAISO will treat gas nomogram constraints that are non-competitive the same way it treats

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<sup>20</sup> See existing tariff section 39.7.3.

<sup>21</sup> See [https://bpmcm.caiso.com/BPM%20Document%20Library/Market%20Instruments/BPM\\_for\\_Market%20Instruments\\_V42\\_clean.doc](https://bpmcm.caiso.com/BPM%20Document%20Library/Market%20Instruments/BPM_for_Market%20Instruments_V42_clean.doc).



constraints that are non-competitive as a result of the dynamic competitive path assessment.

With respect for virtual bids, as is the case under the existing tariff provisions, if the CAISO suspends or limits virtual bidding, it will file an informational report with the Commission explaining why it took such action. The CAISO has also committed to issue a technical bulletin justifying any suspension or limitation of virtual bidding it might need to implement.<sup>22</sup> Thus, the notification mechanisms that WPTF requests the Commission to order already exist.

**D. There Is No Need for the CAISO to Make an Informational Filing Regarding the Measures at Issue in this Proceeding.**

WPTF argues that the Commission should direct the CAISO to submit a filing every six months that reports on the efficacy of any of the measures adopted in this proceeding.<sup>23</sup> No such informational filing is necessary. The CAISO already plans to report on the efficacy of the tariff provisions even more frequently, in its bi-monthly market performance forum meeting. Further, the Commission and market participants will have transparency regarding the effects that the tariff revisions have had on the CAISO markets pursuant to the quarterly Reports on Market Issues and Performance that DMM issues. The CAISO understands that DMM may report on Aliso Canyon-related items in its quarterly reports, if it deems appropriate for inclusion.<sup>24</sup> The CAISO will also notify the market in advance if and when it plans to: (1) enforce a maximum natural gas

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<sup>22</sup> Transmittal letter for October 14 Amendment at 44.

<sup>23</sup> WPTF at 7-8.

<sup>24</sup> Transmittal letter for October 14 Amendment at 48-49.

constraint, to the extent feasible in advance of the deadline for submitting bids for the day-ahead or real-time market; (2) adjusts the existing commitment cost and default energy bid scalars for the real-time market; or (3) suspend or limit virtual bidding, if practicable.<sup>25</sup> WPTF provides no explanation as to what additional value a separate informational filing with the Commission would provide.<sup>26</sup>

**E. The CAISO and Stakeholders Will Address Issues Regarding Exceptional Dispatch in an Upcoming Stakeholder Process.**

The October 14 Amendment did not include proposed tariff provisions related to the CAISO's use of exceptional dispatch. The CAISO did, however, note requests by DMM and a stakeholder that the CAISO pursue tariff revisions for price mitigation of incremental exceptional dispatches due to natural gas limitations, and that the CAISO also develop a methodology to mitigate decremental exceptional dispatches. The CAISO explained that it plans to examine these matters as part of an upcoming stakeholder process and could accelerate the stakeholder process if bidding practices appear to necessitate more expedient action.<sup>27</sup>

DMM and SCE recommend that incremental and decremental exceptional dispatches issued to manage Aliso Canyon gas issues be considered non-competitive and subject to market power mitigation.<sup>28</sup> As stated above, the CAISO plans to address whether such incremental or decremental exceptional

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<sup>25</sup> Attachment B to October 14 Amendment, at new tariff sections 27.11, 39.7.1.1.1.3(d); existing tariff section 7.9.3(a).

<sup>26</sup> WPTF and other parties are, of course, free to raise issues of concern with the Commission at any time.

<sup>27</sup> Transmittal letter for October 14 Amendment at 47.

<sup>28</sup> DMM at 2, 12-17; SCE at 2-3.

dispatches warrant mitigation in the commitment costs and default energy bid enhancements stakeholder initiative.

DMM also comments if the CAISO believes it will take a major effort to address the issue, DMM recommends that the CAISO and Commission place a higher priority on addressing other issues identified by DMM. The CAISO appreciates DMM's recommendations but notes that the issue of how to prioritize the CAISO's policy initiatives is outside the scope of this proceeding. The CAISO continues to work with DMM and all stakeholders to prioritize its efforts through a stakeholder process dedicated to the purpose of prioritization so that all participants and the CAISO can consider the full array of factors in setting the CAISO's agenda for the upcoming year. The CAISO will also obtain input from DMM and stakeholders on how highly the stakeholder processes should be prioritized. The Commission, however, should not order the CAISO to adopt additional tariff language regarding the treatment of exceptional dispatches in this proceeding but should instead consider the merits of any proposal the CAISO may file after the stakeholder processes have been completed.

**F. The Commission Should Permit the CAISO's Longer-Term Stakeholder Processes to Go Forward Without Predetermining What Factors Those Processes Should Consider or When They Must End.**

In the October 14 Amendment, the CAISO explained that it and stakeholders would consider additional measures to improve recovery of costs by resources, including fuel cost recovery, in ongoing and planned stakeholder initiatives evaluating long-term market solutions for bid cost modeling of gas-fired

resources, market mechanisms to improve market efficiency and support sufficient cost recovery, and coordination between the electric and gas markets.<sup>29</sup>

EDF argues that the tariff provisions in the October 14 Amendment are not a sufficient substitute for further fundamental market design changes and requests that the Commission accept the tariff provisions on the condition that the CAISO complete its commitment cost and default energy bid enhancements stakeholder process within six months from the date the process commences. EDF also provides suggestions on what factors the longer-term stakeholder processes should consider.<sup>30</sup> The CAISO encourages EDF to make these suggestions in the stakeholder processes, but believes it would be inappropriate to predetermine what factors should be considered in those processes. Nor does the CAISO believe it would be appropriate to specify in advance a time limit on any of the stakeholder processes (e.g., six months). Although the CAISO agrees that effective permanent solutions are preferable to the interim measures proposed in the October 14 Amendment, the CAISO and all of its stakeholders need sufficient time to develop any such solutions with due care, rather than risk taking hasty action out of concern that they will otherwise fail to meet an arbitrary deadline.

Six months is simply not sufficient time to develop a robust proposal for the Commission's consideration. The issues that EDF raises and the CAISO is currently evaluating are complex and require careful consideration. In addition to

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<sup>29</sup> Transmittal letter for October 14 Amendment at 37, 45-46, 47-48.

<sup>30</sup> EDF at 3-8.

the need for a full stakeholder process that precedes a filing with the Commission, the CAISO must take its proposal to its Board of Governors for approval, as well as to the Energy Imbalance Market (EIM) Governing Board if it affects the Energy Imbalance Market. Both these processes require notice and time to complete. Prior to completing development of the proposals with stakeholders, the CAISO must also conduct an internal process to ensure that business requirements are identified and determine when the CAISO would be ready to implement the proposed changes. Prior to filing, the CAISO also conducts a stakeholder process to review and develop the proposed tariff amendment it will ultimately file with the Commission. Given these necessary steps, the CAISO believes that EDF's request is unrealistic and would require the CAISO to conduct a less than complete stakeholder process in order to make a filing with the Commission in six months. For these reasons, the Commission should decline to impose a six-month clock on these important matters.

The CAISO notes, however, that it has already commenced the commitment cost and default energy bid stakeholder process and hopes to complete this process by the end of 2017. The CAISO is also considering whether it should have the ability to apply a gas constraint on a permanent basis and in other parts of the system. The CAISO anticipates commencing a stakeholder process to address that latter subject in the spring of 2017. The CAISO further recognizes that it will also have to evaluate whether the provisions proposed in this proceeding should be extended beyond November 2017. If so,

the CAISO will consider the extension of the provisions proposed herein as part of the same stakeholder process it expects to commence in the spring of 2017.

DMM proposes that the CAISO implement measures to use the most currently available data to update gas costs in the day-ahead market and real-time market.<sup>31</sup> The CAISO will work with DMM to ensure that its proposal is fully vetted with stakeholders in one of the longer-term stakeholder processes scheduled to conclude next year.

NV Energy requests that the CAISO commit to undertake a stakeholder process to address on a permanent basis the ability of EIM entities without market-based rate authority to recover their fuel procurement costs above their default energy bids.<sup>32</sup> The CAISO plans to address this very issue in the stakeholder process concerning commitment cost and default energy bid enhancements.

**G. The CAISO Will Provide on Compliance the Second Set of Tariff Revisions Inadvertently Omitted from the October 14 Amendment.**

The CAISO stated in the October 14 Amendment that it was submitting two sets of tariff records to implement its interim approach – one set containing the proposed tariff revisions and showing a November 30, 2016 effective date, and a second set containing the tariff sections revised by the October 14 Amendment as they read in the existing tariff (*i.e.*, omitting the tariff revisions) and showing an effective date of November 30, 2017. Pursuant to this approach,

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<sup>31</sup> DMM at 2, 18; attachment A thereto at 26-28.

<sup>32</sup> NV Energy at 5-7.

to the extent the Commission accepted the tariff revisions and did not later take action to continue their effectiveness beyond November 30, 2017, on that date the first set of tariff records would automatically be superseded by the second set of tariff records, and thus the tariff sections revised by the October 14 Amendment would revert to how they read before the CAISO submitted the amendment.<sup>33</sup>

The CAISO recently discovered that due to an administrative error it inadvertently did not include in the October 14 Amendment the second set of tariff revisions described above. The CAISO proposes to provide the second set of tariff revisions on compliance with the Commission's order in this proceeding.

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<sup>33</sup> Transmittal letter for October 14 Amendment at 49.

## II. Conclusion

For the foregoing reasons, the CAISO requests that the Commission accept the tariff revisions contained in the October 14 Amendment as submitted, subject only to the tariff modifications on compliance that the CAISO proposes in this answer.

Respectfully submitted,

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Counsel for the California Independent System Operator Corporation

Dated: November 8, 2016



## CERTIFICATE OF SERVICE

I hereby certify that I have served the foregoing document upon all of the parties listed on the official service list for the above-referenced proceeding, pursuant to 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 8<sup>th</sup> day of November, 2016.

/s/ Grace Clark  
Grace Clark