

127 FERC ¶ 61,233  
UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Jon Wellinghoff, Chairman;  
Sudeen G. Kelly, Marc Spitzer,  
and Philip D. Moeller.

California Independent System Operator Corporation

Docket No. ER09-240-002

ORDER ON COMPLIANCE FILING

(Issued June 10, 2009)

1. On March 23, 2009, the California Independent System Operator Corporation (CAISO) submitted proposed revisions to its Market Redesign and Technology Upgrade (MRTU) tariff, in response to the Commission's directives in its order issued February 19, 2009 (February 19 Order).<sup>1</sup> In this order, the Commission accepts in part and rejects in part the CAISO's proposed MRTU tariff revisions. Specifically, the Commission accepts the CAISO's effectiveness threshold and rejects the CAISO's additional revisions to its tariff as beyond the scope of this proceeding.

**I. Background**

2. As a result of market simulations conducted in preparation for the implementation of MRTU, the CAISO concluded that tariff provisions requiring the exhaustion of economic bids to resolve every market optimization constraint were too rigid, and led to unnecessarily high costs. According to the CAISO, it determined that, at certain times, it would be more economically and operationally efficient to achieve a feasible market solution by adjusting certain inputs, called "non-priced quantities," rather than exhausting all economic bids. These non-priced quantities, such as the adjustment of self-scheduled load or the relaxation of transmission constraints, give the CAISO greater flexibility to achieve feasible market solutions, but have no inherent market price.

3. On November 4, 2008, the CAISO filed tariff revisions to include parameter values for non-priced quantities in its MRTU Tariff. The parameter values would supplement economic bids in that they would allow the market optimization software to determine when the non-priced quantities would be used to adjust flexible operating constraints, and how their use would affect prices paid by market participants. Through

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<sup>1</sup> *Calif. Indep. Sys. Operator Corp.*, 126 FERC ¶ 61,147 (2009).

market simulations and consultations with stakeholders, the CAISO determined the parameter values as well as the relative scheduling priority of non-priced quantities.

4. The CAISO's parameter tuning proposal was based on a two tier market structure. In both tiers, the market optimization software would determine the least cost feasible dispatch solution based on available economic bids and the aforementioned non-priced quantities. The first tier, the scheduling run, would determine dispatch, including the use of any non-priced quantities. The second tier, the pricing run, would ultimately determine the prices paid by market participants.

5. An additional element in evaluating the utilization of economic bids to resolve market optimization constraints involves the development of an effectiveness threshold to apply to economic bids. Without an effectiveness threshold, the market software could accept significant quantities of low-price energy bids to achieve a small amount of congestion relief on a particular constraint. The CAISO agreed that it was necessary to adopt an effectiveness threshold, and the February 19 Order directed the CAISO to submit a compliance filing including tariff revisions defining the effectiveness threshold.<sup>2</sup>

6. The CAISO's November 4, 2008 filing indicated that this was the first time that the CAISO had proposed to modify the inflexible tariff provision that required the market clearing software to exhaust all economic bids before engaging in any adjustments to submitted self-schedules.<sup>3</sup> The CAISO indicated that during the market simulation process and related stakeholder process, several parties who hold existing transmission contracts, transmission ownership rights or converted rights (collectively, existing rights) had expressed concerns that the MRTU market optimization procedures could reduce those parties' self-scheduling in the day-ahead market, which would expose those parties to financial costs that could diminish the value of their existing rights. Because of the concerns, the CAISO indicated that it was proposing a solution to ensure that existing rights self-schedules would not be adjusted in the day-ahead market. Specifically, the CAISO proposed to give existing rights self-schedules a higher priority than the strict enforcement of internal transmission constraints, by setting the parameter values used for adjusting existing rights self-schedules in the day-ahead market above the \$5000 per MWh parameter value for relaxing internal transmission constraints. The CAISO indicated that such parameter settings would mean that when there is a binding transmission constraint near the location of a supply or load resource self-scheduled under an existing right, the software would relax the transmission constraint rather than

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<sup>2</sup> *Id.* PP 50-58.

<sup>3</sup> *See* CAISO November 4, 2008 transmittal letter, Docket No. ER09-240-000 at 2 (CAISO Parameter Tuning Transmittal Letter).

curtail the existing rights self-schedule.<sup>4</sup> This would protect existing rights holders from adjustment in the day-ahead market.

7. The Commission's February 19 Order conditionally approved the CAISO's proposed tariff revisions, effective upon implementation of the MRTU tariff. The Commission found that, for purposes of the initial operation of the MRTU market, the CAISO's proposed scheduling and pricing parameters are just and reasonable.<sup>5</sup> The Commission further found that effectiveness is a necessary criterion in determining whether an economic bid should be considered for relieving congestion on the CAISO grid and that, because the effectiveness threshold is a provision that significantly affects rates, terms and conditions of service, an effectiveness threshold must be filed for Commission approval and made a part of the CAISO's MRTU tariff. Accordingly, the Commission directed the CAISO to make a compliance filing within 30 days from the date of the February 19 Order to include tariff revisions stating the effectiveness threshold.<sup>6</sup>

8. On March 23, 2009, the CAISO filed additional revisions to its tariff in compliance with the Commission's order. In the filing, the CAISO proposed to specify an effectiveness threshold. The revisions also include several other clarifications to its tariff on issues unrelated to the effectiveness threshold. Specifically, the CAISO amended its proposal regarding the protection afforded to existing rights in the day-ahead market, amend tariff language relating to "regulatory must-take generation" and amend tariff language relating to enforcement of transmission constraints. In each case, the CAISO characterized these additional proposed tariff amendments as clarifying in nature.

## **II. Notice of Filing and Responsive Pleadings**

9. Notice of the CAISO's March 23, 2009 filing was published in the *Federal Register*, 74 Fed. Reg. 14,795 (2009), with interventions and protests due on or before April 13, 2009.

10. The California Municipal Utilities Association (CMUA) filed a Motion to Intervene and Protest. Protests were filed by the Transmission Agency of Northern California (TANC), Modesto Irrigation District (Modesto), Metropolitan Water District

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<sup>4</sup> *Id.* at 16-17. The proposal is explained in more detail in the testimony of Dr. Lorenzo Kristov, attached to the CAISO Parameter Transmittal Letter as Exhibit ISO-1, at 37-40.

<sup>5</sup> See February 19 Order, 126 FERC ¶ 61,147 at P 43.

<sup>6</sup> *Id.* PP 57-58.

of Southern California (Metropolitan), the City and County of San Francisco (San Francisco), the City of Santa Clara, California and M-S-R Public Power Agency (collectively Santa Clara), Western Power Trading Forum (WPTF) and the California Department of Water Resources, State Water Project (SWP). Southern California Edison Company (SoCal Edison) and Pacific Gas and Electric Company (PG&E) filed Comments. The CAISO filed a Motion for Leave to File Answer and Answer. Motions to file replies and replies to the CAISO's answer were filed by Metropolitan, Modesto, Santa Clara, TANC and SWP.

### **III. Discussion**

#### **A. Procedural Matters**

11. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2008), the timely, unopposed motion to intervene serves to make the CMUA a party to this proceeding.<sup>7</sup>

12. Rule 213(a)(2) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.213(a)(2) (2008), prohibits an answer to a protest, unless otherwise ordered by the decisional authority. We will accept the CAISO's answer because it has provided information that assisted us in our decision-making process. We will also accept the answers submitted by Metropolitan, Modesto, Santa Clara, TANC and SWP.

#### **B. Minimum Effectiveness Threshold**

13. The CAISO proposed a minimum effectiveness threshold of two percent to comply with the Commission's directive.<sup>8</sup> The CAISO notes that, while it is confident that two percent is the appropriate level for this effectiveness parameter for MRTU launch,<sup>9</sup> it is possible that actual experience in MRTU production may indicate a need to revise this value. The CAISO states that it will closely monitor the market for unintended consequences of the minimum effectiveness threshold.<sup>10</sup>

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<sup>7</sup> All of the other parties filing protests or comments in this docket had previously been granted intervention in the root docket to this proceeding, ER09-240-000, and as a result are already parties.

<sup>8</sup> CAISO transmittal letter at 3.

<sup>9</sup> The CAISO's MRTU tariff became effective March 31, 2009.

<sup>10</sup> CAISO transmittal letter at 3-4.

## 1. Comments

14. No party protested the CAISO's proposed effectiveness threshold. San Francisco indicated that it does not oppose the proposed effectiveness threshold.<sup>11</sup> Santa Clara indicated that it takes no issue with the proposed effectiveness threshold.<sup>12</sup> SoCal Edison and PG&E are the only other parties offering comments regarding the CAISO's proposed effectiveness threshold.

15. SoCal Edison states that it believes that a higher effectiveness threshold may be necessary, since the proposed effectiveness threshold does not match up with historical operating procedures.<sup>13</sup> SoCal Edison requests that the Commission require the CAISO to perform analysis on higher effectiveness thresholds and compare the resultant re-dispatch costs.

16. PG&E makes three recommendations regarding the effectiveness threshold. First, PG&E states that the Commission should require the CAISO, after 90 days, to report on the two percent value of the effectiveness threshold and make a recommendation on the appropriate value. Second, PG&E states that the proposed effectiveness threshold could cause the actual pricing relationship between individual nodes and aggregate nodes to become inconsistent with the relationship between those nodes as required by the tariff. PG&E states that the CAISO should review its tariff and resolve any inconsistencies. Finally, PG&E states that the CAISO should document the mechanics of the application of the effectiveness threshold in the assignment of marginal congestion cost in the business practice manual.<sup>14</sup>

## 2. CAISO Answer

17. In response to SoCal Edison's concerns about the level of the effectiveness threshold, the CAISO states that while historical operating procedures are one important consideration when developing an appropriate effectiveness threshold, it cannot be the only concern, since the CAISO has never previously operated under a locational marginal pricing system. The CAISO states that a higher effectiveness threshold may not produce accurate locational marginal pricing results. The CAISO argues that the current

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<sup>11</sup> San Francisco protest at 4.

<sup>12</sup> Santa Clara protest at 3.

<sup>13</sup> SoCal Edison comments at 2.

<sup>14</sup> PG&E comments at 2-3.

effectiveness threshold balances the concerns of adhering to historical operating practices and producing accurate locational marginal pricing results.

18. In response to calls by PG&E and SoCal Edison for more analysis, the CAISO reiterates its commitment to closely monitor the effectiveness threshold and conduct more analysis, but suggests that such analysis would be better performed six to nine months after the implementation of MRTU.

19. In response to PG&E's concern about price consistency between individual nodes and aggregated nodes, the CAISO acknowledges that aggregate nodes may not fully reflect some local congestion and that it will include an analysis of its procedures regarding aggregate nodes when it analyzes the effectiveness threshold. The CAISO notes that it needs experience with actual market conditions before it can properly analyze these issues.

### **3. Commission Determination**

20. The Commission finds that the CAISO's proposed effectiveness threshold of two percent properly complies with the Commission's February 19 Order. The CAISO reasonably balances competing concerns regarding an effectiveness threshold, and appropriately commits to monitoring the effects of the threshold for unintended consequences. Concerns about the threshold value are speculative at this point, since they lack sufficient supporting evidence. However, given the uncertainty surrounding the effects of this threshold, we direct the CAISO to conduct the planned analysis of the effectiveness threshold and to provide the results of the analysis to its stakeholders no later than March 1, 2010. By ordering the study, we provide a means for the CAISO to continue to evaluate the effectiveness of the threshold and to identify any unintended consequences. The study also provides a means for stakeholders to address any problems with the threshold with the CAISO directly and for the stakeholders or the CAISO to commence a proceeding before the Commission regarding the appropriateness of the threshold.

#### **C. The CAISO's Clarifications**

21. In its compliance filing, the CAISO also states that, in preparation for the implementation of MRTU, it identified three areas that warrant additional explanation of how the CAISO is implementing parameters, scheduling priorities, and the enforcement of transmission constraints. The CAISO states that it has included these clarifications in the compliance filing. However, to the extent that the Commission finds the revisions outside of the scope of this proceeding, the CAISO requests that the Commission

consider these as a Federal Power Act (FPA) section 205<sup>15</sup> filing and grant waiver of the 60 day notice requirement.

22. The first clarifying amendment filed by the CAISO relates to its treatment of existing rights. The CAISO states that its discussions with market participants indicate that some parties understand the CAISO's proposal as a strict requirement to treat all existing rights as having a higher priority than transmission constraint enforcement. However, the CAISO states that the nature of existing rights is communicated by the participating transmission owners through Transmission Rights and Transmission Curtailment (TRTC) instructions. So, some existing rights may actually have a lower scheduling priority than transmission constraints. The CAISO therefore proposes a revision to MRTU Tariff section 27.4.3.5 to indicate that their treatment of existing rights will be consistent with TRTC instructions.<sup>16</sup>

23. The second clarifying amendment concerns the tariff definition of "Regulatory Must-Take Generation." The CAISO states that the MRTU tariff defines Regulatory Must-Take Generation by using the tariff defined term "Generation" rather than the generic term "generation." The CAISO states that this inadvertently limits the category of Regulatory Must Take Generation to resources within the CAISO's balancing authority area. The CAISO therefore proposes to revise the definition to use the term "generation" rather than the tariff-defined term "Generation."<sup>17</sup>

24. The third clarifying amendment deals with enforcement of constraints in the CAISO market process. The CAISO states that there are several instances in the MRTU tariff where it states that all constraints are enforced at all times, when this is simply not practical from a software perspective or feasible from an operational perspective. For example, the CAISO states that for facilities where there is insufficient data on system conditions due to insufficient telemetry, there can be spurious results if constraints are enforced. The CAISO also notes that where there is unnecessary commitment of use-limited resources, constraints are also not enforced to avoid their use. The CAISO states that the business practice manual contains a thorough explanation of the enforcement of constraints. The CAISO therefore proposes to amend section 27.5.1 and section 8.3.3.5 to clarify that the business practice manual fully explains constraint enforcement in the CAISO markets.<sup>18</sup>

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<sup>15</sup> 16 U.S.C. § 824d (2006).

<sup>16</sup> CAISO transmittal letter at 4-7.

<sup>17</sup> *Id.* at 7-8.

<sup>18</sup> *Id.* at 8-10.

## 1. Protests

25. Many commenters had a similar basic set of complaints about the CAISO's clarifications. First, they say that the CAISO's set of clarifications are not properly includable in a compliance filing. They argue that a compliance filing should be limited to amendments directed by the Commission in an order, and that these clarifications were not ordered by the February 19 Order. Therefore, they state that the CAISO's clarifications are outside the scope of this proceeding and should be rejected.<sup>19</sup> Commenters also argue that the CAISO's request that the clarifications be treated as a section 205 filing should not be accepted. In addition to arguing that the proposed clarifications should be rejected for substantive reasons, commenters state that this filing did not give proper notice to market participants that there were major changes to the CAISO tariff.<sup>20</sup>

26. In particular, several commenters objected to the CAISO's revised provisions concerning the treatment of existing rights. Commenters argued that those clarifications are a collateral attack on the Commission's February 19 Order.<sup>21</sup> They note that the Commission concluded that the parameter tuning filing appropriately protected all existing rights, and relied upon that conclusion several times throughout the order. Commenters argue that the Commission also rejected arguments that certain existing rights were being conferred additional benefits by the parameter tuning filing. Commenters state that because the clarifications proposed by CAISO contradict these points from the February 19 Order, they go beyond the scope of the compliance filing and should be rejected.

27. Several commenters argue that the clarification regarding existing rights represents a reversal of position on the issue by the CAISO and undermines the stakeholder process. Commenters state that the CAISO and stakeholders worked through complex issues for the compromise reflected in the original parameter tuning filing. Commenters state that if the Commission implements the CAISO's proposals, stakeholders will no longer be able to trust the assurances of the CAISO during future

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<sup>19</sup> See SWP protest at 13, Modesto protest at 3-4, TANC protest at 3-5, Santa Clara protest at 3-5, San Francisco protest at 3-4.

<sup>20</sup> See WPTF protest at 4, Metropolitan protest at 7-8, CMUA protest at 8-9, Modesto protest at 5, TANC protest at 5, Santa Clara protest at 7, San Francisco protest at 6-8.

<sup>21</sup> See SWP protest at 10-13, Metropolitan protest at 5, CMUA protest at 8-9, Modesto protest at 11-12, TANC protest at 12, San Francisco protest at 5-6.

stakeholder processes. Further, some commenters argue that market participants will not understand the full scope of these clarifications without a stakeholder process.<sup>22</sup>

28. In addition, WPTF protested the CAISO's clarifications regarding its enforcement of all transmission constraints. WPTF states that the CAISO's proposal not to enforce certain constraints when it has insufficient visibility via telemetry to actual flows on grid facilities is unreasonable for two reasons. First, WPTF argues that lack of visibility in the real time market is an inadequate rationale to support the CAISO's request to not enforce constraints in the day-ahead market.<sup>23</sup> Second, WPTF argues that the CAISO's concern regarding lack of visibility is an inadequate basis upon which to decide to refrain from enforcing constraints because the state estimator employed by the CAISO should be able to provide sufficient visibility to enforce constraints in real time.<sup>24</sup>

29. WPTF also argues that it is unreasonable for the CAISO to not enforce constraints because it may cause use-limited resources to be committed when they are not actually needed in real time. WPTF states that the whole point of the forward market is to produce feasible schedules based on the bid-in demand, not on the CAISO's forecast of demand. WPTF argues that the CAISO has not provided sufficient explanation or examples to support the proposed changes and expresses a concern that the effect of the CAISO's proposed changes would be to artificially depress day-ahead prices, rather than to allow the CAISO's sequential MRTU markets to function properly.<sup>25</sup>

30. Finally WPTF states that, if the CAISO does not enforce transmission constraints it should set prices consistent with section 27.4.3. That is, it must set the pricing parameter of the constraint being relaxed at the maximum energy bid price as specified in section 27.4.3.2 in determining the effects of the transmission constraint relaxation on prices in the day-ahead and real time markets.<sup>26</sup>

## 2. CAISO Answer

31. The CAISO states that its clarifications are consistent with the Commission's February 19 Order. The CAISO argues that it had always determined the treatment of existing rights based on instructions from the participating transmission owner, and that

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<sup>22</sup> See SWP protest at 6-10, Metropolitan protest at 7-8, CMUA protest at 8-9.

<sup>23</sup> WPTF protest at 5-6.

<sup>24</sup> *Id.* at 6.

<sup>25</sup> *Id.* at 7.

<sup>26</sup> *Id.* at 9-10.

its clarification reflected that long standing principle. The CAISO states that the argument that its tariff revisions represent a collateral attack on the February 19 Order is based on the mistaken assumption that the order superseded long standing tariff provisions which indicate that the CAISO is to treat existing rights in accordance with participating transmission owner instructions. The CAISO states that there is no indication in the order that the Commission intended to do this.<sup>27</sup>

32. In response to WPTF, the CAISO states that WPTF misunderstands the March 23 filing. The CAISO states that the two situations it described in the clarification were not expansions of authority. Rather they were provided in the interest of transparency. The CAISO states that the procedures for enforcing constraints were provided in the Business Practice Manual.<sup>28</sup>

33. In response to WPTF's concerns about the CAISO not enforcing constraints because of a lack of visibility, the CAISO states that while it is technically true that they could enforce constraints in the day-ahead market without visibility of market conditions, it would cause day-ahead results to diverge from real-time results. In response to WPTF's argument that the CAISO should use the state estimator to achieve market visibility, the CAISO states that when there is insufficient market data, the state estimator does not produce accurate results. The CAISO also states that WPTF misunderstands the CAISO's reasons for its treatment of use-limited resources. The CAISO states that the forward market enforces contingencies that commit the use-limited resources; however there is no need to commit these resources unless they actually occur in real time. So always committing these resources in the day-ahead market would lead to the over-commitment of use-limited resources.<sup>29</sup>

34. The CAISO further states that WPTF's argument concerning pricing is mistaken. The CAISO states that WPTF confuses situations where the constraint is relaxed and where the constraint is not enforced for operational reasons. The CAISO states that when a constraint is relaxed there is no question that there is congestion, but in instances when the CAISO simply does not enforce the constraint for operational reasons, such as the lack of market data, there is no basis to establish a congestion based shadow price. So adopting WPTF's suggestion would artificially inflate prices.<sup>30</sup>

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<sup>27</sup> CAISO answer at 13-14.

<sup>28</sup> *Id.* at 5-6.

<sup>29</sup> *Id.* at 7-10.

<sup>30</sup> *Id.* at 10-11.

### 3. Protesters' Answers

35. The answers submitted by Metropolitan, Modesto, Santa Clara, TANC and SWP were all very similar. Essentially each protester reiterated its position that the CAISO's proposed clarifications were beyond the scope of the compliance filing, constituted a collateral attack on the February 19 Order and explained again the reasons that the CAISO's proposed clarifications were substantively improper. In addition to restating the arguments from their original protests, the protesters expanded some of those arguments in response to the positions stated by the CAISO in its answer.<sup>31</sup>

### 4. Commission Determination

36. The Commission's regulations require that "[f]ilings made to comply with Commission orders must include only those changes required to comply with the order. Such compliance filings may not be combined with other rate or tariff change filings."<sup>32</sup> These clarifications were not ordered by the February 19 Order, and are, therefore, beyond the scope of this compliance filing.<sup>33</sup> While it may be true, as argued by the CAISO, that treatment of existing rights is based on instructions from the transmission owners, there is no basis in the record of this proceeding to support the CAISO's proposed revision that could allow the parameter setting for existing rights to be established lower than the parameter for relaxing internal constraints.<sup>34</sup> Accordingly, we reject these modifications to the CAISO tariff.

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<sup>31</sup> See e.g., TANC answer at 5-7, arguing that the CAISO's proposed clarification would be tantamount to allowing participating transmission owners the discretion to establish parameter levels for existing rights customers, in contravention of the CAISO's tariff.

<sup>32</sup> 18 C.F.R. § 154.203(b) (2008).

<sup>33</sup> See e.g., *New York Independent System Operator, Inc.* 125 FERC ¶ 61,206, at P 20 (2008) (citing *AES Huntington Beach, LLC*, 111 FERC ¶ 61,079, at P 60 (2005)).

<sup>34</sup> The value set for relaxing an internal transmission constraint is \$5000 per MWh. In its initial transmittal letter and throughout its pleadings in the underlying proceeding, the CAISO always indicated that it would set the value of the scheduling parameter associated with self-schedules submitted under existing rights to a level higher than the scheduling parameter associated with internal transmission constraints to ensure that self-schedules associated with existing rights are not adjusted in the day-ahead market. See e.g., February 19 Order, 126 FERC ¶ 61,147 at P 13, 21, 25, 53, 79 and 81.

37. We also reject the CAISO's request to treat these proposed tariff revisions as an FPA section 205 filing. This proceeding was submitted as a compliance matter and the published notice identified it as such. Treatment as a section 205 filing would not be appropriate. Appropriate notice of such a proceeding has not occurred and, as several commenters noted, such treatment would deprive market participants of an adequate period to comment on the changes.

The Commission orders:

(A) The CAISO's tariff revision stating the effectiveness threshold is accepted for filing as discussed in the body of this order, effective March 31, 2009.

(B) The CAISO's other proposed tariff revisions are rejected, as discussed in the body of this order.

(C) The CAISO is hereby directed to conduct an analysis of the effectiveness threshold established under the CAISO's tariff revision and provide the results of the analysis to the CAISO's stakeholders by March 1, 2010, as discussed in the body of this order.

By the Commission.

( S E A L )

Kimberly D. Bose,  
Secretary.

Document Content(s)

ER09-240-002.DOC.....1-12