

108 FERC ¶ 61,193  
UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Pat Wood, III, Chairman;  
Nora Mead Brownell, Joseph T. Kelliher,  
and Suedeen G. Kelly.

California Independent System Operator  
Corporation

Docket No. ER04-938-000

ORDER ON TARIFF AMENDMENT NO. 61

(Issued August 17, 2004)

1. In this order, we accept in part and reject in part proposed tariff revisions the California Independent System Operator Corporation (CAISO or ISO) filed as Amendment No. 61 to its open access transmission tariff (ISO Tariff) and order the CAISO to make a compliance filing. This order benefits customers by clarifying certain provisions of the ISO Tariff and by implementing measures to improve market efficiency, enhance electricity reliability and help provide power at just and reasonable rates.

**I. Background**

2. On March 31, 2003, the CAISO filed proposed Amendment No. 50 to the ISO Tariff to provide the CAISO with a revised method for managing intra-zonal congestion. The CAISO stated that under its existing ISO Tariff provisions it had to resolve intra-zonal congestion in real time which placed undue burdens on its real time operating staff and introduced potentially serious reliability problems. Amendment No. 50 was proposed as an interim solution until the implementation of Locational Marginal Pricing or some other long-term comprehensive management solution.

3. In an order issued on May 30, 2003,<sup>1</sup> the Commission accepted the CAISO's proposed Amendment No. 50, subject to modification, noting that its approval should not be a substitute for the ultimate goal of a rational market-based congestion management system. The Commission approved the CAISO's proposal to use proxy bids to manage intra-zonal congestion and mitigate local market power but limited its application to

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<sup>1</sup> California Indep. Sys. Operator Corp., 103 FERC ¶ 61,265 (2003) (May 30 Order), *order on reh'g*, 107 FERC ¶ 61,028 (2004).

decremental bids.<sup>2</sup> Moreover, the Commission directed the CAISO to use reference prices instead of cost-based proxies for decremental bids which were to be administered by an independent entity and applied to all generators – both thermal and non-thermal.<sup>3</sup>

4. On June 18, 2004, pursuant to section 205 of the Federal Power Act (FPA),<sup>4</sup> the CAISO filed proposed Amendment No. 61 to the ISO Tariff to modify ISO Tariff sections 7.2.6.1 and 7.2.6.1.1 in response to a market participant's concern. The CAISO states that a market participant recently complained that the ISO did not have authority to charge a unit, which was shut off to manage intra-zonal congestion, its minimum load costs and argued that only the independent entity calculating decremental reference prices should determine what the "shut-down" reference price (*i.e.*, the reference price between zero MW output and the unit's minimum operating level) should be.

5. The CAISO proposes to modify ISO Tariff section 7.2.6.1 to: (1) indicate that the price used to determine which resources should be shut off to manage intra-zonal congestion will be the decremental reference price for the range between zero MW and the unit's minimum operating level,<sup>5</sup> as determined by the independent entity calculating decremental reference prices; and (2) charge a resource thus shut off the lesser of the market clearing price (MCP) or the decremental reference price for the range between zero MW and the unit's minimum operating level, as determined by the independent entity calculating decremental reference prices. The CAISO also proposes to modify ISO Tariff section 7.2.6.1.1 to recognize that the decremental reference level for the range from zero MW to the minimum operating level does not need to be "monotonically non-decreasing."<sup>6</sup>

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<sup>2</sup> Decremental bids reflect the highest price at which a generator is willing to purchase energy from the CAISO rather than produce it to fulfill its scheduled energy obligation. Decremental bids are used by the CAISO to relieve congestion when the CAISO faces a transmission constraint. When the CAISO faces intra-zonal congestion it redispatches the system based on "inc" (incremental) and "dec" (decremental) bids submitted by generators to increase or decrease the output of their units.

<sup>3</sup> In addition, the Commission rejected the CAISO's proposal to publish generating limits.

<sup>4</sup> 16 U.S.C. § 824d (2000).

<sup>5</sup> A unit's minimum operating level is the lower limit of the respective unit's dispatchable range.

<sup>6</sup> The CAISO defines a price curve as "monotonically non-decreasing" when the price of a subsequent segment is greater than or equal to the price of a previous segment.

6. The CAISO states that its proposed changes do not conflict with the principles of the Metered Subsystem (MSS) Agreement. The CAISO states that, in its May 17, 2004 compliance filing directed by the Commission's order on Amendment No. 50,<sup>7</sup> it agreed that MSS resources would not be dispatched according to the provisions of ISO Tariff section 7.2.6.1 in advance of real time to manage intra-zonal congestion. The CAISO acknowledges that, while the MSS Agreement allows the CAISO to dispatch MSS resources to address a system emergency, the ISO is expected to prevent intra-zonal congestion from becoming a system emergency by re-dispatching other non-MSS resources prior to real time.

## **II. Notices, Interventions and Pleadings**

7. Notice of the CAISO's filing was published in the *Federal Register*, 69 Fed. Reg. 45,032 (2004). Comments, protests, and interventions were due on July 9, 2004. The Public Utilities Commission of the State of California filed a notice of intervention. The following parties filed timely motions to intervene, protests or comments: California Department of Water Resources State Water Project (CDWR); California Electricity Oversight Board; City of Santa Clara, California, Silicon Valley Power; Cogeneration Association of California and Energy Producers and Users Coalition; Coral Power, L.L.C., Energia Azteca X, S. de R.L. de C.V. and Energia de Baja California, S. de R.L. de C.V. (collectively, Coral/Energia); Pacific Gas and Electric Company; Southern California Edison Company; Termoelectrica de Mexicali S. de R. L. de C.V. (Termoelectrica); and West Coast Power LLC, El Segundo Power, LLC, Long Beach Generation LLC, Cabrillo Power I LLC, Cabrillo Power II LLC and Williams Power Company, Inc. (collectively, West Coast/Williams). On July 15, 2004, the Metropolitan Water District of Southern California (Metropolitan) filed a motion to intervene and protest out of time. On July 26, 2004, the CAISO filed an answer.

## **III. Discussion**

### **A. Procedural Matters**

8. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2004), the notice of intervention and timely, unopposed motions to intervene serve to make the entities that filed them parties to this proceeding. We will grant Metropolitan's untimely intervention, since we find that doing so at this early stage of this proceeding will not unduly disrupt the proceeding or place undue burdens on the parties.

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<sup>7</sup> California Independent System Operator Corp., 107 FERC ¶ 61,042 (2004).

9. Rule 213(a)(2) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.213(a)(2) (2004), 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 has assisted us in our decision-making process.

**B. ISO Tariff Sections 7.2.6.1 and 7.2.6.1.1**

**1. Pricing Methodology**

**a. Comments**

10. West Coast/Williams request clarification of the proposal to use the decremental reference price to determine which resource should be shut down to manage intra-zonal congestion. West Coast/Williams believe that, to be consistent with the methodology currently in place for decremental reference pricing, the decremental reference price for the range between zero MW and the unit's minimum operating level should be, at most, 90 percent of the unit's minimum load cost.

11. In its answer, the CAISO states that this concern should be raised with Potomac Economics, the independent entity that will set the reference price.

**b. Commission Determination**

12. We agree with West Coast/Williams that the pricing methodology proposed in Amendment No. 61 should be consistent with the methodology currently in place for the determination of decremental bid reference prices. ISO Tariff section 7.2.6.1.1 sets forth a multi-tiered approach that the independent entity utilizes in the determination of decremental bid reference levels for use in managing intra-zonal congestion. We note that a determination that is 90 percent of cost is only one possible outcome of the reference level price calculation. We find that the instant filing represents enhancements to this methodology, and, as such, the ultimate price that an entity will face should follow this established methodology.

13. Therefore, we direct the independent entity calculating decremental reference prices to utilize the current methodology when determining the shut-down reference price for a particular generating unit. If any deviation from the established methodology is necessary, we direct the CAISO and the independent entity to submit a compliance filing, within 30 days of the date of this order, outlining the necessary changes and supplying adequate justification for such deviation. By following the established methodology, the shut-down reference levels will be developed in a clear, consistent and transparent manner.

## 2. Start-up Costs

### a. Comments

14. West Coast/Williams state that, depending on the timing of a shut-down instruction and a unit's schedule for the next day, it may be necessary, on occasion, to keep the unit warm in order to restart and meet a subsequent schedule. West Coast/Williams seek clarification that the cost of keeping the unit warm in such circumstances is recoverable as part of the unit's start-up costs.

15. In its answer, the CAISO argues that this issue goes beyond the scope of proposed Amendment No. 61. The CAISO also states that it is reasonable that the ISO pay the costs of keeping a unit operating (*i.e.*, keep it "warm") if that unit was forced to shut down on one day due to its contribution to congestion, but would not contribute to congestion on the following day. The CAISO agrees to pay those costs if maintaining the unit's operation is (1) necessary to meet the next day's schedule without re-creating the congestion that caused the unit to be shut down and (2) less expensive than shutting down and re-starting the unit.

### b. Commission Determination

16. We disagree with the CAISO that West Coast/Williams' argument is beyond the scope of this proceeding. The changes proposed in the instant filing deal specifically with the determination of a verifiable price at which the CAISO will shut down a generating unit to manage intra-zonal congestion in real-time. Therefore, it seems logical that the costs associated with restarting these units also be considered in the instant filing. We note that, in its answer, the CAISO has agreed to compensate generators for the costs associated with keeping a unit warm if the unit is needed to meet the next day's schedule and it is economical to do so. Thus, we direct the CAISO to submit revised tariff sheets, within 30 days of the date of this order, that implement the changes it has committed to making.

## 3. Merit Order Methodology

### a. Comments

17. Termoelectrica seeks clarification that the CAISO's merit order calculation will be based upon the total shut-down cost, rather than the \$/MWh shut-down reference price. It argues that a \$/MWh comparison does not expose the total cost of shut-downs and will result in increased intra-zonal congestion costs.

18. In its answer, the CAISO states that Termoelectrica should raise this concern with Potomac Economics, the independent entity that will set the reference price.

**b. Commission Determination**

19. We do not agree with the CAISO that Termoelectrica should direct its clarification to the independent entity that will determine the shut down reference bid level. The independent entity will only be responsible for calculating the shut down reference bid levels for each respective generating unit. It will be the CAISO's responsibility to utilize this calculation in order to determine the merit order in which generating units will be shut-down, if necessary, to manage intra-zonal congestion in real-time.

20. Further, we agree with Termoelectrica that the CAISO, when determining which units to shut down, should take into account the expected total cost of the shut down. By considering the total cost of a shut down, the CAISO will more accurately reflect the total costs incurred when shutting down a unit to manage intra-zonal congestion. Therefore, we direct the CAISO to submit revised tariff sheets, within 30 days of the date of this order, to clarify that the merit order of shut-downs will be based on the expected total shut down cost.<sup>8</sup>

**4. Hydroelectric Resources**

**a. Comments**

21. In light of the unique and dynamic operational constraints faced in hydroelectric operations, Metropolitan requests that the CAISO provide comparable treatment to hydroelectric generators as it proposes to provide to MSS resources. Specifically, it requests that the CAISO not involuntarily dispatch hydroelectric resources for resolution of intra-zonal congestion unless it first has tried to prevent intra-zonal congestion from becoming a system emergency by redispatching non-MSS, thermal resources prior to real-time. CDWR argues that the CAISO's insistence on dispatching hydroelectric resources to improve its uneconomic, intra-zonal congestion management is unjustified, unjust and unreasonable, and unduly discriminatory. CDWR requests that the CAISO exempt it from unilateral dispatch for intra-zonal congestion management due to its water management function.<sup>9</sup>

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<sup>8</sup> For example, a unit with a minimum operating level of 150 MW that is shut down pursuant to the CAISO intra-zonal congestion management procedure will be charged the lesser of the market clearing price or the shut-down reference price in \$/MWh multiplied by 150 MW and by the period of the shut-down.

<sup>9</sup> *Citing San Diego Gas & Elec. Co. v. Seller of Energy and Ancillary Services*, 107 FERC ¶ 61,294 at P 8 (exempting CDWR's hydroelectric facilities from CAISO outage approval requirements).

22. In its answer, the CAISO states that the ISO's re-dispatch is not unduly discriminatory because the ISO treats hydroelectric and MSS resources in the same manner (*i.e.*, in an emergency, the ISO can and will dispatch both hydroelectric and MSS resources). The CAISO believes that it is reasonable to re-dispatch resources in response to emergencies that must be remedied as quickly as possible.

**b. Commission Determination**

23. In the order on rehearing of Amendment No. 50, the Commission stated that "the provisions of Amendment No. 50 are meant to provide the CAISO with the necessary tools to better manage intra-zonal congestion" and "if a hydroelectric unit is the *only* unit that can effectively mitigate intra-zonal congestion, the CAISO must be able to dispatch hydroelectric resources."<sup>10</sup> The Commission also stated that the "CAISO has committed to consider the effects of curtailing the output of a hydroelectric resource just as it proposed to consider the effects of other externalities such as energy limitations or environmental concerns."<sup>11</sup> In accepting the CAISO's commitment to ensure that its use of these resources is consistent with its obligations and the nature of these units, the Commission denied the rehearing request of CDWR and Metropolitan. Our position on this matter has not changed. We find reasonable the CAISO's commitment to dispatch a hydroelectric resource *only* if such resource is the only resource available to relieve intra-zonal congestion in real-time in order to avoid a system emergency. However, the CAISO's proposed tariff language is unclear on this point. Accordingly, we direct the CAISO to modify its tariff, in a compliance filing within 30 days from the date of this order, detailing the procedure it will utilize in determining the need to dispatch a hydroelectric unit to manage intra-zonal congestion.

**5. Reliability Must Run Units and Must-Offer Obligation**

**a. Comments**

24. West Coast/Williams request clarification that proposed Amendment No. 61 does not apply to the shut-down of reliability must run (RMR) units. In its answer, the CAISO agrees that proposed Amendment No. 61 does not apply when the ISO must shut down an RMR unit.

25. West Coast/Williams also request clarification that the proposed Amendment No. 61 does not apply to units operating under the must-offer obligation which are ordered to shut down. Specifically, West Coast/Williams seek clarification that must-offer units

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<sup>10</sup> California Independent System Operator Corp., 107 FERC ¶ 61,028 at P 18.

<sup>11</sup> *Id.* (citing CAISO March 31, 2003 Transmittal Letter at 15).

will continue to be shut-down via the must-offer waiver process and compensated according to the must-offer compensation procedures. West Coast/Williams believe that, if the CAISO needs to shut down a unit operating under the must-offer obligation to relieve intra-zonal congestion, the CAISO should grant the unit a must-offer waiver. In its answer, the CAISO agrees that proposed Amendment No. 61 does not apply when the ISO must shut down a must-offer unit. The CAISO also agrees that such a unit should be shut off by granting a must-offer waiver and should not be charged the decremental reference price.

26. Finally, West Coast/Williams seek clarification that, if the CAISO has the option to shut down either a must-offer unit or a market unit, the CAISO will shut down the must-offer unit by granting a must-offer waiver. In its answer, the CAISO states that, in general, it will not commit a must-offer unit that would contribute to, rather than relieve, congestion, and, therefore, it will generally leave a market unit operating and will shut off a must-offer unit. However, the CAISO states that such a simple choice may not always be available. It explains that a unit committed under the must-offer obligation to relieve one reliability problem could exacerbate another reliability problem. Due to that possibility, the CAISO finds it difficult to craft a rule that would always require the ISO to turn off the must-offer unit rather than another market unit.

**b. Commission Determination**

27. We find that the CAISO's answer has adequately addressed intervenors' concerns. We find reasonable the CAISO's commitment to make certain changes and its explanation for why it would not be appropriate to require, in all instances, the shut-down of must-offer units before market units. With respect to the changes the CAISO commits to make, we direct the CAISO to submit revised tariff sheets, within 30 days of the date of this order.

**6. Day-Ahead Energy Schedules and Day-Ahead Ancillary Service Capacity Schedules**

**a. Comments**

28. West Coast/Williams argue that, if a market unit has been ordered by the CAISO to shut down to relieve intra-zonal congestion and is unable to restart in a timely manner to meet the unit's day-ahead energy schedule for the next day, the CAISO should charge the resource the lesser of the decremental reference price corresponding to that resource's day-ahead energy schedule or the MCP, rather than the decremental reference price at minimum load. West Coast/Williams also argue that, from start-up to the point at which the unit is fully able to meet a day-ahead energy schedule, the Scheduling Coordinator (SC) should not be penalized with an Uninstructed Deviation Penalty (UDP) or any other penalty.

29. Similarly, West Coast/Williams assume that, if a market unit that has been shut down by the CAISO to relieve intra-zonal congestion has a day-ahead Ancillary Service Capacity Schedule, the CAISO will cover the Ancillary Service schedule for the SC and that the SC will not be subject to any penalty, including no-pay charges.

30. In its answer, the CAISO argues that these issues go beyond the scope of proposed Amendment No. 61. The CAISO also states that protestors' fail to explain how, assuming similar conditions, a unit that is shut down on one day to manage congestion could be operating the next day without re-creating the same congestion. The CAISO states that it has agreed to pay start-up costs for a unit that is shut down to manage intra-zonal congestion. It does not believe that it should be required to insulate a market participant, especially one operating a unit that creates such a severe congestion problem that it can only be remedied by shutting off the unit, from all possible risk.

**b. Commission Determination**

31. We disagree with the CAISO's assertion that this issue is beyond the scope of this proceeding. The changes proposed in the instant filing deal specifically with the determination of a verifiable price at which the CAISO will shut down a generating unit to manage intra-zonal congestion in real-time. Therefore, issues relating to restarting these units should also be considered in this proceeding.

32. We find that, if a generating unit has been ordered by the CAISO to shut down to relieve intra-zonal congestion and is unable to restart in order to meet the unit's day-ahead energy schedule due to legitimate operational limitations, the CAISO should charge the resource the lesser of the decremental reference price corresponding to that resource's day-ahead energy schedule or the MCP. We find this approach to be consistent with the proposed methodology for determining and evaluating the shut down reference level. We direct the CAISO to submit revised tariff sheets, within 30 days of the date of this order, that incorporate these changes.

33. We further find that a market unit that has been shut down by the CAISO to relieve intra-zonal congestion should be required to meet its ancillary services obligation. A self-committed market unit makes a conscious business decision to operate in a given market and as such should be willing to accept a certain level of risk associated with operating. We envision that a generating unit would incorporate the risks associated with operating in a chronically constrained area into its energy bids. In this respect, the generator will face a cost of doing business that should be reflected in the unit's decremental reference levels.

34. In addition, if a generating unit is required by the CAISO to shut-down, it should not be subject to UDPs. Such penalties were developed in order to penalize generators when the actual hourly amount of energy a resource delivers does not match its scheduled

amount. These imbalance charges enhance reliability, encourage accurate scheduling and discourage gaming. When a unit is shut down pursuant to Amendment No. 61, the application of UDPs would be contrary to their express purpose of discouraging gaming and encouraging accurate scheduling.

## **7. Alleged ISO Tariff Violation and Refund Request**

### **a. Comments**

35. While Coral/Energia do not object to the instant filing, they request review of the CAISO's actions under the existing ISO Tariff. Coral/Energia assert that, contrary to existing ISO Tariff section 7.2.6.1, the CAISO did not provide reference level priced settlements for all decremental energy related to two facilities. They assert that, instead, the CAISO charged minimum load cost compensation (MLCC) and *ex post* prices for units that were decremented below minimum operating levels. Coral/Energia assert that the MLCC and *ex post* prices imposed by the CAISO violate the filed rate doctrine and the May 30 Order. Coral/Energia request that the Commission direct the ISO to refund with interest all decremental rates that the ISO has assessed since January 2004 that exceed the reference level prices in the ISO Tariff. They claim that, unless timely refunds are provided, other market participants would be unjustly enriched by the ISO's unlawful behavior.

36. In its answer, the CAISO denies violating the ISO Tariff. It states that the relevant price, the reference price between zero and the minimum operating level, is not explicitly indicated in the ISO Tariff. It states that the only reference price contained in the ISO Tariff is the price at minimum load which was discussed only in the context of determining which unit to shut down, not how to settle the unit. It argues that no refunds are required or justified. CAISO adds that, even assuming *arguendo* that the ISO had been in violation of the ISO Tariff, the proper recourse is to file a complaint under section 206 of the FPA.

### **b. Commission Determination**

37. The Commission's Rules of Practice and Procedure expressly provide for the filing of complaints, and the Commission has determined that such complaints must be filed separately from motions to intervene and protests.<sup>12</sup> Therefore, the proper recourse for Coral/Energia is to file a complaint under section 206 of the FPA.

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<sup>12</sup> Entergy Services Inc., 52 FERC ¶ 61,317 at 62,270 (1990).

## 8. Effective Date

38. The CAISO seeks an effective date for proposed Amendment No. 61 of 60 days from the date of this filing (*i.e.*, August 18, 2004).

### a. Comments

39. Coral/Energia argue that it is necessary to arrest the CAISO's ongoing, alleged violation of ISO Tariff section 7.2.6.1 and the Commission's orders in Docket No. ER03-638 as expeditiously as possible. Therefore, they contend that good cause exists for the Commission to waive the 60 day notice requirement and make the filing effective on June 18, 2004.

40. In its answer, the CAISO states that, although it could theoretically implement proposed Amendment No. 61 on June 18, 2004, good cause does not exist for this earlier effective date because the CAISO has not violated the ISO Tariff.

### b. Commission Determination

41. Since the alleged violations are outside the scope of this proceeding, as discussed above, we find that good cause does not exist for waiver of the 60 day notice requirement. We accept proposed Amendment No. 61, subject to modification, to be effective August 18, 2004.

## 9. Compliance Filing

42. We direct the CAISO to submit a compliance filing within 30 days of the date of this order with the revisions directed herein.

### The Commission orders:

(A) The CAISO is hereby directed to submit a compliance filing, as discussed in the body of this order, within 30 days of the date of this order.

(B) The CAISO's proposed tariff changes, subject to modification, are hereby accepted for filing, without suspension or hearing, to become effective on August 18, 2004, as discussed in the body of this order.

By the Commission.

( S E A L )

Linda Mitry,  
Acting Secretary.