

111 FERC ¶ 61,008
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. ER05-718-000

ORDER ON TARIFF FILING

(Issued April 7, 2005)

1. In this order, the Commission accepts a tariff filing by the California Independent System Operator Corporation (CAISO) to provide an interim solution to the problem of excessive costs incurred as a result of the manner in which import and export bids from system resources are cleared and settled. This order benefits customers by ensuring that market participants are only able to charge customers for services actually provided.

I. BACKGROUND

A. The CAISO's filing

2. The CAISO uses a real-time economic dispatch algorithm which continuously clears the energy market at five-minute intervals. Scheduling Coordinators submit bids to the system either to "buy" energy through reducing generation (decrement or "dec" bids), or to sell energy (increment or "inc" bids), at the price for each settlement interval. Previously, parties were unable to use their overlapping inc bids and dec bids for the same interval to make mutually beneficial trades. Under its current tariff provisions, therefore, the CAISO issues dispatch instructions to all overlapping bidders and requires bidders to reduce generation or increase generation for each interval, so that the inc and dec bids clear together and converge to a single market clearing price.¹

¹ See *California Independent System Operator Corporation*, 100 FERC ¶ 61,060 at P 126 (2002).

3. Import/export bids from System Resources² located outside of the CAISO's control area must be dispatched separately from the real-time energy market. Thus, the CAISO "pre-dispatches" inc and dec export/import bids approximately forty minutes before each hour. It makes an estimate of what the real-time market clearing price will be, and then pre-dispatches all dec bids from System Resources that are higher than this anticipated market clearing price, and all inc bids from System Resources that are lower than the anticipated market clearing price.

4. The CAISO's tariff does not, however, currently provide for payment to such System Resources solely on the basis of the market clearing price. So as to provide an incentive to external generators to participate in the California markets and to eliminate the price uncertainty of offering bids for transactions across interties, the CAISO settles import/export transactions on a "bid or better" settlement rule. Under this procedure, when the CAISO pre-dispatches an external transaction, that resource is paid either its bid, or the market clearing price, whichever is more advantageous to the resource. Thus, a pre-dispatched System Resource making an inc bid is paid either the market clearing price or its own bid, whichever is higher, and a pre-dispatched external resource making a dec bid must pay either the market clearing price or its own bid, whichever is lower. In situations where the resource's bid, rather than the market clearing price, is the "better" price, the CAISO adds an uplift payment to the market clearing price to enable that resource to receive this "better" treatment.³

² System Resources are resources external to the CAISO control area.

³ For example, the CAISO may anticipate a market clearing price of \$50/MWh, and schedule import and export bids accordingly, so that all inc bids (generators bidding from outside the system to sell energy into the system) less than \$50 will be dispatched, and all dec bids (generators bidding from outside the system to buy energy from the system) greater than \$50 will be scheduled. Assume that the CAISO receives equal quantities of inc bids at \$45 and dec bids at \$55. If the real time market clearing price is \$50 (or anywhere between \$45 and \$55), inc and dec bidders will receive or pay the market clearing price, payments and revenues will offset one another, and no uplift is needed.

If, however, the real time price is \$60, the payments and revenues will not offset one another. Inc bidders receive, and dec bidders pay, the market clearing price of \$60. However, even though no energy is provided, dec bidders receive an uplift payment of \$5/MWh to reflect the difference between their bid and the market clearing price.

(continued)

5. The CAISO states that, in recent months, it has observed that the combination of the pre-dispatching of import/export bids and the "bid or better" settlement rule, together with other factors, has created an incentive for Scheduling Coordinators to bid in a manner that increases the uplift costs incurred by the CAISO, despite the fact that during many intervals, the CAISO has no need for additional energy from System Resources in real time. It states that this occurs because of the lack of convergence between real-time market clearing prices, and the prices at which external bids are pre-dispatched, due largely to changes in expected loading and resource deviation conditions between the time that pre-dispatch occurs and real time dispatch. Additionally, uplift costs are allocated in a manner under which Scheduling Coordinators are charged little or none of the uplift costs created by the "bid or better" rule.⁴ Thus, the CAISO states, Scheduling Coordinators have an incentive to bid large quantities of offsetting incremental and decremental energy (which to a significant extent offset one another, in which case no energy is actually received by or provided to the system), and load is being charged significant amounts for the ensuing uplift costs without receiving any concomitant benefits. The CAISO estimates that, between October 1, 2004 (the date on which the "bid or better" rule went into effect), and March 22, 2005, this netting of overlapping inc and dec bids by System Resources has caused load to incur approximately \$18.5 million in uplift costs, nearly \$10.5 million for the last month alone.

6. The CAISO states that, because of the magnitude of the uplift costs being incurred by load, it is critical to implement a solution to this problem as quickly as possible. The CAISO has begun exploring, with its market participants, several alternative long-term

If the real time market clearing price is \$40, once again the payments and revenues will not offset one another. Dec bidders pay \$40, but inc bidders receive \$45. Even though no energy is provided, inc bidders are paid an additional \$5/MWh above the market clearing price, which is charged to load in the form of uplift.

⁴ The CAISO states that System Resources are charged little or no uplift costs since uplift is allocated first to Scheduling Coordinators based on their net negative deviations, and then to all metered demand (excluding pre-dispatched export transactions); thus, Scheduling Coordinators are charged a small if any portion of the uplift costs they create through their bidding practices discussed here.

solutions to the problem, and states that it is committed to working with its participants to craft and implement a long-term solution. In the immediate term, however, the CAISO proposes, as an interim solution, to move to a "pay as bid" rule, under which System Resources, if dispatched, would be paid their original bid price.⁵

7. The CAISO states that, in light of the magnitude of the problem that it sees, it seeks expedited Commission action on this filing, and also asks for waiver of the 60-day notice requirement, so that the filing may become effective on March 24, 2005. The CAISO believes that the settlement changes necessary to adopt a "pay as bid" approach could be made within 45 days, so that transactions occurring as of March 24, 2005 could

⁵ The CAISO proposes to achieve its goal by modifying certain tariff sections, as follows:

It will modify section 11.2.4.1.1.2 to specify that the CAISO will settle pre-dispatched Energy from System Resources based on each resource's Energy Bid costs, rather than the "bid or better" settlement currently in effect. The Energy Bid costs shall be calculated as set forth in sections 2.1.2 and 2.6.3 of Appendix D of the Settlements and Billing Protocol.

It will modify section 2.1.2 of Appendix D of the Settlements and Billing Protocol to specify that Hourly Predispatched energy from System Resources is an explicit component of Instructed Imbalance Energy for each resource, and will be settled as set forth in tariff section 11.2.4.1.1, based on each System Resource's Energy bid costs or the resource-specific price.

It will modify section 2.6.3 of Appendix D of the Settlements and Billing Protocol to provide that System Resources that deliver hourly pre-dispatched incremental or decremental Instructed Imbalance Energy will be paid their Energy bid costs for each Settlement Interval. In addition, an uplift payment will be made for each Settlement Interval when settlement as set forth in section 2.1.2 of Appendix D is insufficient for recovery of a System Resource's bid costs. That uplift payment will be determined based on the minimum of zero or the difference between the resource-specific settlement amount and the bid cost settlement amount, pursuant to the equation contained in this section.

Finally, it will make minor conforming changes to sections 2.5.23.1 (Pricing Imbalance Energy - General Principles) and 2.5.22.6.1 (Resource Constraints), in order to reflect the "pay as bid" solution.

be settled on a "pay as bid" basis. This date, however, will require the Commission to approve this filing effective as of March 24, 2005 so as to enable CAISO staff to begin immediately making the necessary modifications to its settlement system.

B. Protests and comments

8. The CAISO made its filing on March 23, 2005. The CAISO's filing was noticed in the *Federal Register*, with protests, comments and motions for intervention due on April 4, 2005.⁶

9. Timely motions to intervene were submitted by the Cities of Redding and Santa Clara, California and the M-S-R Public Power Agency (Cities/MSR), the Northern California Power Agency, Reliant Energy Services (Reliant), and the Transmission Agency of Northern California (TANC). The California Electricity Oversight Board (CEOB) submitted a motion to intervene one day out of time.

10. Motions to intervene and comments generally supporting the filing were filed by the following parties. The California Manufacturers and Technology Association and the California Municipal Utilities Association (CMUA) asks the Commission to clarify what if any investigations have been undertaken of this problem and what steps have been taken to ensure refunds. The California Department of Water Resources State Water Project (SWP) supports the CAISO's filing and urges the parties to ensure that, when the CAISO determines its long-term solution, it should ensure that costs are allocated according to principles of cost causation. The Sacramento Municipal Utility District (SMUD) states that the Commission should ensure that this interim provision is only a stopgap filing that has no precedential value, and asserts that greater transparency and timeliness in the billing of uplift charges would have enabled market participants to identify this problem sooner. The Metropolitan Water District of Southern California (Metropolitan) also applauds the linking of the allocation of costs with cost causation principles, but further notes that increased vetting and testing of market rules may be necessary to avoid the unintended consequences of new market rules, as happened here. Williams Power Company (Williams) does not oppose the filing, but states that the problem the CAISO is seeking to correct here is merely one aspect of a broader problem – the inability of the CAISO's software, forty minutes prior to the operating hour, to accurately forecast system imbalance energy needs for the next hour – and urges attention to this broader problem. Target Corporation (Target) states that it believes the effective date for the interim provision should be October 1, 2004, rather than March 24, 2005. Indicated California Customers state that they support the filing.

⁶ 70 Fed. Reg. 17,443 (2005).

11. Southern California Edison (SoCal Edison) asks the Commission to refund any gains associated with tariff violations to California participants and undertake disciplinary actions against parties found to have manipulated the California markets; it also asks the Commission to require the CAISO to post hourly information on the prices and quantities of power it is purchasing/selling on the inter-ties, and to clarify the treatment of "downlift" (any excess revenues the CAISO may collect if it charges buyers the market clearing price, but pays import sellers less than the market clearing price). SoCal Edison and Pacific Gas and Electric Company (PG&E) also ask the Commission to take appropriate enforcement action as necessary. Duke Energy North America, LLC and Duke Energy Marketing America, LLC (Duke Energy) encourages the CAISO and the Commission to consider other options besides those identified by the CAISO in its transmittal letter.

12. Motions to intervene and protest were filed by the Powerex Corporation (Powerex) and the Bonneville Power Administration (Bonneville). Powerex urges rejection of the filing, asserting that the current "bid or better" settlement rule provides the correct incentive for resources to submit competitive inc and dec bids, because System Resources have a guarantee that each bidder will receive its bid price, reflecting the marginal value of its energy. Powerex also argues that the current system assures that the CAISO has a large, flexible and highly liquid pool of bids to meet its energy imbalance needs every hour, which might not be available to the CAISO under an "as bid" pricing system. Powerex further asserts that the CAISO is implementing this change after only perfunctory opportunities for stakeholders to comment or participate. Specifically, Powerex states that the CAISO has not demonstrated that the overlapping bids involved here have resulted in no net energy being provided to or received from the CAISO system, and it has not made clear what "overlapping" bids have caused this problem (i.e., whether the CAISO is considering bids at the same intertie, bids at different interties in the same zone, or bids at interties in different zones). Absent this information, Powerex argues, the Commission cannot make a meaningful determination as to the justness and reasonableness of the CAISO's filing. Bonneville similarly asserts that, because the CAISO did not conduct a meaningful stakeholder process before filing its interim provision, it was unable to obtain adequate information as to other possible solutions, such as ceasing to clear redispatch bids, prohibiting offsetting incremental and decremental bids in predispach, enforcing market behavior rules to prevent inappropriate use of offsetting inc and dec bids, or revising predispach criteria to reduce the potential price discrepancy between predispach and real-time prices.

13. Additionally, Powerex and Bonneville claim that the CAISO has not substantiated its claim that this tariff problem has led to \$18.5 million in uplift costs (and that, by focusing solely on uplift payments, the CAISO may have failed to consider the substantial net savings it has achieved via dispatch of only one side of the overlapping

inc and dec bids to meet the CAISO's own hourly internal energy needs). Powerex states that it believes the recent rise in uplift costs stems from other causes, particularly the periods since October 1, 2004 when there was lengthy and significant divergence between the anticipated clearing price and the actual market clearing price, attributable to overly conservative forecasting (and thus, over-procurement) by the CAISO of its energy needs. Finally, Powerex and Bonneville argue that the CAISO's interim solution could lead to pricing inefficiencies and disincentives for external suppliers to participate in the California energy market. Powerex states that, rather than replacing the existing intertie bid settlement system altogether, the CAISO should modify it in less drastic ways. Bonneville suggests that, before taking action on the CAISO's tariff filing, the Commission should wait for the conclusion of its ongoing investigation of market behavior.

II. DISCUSSION

14. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2004), the unopposed motions to intervene of the entities listed above serve to make them parties to the proceeding.

15. The Commission accepts the CAISO's filing for an interim period, effective from March 24, 2005, as requested, until the earlier of (a) September 30, 2005, or (b) the effective date of a tariff filing providing a long-term solution filed by the CAISO and accepted by the Commission. If no proposed tariff amendment has been filed to become effective by September 30, 2005, then on October 1, 2005, the tariff provisions accepted here will sunset, and those tariff sections will revert to their current version. In light of the fact that under the current "bid or better rule" in the CAISO tariff, customers may be absorbing excessive amounts of uplift costs (particularly in situation where they may not be receiving any actual energy), the Commission finds it just and reasonable to implement this interim provision to prevent that potential imminent harm to customers.

16. The CAISO contends that it has an urgent problem with its tariff, as a result of which customers may be incurring unnecessary charges for uplift. Based on the CAISO's assertions of the immediacy and gravity of this potential problem, we are taking this interim remedial action to prevent harm to customers, mindful that the CAISO is committed to developing and filing with us a longer-term solution, and to grant the waiver of the 60-day notice requirement sought by the CAISO. We are accepting this filing solely on an interim basis, however, because we are mindful that the CAISO has not had time to develop a long-term solution through a full stakeholder process.

17. The Commission originally approved the CAISO's proposal to pay imports the higher of their bid or the market clearing price in an order issued October 22, 2003. In approving that proposal, we expressed our concern regarding the possibility of increased incentives for market manipulation and stated our belief that the CAISO is well-equipped to monitor for this type of behavior.⁷

18. The tariff changes approved in the October 22 Order became effective on October 1, 2004. As stated above, the CAISO estimates that since that date, about \$18.5 million in uplift charges have been incurred which it attributes to overlapping incremental and decremental bids that are cleared, i.e., these bids are netted and no net energy is actually provided to or received from the CAISO system. By expediting our consideration of the CAISO's request for tariff amendment and approving it with an effective date of March 24, 2005, we are removing the tariff provision the CAISO believes responsible for a major portion of the high uplift costs to customers. If the Commission determines that any market participants have violated our Market Behavior Rules, we will take prompt action to remedy the situation by ordering a disgorgement of any unjust profits and refunds as appropriate.

19. Powerex and Bonneville assert that the CAISO's filing here, and the Commission's acceptance of it, is too precipitate, in that the CAISO did not conduct a sufficient stakeholder process or investigate sufficiently the causes of the increase in uplift that this tariff filing seeks to address. This argument misses the point: the CAISO's proposal is an interim measure to protect customers from the possibility of immediate harm. We expect the CAISO will act swiftly to implement a longer-term solution shortly. The Commission supports such swift action when necessary to protect customers. In the Commission's policy statement, issued concurrently with this order, we state that, when an Independent System Operator (ISO) discovers tariff provisions or market participant activity that "materially adversely impacts the market" and "requires prompt action to prospectively revise the tariff to remove the ability to cause such material adverse impacts," the ISO should make a filing to correct the problem, and seek expedited treatment for that filing.⁸

⁷ *California Independent System Operator Corporation*, 105 FERC ¶ 61,091 at P 123 (2003) (October 22 Order).

⁸ *Guidance Order on Expedited Tariff Revisions for Regional Transmission Organizations*, 111 FERC ¶ 61,009 at P 2 (2005).

20. As to the specific issues that Powerex, Bonneville and the supporting parties raise, the purpose of this filing is not to make tariff changes proposing a long-term solution, (which will be filed with the Commission once it is developed by the CAISO); nor is it to conduct an investigation or enforcement action. We encourage the parties to raise their concerns in the CAISO's stakeholder process as it develops new tariff provisions putting into place a long-term solution. In this order, the Commission approves the CAISO's putting into place an immediate, stopgap solution to ensure that customers are not overcharged while the CAISO's participants work together for a long-term solution. We are not here making a finding as to wrongdoing by any participant; nor are we predetermining any ruling on a longer-term solution.

21. During this interim period, the Commission understands that the CAISO will be alert to any potential unintended consequences of this "as bid" approach, such as the possibilities raised by intervenors, namely (a) whether liquidity of bids at the interties will be diminished, (b) the extent to which the "as bid" policy may cause bidders to change the level of their bids to the expected clearing price, and the resulting effect on the overall costs to customers from both of these possible problems. We further expect that the CAISO's market monitor will be vigilant in observing whether, even for this interim period until a long-term solution is put into place, the liquidity and sufficiency of bids at interties deteriorates to the point where this interim change should be reversed or additional interim action should be taken. Accordingly, we will order the CAISO's Division of Market Analysis to provide us with weekly reports on the effects of this interim solution with regard to the questions above and other issues of concern to the Division of Market Analysis, until a long-term solution is implemented or until September 30, 2005, whichever date is earlier. We further direct that the CAISO's Division of Market Analysis shall present to the Commission, within 30 days from the date of this order, the CAISO's plan (including milestones) for addressing the problems identified in this order.

22. Finally, as the CAISO and its stakeholders explore a long-term solution, it is important to note that the CAISO's forecasting and estimating of real-time imbalance energy needs and the resulting market clearing prices continue to be a concern. In addition to the long-term approaches suggested by intervenors in this proceeding, the stakeholders should also consider the feasibility of a financially binding hour-ahead market for inc/dec bids from System Resources at the interties under which bids would be settled at the predicted market clearing price rather than the higher of bid or real-time market clearing price.

The Commission orders:

(A) The CAISO's tariff filing is accepted, as discussed above, effective March 24, 2005.

(B) The CAISO's Division of Market Analysis is ordered to file weekly reports on the market effects of these interim tariff provisions, including the liquidity and sufficiency of bids at the interties, until the earlier of the effective date of a future tariff change implementing a long-term solution or September 30, 2005.

(C) The CAISO's Division of Market Analysis is ordered to present to the Commission the CAISO's plan (including milestones) for addressing the problems identified in this order, within 30 days from the date of this order.

By the Commission.

(S E A L)

Linda Mitry,
Deputy Secretary.